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COMBATING OBESITY IN KUWAIT

In the state of Kuwait, obesity has risen at an epidemic rate during the past years.

According to the results of the survey of risk factor for chronic Non-Communicable diseases in Kuwait (WHO-MOH,2008) more than three quarter of Kuwaiti adults aged 20-64 are overweight or obese, the prevalence among males was 73.6% while it was 77.4% among females.

Overweight and obesity are modifiable risk factors for chronic non-communicable disease, mainly diabetes, cardio vascular diseases and certain types of cancer.

Low level of physical activity and unhealthy diet are among the main causes of obesity. Advertising and marketing of fast food and drinks are contributing factors affecting the nutritional behaviours and habits of the whole population.

Rapid urbanization, characterized by changing modes of life, dietary habits, food processing, distribution and marketing is also a contributing factor for obesity and overweight.

One of the choices to manage this problem is by combating obesity by surgery; however it is not easy, as there are many factors to be considered to choose from many different surgical procedures including the health status, the surgeons preference, the expected outcome and safety of the surgery.

Obesity and overweight is a major public health problem affecting the quality of life, hence the importance of combating this challenge through integrated and self comprehensive nation-wide programs addressing the problem as a top priority for the development.

Screening and surveillance activities of obesity and overweight as well as other risk factors for non-communicable diseases are core components of the national program.

Providing consumers with information about calories, carbohydrates and transfats in their food and promotion of healthy eating are important for improving community nutritional habits.

Combating the epidemic of obesity in Kuwait is a challenge needing a collaborative work with governmental and non-governmental agencies, represented in the national committees of the programs, working together to overcome this public health threat.

Strengthening the capacity of the health care system to deal with this new epidemic is a crucial issue of the national plan.

We are strongly committed to fight against obesity to improve the quality of life and wellbeing of the whole population in Kuwait.

My best wishes and wish you all the success on behalf of the Health Ministry, Kuwait.

Dr. Mohammad Barrak Al-Haifi
Minister of Health
State of Kuwait





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January 9, 2013

MESSAGE

I am pleased to know that Indian Doctors' Forum – Kuwait (IDF) is organizing its annual cultural event 'IDF Docfest 2013' on January 18, 2013 at Hotel Kuwait Regency. It gives us an opportunity to see the IDF members in a different avatar – one of cultural artists.

IDF's contribution to Kuwait and in particular to the Indian community is tremendous. Over the years, IDF members have treated tens of thousands of patients, who otherwise may not have got easy access to medical services or specialists, at medical camps organized in cooperation with other community organizations during their free time. IDF has also organized orations at which it has invited renowned experts to speak on important medical issues. Its web-based "Ask the Doctor" allows anyone in the world to put a medical query and get a prompt response from an expert. It has conducted many awareness campaigns, including in schools which have been well-received.

'IDF Docfest 2013' would also be an occasion for the release of the much-awaited Health Guide dealing with Obesity. The annual Health Guides of IDF, which are distributed free not just in Kuwait but also other countries, are a very useful reference material. I am confident that this year's Health Guide will be as useful as earlier editions as it deals with a major health issue of global concern.

I take this opportunity to congratulate the Indian Doctors' Forum – Kuwait for receiving the Pravasi Bhartiya Samman Award in recognition of its sustained self-less service to the Indian community in Kuwait. This would undoubtedly encourage them to do more.

I extend my greetings and good wishes to all members of the Indian Doctors' Forum – Kuwait and their families for the success of the 'IDF Docfest 2013'.


(Satish C. Mehta)

ص.ب. : ١٤٥٠ - الرمز البريدي ١٣٠١٥ الصفاة - الكويت - تلفون : ٦١٣ / ٦١٢ / ٢٢٥٣٠٦٠٠ فاكس : ٢٢٥٤ ٦٩٥٨
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Ref : 2013 / 01 KMA

Date : 2013 / 01 / 03



MESSAGE FROM THE KMA PRESIDENT

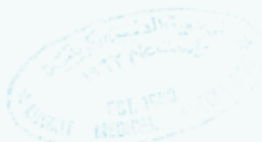
I am extremely happy to learn about the Indian Doctors Forum, which is an outstanding organization of Indian health care professionals, who have come together to carry out various community activities and cement the Indo-Kuwait health care relationship. We are proud to say that the Indian Doctors Forum is affiliated to the Kuwait Medical Association and we admire & compliment the various activities it carries out for the benefit of all its members and the community at large.

They have been conducting several community oriented programs in the form of Health Seminars, Health Screening camps & School Health Programs for the past nine years. In accord of their commitment to community service, they annually release a Health Guide, and this year the theme is "Obesity". This is mainly to create awareness of the different medical conditions Obesity can lead to like Type 2 Diabetes, Hypertension, heart disease, sleep apnea and stroke. Kuwait being the fifth most obese nation on Earth, needs vigorous education and other similar measures to be adopted to increase the public awareness.

This Health Guide will be filled with beneficial articles in simple plain English for the common man to comprehend with a special mention of current treatments and remedies. These articles are written by eminent experts, who are all members of the Indian Doctors Forum.

I personally and on behalf of the officials of Kuwait Medical Association, wholeheartedly wish the Indian Doctors Forum all the success.

Dr.Mohammad Almutairi
KMA President



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*With Best Compliments
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From*



Pravasi Bharatiya Samman Award To IDF

2013



इंडियन डॉक्टर्स फोरम, कुवैत
Indian Doctors Forum, Kuwait

मैं, प्रणब मुखर्जी, भारत का राष्ट्रपति, सामुदायिक सेवा के क्षेत्र में आपकी उत्कृष्ट उपलब्धि और भारत का सम्मान और प्रतिष्ठा बढ़ाने में आपके बहुमूल्य योगदान को देखते हुए तथा प्रवासी भारतीयों के हितों को प्रोत्साहित करने के लिए आपको प्रवासी भारतीय सम्मान पुरस्कार से सम्मानित करता हूँ।

कोच्चि
9 जनवरी, 2013

प्रणब मुखर्जी
राष्ट्रपति

I, Pranab Mukherjee, President of India, confer on you the Pravasi Bharatiya Samman Award in acknowledgement of your outstanding achievement in the field of Community Service and in recognition of your valuable contribution in promoting the honour and prestige of India and in fostering the interests of Overseas Indians.

Kochi
9 January, 2013

Pranab Mukherjee
President





President's Message

It has been nine glorious years since IDF was founded. During this period the bonds of friendship amongst the Indian medical fraternity has been cemented. We have been able to stand together as one big family. This show of unity and strength has helped us to carry on performing the various community welfare activities in a non-biased professional manner. By the Grace of God Almighty large sections of the community have benefitted from such programs. Free Monthly Medical Consultation and Screening Camps; Health Education through the Health Guides and Seminars; reaching out and

answering questions on health issues to the community through IDF Website; Annual Health Quiz event for the students of the schools; and School Health Programs are some of such initiatives that have endeared us to the community at large. Our efforts in fostering and strengthening Indo-Kuwait ties through KMA – IDF Oration event; IDF Ghabqa and IDF Docfest have been commended by both the Kuwaiti and Indian authorities. Our joy knew no bounds and our happiness was compounded multiple times when His Highness – Amir of Kuwait, Sheikh Sabah Al Ahmed Al Sabah patronized IDF Docfest for the second consecutive year.

Today, on behalf of the IDF executive committee, it is my honor and privilege to present to you IDF Health Guide 2013 Volume IX which is based on the theme of 'Globesity' – Global Obesity. All aspects related to 'Obesity' have been put forth in a simple manner by IDF members in this issue of health guide. I am sure that the health guide will be treasured by its readers and act as a ready reference book. I am immensely indebted to Dr. Vinod K Grover and Prof. P S N Menon, the Chief Editors of the Health Guide.

The New Year has begun on a very happy note for IDF. On the occasion of the XI Bharatiya Pravasi Divas, the Indian Doctors Forum was honored with the prestigious 'Pravasi Bharatiya Samman Award'. The award is the highest civilian award bestowed upon Non-Resident Indians/Organizations. The award is recognition of the multifarious voluntary and selfless activities of the Forum and the meaningful contribution of the Forum towards promotion of cooperation between Kuwait and India in the health sector. On behalf of IDF, the award was received by the Honorary Chairman – Dr. Narayanan Nampoory from the Honorable President of India, His Excellency Shri Pranab Mukherjee. On this occasion I extend my heartfelt congratulations to each and every IDF member for his/her valuable individual contribution towards achieving the award.

On this happy occasion, IDF would like to express its gratitude to the KMA President, Dr. Mohammed Al Mutairi and his team of office bearers for extending all necessary help and support to the various activities of the Forum. We feel proud to be affiliated to KMA and highly value this association. I would also like to profusely thank His Excellency – Shri Satish C. Mehta, the Honorable Ambassador of India and all the staff at the Indian Embassy for their advice, guidance and whole hearted support rendered to the various activities of the Forum. IDF would also like to express its gratitude to the Honorable Kuwait Health Minister and Honorable Undersecretary in the Ministry of Health, to the KIMS General Secretary, to the Dean at the Faculty of Medicine and to the Director of Dasman Diabetes Center.

I would like to extend my sincere thanks to all our sponsors, media personnel and the various Indian Associations, without whose support we would not be able to accomplish our Community Welfare Activities.

On behalf of the Indian Doctors Forum I would like to extend our greetings, good wishes and pray to God Almighty to bless His Highness – Amir of Kuwait; His Highness – Crown Prince of Kuwait; His Highness – Prime Minister of Kuwait, Government of Kuwait and the wonderful people of Kuwait for their hospitality and kindness. Long Live Indo-Kuwait friendship and Long Live IDF!!!

A handwritten signature in black ink, appearing to be 'Amir Ahmed', written in a cursive style.

Dr Amir Ahmed
President IDF

Chairman's Message



It is with immense pride and happiness that the Indian Doctors Forum is celebrating its annual event, DOCFEST 2013. We have passed through various hurdles & hindrances in the past, but eventually came out victorious in all our efforts. Today, every IDF member is proud to be a part of this Forum, because of its unparalleled, committed, noble and highly innovative activities presented to the community and its family members.

I am thankful to His Highness - Amir of Kuwait, Sheikh Sabah Al Ahmed Al Sabah; His Highness - The Crown Prince of Kuwait, Sheikh Nawaf Al Ahmad Al Jaber Al Sabah; His Highness - The Prime Minister, Sheikh Jaber Mubarak Al Hamad Al Sabah; The Government of Kuwait and all the loving people of Kuwait for their affection and support given to us, in this great country.

Hon. Indian Ambassador His Excellency Shri Satish C Mehta and all the officials in the Indian Embassy have always been leading, guiding and supporting us. Words cannot express our enormous gratitude and appreciation to them.

We conduct all our activities under the umbrella of Kuwait Medical Association, with which we are officially affiliated. We are thankful to its President Dr. Mohammed Al Mutairi and all other officials of Kuwait Medical Association for their unrestricted and continued support being provided to us unconditionally.

IDF has organized several Health camps, Health Seminars, School Health Programs and published a lot of Health related materials for the benefit of the community. We have also published the Health Guide every year, of which thousands of copies are distributed free to the community. This year, the topic of the Health Guide is GLOBESITY, which is a major health problem not only in Kuwait and India, but also other parts of the world. It is a major cause of Heart attack, Cancer, Hypertension and Diabetes Mellitus. Knowing the gravity and magnitude of this problem, IDF has decided to devote this year's theme towards this cause. In addition to the Health Guide, we are also aiming at further spreading the information to different communities by means of various seminars, counseling sessions and online interactions. Several eminent senior Indian Doctors have written meaningful articles in a very legible & coherent manner for the benefit of the common man to understand. We hope these activities will benefit the community at large.

At this juncture, I wish to thank all the authors, editors and sponsors who made this dream a success.

Jai Kuwait..... Jai Hind..... Jai IDF !

Dr Narayanan Nampoory
Chairman IDF

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About Us



Let me commence by wishing you all a very Happy, Healthy and Prosperous New Year, 2013. The Indian Doctors Forum – Kuwait is a body of Indian Medical Doctors residing or working in Kuwait. This Forum was formally inaugurated on 28th May 2004 and since then it has been pulsating & marching forward with nonstop activities till date as it enter its ninth year. This Forum was formed with the main aim of fostering and strengthening the already existing healthy relationship between Kuwait and India in the field of Medicine. It is be one of the biggest Indian professional associations in Kuwait with a total number of around 500 members to its credit. We are officially registered with the Indian Embassy of India in Kuwait and are affiliated to the Kuwait Medical Association. We conduct all our activities by strictly abiding and adhering to the rules and regulations laid down by our host country and with outstanding support & guidance from the Kuwait Medical Association and the Indian Embassy at Kuwait.

IDF manages to conduct an array of community welfare activities by utilizing our free and spare time in the form of Free Medical Screening Camps, Health Awareness Seminars, School Health Programs and Meet the Specialist sessions. For the benefit of the common man, the Health Guide is released annually, which contains expertly written articles on common ailments with a special attention provided to prevention and early detection. We are proud to say that this will be our ninth volume in succession.

As a family we have also managed to strengthen the relationship amongst members through various social events like IDF Sports Day, IDF Picnic, IDF Ghabqa, IDF Summer Hungama etc. Amongst the medical fraternity in Kuwait, the unknown has become known and strangers have become friends, which has been achieved mainly through this forum and its activities.

The mega event of the year is the Doc Fest which showcases the different colors of the Rainbow and the relevance of each color under the theme “RAINBOW 2013”. It will have you hypnotized and spell bound with a spectacular display of colors and professional performances of our members at their best.

Finally, on behalf of IDF, I would like to express my heartfelt gratitude to the entire Editorial team, led by Dr. Vinod Grover & Prof. P. S. N. Menon, with the other authors who have been successful in tailoring such a handy book on “Globesity”, which addresses the concerns of Obesity, which has Kuwait ranking at the second position after U.S.A. in the world, according to a recent study. This is one of the leading causes of preventable deaths today, making one vulnerable to various life threatening conditions like heart diseases, D.M., Hypertension etc.

Last but not the least, we wish to thank our Health Guide sponsor - Al Mulla Exchange & Burgan Bank and all other advertisers, without whom this Health Guide would not have been possible.

HAPPY READING !

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Dr. Jaganath R Chodankar
General Secretary IDF





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From the Desk of Editors



Not long ago the world's main worry was that people had too little to eat; mankind's main concern is now eating too much. (Economist)

There has been change of disease and mortality patterns worldwide, from communicable to non-communicable diseases over the past two decades. Non-communicable diseases causing death are mainly heart disease, stroke, diabetes and some cancers. Obesity increases the risk of these diseases.



Obesity worldwide has more than doubled since 1980 (WHO). In USA about two-thirds of adults and a third of children and teens were overweight or obese in 2008. One in four adults was too fat in China in 2008. The Pacific Islands and Gulf States are home of some of the world's fattest people. Kuwait stands 6th on global scale in obesity. In Abu Dhabi 35% were obese and a further 32% overweight in 2010. Bedouin traditions of hosting and feasting have combined with wealth to make overeating a nightly habit. Any inclination to exercise is discouraged by heat and cultural restrictions. In urban India obesity is becoming a problem too. By 2030 the global number of overweight and obese may double.

Obesity is linked with high blood pressure, high blood sugar and an excess of cholesterol and fats in the blood. WHO blames excess fat for 44% of cases of diabetes, 23% of ischemic heart disease and over 40% for some type of cancer.

The recent rise in prevalence of obesity includes children and women of reproductive age also. The children are obese due to easy access to fast food restaurants providing energy dense food, having less fruits and vegetables in diet, drinking more soft drinks, less frequent vigorous exercise, and more daily time spent watching television. An obese child is not only at risk of chronic disease later in life but also at risk of immediate co-morbidities. Obesity during pregnancy is related to higher incidence of gestational diabetes and hypertension, miscarriage and higher levels of caesarian sections.

Whenever the dietary energy supply exceeds expenditure, surplus is stored as fat. Genetic and socio-economic factors do play a role. Diet, exercise, and behavioral changes are needed to control overweight. There is no magic diet for quick weigh loss – eat healthy diet and reduce calories. Vigorous aerobic exercise, done four times a week, trims fat (Duke Unit Study).

Pharmaceutical companies excel in treating the diseases that come with obesity; they have been conspicuously unsuccessful at treating the condition itself. There has been increase in bariatric surgeries. But it is dramatic intervention in body's natural machinery, an extreme



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response to a condition that for most patients is preventable. Drugs and surgery are not the answer to the obesity epidemic on their own.

To challenge the growing obesity epidemic measures are to be taken at the individual level – to eat healthy diet and exercise. Government should strive to provide healthy diet and exercise time in schools, gym and parks for public and to find money to treat obesity related diseases. Food companies (Commercial sector) are urged to reduce energy dense “junk foods” and high calorie beverages; need to reduce portion and serving size; change food recipes and marketing strategies. There needs to be genuine discussion and deep soul searching about how to improve the health and well-being of our community.

Because of the growing concern and efforts taken, finally to some extent, the obesity rates among small children has started to show some decline in some states in US, after more than tripling in the past 30 years.

In our Health Guide on GLOBESITY, we have tried to discuss the problems and solutions related to obesity. We want to acknowledge all the authors who contributed in this health guide in the simplest way possible.

We acknowledge and thank our wonderful sponsors, Al Mulla Exchange and Burgan Bank.

Next we want to express our heartfelt gratitude to executive members and office bearers of IDF who have put their faith in us in bringing out this Health Guide on GLOBESITY

And we can't let the moment of this last installment of thanks pass without acknowledging the extraordinary contribution to its publication made by Lucky Press.

Chief Editors

Dr Vinod K. Grover

Dr P S N Menon

Disclaimer: The articles published in this book are for information only.
Please consult your doctor before following any advice.

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GLOBESITY THE FACTS OF LIFE

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Globesity – An Overview: Magnitude, Definition, Assessment and Principles of Management

Dr Thomas Vurgese
Department of Medicine,
Al-Jahra Hospital, Kuwait



The Magnitude of the Problem

Obesity is an increasingly important health problem worldwide including the developing countries. It is estimated to affect nearly one-third of all adult Americans and more importantly, 3,00,000 deaths yearly in the United States can be attributed to obesity-related conditions. As a preventable cause of death, obesity is second only to smoking.

In India, obesity is emerging as an important health problem particularly in urban areas, paradoxically co-existing with undernutrition. Almost 30-65% of adult urban Indians are either overweight or obese or have abdominal obesity. The rising prevalence overweight and obesity in India has a direct correlation with the increasing prevalence of obesity-related co-morbidities; hypertension, the metabolic syndrome, dyslipidemia, type 2 diabetes mellitus (T2DM), and cardiovascular disease (CVD).

According to recent estimates by World Health Organization (WHO), Kuwait ranks the 8th on global scale in obesity. In recent years, there is a rapid increase in the obesity prevalence in Kuwait. It appears that nearly 74% of Kuwaiti males over 15 are overweight or obese, according to the WHO. For women, the figures are even worse - slightly over 80%.

Definitions

Obesity is usually easily diagnosed using what has been called the eyeball test. "If a person looks fat, the person is fat." Few disorders are as visible to others as obesity, and fewer still elicit such ridicule and condemnation.

Historically, weight-for-height tables were used to define the normal weight range. However, such tables have major limitations, including use of an unvalidated estimate of frame size, reliance on primarily white populations, and derivation of the tables from mortality data, which may not accurately reflect obesity-related comorbidities.

Obesity is defined as an excessive accumulation of fat in the body resulting in adverse effects on health of the individual. Three simple measures of obesity are widely used in clinical practice:

- Body Mass Index (BMI),
- Waist Circumference (WC) and
- Waist-to-Hip Circumference Ratio (WHR).

The most widely used method to define thinness and fatness is BMI, a ratio of weight in kilograms divided by height in meters squared (kg/m^2). It has been correlated to morbidity and mortality risk in various populations.

Abdominal obesity is defined by easy-to-use parameters; WC and WHR. Though BMI, WC or WHR correlate well with each other, it is also believed that combined use of these parameters of generalized and abdominal obesity may be better in identifying people at risk of cardiovascular and coronary disorders than either of them alone.

Cut-offs of BMI: The currently recommended cut-offs of BMI recommended by WHO include

- 18.5 - 24.9 kg/m² for normal,
- 25.0 - 29.9m² for overweight and
- >30 kg/m² for obesity.

These are largely based on the morbidity and mortality data from the white Caucasian populations and may not be applicable across all ethnic groups, particularly Asian Indians. Several investigators have shown that Asian Indians are more predisposed to develop insulin resistance and cardiovascular risk factors at lower levels of BMI as compared to other ethnic groups. Asian Indians have higher percentage body fat, abdominal adiposity at lower or similar BMI levels as compared to white Caucasians.

The Waist-to-Hip Ratio provides information about the distribution of body fat. To find the ratio, the circumference of the waist at the naval is measured while the patient stands relaxed. The next step is to measure around the hips at the point where the buttocks protrude the most. The waist measure is then divided by the hip measure, resulting in the waist-to-hip ratio.

Women should have a waist-to-hip ratio of 0.8 or less, while men should have a ratio of 1.0 or less. Values above this are considered clinical obesity. In men, there is increased risk if the waist circumference is 94 cm or more and substantial risk if it is 102 cm or more. For women, the figures are 80 cm or more and 88 cm or more, respectively.

Abdominal obesity is increasingly being recognized as an important cardiovascular risk factor. In some studies, association of abdominal obesity with various metabolic risk factors appears to be stronger than generalized adiposity. WC and WHR are common surrogate measures of abdominal obesity.

Both BMI and WC should be used together (with equal importance) for population and clinic-based risk stratification.

Types of Obesity and Health Risks

Based on the WHR, obesity can be described by fat distribution. A collection of fat on the hips and buttocks (below the waist or gluteo-femoral) may be characterized as gynoid obesity ('pear shape'). A collection of fat mostly in the abdomen (above the waist) may be characterized as android obesity or central obesity ('apple shape'). Android obesity is associated with an increased risk of metabolic complications such as coronary heart disease, hypertension, dyslipidemia, diabetes mellitus and cancers, while gynoid obesity makes the person more prone to mechanical disorders such as varicose veins and disorders of the joints.

Even at the same level of overweight, the individual with a greater amount of visceral or abdominal fat is more likely to have or develop, many of the serious health conditions associated with obesity. Also, since men typically carry excess weight in the upper body and women in the lower body, men rather than women, should be targeted for weight reduction.

The Health Consequences of Obesity and Associated Comorbidities

Obesity is associated with more chronic (continuing) medical conditions than smoking or excessive drinking. Some of these include:

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- Insulin resistance, Impaired glucose tolerance and Type 2 diabetes mellitus.
- Dyslipidemia: 4-fold risk
- Metabolic syndrome (MS)
- Cardiovascular disorders (CVD): Heart disease and Hypertension
- Hyperandrogenism (Menstrual disorders, Subfertility, and Polycystic Ovarian syndrome)
- Respiratory disorders: Asthma, Sleep disorders (obstructive sleep apnea)
- Gastrointestinal : Non-alcoholic steato-hepatitis (NASH); Gall bladder disease
- Physical: Functional limitation for sports and activities
- Orthopedic disorders: Injury to growth plate, Slipped capital femoral epiphyses (SCFE), genu valgum, tibia vara
- Dermatologic disorders: Acanthosis nigricans, skin tags, infections
- Kidney: Albuminuria, focal segmental glomerulosclerosis, Kidney stones
- Neurologic disorders: Diminished memory, Pseudotumor cerebri
- Psychological problems: Poor quality of life, low self-esteem & depression
- Malignancies: Increased risk for selected cancers
- Pregnancy associated complications; risk for fetus.

Metabolic Syndrome and Obesity

Metabolic syndrome (MS) is a combination of medical disorders that, when occurring together, increase the risk of developing cardiovascular disease and diabetes. Metabolic syndrome is also known as metabolic syndrome X, cardiometabolic syndrome, syndrome X, insulin resistance syndrome, Reaven's syndrome (named for Gerald Reaven), and CHAOS (in Australia). Some studies have shown the prevalence in the USA to be an estimated 25% of the population, and prevalence increases with age.

Several definitions of the MS have been enunciated: National Cholesterol Education Program, Adult Treatment Panel III (NCEP, ATP III), WHO and the International Diabetes Federation (IDF).

American Heart Association/Updated NCEP Criteria for MS:

- Elevated waist circumference:
 - ❖ Men — greater than 40 inches (102 cm)
 - ❖ Women — greater than 35 inches (88 cm)
- Elevated triglycerides: Equal to or greater than 150 mg/dL (1.7 mmol/L)
- Reduced HDL ("good") cholesterol:
 - ❖ Men — Less than 40 mg/dL (1.03 mmol/L)
 - ❖ Women — Less than 50 mg/dL (1.29 mmol/L)
- Elevated blood pressure: Equal to or greater than 130/85 mm Hg or use of medication for hypertension
- Elevated fasting glucose: Equal to or greater than 100 mg/dL (5.6 mmol/L) or use of medication for hyperglycemia



Physical Activity and Exercise

Physical activity is defined as any activity leading to calorie consumption. Any form of increased physical activity is beneficial, provided that activities are age appropriate and enjoyable. The main idea is to increase daily energy expenditure. It reduces risk for cardiovascular diseases, diabetes and other disabilities associated with obesity. The current recommendations are as follows:

- Physical inactivity should be avoided as far as possible.
- Pre-participation medical consultation is recommended for those with chronic conditions or those who are symptomatic.
- Inactive people should start slow and gradually increase physical activity.
- Brisk walking (walking at an intensity wherein an individual finds speaking difficult but not impossible) is preferred initial mode of exercise and as this does not require any special training or equipment.
- In general, a total of 60 minutes of physical activity is recommended every day; this includes aerobic activity, work-related activity and muscle strengthening activity.
- Physical activity can be accumulated throughout the day in blocks as short as 10 minutes. Work-related activity should be encouraged wherever possible.
- There is a dose-response relationship between physical activity and health, greater benefit is derived by exceeding minimum recommendations. For additional and more extensive health benefits, adults can increase their aerobic physical activity to 300 minutes (5 hours) a week of moderate-intensity, or 150 minutes a week of vigorous-intensity aerobic physical activity.
- Physical activity must be individualized on the basis of person's abilities and comorbidities. Much like pharmacological therapy it requires prescription with careful consideration of both appropriate dosage and frequency.
- Dynamic yoga should be encouraged but needs more research.

Dietary and Lifestyle Approaches

Overnutrition and malnutrition may coexist side by side in rich and poor families alike, requiring different approaches. Simple dietary interventions supported by observational studies include focusing on increasing intake of healthy foods like fruits and vegetables, reducing inappropriate serving sizes, not offering sugary drinks, the use of olive oil in place of other oils, and increasing the intake of dietary calcium. Breastfeeding may be protective against later obesity. Eating in fast-food restaurants has also been associated with an additional weight gain (126 kcal/d).

Some patients with severe obesity may need very low calorie diets for a limited time because of severe comorbidities. These should be carried out under medical supervision and may include variations of a protein-sparing modified fast, a hypocaloric, ketogenic diet designed to provide enough protein (1.5–2.5 g protein or 6–10 g fish or meat/kg ideal body weight) to minimize loss of lean body mass and a low enough intake of carbohydrate to maintain ketosis.

Pharmacological Treatment of Obesity

Anti-obesity drugs should be used only in conjunction with diet and lifestyle modifications as a part of comprehensive weight loss program. Also, pharmacotherapy should be monitored on an on-going basis for efficacy as well as safety. Management of obesity should be initiated at lower levels of BMI

in specific populations than those currently recommended depending on health risks involved. The current guidelines are based on cut-offs of BMI, but it is important to include WC as another criterion for initiating anti-obesity pharmacotherapy.

Current International Guidelines for pharmacotherapy: BMI above 27 kg/m² with risk factors or co-morbidities like Type 2 Diabetes mellitus, hypertension, dyslipidemia, and BMI above 30 kg/m² without comorbidity.

Surgical Treatment of Obesity

Bariatric surgery has evolved over the last half century as a treatment option for patients suffering from morbid obesity. It involves modification of the digestive system by either decreasing the gastric volume (restriction) or altering the path of the food bolus causing an element of malabsorption. These alterations effect appropriate changes in eating behavior and aid lifestyle modifications to help weight loss. The current guidelines for bariatric surgery were arrived at following research regarding resolution of obesity and related co-morbidities in response to various treatment options.

The Surgical Options for Weight Loss Surgery:

Each surgical procedure has its advantages and disadvantages as regards weight loss, resolution of surgical co-morbidities, peri-operative morbidity and mortality and long-term sequelae.

Current International Guidelines for Bariatric Surgery: BMI above 40 kg/m² ; or BMI above 35 kg/m² with comorbidity.

Financial Consequences of Obesity – Worldwide

The financial costs of childhood obesity are difficult to quantify because they go beyond the cost of increased health care needs especially during the childhood years. For US youths (6–17 years of age), obesity-associated annual hospital costs increased more than threefold from 1979–1981 to 1997–1999. In Germany, the cost of illness of an obese child and an obese child with type 2 diabetes were three and eight times the mean costs of treating a non-obese child of the same age (5–20-yr rehabilitation). If tracking of obesity and cardiovascular risk factors, subsequent increase in adult morbidity, and loss of productivity are taken into account, the worldwide costs are astronomical.

Key Messages

The successful management of obesity remains a challenge to caregiver and patient alike. There are no quick fixes and no easy answers. No two obese patients will be truly alike, and while whole populations may see improvements in the prevalence of obesity as a result of societal changes, we will need to carefully assess the individual etiology, complications, and possible treatment options for each obese individual who presents to us. Obesity, like diabetes mellitus, is a serious and multifaceted condition and needs our urgent and professional attention.





MONSTERS HIDING UNDER WEALTHY MASK

2013

By. Dr Jafer Ismail Ali





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Presumed infections in adult neutropenic patients	1 g every 8 hours
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Nosocomial Pneumonia	1 g every 8 hours
Pneumonia	500 mg every 8 hours
Meningitis	2 g every 8 hours
Peritonitis	1 g every 8 hours
Urinary tract infections	500 mg every 8 hours
Gynaecological infections	500 mg every 8 hours
Skin and skin structure infections	500 mg every 8 hours

Children

AGE GROUP	Meronom® IV (bolus or infusion)
0-3 months	No data available, therefore not recommended
3 months - 12 years: Meningitis	40 mg/kg every 8 hours
Other indications	10-20 mg/kg every 8 hours
Children over 50 kg	Adult dosage

Dose adjustment

Hepatic impairment: Dose adjustment is not necessary in adults with impaired hepatic function, but careful monitoring of transaminase and bilirubin levels should be carried out.

There is no experience in children with impaired hepatic function.

Renal impairment: Dose should be reduced in adults with creatinine clearance less than 51 ml/min, as shown below. There is no experience in children with renal impairment.

CREATININE CLEARANCE ml/min	IV DOSE (based on unit doses of 500 mg, 1 g, 2g)	FREQUENCY
26-50	1 unit	every 12 hours
10-25	0.5 unit dose	every 12 hours
<10	0.5 unit dose	every 24 hours



References:

1. Kollef MH. *Clinical Infectious Diseases* 2003;15(suppl 4):S11-8
2. American Thoracic Society Documents. *Am J Respir Crit Care Med* 171:pp 388-416, 2005
3. Tomasz M et al. *Antimicrob Agents and Chemother* 2007;51(8):1987-94
4. O'Brien AD, Aikawa R. *Curr Opin Anaesthesiol Crit Care* 2006; 10(6):721-230
5. Turner A, Roberts D, Wood RE et al. *Crit Care Medicine* 2005; Vol 34 No 6
6. DeBonghe et al. *Crit Care Medicine* 2005; 33(3):E58-72
7. Colobry F. *Acta Clinica Belgica* 2005;60:53-62
8. Livornese EM, Maritani S, Jones D et al. *International Journal of Antimicrobial Agents* 2005;25(1):14-27
9. Paterson DL, Ko W, Von Gottberg A, Mahappata S et al. *Clinical Infectious Diseases* 2004;39:14-22
10. The European Committee on Antimicrobial Susceptibility Testing (EUCAST). *Clinical Breakpoints 2010*. http://www.eurosurveillance.org/clinical_breakpoints/
11. Tegace®. 2010. Tegace® FDA prescribing information. Pfizer Inc, Collegeville, PA
12. Clinical and Laboratory Standards Institute. 2011. Performance Standards for Antimicrobial Susceptibility Testing. Twenty First International Supplement. CLSI Document M100-S11. Wayne, PA
13. Tenover FC. *Diagnostic Microbiology and Infectious Diseases* 2005; 53: 281-289
14. Gonon H, Gubler B. *Diagnostic Microbiology and Infectious Diseases* 2005; 53: 257-264
15. Jones SR, et al. *Diagnostic Microbiology and Infectious Diseases* 2005; 53: 247-256
16. Garcia-Rodriguez JA, Jones RH. *J Chemother* 2002; 14(1):25-32
17. Vandecasteele B, Genest J, Humbler B et al. *Annals of Hematology* 2006;95(3):352-357
18. Colobry F. *Acta Clinica Belgica* 2005; 60:62, 53-62
19. Reilly C, Conroy DA, Savelle M et al. *British Journal of Haematology* 2005;130:265-270
20. Bonifazi G et al. *Recent developments in carbapenems*. *Expert Opin Invest Drugs* 2002;11(6):529-44
21. Kizian P. Molecular characterization and epidemiology of imipenem-resistant isolates other than *Escherichia coli* and *Klebsiella spp.* that are non-susceptible to extended spectrum cephalosporins in Thailand. Abstract presented at the ECCMID meeting May 2009 Helsinki
22. Narby SR, et al. *Antimicrob Agents* 1999;Feb 11(2):91-99
23. John F, Mohr B. *Clinical Infectious Diseases* 2008; 47:548-54
24. Paterson DL, et al. *Clinical Infectious Diseases* 2002; 35:11-7
25. Cori JC, Holloway YD, Gaster R, et al. A multi-center, comparative study of meropenem and imipenem/cilastatin in the treatment of complicated urinary tract infections in hospitalized patients. *Clinical Infectious Diseases* 1999; 21:38-42
26. Mouton RP, Bouchard C. *Antimicrob Chemother* 1995; 34:38 Suppl A:145-56
27. Fabian TC, et al. Meropenem versus imipenem/cilastatin for the treatment of hospitalized patients with complicated skin and skin structure infections: results of a multicenter, randomized, double-blind, comparative study. *J Infect Dis* 2005; 191: 1020-1031
28. Versant C. Belgian Multi-center Study Group. Meropenem versus imipenem/cilastatin as empirical monotherapy for serious bacterial infections in the intensive care unit. *Clin Microbiol Infect* 2003; 6:299-302
29. Mazonson et al. *J Antimicrob Chemother* 2005; 55: 71-77
30. Meronem IV. Approved Product Information. 30.01. Approved 13/09/05. Date of last amendment 22/01/11. 2.14.01/11/3M
31. Bentley SD. *Pharmacoeconomics* 1998;13:209-22
32. Plummer SJ. *Clin Drug Invest* 1992;14:132-6
33. Tomby LJ, Gidycz JM, Scand J. *Infect Dis* 1990;13:1-10
34. Hays R, Lamb HN. *Drugs* 2002;59(5):53-68
35. Threlking PH, et al. *Drug Metabol Infect Dis* 2003;147:265-72, 12
36. Wainwright JH, et al. *Antimicrob Chemother* 2004;5:290-6
37. Merrick AH, et al. Carbapenem resistance in enteric bacilli and *Pseudomonas aeruginosa* in the USA (1989-2002). Presented at the 42nd Interscience Conference on Antimicrobial Agents and Chemotherapy, September 27-30, 2002, San Diego, USA
38. Uchi S, et al. *Int J Antimicrob Agents* 2004;23:155-63
39. Gonon H. *Clin Microbiol Infect* 2005;9:985-3
40. Jones RH, et al. *Clin Microbiol Infect* 2005;10:8-12
41. Sailer H, et al. *Drug Metabol Infect Dis* 2005;16:361-4
42. Bell L, Burridge J. *Commun Dis Public Health* 2002;27:Agg0566-66
43. Mouton RP, Linares C, Haver S, Bodek R, Hudson G, Beachlihe S, Johnson B, Cowdery M. Antimicrobial Susceptibility Patterns Associated with European IPC. *Producers, Poster 732* presented in the 29th ECCMID / 27th ICC, 07 May 2011 - 10 May 2011. Abstract Available at <http://www.eccmid.eu.org/abstracts/abstract.asp?id=19163> Accessed December 12, 2011

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Blame-Game In Obesity: Where Is The Fault?

Dr Arijit Chattopadhyay

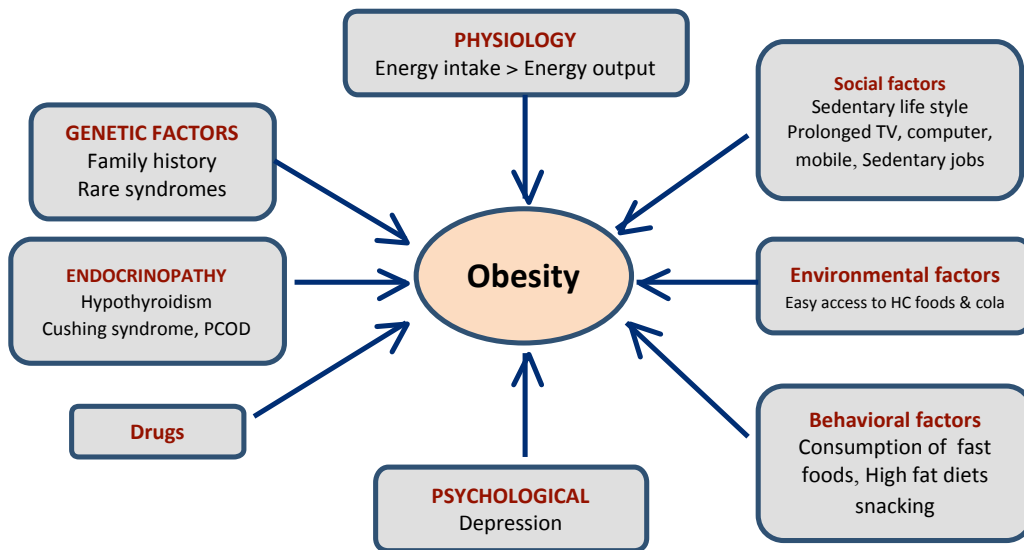
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What Causes Overweight and Obesity?

In simple term energy imbalance most often leads to overweight and obesity. Energy imbalance means that your energy INPUT is more than your energy OUTPUT.

Energy IN is the amount of energy or calories we get from food and drinks. Energy OUT is the amount of energy body uses for things like breathing, digesting, and being physically active.



Who Controls Energy Balance?

The biology of fat storage and energy metabolism is a fascinating subject. Like every vital function of our body, brain is the principal regulator of weight signal.

Unfortunately, due to the modern lifestyle where food is so abundant, it is overwhelmed by signals from gut/stomach- intestine, liver and fat tissue.

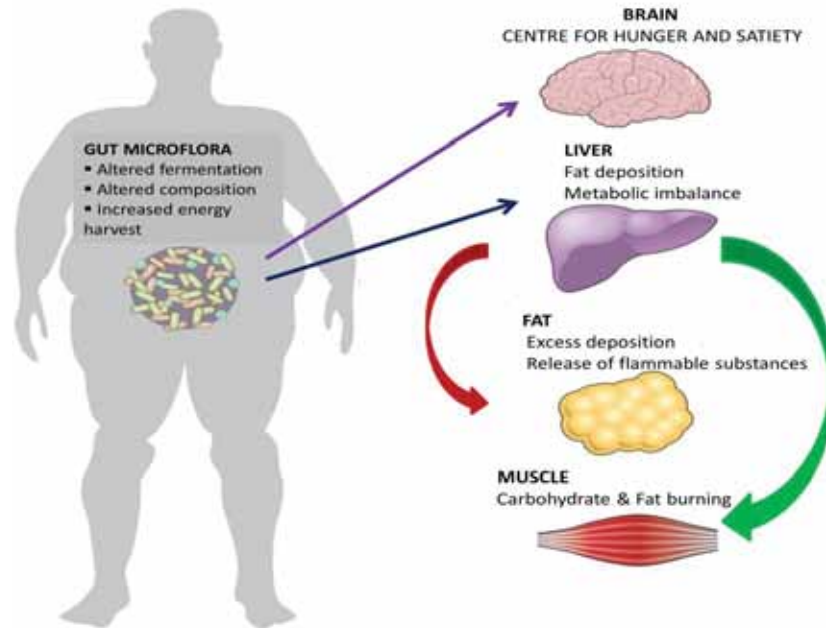
Whom to Blame: 'Genetics' or 'Environment'?

Many time patient tells us, Doc, Is it all in my genes/ families? How far this is true?

We need to remember that even if a patient carries 'bad' genes, ultimately it is the interaction between genetics and adverse environmental conditions, such as high-fat diets and sedentary lifestyles which is crucial. The human gene system appears to be very complex, therefore purely distinct genetic disorders are rarely found to be the sole "cause" of human obesity.

Only in few distinct situations, hormone disorders are directly responsible for significant obesity like excess cortisol (Cushing Syndrome), hypothyroidism (underactive thyroid). In contrast, obesity

frequently leads to a variety of hormone imbalances and metabolic problems like insulin resistance, polycystic ovary syndrome, delayed puberty, and hypogonadism.



Does Mood and Emotion have Something to do with Obesity?

The psychological and behavioral elements remain important because the final common act that leads to either obesity or its amelioration is the behavior of altered food intake and/or physical activity. It seems that there is bi-directional risk between obesity and common mental disorders. Activation of the brain signal system (endocannabinoid) increases appetite that leads to overeating - "particularly comfort foods rich in fats and sugars" - are common among depressed and anxious patients.

People with high levels of depression develop abdominal obesity and BMI at a faster rate. Cortisol, a stress hormone is often related to depression and abdominal obesity.

What about Gut Microflora/ Bacteria and Obesity?

Our food pipe (intestine/gut) is home to trillions of bacteria that help break down foodstuffs. Together the genes expressed by these intestinal microflora outnumber our own thousands of times.

Several mechanisms have been proposed as to how gut flora regulates weight; inflammation, energy from polysaccharides, altered fatty acid metabolism and composition in fat tissue and liver, insulin sensitivity and energy expenditure. Gut flora can probably influence food cravings and thereby play a part in determining dietary choices.



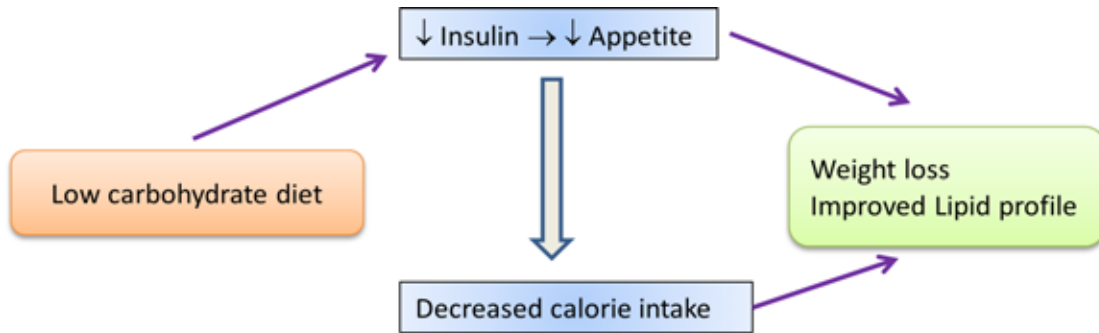
Obesity is hereditary, and the importance of gut flora shouldn't be underestimated. Flora is passed on from mother to child during birth, breastfeeding and early years, there by "obese gut flora" is passed on to the child. Furthermore, the key importance of early antibiotic use and dietary nutrient composition are increasingly recognized.

Finally How Food is Responsible for Obesity?

The food that we eat affects our health particularly weight. Regulation of food intake i.e., appetite appears to be the most central to the problem of obesity in most people. There is two-way communication between the brain ('hypothalamus') and peripheral tissues mainly, gut/intestine and adipose tissue.

Scientific studies have repeatedly documented that ingesting simple carbohydrates, such as white flour, white rice, sugar, pasta and potatoes, leads to a rapid rise in blood glucose with a vigorous pancreatic insulin response.

A diet low in carbohydrates and high in fat and protein so-called "Atkins weight-reducing diet" generally suppresses appetite.



Various additional dietary factors which may be responsible for weight gain include snacking (eating between major meals), eating out; generally higher in total energy, total fat, saturated fat, cholesterol and sodium, but contains less fibre and calcium and is overall of poorer nutritional quality than home food.

A diet rich in complex carbohydrates, such as beans, whole-grain foods, and nuts which raise blood glucose more slowly, therefore pancreatic insulin secretion is moderated. In addition fruits, vegetables, and nuts (especially almonds, walnuts, and hazelnuts), bean curd—or tofu—products are highly-recommended for sustained weight reduction and obesity related metabolic risks.



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Obesity in children: A Growing Concern

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How common is childhood obesity? Are there any Indian and Kuwait prevalence figures?

About 17% of all 15 year-olds in USA were classified as obese in 2007-8 during the NHANES survey. Increasing trend of prevalence in obesity is seen in the developing countries – Middle East 7%, North Africa 8%, Latin America and Caribbean 4.5-7%.

Large-scale epidemiological data are not available for India but the trend towards obesity seems to be more in the preadolescents and adolescents, children from affluent families, from urban areas and those with an obese parent and sibling. In urban Indian adolescents, studies have shown a prevalence of 5-7% and obesity is on the rise.

Kuwait has one of the highest levels of obesity in the world. An estimated one-third of Kuwaiti adults are obese and there have been several reports describing the pervasiveness of childhood and youth obesity in varying age groups.

What are the bedside methods for the diagnosis of obesity?

- Physical examination should be directed to overall body proportions and the presence or absence of any distinctive or dysmorphic features that could guide the diagnosis to rare obesity syndromes.
- Anthropometry (recording and plotting of height, weight, BMI, waist circumference, waist hip ratio, and skin fold thickness) is essential for diagnosis, follow up and prediction of risk for comorbidities.

Under 2 years of age:

Weight for length is usually used, overweight being defined as greater than 95th percentile of weight for length.

For ages 2-19 years:

1. Body Mass Index (BMI): BMI is calculated by dividing measured body weight in kilograms by the height in meters squared.



Figure 1. Measurements in children should be accurate with appropriate instruments and technique.

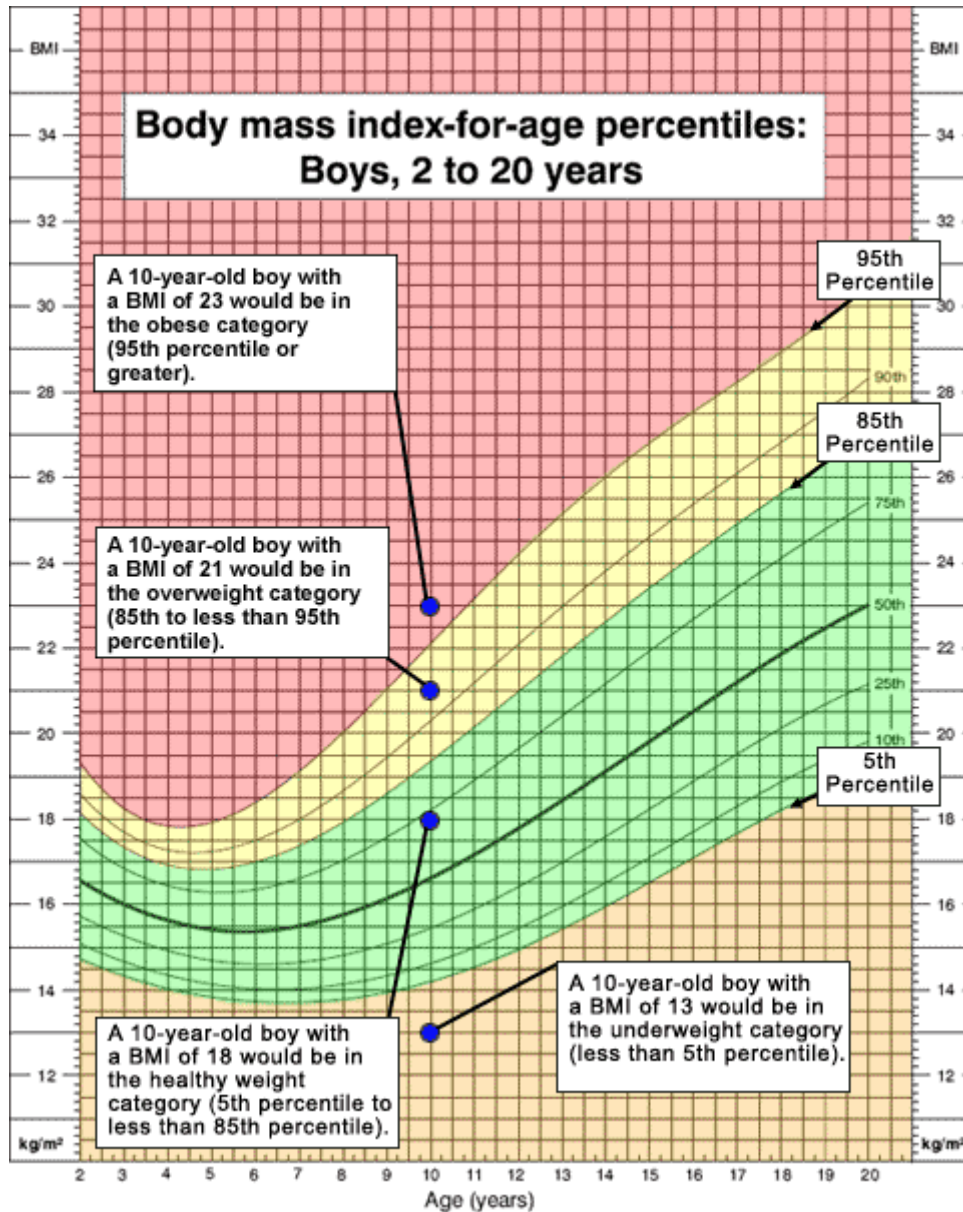


Figure 2: Example of a BMI-for-age growth chart: Available at: CDC Growth Charts: United States

United States Centre for Disease Control and Prevention (CDC) growth charts, which include gender specific BMI for age growth charts are the best for use: Obesity is defined as 95th percentile or greater of BMI for age; between 85th –95th percentiles are at risk for overweight. See Figure 2 for explanations.

BMI charts are available for Indian children based on Indian studies in on well-nourished children are now available (Agarwal KN et al 2001; Khadiolkar V et al 2009 and Marwaha R et al 2011.)



2. Waist Circumference (WC): WC above 95 cm is a predictor of cardiovascular and metabolic risk factors in obese children. Currently there are limited pediatric reference values for WC and these should be developed.

3. Waist Hip Ratio (WHR): Most physicians now prefer the Waist-to-Hip Ratio (WHR) which provides

better information about the distribution of body fat. To find the ratio, the circumference of the waist at the naval is measured while the patient stands relaxed. The next step is to measure around the hips at the point where the buttocks protrude the most. The waist measure is then divided by the hip measure to calculate the WHR. Women should have a ratio of 0.8 or less, while men should have a ratio of 1.0 or less. Values above these are considered obesity. WHR charts for children are not available for all populations.

Why do children become obese?

Obesity is, in simple words, caused by an imbalance of energy intake and output, but exact mechanisms are unclear.

- Genetic influences are strong, as shown by studies on adopted children and twins.
- Environmental factors are equally important, e.g. differences in food choices, levels of physical activity, attitudes to food, activity, body image, etc. A consistently strong correlation is seen with TV viewing (reduces activity, increases calorie intake, pushes wrong messages about food, encourages intake of junk foods).
- Pathologic causes like endocrine diseases (hypothyroidism or Cushing syndrome), brain disorders (hypothalamic obesity) and genetic syndromes (e.g. Prader-Willi syndrome), account for less than 1% of all cases.

In general, obesity runs in families, as they share both genes and environment; parental obesity is a strong risk factor. About 80% of children of both obese parents, and 40% of one obese parent are overweight!

How do you clinically differentiate pathologic from non-pathologic obesity?

Constitutional or Endogenous Obesity: Majority of children with obesity does not have an organic cause. These children grow normally and are tall for their age. They have proportional obesity and normal development. It is important to identify this subgroup of children so as to avoid unnecessary investigations.

Syndromic obesity can be differentiated by presence or absence of following features.

1. Developmental delay (milestones)
2. Abnormal anthropometry (body measurements)
3. Dysmorphic features (abnormal features found on examination)
4. Visual abnormalities.

Exogenous obesity: Obese children with an underlying pathology are shorter than expected (unless they also have precocious puberty or virilization). Their identification is important as they have specific forms of treatment.

Genetic Obesity: There are reports of single gene mutations with haploinsufficiency in human subjects and single gene disorders resulting in obesity; but most cases of obesity are likely the result of subtle interactions of several related genes with environmental factors, which favour the net deposition of calories as fat, culminating in the obese phenotype. Obesity is unlikely to be caused by a single gene defect unless it is extreme (BMI >60) or present in an isolated population group.

Some examples of Exogenous and Syndromic Obesity:

- Cushing syndrome: Due to adrenal hormone excess; short stature, hypertension and striae.
- Hypothyroidism: Due to thyroxine deficiency; short stature, poor school performance, rough and dry skin, facial puffiness and occasionally goiter.
- Prader-Willi syndrome: Intrauterine hypotonia, mental retardation, and underdeveloped genitals, almond shaped eyes, temper tantrums, hyperphagia (voracious appetite), or V-shaped mouth.
- Laurence-Moon Biedl-Bardet syndromes: Blindness or poor vision due to retinitis pigmentosa (abnormal pigment of retina), underdeveloped genitals, developmental delay, and/or spastic paraplegia (weakness or stiffness of limbs).



Figure 3. A child with Cushing syndrome

What is metabolic syndrome and does it occur in children?

Metabolic syndrome (MS) is discussed in detail in a separate chapter. The National Cholesterol Education Program of USA guidelines for adults have been modified for adolescents such that it requires **three of five characteristics** for diagnosis of MS in adolescents:

- 1) Abdominal obesity given as waist circumference greater than 90% or more (from National Health and Nutrition Examination Surveys III)
- 2) Hypertriglyceridemia with triglyceride concentration (>110 mg/dl or 1.2 mmol/L or more);
- 3) Abnormal cholesterol profile with high-density lipoprotein (HDL) cholesterol less than 40 mg/dl or 1 mmol/L
- 4) Blood pressure: 90% or more (from National Health and Nutrition Examination Surveys III)
- 5) Impaired glucose tolerance, i.e. elevated fasting plasma glucose 100 mg/dl or 5.5 mmol/liter or more.

The overall prevalence of MS among 12 to 19 year-olds in the USA was found to be 4.2%. Recent studies noted that the risk of MS was nearly 50% in severely obese youngsters, and risk increased with every 0.5 kg/m² increment in BMI.



Figure 4. Just over half of obese children suffer from hypertension, a study has found.

Do the adolescent obese girls have increased risk for menstrual disorders? (The Link between Obesity and PCOS)

PCOS is discussed in detail in another chapter. In adolescent girls and young women, excess central or abdominal body fat is associated with excess of male sex hormones (hyperandrogenemia). To complete the circle, insulin resistance correlates strongly with the abdominal fat in obese adolescent girls. Insulin resistance stimulates ovarian as well as adrenal androgen and estrogen production. Obese girls also have lower concentrations of Sex Hormone Binding Globulin (SHBG) with consequent further increase in the (free) biologically active fraction of the sex hormones. These hormonal perturbations place the obese adolescent girl at a high risk of menstrual disorders and early onset of polycystic ovarian syndrome (PCOS). Weight loss induces a decrease in insulin resistance and androgenic activity, particularly in adolescent girls with the abdominal pattern of obesity.

Do children with non-pathologic or constitutional obesity require lab tests?

Investigations are guided by the clinical presentation.

The tall and obese child, with normal growth velocity, normal BP or mild hypertension, no clinical evidence of pathology, advanced bone age (usually close to height age) is likely to have exogenous obesity. The Endocrine Society's guidelines recommend against routine testing for hormones in such children.

Routine laboratory assessment of children above 95th centile for BMI should include:

- Fasting glucose, lipid profile, Liver enzymes (ALT and AST).
- Screening for other co morbidities: e.g. hypertension.

Children at increased risk for the metabolic syndrome may require periodic oral glucose tolerance tests (OGTT) or insulin levels starting from age 10 years if they have additional risk factors such as:

- Family history of type 2 diabetes in first or second degree relatives.
- Signs of insulin resistance or conditions associated with insulin resistance (acanthosis nigricans, hypertension, dyslipidemia, or PCOS).

What are the long-term deleterious effects of childhood obesity?

Almost 50% obese children become obese adolescents, and almost 80% of them become obese

adults. Long-term deleterious effects of childhood obesity include:

1. Diabetes mellitus
2. Metabolic syndrome (MS)
3. Hyperandrogenism (abnormally high male sex hormone levels, PCOS)
4. Cardiovascular risks: Heart disease and hypertension
5. Respiratory disorders: Asthma, sleep disorders (obstructive sleep apnea)
6. Non-alcoholic steato-hepatitis (NASH)
7. Gall bladder disease
8. Orthopedic disorders: Injury to growth plate, slipped capital femoral epiphyses, genu valgum, tibia vara.
9. Dermatologic disorders: Acanthosis nigricans
10. Neurologic disorders: Pseudotumor cerebri (increase in intracranial tension causing headache and convulsions).

Weight Loss - A Worthwhile Goal

Several studies have shown the importance of weight reduction in obesity management. The weight loss goals have changed significantly, moving away from attaining ideal body weight and cosmetic thinness to a more appropriate and attainable goal of decreasing the medical complications associated with obesity. Most experts recommend losing not more than 0.5 to 1 kg per week. Several interventions are available for the management of obesity including behavioral therapy, diet modifications, and drugs. Success in losing weight and maintaining that weight loss is heavily dependent upon the interrelation of these modalities with diet and physical activity.

“Eat less, walk more” and let’s not forget that chubby children are potential health hazards.



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OBESITY AND HEALTH CONSEQUENCES

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Obesity and Dyslipidemia

Dr Raji Easo, Dr Sachin Bangera

Department of Medicine
Al Sabah Hospital, Kuwait



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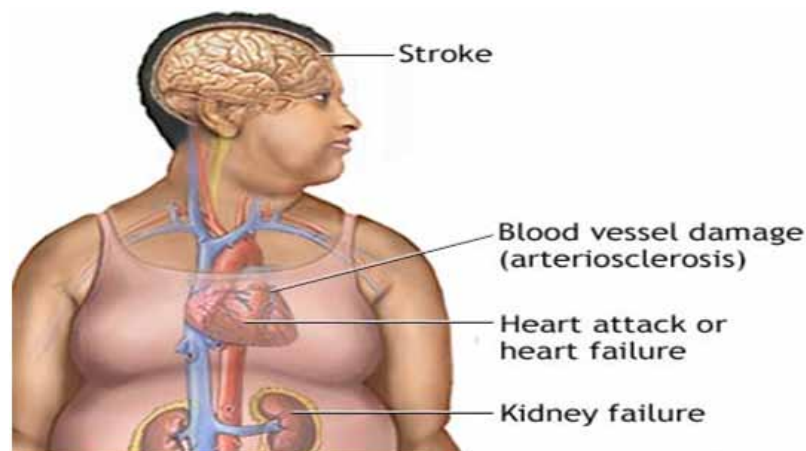
Obesity and Dyslipidemia are very closely related terms. Whenever we see an overweight person it automatically draws our attention to the fact that he has excess fat in the body.

Obesity is a pandemic in our society and is responsible for increasing incidence of a variety of medical illnesses; heart disease, snoring and sleep disturbances, high blood pressure, high blood sugar, cancer, osteoarthritis.



What is Dyslipidemia?

Dyslipidemia means derangement in blood lipids i.e. cholesterol (LDL, HDL) and triglycerides. Dyslipidemia associated with obesity plays a very important role in narrowing of arteries - 'atherosclerosis' and heart disease.



It's important to keep your cholesterol levels within healthy limits. And if you have other risk factors for developing heart disease, you need to be even more careful — especially with your low-density lipoprotein (LDL) or 'bad' cholesterol.



What are 'bad' [LDL], 'good' [HDL] cholesterol and triglyceride?

Low-density lipoprotein (LDL): LDL or 'bad' cholesterol (LDL-Ch) is the circulating cholesterol in blood which has a tendency to be deposited in the walls of arteries, making them hard and narrow. This causes clogging and sluggish blood circulation leading to complete blockage of blood flow. Because LDL cholesterol is a major risk factor for heart disease, it's the main focus of cholesterol-lowering treatment.

High-density lipoprotein [HDL]: HDL cholesterol (HDL-Ch) picks up excess unwanted cholesterol and takes it back to liver. HDL cholesterol is known as 'good' cholesterol because it helps prevent arteries from becoming clogged.

Triglycerides are another type of lipid found in blood. When you eat, your body converts any calories it doesn't need to use right away into triglycerides.

What are the blood levels of various cholesterol?

	#Healthy	Desirable	Borderline	Risky
Total Cholesterol	3.2-5.2 mmol/L	< 5.2	5.2-6.0	> 6.0
LDL-Ch	1.5-4.1 mmol/L	< 1.8*, < 2.6 **, 2.6-3.3	3.4-4.1	> 4.1
HDL-Ch	1.0-2.4 mmol/L	1.5	1.3-1.5	< 1 (man) < 1.3 (woman)
Triglyceride	0.4-1.7 mmol/L	< 1.7	1.7-2.2	2.3-5.5, > 5.5***
# Healthy [Normal Range] indicates common population range * Desirable for person with very high risks like diabetes etc. ** Desirable for those under treatment for high cholesterol *** very high triglyceride				

What is the relationship between obesity and dyslipidemia?

Obesity frequently leads to a cluster of metabolic abnormalities including lipids called 'metabolic syndrome' which is covered in another chapter.

Some important points worth realizing are that

- Obesity is always associated with increase in triglycerides
- Obesity is associated with a decrease in HDL
- Obesity leads to small dense LDL particles

Distribution of fat in the body also plays an important role also when it comes to dyslipidemia. People who have central body fat distribution (as measured by waist circumference (WC) and waist hip ratio (WHR) have more tendencies to have dyslipidemia.



How to treat dyslipidemia in obesity and metabolic syndrome?

Because LDL cholesterol is a major risk factor for heart disease, it's the main focus of cholesterol-lowering treatment. Your target LDL number can vary, depending on your underlying risk of heart disease. In general, the lower your LDL cholesterol level is, the better.

- LDL-Ch reduction Diet low in saturated fat, trans-fat and cholesterol - substitute grains, unsaturated fatty acids from fish, vegetables, legumes, and nuts. Change to low fat or no fat dairy products, poly- and mono-unsaturated fats, soluble fiber, soy protein
- Raise HDL-Ch by increasing physical activity and avoiding weight gain.
- Lower TG by decreasing intake of sugars and refined carbohydrates, decrease alcohol intake, and increasing omega 3 fatty acids, complex carbohydrates like whole grains.
- Medicines: Major groups include Statins (atorvastatin, rosuvastatin, simvastatin), and Fibrates (Fenofibrate, Bezafibrate).



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Obesity and Heart Disease

Dr. A. M. Shukkur

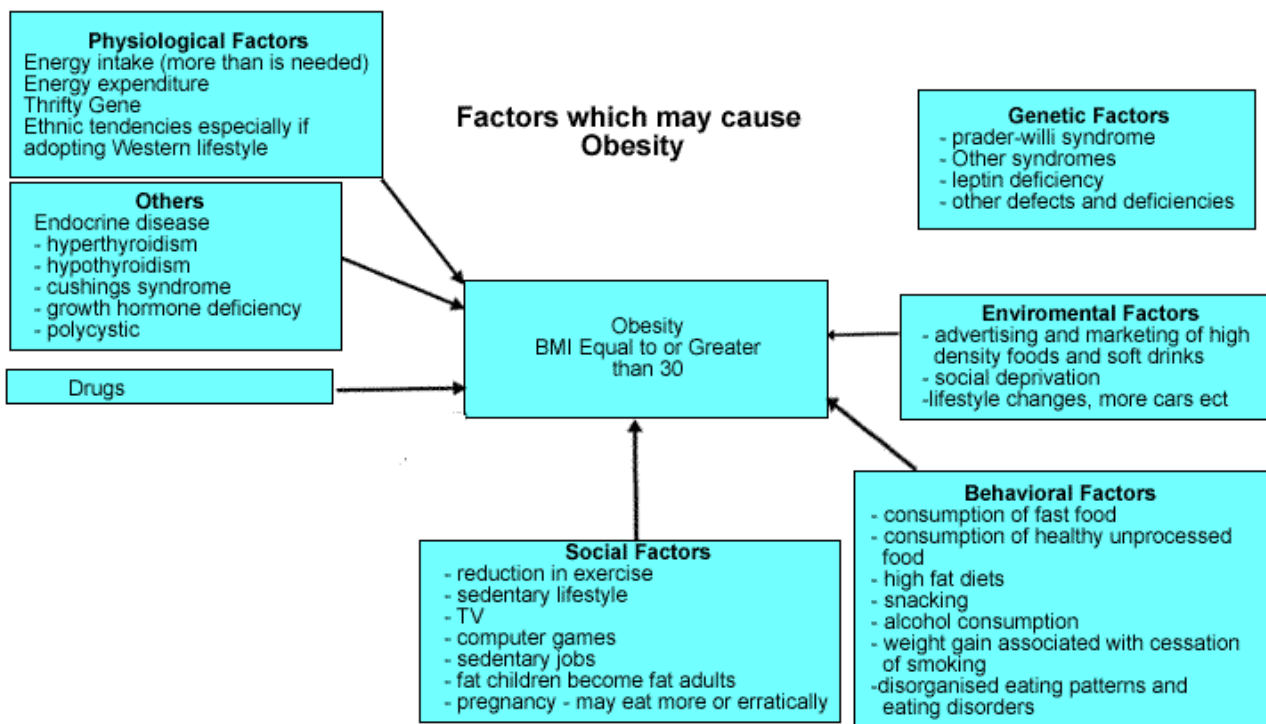
Cardiology Division, Chest Diseases Hospital
Kuwait Health Center



Obesity is the most common disorder in the medical practice and among the most frustrating and difficult to manage. The incidence of obesity is increasing worldwide. The rates in Europe and America are generally high while the rates in Africa and Middle East countries are variable.

There are numerous adverse effects of obesity on cardiovascular health and has been implicated as one of the major risk factors for heart attack (coronary heart disease), hypertension and heart failure. Central obesity is directly associated with higher mortality in patients with coronary heart disease. Indexes that are used for predicting the associated health risks in obese individuals with heart disease (Cardiovascular disease) are body mass index (BMI) waist circumference (WC), waist-to-hip ratio (WHR) and weight-to-height ratio.

It is caused by a complex interaction between the environment, genetic predisposition and human behavior. Common factors that can lead to obesity are summarized below.



What are the effects of Obesity on Heart? (Cardio-vascular Structure and Function)

Cardiovascular complications (especially **heart attack, hypertension and heart failure**) are among the most common and most devastating disorders that occur in association with obesity.

- Elevated blood levels of LDL cholesterol, triglycerides and reduced levels of HDL cholesterol are known to increase cardiovascular risk in obese individuals.
- Increased levels of leptin, a fat derived hormone (an adipocyte derived hormone) may be particularly related with heart disease.
- Heart attack: angina, acute coronary syndrome, non-ST-segment myocardial infarction and ST segment elevation M.I (occurring at a younger age)
- High blood pressure leads to thickening of the ventricular walls, a process called Left Ventricular hypertrophy.
- Heart Failure: Studies have shown that for every 1 kg/m² increment in BMI the risk of heart failure increased 5% in men and 7% in women. (Framingham Heart Study).

There are numerous adverse effects of obesity on cardiovascular health. Obesity has several adverse effects on the heart structure and function. Cardiac workload is greater in obese individuals.

It affects the chamber dilation and wall thickness (Left Ventricular Hypertrophy,) of the heart leading to heart failure and irregular heartbeats (atrial fibrillation, AF). Previous studies have shown a higher prevalence of hypertension and heart failure in morbid obese individuals.

3

Adverse Effects of Obesity on Heart (Cardiovascular System) in brief are listed below.

A. Effects on Haemodynamics.

1. Increases total blood volume.
2. Increases cardiac output.
3. Increases cardiac workload.

B. Increases in blood pressure (Hypertension).

C. Effects on Lipids (Lipid abnormalities).

1. Elevated serum total cholesterol (Normal range 3.1 – 5.2 mmol/L)
2. Elevated serum triglycerides (Normal range 0.34 – 2.28 mmol/L)
3. Elevated serum LDL cholesterol (Normal range 1.7 – 3.4 mmol/L)
4. Elevated serum Apo lipoprotein-B (Normal : Less than 4.99 mmol/L)
5. Decreased serum HDL cholesterol (Normal range: 1.01 - 2.49 mmol/L).
6. Decreased serum Apo lipoprotein -A1 (Normal range 5.8 – 12.2 mmol/L).

D. Abnormal left ventricular geometry

1. Concentric remodeling
2. Left ventricular hypertrophy

E. Endothelial dysfunction

F. Increased systemic inflammation and prothrombotic state (Increases the blood clot formation).

G. Systolic and diastolic dysfunction

H. Heart failure

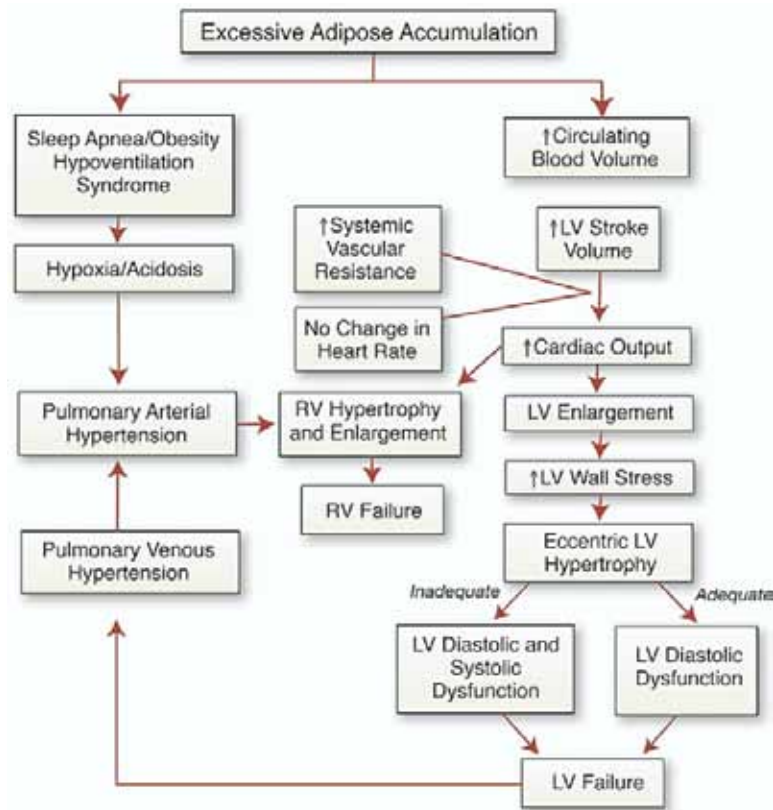
I. Coronary heart disease (ACS, MI and Heart Failure)

J. Atrial fibrillation

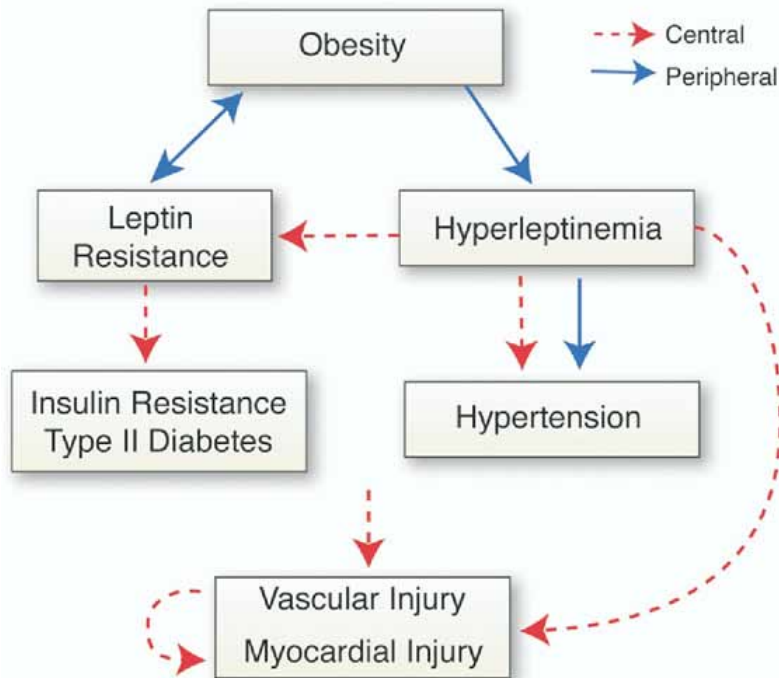
K. Obstructive sleep apnea/sleep-disordered breathing and pulmonary hypertension.



What are the effects of obesity on heart muscle and its consequences?



Central and Peripheral effects of obesity is represented below.



What are the treatment options and preventive measures in obese individuals with cardiovascular complications (Heart disease)?

Life style modification remains the cornerstone of anti-obesity treatment. American Heart Association (AHA) guidelines recommend maintenance of a healthy body weight as a BMI goal of 18.5-24.9 kg/m². Therapies aimed in an attempt to lose weight include dietary intervention, physical activity, pharmacotherapy and surgery. Diet and physical activity and behavior therapy are all recommended for individuals with BMI more than 25kg/m², based on AHA and NCEP guidelines. Drugs can be introduced as adjuncts to assist and maintain the weight loss in unsuccessful attempts.

- A. Dietary interventions: The American Heart Association (AHA) and National Heart, Lung and Blood Institute (NHLBI) recommends diets containing 1000-1200 kcal/day for women and 1200-1600 kcal/day for men for those who weigh 75kg or decreasing daily calories by 500-1000 kcal/day. Weight loss is recommended at 0.5-1 kg /week or 10% of body weight over 6 months followed by a period of weight maintenance with diet, exercise and behavior modification.
- B. Physical activity: moderate intensity physical activity for at least 30 minutes per day.
- C. Behavioral therapy: Includes stress management, self monitoring, social support and cognitive restructuring,
- D. Drug therapy: National Institute of Clinical Excellence guidelines indicate (The waist circumference above 88 cm for women or 102 for men) the use of adjunct pharmacotherapy in conjunction with life style modification. At present orlistat is the only anti-obesity drug approved by the European Medicines Act (EMA) and Food and Drug Administration (FDA). This drug is pancreatic lipase inhibitor. Orlistat has been shown to modestly improve the risk factors of obesity related comorbidities such as blood pressure, diabetes mellitus and lipid abnormalities.
- E. Current Endoscopic and surgical Interventions. Intra-balloons and endosleeve, laparoscopic gastric banding, Gastric bypass surgery and sleeve gastrectomy.
- F. Treatment for cardiovascular complications. In addition to the management of obesity, cardiovascular complications are also to be treated in conjunction with treatment for obesity. The mainstay of treatment for heart diseases (Cardiovascular diseases), apart from dietary and lifestyle modification, is anti-ischaemic, revascularization strategies, blood thinning drugs (antiplatelets, and thrombolytic therapy), anti-hypertensive medications, lipid lowering drugs (statins Fibrates, Nicotinic acids and Bile acid sequestrants) and treatment for heart failure.
- G. Coronary revascularization: percutaneous coronary intervention (PCI) with stenting and Coronary artery bypass graft (CABG). Percutaneous coronary angioplasty with stenting is preferred to Coronary Bypass graft in morbid obese individuals with coronary artery disease.

Suggested Dietary Nutrient Composition for patients who are overweight or obese

Nutrients	Recommended intake
Saturated fat	< 7% of total calories
Monounsaturated fat	20% of total calories
Poly unsaturated fat	10% of total calories

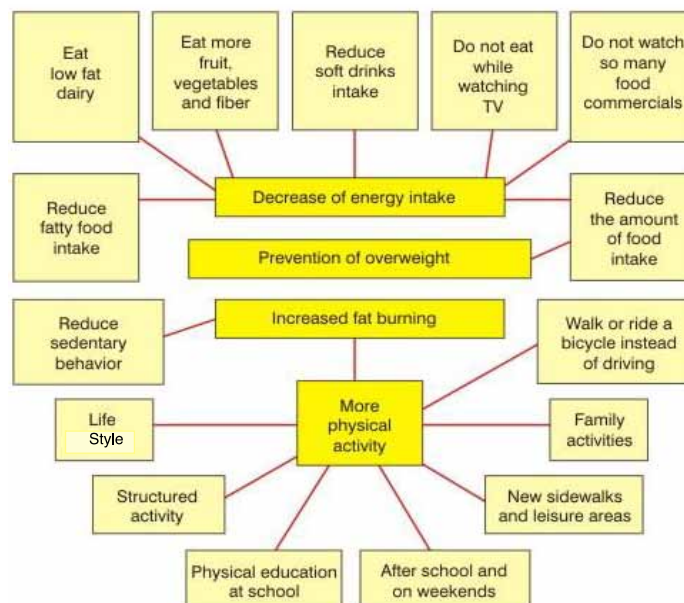


Total fat	25-35% or less of total calories
Carbohydrate	50-60% or more of total calories (complex carbohydrate from a variety of vegetables, fruits, whole grains)
Fiber	20-30 g/day
Proteins	15% of total calories
Cholesterol	< 200 mg/day

AHA diet and lifestyle recommendation for cardiovascular disease risk reduction in obese individuals

- Balance calorie intake and physical activity to achieve or maintain a body weight
- Consume a diet rich in vegetable and fruits.
- Choose whole-grain, high fiber foods.
- Consume fish, especially oily fish, at least twice a week
- Limit your intake of saturated fat to < 7% of energy, trans fat to < 1% and cholesterol to < 300 mg per day by:
 - Choosing lean meats and vegetables alternatives
 - Selecting fat free (skim), 1% fat, and low fat dairy products; and
 - Minimizing intake of partially hydrogenated fats
- Minimize your intake of beverages and foods with added sugars
- Choose and prepare foods with little or no salt
- If you consume alcohol, do so in moderation
- When you eat food that is prepared outside of the home, follow the AHA diet and lifestyle recommendations.

How to prevent heart disease caused by overweight and obesity from childhood and adolescence?



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Effort Intensity for Various Commonly Performed Exercise Activities

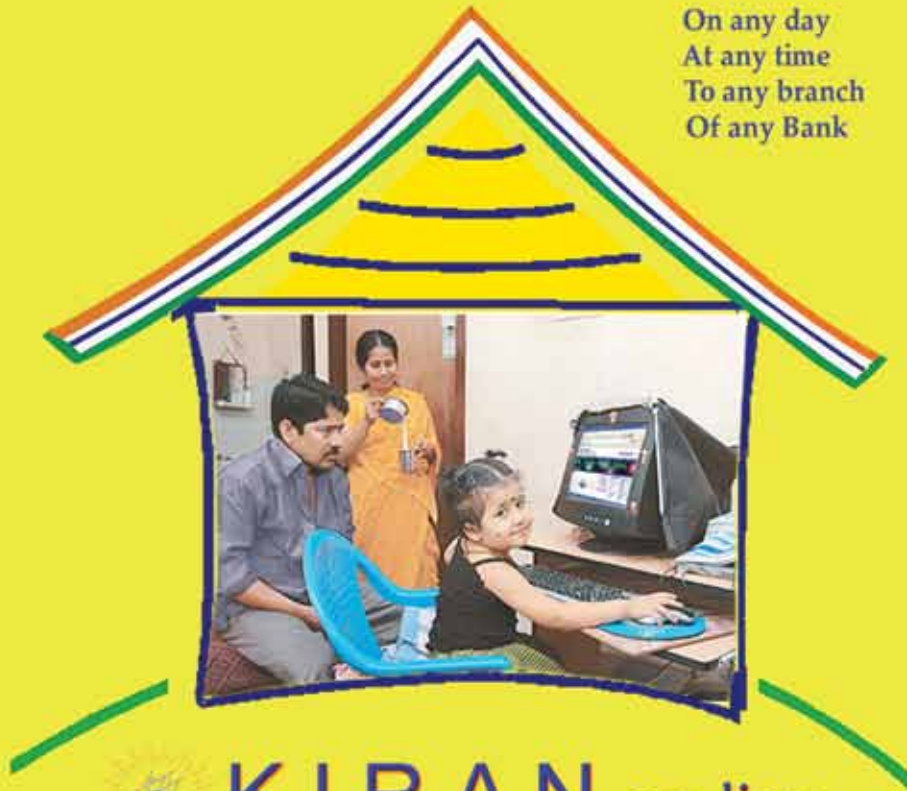
Light (>0.3 MET or > 4 KacI/min)	Moderate (3.0 – 6.0 MET or 4-7 KacI/min)	Hard/ Vigorous (>6.0 MET or >7 KacI/min -1)
Walking, slowly (strolling) (1-2miles/h) Cycling, stationary (>50 W) Swimming, slow treading Conditioning exercise, light stretching Golf, power cart Bowling Fishing, sitting Boating, power Home care, carpet sweeping Mowing lawn, riding mower Home repair, carpentry	Walking, briskly (3-4 miles/h) Cycling for pleasure or transportation (<10 miles/h) Swimming, moderate effort Conditioning, exercise, general calisthenics, racket sports, tennis Golf, pulling cart or carrying clubs Fishing, standing/casting Canoeing, leisurely (2.0-3.9 miles/h) Home care, general cleaning Mowing lawn, power mower Home repairs, painting	Walking, briskly uphill or with a load Cycling fast or racing (>10 miles/h) Swimming, fast treading or crawl Conditioning exercise, stair ergometer, ski machine, racket sports, single tennis, racquetball Fishing in stream Canoeing, rapidly (>4 miles/h) Moving furniture Mowing lawn, hand mower

Key Points to Remember

- Obesity is an independent risk factor for cardiovascular disease (Heart Disease).
- The common investigations which are advisable and to be considered for overweight/obese individuals with the history of chest pain on effort, apart from physical examination are as follows:
 - Cardiac evaluation: ECG, chest X-ray, stress ECG, stress myocardial perfusion scan (nuclear SPECT), Echocardiography, Stress Echo, Coronary CT angiography (MDCT coronary angiography) and Coronary Angiography (according to the severity of symptomatology/results of stress ECG/ Nuclear stress perfusion scan with Gated blood pool scan).
 - American Heart Association (AHA) guidelines recommend BMI, to be achieved a target level of 18.5-24.9 kg/m² (normal BMI), LDL cholesterol less than 2.5mmol/l, Blood pressure of less than 120/80 mm Hg and lifestyle modification with regular physical activity, avoidance of smoking and maintenance of normal blood sugar level.
 - Dietary patterns include a balanced diet with high consumption of fish, vegetables, fruits and whole grain and restriction of salt and alcohol.
 - Drugs can be added as adjuncts to assist and maintain the weight loss.
 - The treatment for Coronary heart disease (Heart Attack) Hypertension, Heart Failure, Arrhythmia and Hyperlipidemia.
 - Quality of life in obese individuals may be lower than the normal and our main objective is to build a healthier life and free of cardiovascular disease (Heart disease).

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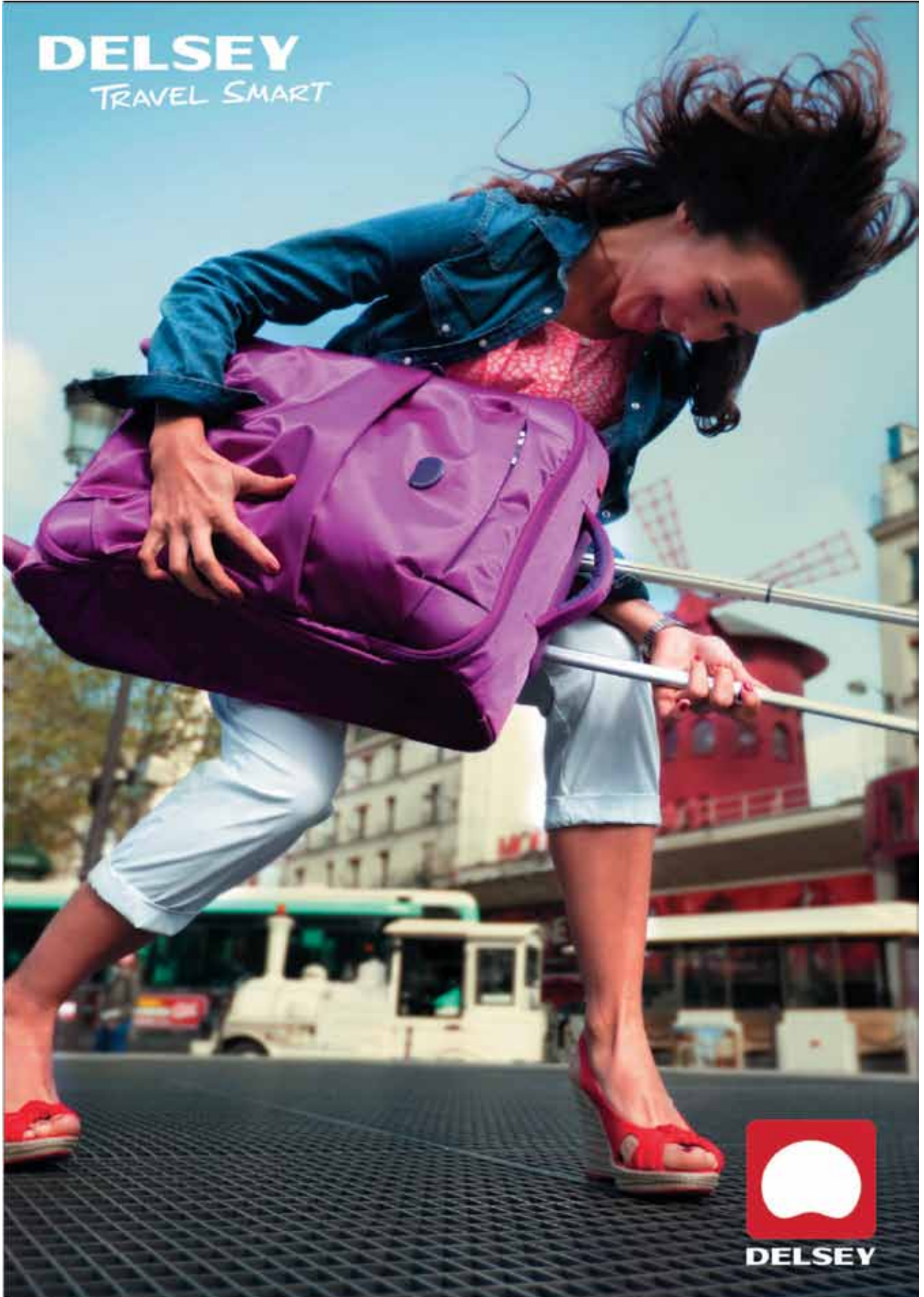
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Obesity and Metabolic Syndrome

Dr Arijit Chattopadhyay
Department of Endocrinology
Al Sabah Hospital, Kuwait



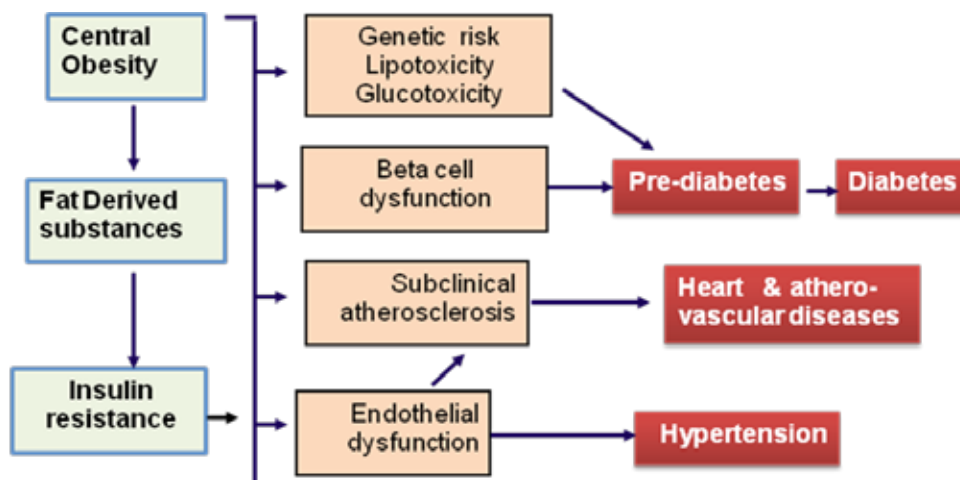
“OBESITY and METABOLIC SYNDROME” is a rising clinical challenge that received great deal of attention recently since it has been linked to the development of heart/cardiovascular disease (CVD) and type 2 diabetes (T2DM). Overweight and obesity are chronic diseases the origin of which can often be traced to habits developed during childhood, and the continuation of which is rooted in the modern environment.

Metabolic Syndrome (MS) or Insulin Resistance Syndrome (IRS) consists of clustering of common conditions like central (abdominal) obesity, hyperglycemia, hypertension, and dyslipidemia. Other important diseases strongly associated with MS/ IRS are non-alcoholic steato-hepatitis (NASH) commonly known as ‘fatty liver’ and polycystic ovary syndrome (PCOS).



Consequences of Metabolic Syndrome/IRS

This clinical entity reflects the major detrimental role that obesity, especially abdominal fat plays as a determinant of insulin resistance that in turn results in adverse clinical consequences of hypertension, atherosclerosis, and finally, abnormal glucose tolerance (IFG/IGT) and diabetes. Indians compared to white population tend to have more abdominal visceral adipose tissue (VAT), causing higher insulin resistance, despite having lean body mass (low BMI).



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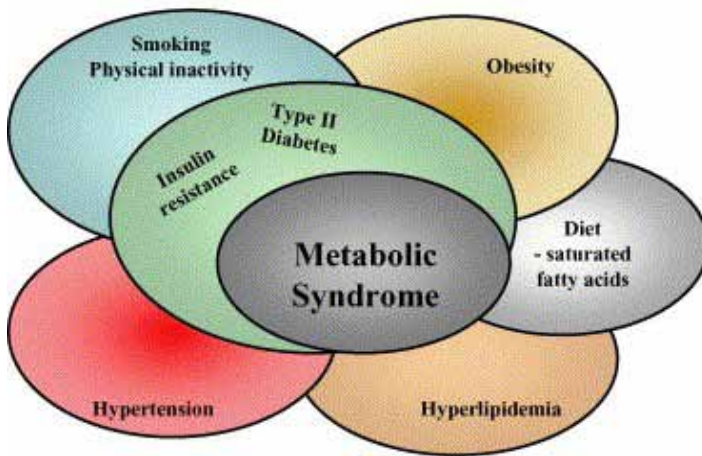
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Risk Factors of Obesity & Metabolic Syndrome

- Genetic predisposition e.g. South East Asians including Indians.
- Fetal malnutrition (IUGR) and “catch-up fat” deposition.
- Dietary factors; eating high-fat diets, especially fried foods, high carbohydrate intake, so called ‘refined calorie dense foods’ and empty-calorie (cola drinks).
- sedentary lifestyle
- Chronic stress
- Food marketing strategies intentionally targeting children attracting them to eat high-calorie, low-nutrient highly profitable “junk” foods is an alarming sign.



Measurement of Obesity & Metabolic Syndrome

It is generally recommended to consider Indians as obese if BMI $>25 \text{ kg/m}^2$, Waist circumference (WC) cut-offs of $>90 \text{ cm}$ in men, $>80 \text{ cm}$ in women, Waist-Hip Ratio (WHR) 0.88 and 0.81, respectively.

Watch for presence of Metabolic Syndrome (THREE of the following FIVE risk factors) in routine out-patient (OPD) visit

- Look for central obesity, routinely measure waist circumference, WHR.
- Blood pressure
- Triglyceride
- Lipid status; HDL so called ‘good cholesterol’
- Insulin resistance, Fasting glucose/glucose tolerance test



Metabolic syndrome

- Central Obesity
- High blood pressure
- High triglyceride
- Low HDL cholesterol
- Insulin resistance

Treatment of Metabolic Syndrome

- There is no specific single therapy to this complex and multifactorial issue.
- Lifestyle modification is considered to be the first and most important therapeutic target. Lifestyle modifications should be addressed at each clinic visit.
- Advice regarding structured programs to lose weight, weight maintenance and meal



replacement ideas are important.

- It is necessary to teach children about lifestyle modification through the school curriculum as they are most receptive to such advice.
- Reducing stress through meditation, biofeedback relaxation, adopting healthy lifestyle and giving up smoking are all important components for a successful healthy lifestyle campaign.
- A thorough discussion of various components of metabolic syndrome and their intended risk should be done with all patients.

Start with small goals like, for example

- Take the stairs/slope instead of the elevators.
- Park your car at the far end of the parking lot and walk back.
- Get off the bus/ train two blocks prior and walk home.
- Take a walk during your lunch break.
- Encourage to form a group, to engage in sports like golf, swimming.
- Exercise at home with safe equipment while watching a favorite TV program.
- Encourage a gradual increase in activity to finally achieve 30 minutes per day.

Potential health benefits of 10% weight reduction in obesity related co-morbidities.

Mortality	20% reduction total mortality 30% reduction diabetes related deaths 40% reduction obesity-related cancer deaths
Type 2 Diabetes	↓ 50% in fasting glucose ↓ 15% in HbA1c
Blood pressure	↓ 10 mmHg systolic ↓ 20 mmHg diastolic
Lipids	↓ 10% total cholesterol ↓ 30% triglycerides ↓ 15% low density lipoprotein (LDL) ↑ 8% high density lipoprotein (HDL)

General advice towards metabolic Syndrome

- Five or more servings of fruit and vegetables day
- Six or more servings of grain including whole grain fiber intake of 25 g/day.
- Moderate calorie restriction—aim for a weight loss of 5–10% in one year.
- Physical activity and exercise: Moderate increase in physical activity, approximately 30–40

min/day brisk walking on most days of the week (150 min/wk) or at least 90min /wk of vigorous aerobic exercise.

Obesity

- Referral to a professional for nutritional counseling.
- Reduced energy diets are more effective 500–1000 calorie/day reduction.
- Behavioral change should emphasize setting goals, planning meals, reading food labels, eating regular meals, reducing portion sizes and avoiding eating binges.
- Refer to a structured program to help weight loss and increase physical activity.
- Anti-obesity Drugs: Orlistat.

Insulin resistance & Prevention of diabetes

- Weight reduction
- Metformin (glucophage®)

Dyslipidemia (covered in 'obesity and dyslipidemia' chapter)

Blood pressure (BP)

- Decrease salt intake to around 6 g/day
- Moderate weight loss and weight maintenance.
- Limit alcohol intake to 2 drinks/day in men and 1 drink/day in women
- Dietary Approach to Stop Hypertension (DASH) diet recommends with 5–9 servings of fruits and vegetables, 2–4 servings of low fat dairy products.
- Drugs: According to professional advice.

Endothelial dysfunction and Pro-coagulant milieu

- General lifestyle changes.
- Aspirin
- Clopidogrel (Plavix®)

Preventing Obesity/Metabolic Syndrome Pandemic

- Identify high-risk child /adolescent population early to implement lifestyle modifications.
- Well-defined strategies for screening and guidelines are needed. Routine measurement of BMI and WC is mandatory as part of the vital signs.
- Prevention of the obesity and metabolic syndrome at the present time is of utmost importance to avert the epidemic of diabetes and cardiovascular disease in the world.



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Obesity and Digestive Diseases

Dr Rosh Varghese

Department of Gastroenterology
Mubarak Al Kabir Hospital, Kuwait



Obesity is a leading cause of illness and death worldwide. It is one of the greatest public health challenges of this century, with more than 1.6 billion adults classified as being overweight and 400 million as obese. Obesity also increases the risk of developing several chronic diseases such as type II Diabetes mellitus, coronary heart disease (responsible for heart attacks) cerebrovascular disease (responsible for strokes), high blood pressure, gout, sleep apnea and a form of liver disease called non-alcoholic fatty liver (NAFLD).

Obesity and Liver

Obesity Can Lead to Fatty Liver...a Silent Killer

Liver disease is one of major problems in the digestive system which is associated with obesity. Most important of these is **non-alcoholic fatty liver disease (NAFLD)**. Non-alcoholic fatty liver disease refers to a wide spectrum of liver diseases ranging from the most common, fatty liver (accumulation of fat in the liver, also known as steatosis), to **non-alcoholic steatohepatitis (NASH)**, fat in the liver causing liver inflammation), to **cirrhosis** (irreversible, advanced scarring of the liver as a result of chronic inflammation of the liver). In fact, the BMI correlates with the degree of liver damage, that is, the greater the BMI the greater the liver damage.

The term non-alcoholic is used because liver disease due to alcohol can show the same spectrum of liver disease as non-alcoholic fatty liver disease; however, patients with non-alcoholic fatty liver disease do not consume excessive amounts of alcohol. Non-alcoholic fatty liver disease is currently the most common liver disease in the U.S. and worldwide, affecting estimated 10-24% of the world's population.

In most patients non-alcoholic fatty liver disease causes no symptoms. This liver disease often is discovered when routine blood tests show slightly elevated levels of liver enzymes (ALT and AST) in the blood or on ultrasound examination of the abdomen which is done for other purposes, shows fat in the liver.

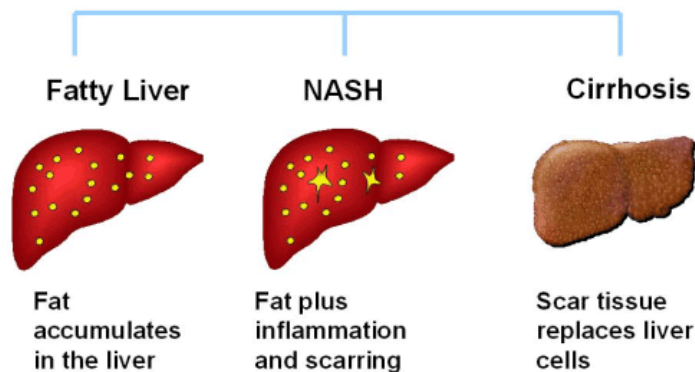
In the late stages of non-alcoholic fatty liver disease, the development of cirrhosis can lead to failure of the liver, swelling of the legs (edema), accumulation of fluid in the abdomen (ascites), bleeding from veins in the food pipe (varices), and mental confusion (hepatic encephalopathy). Patients with cirrhosis caused by non-alcoholic fatty liver disease also may be at risk of developing liver cancer (hepatocellular carcinoma, HCC).

Doctors now believe that a large number of patients with cryptogenic cirrhosis (cirrhosis of unknown cause) are actually patients in the late stages of non-alcoholic fatty liver disease. It is predicted that obesity related liver diseases (cryptogenic cirrhosis and liver cancer) will become the leading cause of liver failure and liver transplantation in the near future. Fatty liver is itself quite harmless, disappears rapidly with loss of weight, and infrequently progresses to non-alcoholic steatohepatitis, which is the next stage of non-alcoholic fatty liver disease.

In non-alcoholic steatohepatitis there is accumulation of fat in the liver, but there also is inflammation (hepatitis), destruction (necrosis) of liver cells, and scarring (fibrosis) of the liver. The scarring can progress to cirrhosis, which is the last stage of non-alcoholic fatty liver disease. Estimates of the number of cases of non-alcoholic fatty liver disease among the obese and patients with diabetes mellitus type 2 (DM2) suggest that 90% have fatty liver, 20% have non-alcoholic steatohepatitis, and 10% have cirrhosis. Among those with cirrhosis, liver cancer develops in approximately 1% to 2% of patients per year. The presumptive diagnosis of non-alcoholic fatty liver disease or non-alcoholic steatohepatitis is made in individuals who are insulin resistant, have mildly elevated liver enzymes in the blood, and have signs of fatty liver on an ultrasound. These patients must have no other cause for the abnormal enzymes or for the fatty liver, particularly no excessive use of alcohol.

If weight loss results in a decrease or normalization of the liver enzymes, the diagnosis of non-alcoholic fatty liver disease is practically assured. Only a liver biopsy, however, can confirm the diagnosis of non-alcoholic fatty liver disease and Non-alcoholic steatohepatitis and determine the severity of the disease. The need for liver biopsy in individuals with suspected non-alcoholic fatty liver disease or non-alcoholic steatohepatitis is still debated since no well-proven treatments are available. It may help to rule out other diseases if in doubt and provide an incentive for an individual to adopt a healthy lifestyle (diet and exercise) with the aim of losing weight. Weight loss (if overweight), regular exercise and correcting elevated cholesterol, triglycerides, and blood sugar should be beneficial in non-alcoholic fatty liver disease.

The Spectrum of NAFLD



Gastrointestinal Symptoms Associated With Increased BMI

Several studies have found association between obesity and gastrointestinal symptoms. An increase in body weight of more than 4.5 kg during a 10 year period is associated with onset of new gastrointestinal symptoms. Abdominal pain, fullness, food staying in the stomach, Bloating, sour fluid coming into the mouth, heart burn, nausea, vomiting, diarrhea are increased in patients with overweight and obesity.

Obesity and Esophagus (Food Pipe)

Gastroesophageal reflux disease (GERD) is a disease where acid and stomach contents enter into the food pipe causing inflammation and damage to the food pipe mucosa (surface layer of the food pipe lumen). Many studies have shown that high BMI was associated with 1.5 to 2.5 fold increase in the risk of GERD and its complications.

The GERD symptoms include heart burn, acid regurgitation, water brash (excessive salivation), and vague chest pain, upper abdominal pain. Some people get sore throat, sinusitis and also exacerbation of their asthma. The presence of the typical symptoms and endoscopy help in making a diagnosis.

The disease symptoms significantly improve with weight reduction besides other life style modifications especially in diet along with acid suppressing medications. Severe GERD in some patients can lead to Barret's esophagus (Pre-cancerous change in the mucosa of the food pipe). This Barret's esophagus has also been found to be 2 fold more in obese individuals. The other complications of GERD like esophageal ulcer and cancer of the esophagus are increased in obese patients compared to the non-obese.

Obesity and Gall Bladder and Pancreatic Disease

Many studies have shown that there is a 2-3 fold increase in gallbladder stone in obese women. Gall bladder is seen more often in fair female of forty even in normal weight individuals. A study has shown that a 5 kg/m² increase in BMI was associated with 30-70 % increase in the incidence of gall bladder cancer. However gall bladder cancer is a rare form of cancer.

Obesity has been associated with a 30-50% increase in pancreatic cancer also.

Obesity and Colonic Diseases

Both the **colon cancer and polyps** (pre-cancerous small growths in colon) have been found to definitely increased in patients with overweight and obesity when compared to those with normal weight. This effect was not seen in women so much especially in the younger age group. For every 2 kg/m² increase in BMI, the risk for colon cancer is increased by 7% and for a 2 cm increase in the waist circumference the risk is increased by 41%. Even the adenoma occurrence was increase by 1% for every 1 unit increase in BMI over 30.

Obesity-related health care costs have also ballooned. Although there are no current recommendations for testing in the absence of symptoms or preexisting laboratory abnormalities, weight loss is a recommended strategy to prevent the symptoms that are related to obesity related gastrointestinal disorders and to decrease the risk of progression of diseases.

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The relationship between obesity and diabetes

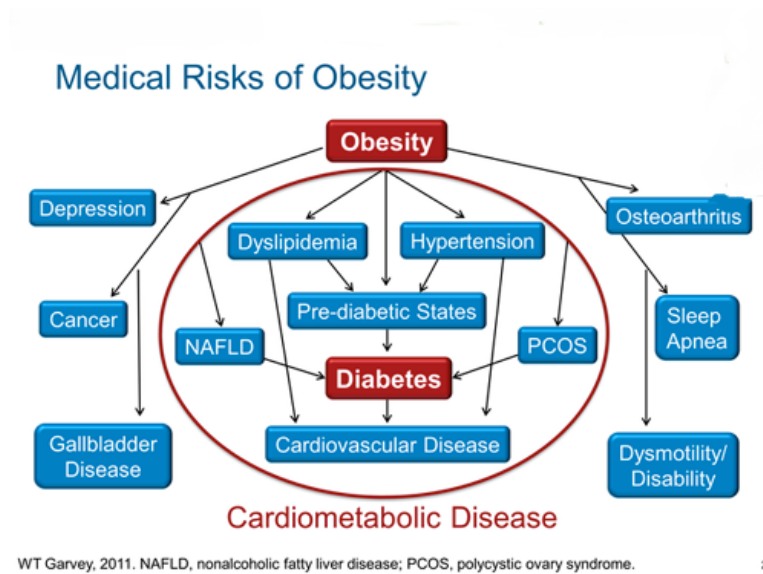
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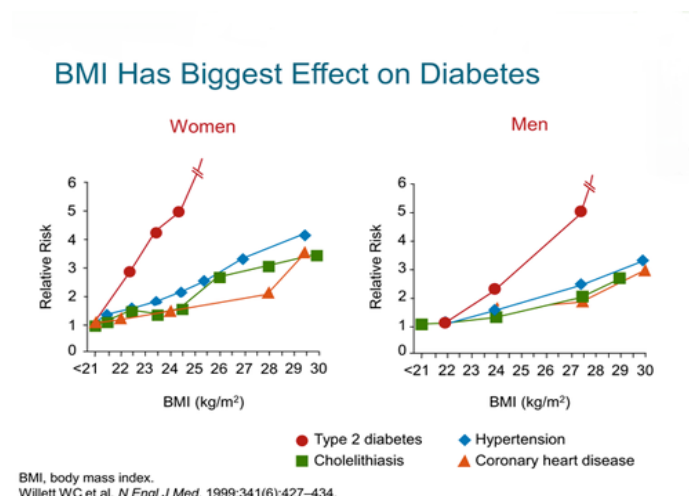
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Obesity and diabetes are twin scourges of present day lifestyle and these problems are growing in epidemic proportions.

One of the major risk factors for diabetes is obesity which also produces a number of health problems as shown in the diagram below. These are discussed in detail in the other chapters of this book.



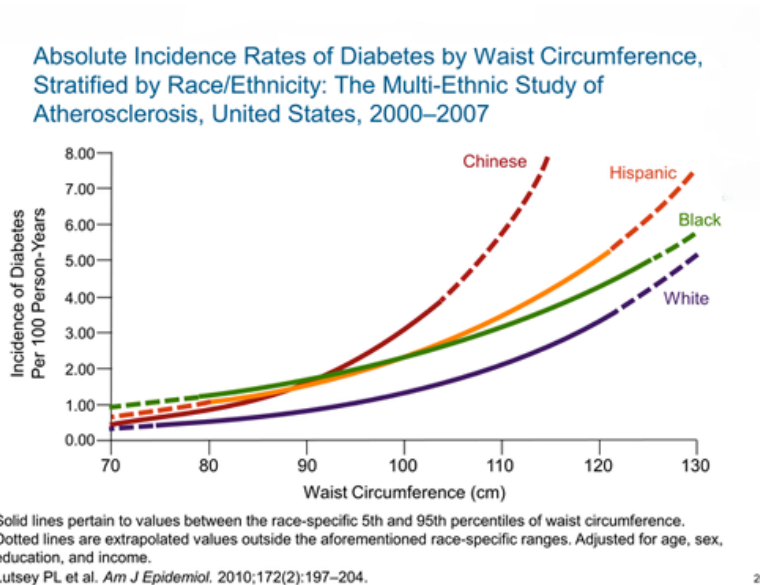
Overweight and obesity increase the risk of diabetes. This is because obesity causes Insulin Resistance, the reason for Type 2 diabetes. Gaining weight above normal increases the chance of getting diabetes.



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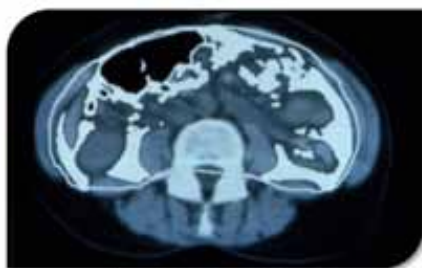


Waist circumference related to the presence of fat in the abdomen is even more important than weight. Indians and other Asians are at higher risk of diabetes and this occurs at lesser weight and abdominal circumference than other races.

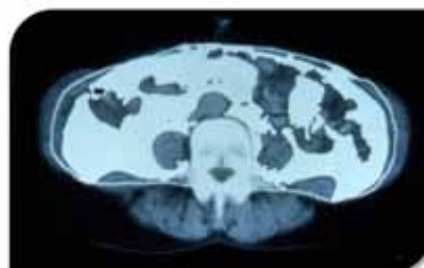


The CT scans shown below show increased fat (white colour) in the abdomen of people who are insulin resistant.

Visceral Fat Distribution: Insulin Sensitive vs. Resistant



Insulin Sensitive



Insulin Resistant

The development of diabetes due to obesity is gradual and goes through the stage of prediabetes. Pre diabetes can be in the form of Impaired Fasting Glucose (IFG) in which fasting blood sugar is from 5.6 mmol/l to 6.9 mmol/l or Impaired Glucose Tolerance (IGT) in which the blood sugar after food is between 7.8 mmol/l and 10.9 mmol/l or the HbA1c (related to the average blood sugar over the past 3 months) is between 5.7% to 6.4%.

Studies have shown that about 11% of people with pre diabetes develop diabetes every year. Diabetes is a disease which can produce damage to almost all organs of the body and every effort

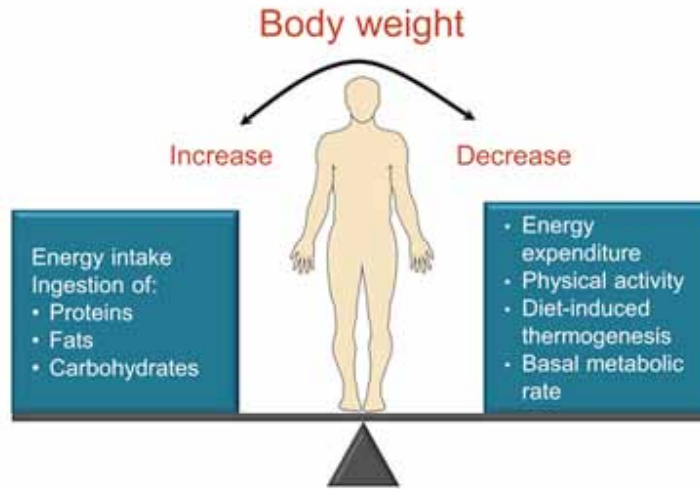
should be taken to prevent it.

The most effective way for an overweight or obese person to prevent this progression to diabetes is to lose weight.

How much weight loss is required to prevent diabetes?

A loss of 7% weight has been shown to decrease diabetes by 58%. Even the smaller weight loss is effective in reducing the incidence of diabetes to a lesser extent.

To achieve this, life style changes including diet, exercise are important. Sometimes medicines are also required.

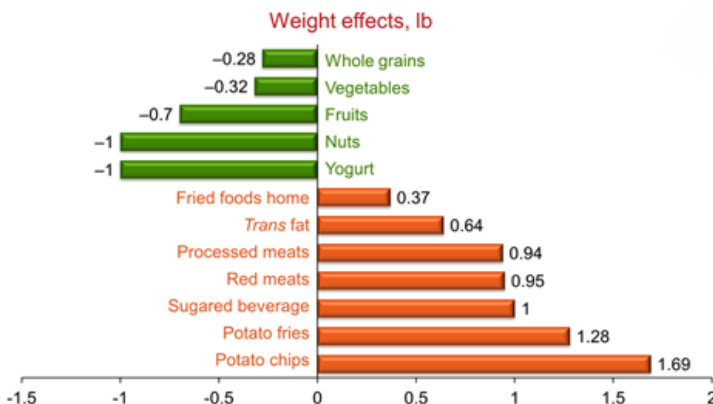


**1. Diet:
A. Reduce quantity.**

About 7000 calories is equal to about 1 Kg in weight. So if we reduce the daily calories intake by about 500 to 1000 calories, a weight loss of about 1/2 kg to 1 kg per week is possible.

B. Eat a healthy diet and not empty calories.

Dietary Components That Predict 4-Year Changes in Body Weight



Low glycemic index foods such as lean proteins, seafood, eggs, cheese, nuts and seeds, most vegetables, fruits, and certain grains such as Barley and brown rice. Thermogenic foods which include garlic, chilli, apple cider vinegar, celery, cinnamon, mustard, parsley, ginger, turmeric, salmon, tuna, and green tea help to increase the metabolism and burn more calories.

Mozaffarian D et al. *N Engl J Med.* 2011;364(25):2392-2404.

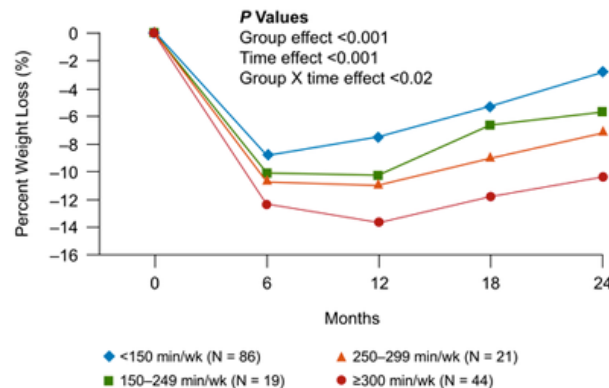
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2. Exercise:

Exercise burns calories. It is an additional tool to diet to reduce weight and to maintain it. Moderate exercise of 30 minutes to 1 hour per day can reduce the weight by 8 to 12% but the weight is regained over a period of time at low levels of exercise.

High Activity Needed for Weight Loss Maintenance



3. Medicines

Several medicines were introduced to treat obesity but most of them were withdrawn due to undesirable effects.

Unintended Consequences of Drug Treatment for Obesity in the 20th Century

Year	Drug	Consequence
1892	Thyroid	Hyperthyroidism
1932	Dintrophenol	Cataracts/Neuropathy
1937	Amphetamine	Addiction
1968	Aminorex	Pulmonary Hypertension
1997	Phen/Fenfluramine	Valvulopathy
1998	Phenylpropanolamine	Strokes
2003	Ma Huang (ephedra)	Heart attacks/stroke
2007	Ecopipam (Dopamine)	Depression/Suicide
2008	Rimonabant (CB-1)	Depression
2010	Sibutramine	CVD Risk

Bray GA. *Battle of the Bulge*, Dorrance Publishing 2007 p. 59

A few of the medicines used in the treatment of diabetes also help in reducing weight in obese people with diabetes. Metformin and GLP1 agonists Exenatide and Liraglutide are useful. Insulin, sulphonyl-urea and thiazolidine group medicines often increase weight.

4. Bariatric Surgery

Weight loss surgery has become popular to reduce weight. Different types of surgery are effective to different extent. All types of surgery reduce blood sugar and the need for medicines immediately after surgery, even before there is significant change in weight. Long term follow up show gradual increase in weight and need for medication but even at 10 year follow up weight and the dose of medicines were less in people who underwent the gastric bypass surgery when compared to those who did not have any surgery. Banding and gastroplasty (sleeve surgery) are effective to a lesser extent.

Childhood Obesity and Diabetes

Childhood obesity is the biggest threat to the health in the future and will be the main cause of diabetes.

Classically diabetes in children is Type 1, in which there is destruction of the insulin producing beta cells of pancreas and there is deficiency of insulin leading to diabetes. Type 2 diabetes, as we have already discussed, is due to Insulin Resistance for which obesity is a major cause. Before 1990 Type 2 diabetes was unheard of in children. Now that the prevalence of obesity in children is so high that many diabetes clinics are seeing a large number of Type 2 diabetes in children and adolescents. These children become resistant to oral medicines very fast and are difficult to control if they remain obese. They also develop the devastating complications of diabetes like blindness, kidney failure earlier.

Obesity may predispose immune mediated destruction of beta cells of pancreas and considered to be another risk factor for type 1 diabetes. If a patient with Type 1 diabetes becomes obese, he/she can develop insulin resistance which further complicates management of this vulnerable group.

Key Points to Remember

Obesity increases the risk and complications of diabetes in adults and children. This is more so with abdominal obesity. Weight loss by diet, exercise and appropriate medicines reduce the risk and complications of diabetes. Bariatric surgery is an option in those who are morbidly obese and have diabetes.

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Obesity and Thyroid

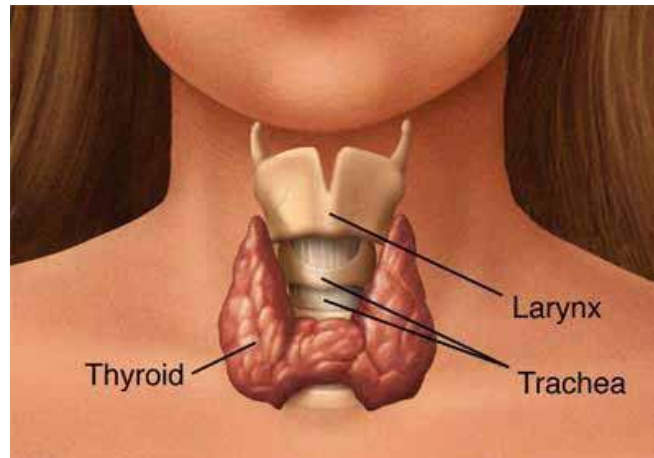
Dr Sachin Bangera
Department of Medicine
Al-Sabah Hospital Kuwait



“Doctor, am I obese because of malfunctioning thyroid gland?”

This is a common question encountered while treating obese patients.

There might be some truth to this argument; however, the more common causes for the same are selectively forgotten. In the overwhelming majority, issues like poor diet, lack of exercise, sedentary lifestyle are more important.



Below is an excerpt from an interaction between a patient and a doctor.

Patient: Doctor, I’ve been gaining weight over the past few years, I’ve tried all sorts of diet and exercise but nothing seems to be working. Could the problem be with my thyroid gland?

Doctor: There is a possibility of that, although I would like to know in detail the diet and exercise regime you follow. Meanwhile we could investigate you for other causes of obesity.

Patient: How would I know if something were wrong with my thyroid?

Doctor: That’s simple, if there is something wrong with your thyroid gland, it can be identified by a simple blood test called thyroid function tests (TFT), which include estimation of thyroxine (T4) and thyroid stimulating hormone (TSH). Thyroxine (T4) is the hormone produced by the thyroid gland and TSH is produced by the pituitary.

Patient: Why should someone with hypoactive thyroid become obese?

Doctor: Thyroid gland, a ‘butterfly’ like structure situated at the root of neck is an extremely important gland which releases hormones responsible for metabolism. Therefore under-active thyroid (hypothyroidism) leads to slow down of metabolism including fat metabolism. Moreover,

hypothyroidism leads to excess water accumulation that makes a patient look puffy and swollen.

Patient: Other than weight gain, would I have any other symptoms related to a hypo-functioning thyroid?

Doctor: Slowing of the heart rate, puffiness of the face, slowness of speech, generalized weakness and constipation are some of the symptoms related to low thyroid status.

Patient: What about the treatment for this condition?

Doctor: Since the gland is not producing enough hormones, patient needs to take the thyroxine (thyroid hormone) tablet every day. In most situations, the gland is permanently damaged and lifelong treatment is required. Patients with established hypothyroidism should be under regular follow up with an endocrinologist.

Patient: Does obesity alter thyroid function tests (TFT)?

Doctor: That's a good question. Recent evidence suggests that obesity may provoke immune mediated damage to various glands including thyroid. Frequently, simple obesity leads to subtle elevation of TSH. Monitoring these patients for other features of hypo-functioning of thyroid (hypothyroidism) and worsening TFT status may ultimately establish a cause and effect relationship.



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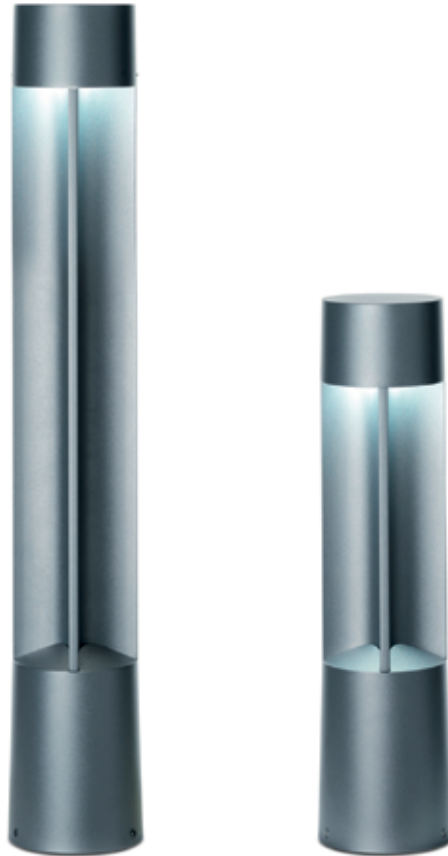
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Can't Breath, Won't Breath in Obesity – Obstructive Sleep Apnea



Dr. P. C. Nair

Chest Unit
Al-Amiri Hospital, Kuwait

Obesity is a leading preventable cause of death worldwide and is considered as serious health problem of the 21 st century. Obesity is defined as having an excessive amount of body fat. More than its cosmetic concerns, obesity produces a number of health related problems. Patients with obesity usually complaints of easy fatigability, difficulty in breathing and shortness of breath- usually described as can't breathe and won't breathe. BMI is a simple index of weight to height and is commonly used to classify obesity and overweight.

In 1956, Burwell and colleagues first categorized a syndrome "Extreme obesity associated with alveolar hypoventilation". Charles Dickens, described Mr.Wardle's servant, Joe in his posthumous book, Picwickian papers as obese, somnolent with periodic breathing later known as Pickwician syndrome. Kumbakarna of Hindu mythology, also refers to a character with extreme obesity, voracious appetite and somnolence probably with Obstructive Sleep Apnea (OSA).

Physiological Effects of Obesity:

Obesity imparts increased mechanical load in the form of decreased chest wall compliance.

Restrictive ventilatory defect due to reduction in the flow volumes and capacity.

Partial collapse of the lung especially in the lung bases leading to hypoxia.

Increased work of breathing.

These physiological effects leads to the common symptoms of can't breath and difficulty in breath and short of breath. There is a proportionate increase in symptoms to that of obesity.



The Respiratory Complications of Obesity

- Worsening of asthma
- Sleep disordered breathing (SDP).

Obesity is considered as a pro inflammatory condition, and that may explain the worsening of an inflammatory condition - asthma. SDP is a spectrum of disorders from simple snoring, to Obstructive

sleep apnea and Obesity hypoventilation syndrome. Upper airway is basically a soft tissue tube the patency of which is maintained by muscular groups. Snoring is often the result of the base of the tongue obstructing the upper airway. Simple snoring is seen in 45 % of the general population and occurs in 25% habitually. Snoring usually worsens as age advances, due to sedative drugs and by alcohol. The upper airway consists of nasopharynx, oropharynx and hypo pharynx. When the patient sleeps in supine position the muscle relaxation causes the base of the tongue to approach the posterior wall of the pharynx with the consequent reduced airflow, the patient must increase the speed of the airflow to maintain the required oxygen. Total increase in fat in the pharyngeal wall, also lead to upper airway obstruction. A neck size/ collar size of more than 16.5 cms carries a high risk of upper airway obstruction.

OSA is characterized by partial or complete obstruction of the upper airways during non-REM sleep. These respiratory events deplete certain stages of non-REM and REM sleep. Patients have an agitated sleep and present as abnormal breathing pattern during sleep. Obesity is the main cause of OSA however in non-obese patients; OSA may be due to micrognathia, retrognathia, enlarged tonsils, and high arched palate. Sleep apnea sometimes develops due to neurogenic causes, and then it is called central sleep apnea. Many times morbid obesity leads to alveolar hypoventilation there by the blood carbon-dioxide slowly increases and oxygen in the blood slowly decreases. Sedative drugs, alcohol and smoking aggravate OSA. Alcohol relaxes the oropharyngeal muscles leading to aggravation of sleep apnea.

Psychosocial impact of OSA includes poor work performance, occupational accidents, reduction in social interaction and deceased quality of life. Motor vehicles accidents are 2-3 times are more common in sleep apnea patients than the control population.

Symptoms of Sleep Apnea

1. Snoring.
2. Witnessed apneas - patient usually stops breathing momentarily during sleep.
3. Chocking sensation at night.
4. Patient complain of day time sleepiness
5. Usually complain of morning headache due to CO₂ retention in blood during sleep.

Patients also will have high BMI, large neck circumference, crowded oropharynx and low oxygen saturation on room air.

Diagnosis of Sleep Apnea

1. A detailed history and physical examination is mandatory for diagnosis.
2. Overnight oximetry- This is a simple screening test for the diagnosis of sleep disorders. An oximeter records the pulse and oxygen saturation during sleep. This can be done at home and the machine should be returned the next day for download and graphic summary recording. Sleep apnea is diagnosed on the basis of saturation index and the heart rate response.
3. Polysomnography (sleep study). Sleep study is the diagnostic test for sleep apnea. The patient should sleep in the hospital for one day in the sleep lab. It is a private room where ECG, eye movements, oxygen saturation, leg movements, apneas and hypopneas are videoed. Various patterns of sleep disordered breathing, central sleep apneas, Cheyne-Stokes breathing etc are diagnosed by sleep study.
4. ABG-Arterial blood gas analysis shows O₂, CO₂, pH, and HCO₃ of the arterial blood sample.



Treatment of Sleep Disorders

Behavior Modification

- Active weight reduction. This can be achieved by diet, exercise, drugs and gastric surgery.
- Change of sleep position from supine to side position.
- Avoid alcohol and sedatives for 3 hrs before sleep.

Oral Appliances

- Adjustable mandible advancing oral devices. E.g. MRD/MAD.
- TRD-Tongue repositioning or retaining devices. E.g. Snorex.
- Soft palate lifters.
- Tongue trainers.

These are indicated only in mild to moderate OSA patients and are custom made. A proper selection of patients is required for its optimal and effective use.

Surgical Options

- Classic procedures that directly enlarge the upper airways. e.g. MMA (Maxilla, mandible anteriorly).
- Specialized surgical procedures that enlarge the upper airway by modifying soft tissue elements. E.g.-UPPP (Uvula palate pharyngoplasty).
- Tracheotomy - patients with persistent tachypnea and recurrent aspiration.

Non-Invasive Ventilatory Support

CPAP (Continuous positive airway pressure) - It is the appropriate first line therapy for patients with stable OSA. If the titration of nocturnal CPAP fails to eliminate oxygen saturation, either add low dose oxygen or need to change to BiPAP. (Bi level positive airway pressure).It has no side effects and has good compliance.



Key Points to Remember

Obesity is an endemic health issue due to modern life style of the 21 st century. Unhealthy eating habits, sedentary life styles, lack of physical activity are major contributing factors to obesity. Obstructive sleep apnea is the major byproduct of obesity. More than its cosmetic effect, obesity contributes to metabolic syndrome to sudden death. Various treatment modalities are available at present. But active weight reduction, maintenance of ideal BMI and active life style are the keys to good health.

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Obesity- An Increasing Problem For Orthopaedic Surgeon

Dr. George Vergese
Department of Orthopedics
Al-Razi Hospital



It is well recognized that obesity is a major risk factor for development of chronic diseases all of which cause a high mortality rate. Over the past 30 years, this population has increased dramatically in number, and the optimization of their care demands the attention of the medical community. The medical and surgical care of obese trauma patients presents a variety of unique and important challenges. Musculoskeletal disorders of adulthood due to excess weight involve earlier presentation of such bone degenerative diseases as osteoarthritis due to extra wear and tear on weight bearing joints.

TRAUMA

The obese trauma patient has serious comorbidities like high blood pressure, diabetes, and heart disease. These patients need more detailed planning before, during and in the postoperative period. The risks for complications during any phase of the treatment and death following these complications are higher in the morbidly obese.

At The Accident Scene:

Extrication of the extremely obese from the damaged vehicle is a risky and time consuming process. Hoists and cranes may need to be employed to lift the victim from the vehicle. Delays at the accident scene further hasten the chances of serious complications. Transportation of an obese patient can be difficult for emergency service personnel. Standard stretchers may not suffice and so also splints and traction devices.

In The Emergency Room:

The obese body habitués will make examination difficult and body surveys more challenging and less reliable especially for pelvis, spine and extremities. Skin folds need to be specially examined. Soft tissue swelling may be less evident and deep palpation may not be accurate. This group of patients has a base line decreased range of motion of the joints. Limb asymmetry will be less evident and fractures and soft tissue injuries may be missed initially.

Standard X ray cassettes may not be enough for routine examination and X rays need to be taken with higher resolution to be able to penetrate the fat layers. Another problem is that standard X ray, CT and MRI machines will not accept patients with weight above 160 kg and so will need to be shifted to another centre with such facilities.

In The Operating Room:

For surgery on this group of patients an initial accurate evaluation and preoperative planning is important. The fractures may need larger sized implants which may not be available in all centres. Blood loss will be more so this should be arranged in advance.

In some situations two operating tables need to position together to take the patient. Transfers need special care from the trolley to the OT table and back. Positioning of the patient for long surgery need special supports, gel bags and care to avoid nerve and blood vessel damage from prolonged pressure.

Operative planning should be detailed as bony landmarks will not guide the surgeon to accurately locate the incision which is of great importance. Increased body girth will necessitate the use of special instruments for retraction and for the surgery. Deeply located structures makes viewing more difficult. The extensive fat layer needs proper closure failing which blood and fluids may collect in the wound. Fat necrosis can cause wound discharge leading to infection. Wound healing is generally poor in the obese.

Post-Operative Period:

The emphasis is on fracture fixation for early mobilisation of the patient out of bed and then to rehabilitate him to return to the pre-fracture status as quickly as possible. All this is considerably delayed in the obese. Walking non- weight bearing with supports is a near impossibility and so may be confined to wheelchairs for long periods.

OSTEOARTHRITIS (OA)

Obesity is a risk factor for patients with OA in whom the knees are particularly susceptible. Extra wear and tear and high magnitude repetitive loading causes damage to the cartilage. Every kg of weight gained will stress the knee by 2 or 3 kg which hastens cartilage damage. Pain and stiffness associated with OA further restricts activity of these individuals and this leads to increasing body weight. Standard methods of management by physiotherapy and exercise will not be useful.

It used to be that joint replacement was not even an option for obese patients, especially very obese patients. Studies have shown that joint replacement surgery is feasible for obese patients but the complication rate is higher. These patients have double the rate of infection following knee replacement surgery (compared to non-obese patients). Obese patients require significantly longer time on the operating table and longer hospital stays. Orthopedic operations can be technically more difficult in this group of people. They also require care at a rehabilitation or skilled nursing facility more often than non-obese patients. Inevitably, the long-term revision operation rate for obese patients is nearly double that of the non-obese.

The increased morbidity seen in obese patients therefore calls for attempts at weight reduction prior to undergoing joint replacement surgery.



Fig 1. Normal Knee Anatomy and with OA



Fig 2: Total Knee Joint Replacement done for OA Knee

It may be noted that as waistlines have ballooned, so have the number of total knee replacements. The number of total knee replacements more than doubled in the decade between 2000 and 2010.

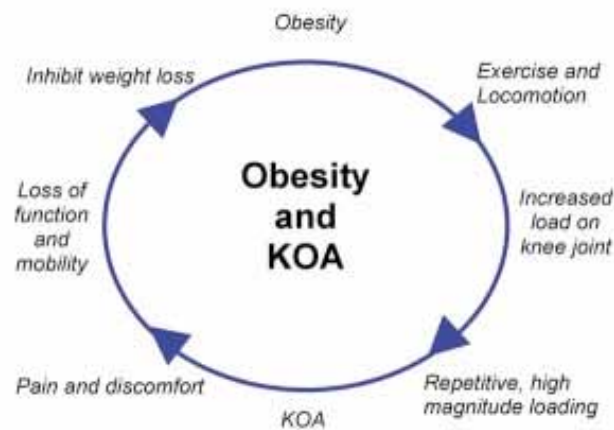


Fig 3: The obesity and OA cycle

ORTHOPEDIC PROBLEMS IN OBESE CHILDREN

Overweight children are suffering more acute problems, which are proving to be more than just 'growing pains'. Children are seeking medical advice from orthopaedic surgeons due to musculoskeletal conditions directly related to excess weight. These disorders include slipped upper femoral epiphyses (hip condition involving the growth plate of the bone), and Blount's disease, where the leg bones bow and thicken from the stress of extra weight and painful flat feet. The risk of obesity in childhood also extends to continuing to battle weight in adulthood, when conditions such as diabetes, obstructive sleep apnoea, and cardiovascular disease begin to surface.

1. Bowing of the legs – Tibia vara (Blount's Disease)

The overload on the inner side of the growth plate along with tension on the outer aspect is said to cause asymmetric growth and deformity of the tibia which causes the leg to bow out ward. X rays show abnormal shape of the tibia and changes in the growing area. Treatment is using braces and surgery to correct the deformity.

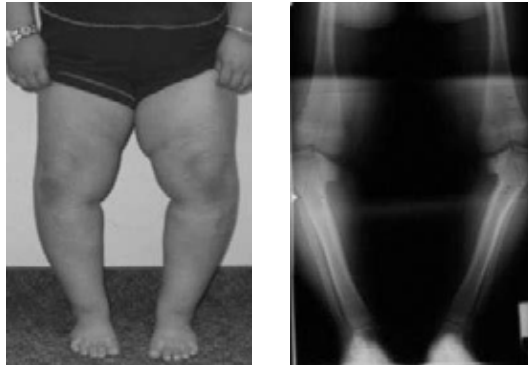


Fig 4: A 7 year old with severe Blount's disease

2. Painful foot

The increased body weight concentrates a lot of pressure on the arch of the foot leading to malalignment and altered positions of the heel. This leads to a condition called rigid idiopathic flat foot. Shoe inserts or specially designed footwear do not work in such cases. Efforts should be made to decrease the body weight.

3. Slipping of the growing end of the head of the femur (Slipped capital femoral epiphysis)



The growth plate of the hip joint weakens in the obese child. Decreased calcium intake, thyroid problems, decreased Vit D levels and decreased leptin levels contributes to this. Shear forces causes the end of the femoral head to slip. This is usually seen as an acute condition and is treated by screw fixation through the femoral head. Late conditions are kept under close follow up, and after skeletal maturity is re-evaluated for corrective surgery.



4. Fractures in obese children

These children have a greater risk of fractures because of increased mechanical load and relative decrease in bone density. Very large children may need adult sized implants for surgical fixation. Splints and plaster are poorly tolerated by them.

Fig 6: Slipped femoral epiphysis fixed with pins





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Obesity And Musculoskeletal Pain

Dr. Unnikrishnan R

Physical Medicine and Rehabilitation Hospital, Kuwait



Human body is a highly developed structure with respect to adaptability and function. Various body structures - the bones, and the joints formed by them, the muscles attached to these bones, and the strong rope like ligaments which hold the joints together, help us to maintain our body in the erect posture, and also support the body in various daily activities viz., walking, jumping, running, sitting etc. The spine and the major joints of the legs like the hips and the knees take most of the load caused by the body weight, in various activities. Nature has designed our body in such a way that the body structures are capable of bearing all the stress caused by the daily activities. But the structures are only capable of functioning well, for a certain optimal load, as determined by the height of the person. This load is directly proportional to the body weight of the person. This also means that any extra load, caused by an increase in body weight would impose a greater stress on the joints.

As we get older, all body structures undergo change, become weaker and develop degenerative or age related changes. This is a natural process in everybody's life. Joint degeneration (wear and tear) is one of the important causes of the common musculoskeletal problems like knee pain, neck pain and back pain. The rate at which joints undergo degeneration varies in different individuals, and is dependent on the life style, body weight, type of job, level of activities and to some extent the genetic predisposition. We will look at some common problems - neck pain, back pain and knee pain, which are more common and which usually occur at an earlier age in the obese population.

BACK PAIN

Back pain is a very common problem nowadays. Changing life styles, with more of sedentary habits, lack of exercise and physical fitness, prolonged posturing in sitting, or standing as part of job requirements, and increase in body weight all are thought to be the contributory to the increased incidence of back pain.

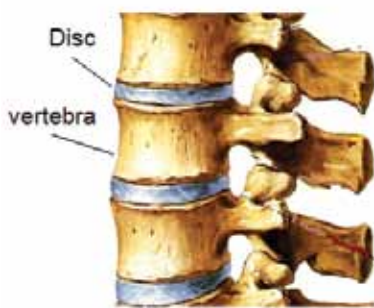


Fig. 1

In a normal individual, the erect posture and the range of movements like bending forwards and backwards, turning etc are possible because of the structure of the spine. The spine is made up of small bones called vertebrae. In between these vertebrae, we have the discs. While the vertebrae are bony structures, the discs are elastic structures with a gel like interior, which helps in absorbing the load applied to it, much like a shock absorber (Fig.1). The vertebrae, the ligaments attached to them, and the discs in between, together carry the load imposed by the body at rest and the stress caused by movements. These bones are so arranged that, in a normal person, there are some curvatures for the spine (Fig.2) that is, when we view it from the side, the spine is not in a straight line. These curves at the neck, back of chest and the lower back,

allow the weight to be transmitted along the spine in an efficient manner. The correct alignment of the various body structures is called the posture.



Good Posture

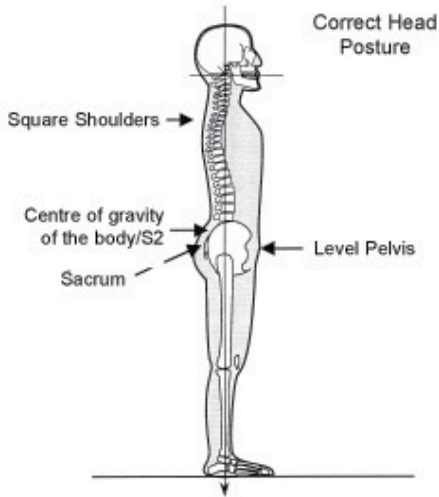


Fig. 2

Why are obese persons more prone to Back Pain ?

1. Increase in body weight increases the load on the spinal structures. This results in increased wear and tear, and causes early changes of degeneration (age related changes). In the discs, the gel like structures gradually lose their water content and become harder, thus reducing the cushioning effect of the discs, thereby transmitting more load to the bony vertebrae. The ligaments which are like tough elastic bands also become weak when exposed to loads which exceed their capacity. It is similar to what happens when elastic is stretched. As the force increases, the elastic stretches more and more and then breaks. Both the degenerative changes in the discs and the ligaments described above, will cause more load to the bones, and also will affect the stability of the joints between the vertebrae. This leads to extra bone formation at the vertebrae (called osteophytes) and the typical degenerative changes of the spine, what is commonly called as spondylosis.
2. In normal individuals, the strong muscles around the spinal column and the abdomen are important support structures to the spine, and help to reduce the weight which is transmitted to the spine. Obese individuals have lax and weak muscles due to lack of exercise, which will reduce this support, and result in increased load (due to overweight) to be applied on the spine.
3. Obese individuals tend to develop bad postures like drooped shoulders, humping of spine, pot belly, and increased curvature at low back, all of which cause increased stress to the spine and the ligaments supporting the spine, resulting in strain to the back and, in chronic cases lead to degeneration changes of the joints of the vertebrae.
4. All the factors described above predispose the obese person to more chances of injury to the discs and ligaments in day to day activities (either acute injury due to a fall, trauma, lifting weight etc, or long term repetitive strain injury which can occur even in routine activities like walking, sitting etc.) This is due to unusual loading of an already stressed spine.

NECK PAIN

The head is carried on the trunk by the neck, formed by seven bones at the upper end of spinal column, the cervical vertebrae. The general structure of the vertebrae are almost similar to that of the back with some extra features to allow more movement. The vertebrae of the neck are also supported by the discs, ligaments and muscles, similar to the back. While back pain is caused by the effect of body weight on the back in obese people, neck pain is caused by strain on the structures due to altered posture, early degenerative changes (spondylosis) and due to injury to the support structures (acute injury or by repetitive strain).

As mentioned above, the spine has some curves (as seen clearly if viewed from the side) and these curves help in distributing the transmitted load optimally along the vertebral column. Any alteration in the curve will cause a compensatory change in the column above or below to redistribute the load. This is what happens in an altered posture as that which occurs in obese people. For example,



Fig. 3

a person with a huge abdomen (pot belly) will have increased curvature of the lower back to support the extra weight, and this will result in an increase in the curvature of the thoracic spine in the opposite direction (like a hump). This will in turn cause the shoulders to droop forwards, and also causes the head to be positioned forward (Fig 3). As a corrective step, the neck has to curve more backwards to keep the head level, and this will put added strain on the lower neck vertebrae, discs and the supporting structures. These strained structures can cause pain in the long run (repetitive strain) and it can also make them more vulnerable to injury (fatigue failure) even in routine activities. Any added stress (like lifting weights, a fall, accident) may also cause an injury to the discs in such a situation.

Obese people are also prone to develop early degenerative changes of spondylosis. Degeneration of the discs and ligaments alters the stability and integrity of the spine and cause pain by induced stress on the ligaments and support structures.

KNEE PAIN

The most common cause of knee pain is Osteoarthritis. Knee joint is formed by the lower end of thigh bone (Femur) and the upper end of leg bone (Tibia), connected together by ligaments which hold the bones together. There are C shaped structures called menisci between the ends of these bones, which act like cushions. There is also a small bone which slides up and down when we bend and straighten the knee. This is called the patella. The joint has a thin layer of fluid called the synovial fluid, which acts much like a lubricant (fig4). As we age, changes of degeneration occurs initially in the joint between the knee and the patella, and then the knee joint itself, which causes narrowing of the joint space due to thinning of the meniscus. This will also cause extra bone to form from the bone ends (osteophytes). These changes result in pain and in advanced cases lead to instability of the knee.



Fig. 4

Knee joint is the main weight bearing joint in the human body. When we walk, the whole body weight loads both the legs alternatively. In obese and overweight persons, the extra load due to the excess weight will result in early degeneration of the meniscus and early onset of osteoarthritis. This again is due to the wear and tear effect on the knee joint due to the increased load.

MANAGEMENT OF MUSCULOSKELETAL PAIN IN OBESE INDIVIDUALS

Pain management

- Medications may be needed to tackle pain which interferes with daily routine. Pain killers as they are commonly known, most of which are available over the counter, are to be used judiciously. These medications, when used on a long term basis can cause ulcers in the stomach, can worsen hypertension and also damage the kidneys. Paracetamol is relatively safe and is now a days the preferred pain killer for osteoarthritis.
- Local applications with pain relieving substances are found to be helpful in mild and moderate pain.
- Supplements like Glucosamine and Chondroitin sulfate are effective in mild and early degenerative disease, of the knee joint.
- Injection of sodium hyaluronate into the knee joint helps in mild and moderate cases of osteoarthritis.
- Physical modalities like heat and cold and specialized modalities like ultrasound, electrotherapy etc are also useful in the control of pain, usually done by a physiotherapist.
- Specific Exercises aimed at strengthening the core back muscles, neck muscles, and quadriceps are taught to the patient. Exercise has been proven to reduce pain and disability and to improve function in persons suffering from musculoskeletal pain, by scientific studies.
- Cases of back and neck pain which do not respond to conservative measures and those with neural deficits would warrant a consultation from a Spinal surgeon, or Neurosurgeon. In advanced cases of osteoarthritis of the knee a consultation by an Orthopedician may be needed to consider Total Knee Replacement or other surgical options.
- Weight reduction forms an essential part of management in musculoskeletal pain in patients who are obese.

Advantages of Weight reduction

Weight reduction measures are very important in the care of knee and back pain in obese persons. Since the effective force acting on the spine and knee are many multiples of the extra weight in obese persons, any loss of weight will also result in more load reduction proportionately, and will have a beneficial effect on the joint.

Weight reduction will make it easier for joints to move, will reduce the work of walking or moving and consequently will reduce the load on the joints. Less body weight to move also makes it better from the cardio-respiratory angle (less load on the heart, lungs). Moreover muscles can function more effectively when the overall body weight is less.





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Common Skin Diseases in Obese

Dr. Arun Joshi

Department of Dermatology
Farwaniya Hospital



Q.1. My 12-year old son has dark brown pigmentation with roughness of skin on his neck and armpits. He is obese. Is his condition related to obesity?

A. Dark brown pigmentation with velvety roughness of skin on neck, armpits, sometimes on groins and face is the most common skin condition observed in obese persons (adults as well as children). It is medically known as acanthosis nigricans (AN). (Fig.1, 2, and 3.) The condition results from insulin resistance resulting in increased insulin levels in the blood that promotes increased growth of skin. It is an important sign of obesity and its dreaded association of diabetes.



Fig. 1, 2, 3: Acanthosis nigricans (armpit, neck and face)

Q. 2. My husband is 45-year-old. He is overweight and has numerous disfiguring growths on his face, neck, armpits and groin. Some of these become painful, red, inflamed on and off due to friction. He is overweight. What are these?

These 1-20 mm, skin colored, asymptomatic growths seen most commonly on neck, axillae, groins and face are known as skin tags (acrochordons) (Fig.4.) They often occur in association with AN. Although they are present in non-obese persons also, they are an important marker of obesity.



Fig. 4: Skin tags on neck

Q. 3. My 60-year-old mother who is obese complains of moist, sometimes oozing redness of skin beneath her breasts and lower abdomen. What condition is this? This macerated of skin with redness in the body skin folds (beneath the breasts, lower abdomen, axillae and groin is known as intertrigo (Fig. 5). This common condition in obese persons results from combination of friction, occlusion, increased sweating and presence of candida yeast fungal and sometimes secondary bacterial infection.



Fig. 5: Intertrigo of body fold area

Q. 4. My 20-year-old daughter has developed linear red bands on her shoulders, thighs and abdomen. She has recently put on too much weight over past few months.

A. These linear bands are stretch marks (striae distensae) (Fig. 6). They are initially red and turn purple and then porcelain-white over time. They result from mechanical stretching of overlying skin in the event of rapid weight gain due to too much fat deposition in obesity, or increase in muscle mass in body builders or after rapid increase in height during puberty. They are a type of scar that is permanent and irreversible. A similar condition occurs in pregnancy on the lower abdomen, and thighs (striae gravidarum).



Fig. 6: Striae distensae (Stretch marks, in the early red stage)

Q. 4. My 16-year-old daughter who is obese has severe treatment resistant acne on her face and back, increased facial hair and irregular menses for past couple of years.

A. The combination of acne, hirsutism (increased facial hair) (Fig.7), and irregular menses is a very significant complication/association of obesity. It is an important indicator for underlying associated



hormonal imbalance and multiple cysts in the ovaries, a condition known as polycystic ovarian disease (PCOD). Obesity is the major cause and component of PCOD. A thorough check-up by a gynecologist with ultrasound and hormonal assay is a must. Weight reduction results in a dramatic improvement of acne, hirsutism and is an important component of the management. It also reduces the need for medication to treat this condition.



Fig. 7: Acne with hirsutism

Hyperandrogenism in women is a similar condition resulting in hirsutism associated with loss of scalp hair occurs from increased male hormone testosterone production by increased fat tissue (adipose) in response to elevated insulin levels in obese persons.

Q 5. I am a 50-year-old obese male. Although I don't have any diabetes or blood pressure, I do suffer from swelling of my legs below the knees for past few years.

A. Swelling of lower limbs due to inadequate flow of blood, associated with or without properly functioning valves in the veins results in, initially transient recurrent and eventually persistent accumulation of fluid in the legs is known as lymphedema. It is cosmetically and functionally disabling condition that predisposes to repeated severe infection of skin such as cellulitis.

Q. 6. I am a 30-year-old obese male having persistent small rough bumps on my shoulders, back and thighs for past many years. I have tried many treatments with no benefit.

A. This common condition in obese persons is known as keratosis pilaris (thickened brown skin around hair roots) results in rough 1-2 mm bumps around hair follicles. It is a difficult condition to treat.

Q. 7. My 35-year-old grossly obese male cousin has painful hardening of skin over his soles for past 6 months.

A. Diffuse yellow horse-shoe shaped thickening of soles over the heels, instep and arch of the foot is a recently observed painful disturbing condition in obese persons. It occurs due to mechanical factors as obese persons have higher pressure on heels on walking and they have increased forefoot width.

Q. 8. I am a 38-year-old obese female and have thickening of skin with dimpling of overlying skin on my thighs and buttocks.

A. This condition seen predominantly in healthy females is called cellulite. (Fig. 8) It is characterized to by hardening and depressions in skin, resulting in "orange-peel" appearance. It is not caused but

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aggravated by obesity.



Fig. 8: Cellulite of thighs

Q. 9. Are skin infections common among obese persons?

A. Obese persons do suffer from bacterial and fungal skin infections much more commonly compared to healthy normal weight individuals due to many reasons such as increased sweating, friction, occlusion, maceration of skin between body folds, and underlying diabetes. Some of them are merely annoying and of cosmetic concern whereas others are serious and could be even life-threatening.

Common non-serious skin infections in obese

1. Intertrigo: described above.
2. Folliculitis/furuncle/boil (Fig. 9): bacterial pus producing infection of hair roots can occur anywhere on the hairy parts of the body. Painful red bumps with without pus points.



Fig. 9: Folliculitis/furuncle/boil



Fig. 10 Erythrasma



Fig. 11. Candida yeast infection of body skin folds

3. Erythrasma: Well demarcated brown or red scaly patches in the groin and axillae (Fig. 10).
4. Candida infection: Bright red/brown patches with smaller similar lesions or pus points at the periphery, mainly in body fold area. (Fig 11).
5. Tinea cruris: Ringworm fungal infection of the skin presenting as red, circular patches with scaling and raised borders in the groin.

Serious/life threatening skin infections in obese

1. Cellulitis/erysipelas: is a serious infection of the skin and underlying fat. Obesity, lack of movement, lower limb swelling and associated diabetes are common predisposing factors (Fig 12.).
2. Necrotizing fasciitis: is an even more serious and life threatening bacterial infection of the skin, causing destruction underlying muscle, fat and sometimes bone and spreading and damaging other organs in obese, esp. diabetic persons.





Fig. 12: Cellulitis of lower limb



Fig 13. Varicose veins

Skin conditions aggravated by obesity.

1. Varicose veins (Fig. 13): Dilated veins on the legs with or without lymphedema.
2. Delayed wound healing
3. Increased chances of breaking of surgical wounds: due to poor nutrition, tension on wound edges, reduced blood circulation, increased incidence of infections, associated DM.
4. Bed/pressure sores. Non-healing long standing very debilitating ulcers on pressure points in bed-ridden or persons lacking mobility due to any reason.

Key Message

Weight reduction by physical exercise and dietary changes will prevent and help in curing these condition. It is a major component of management of these conditions.

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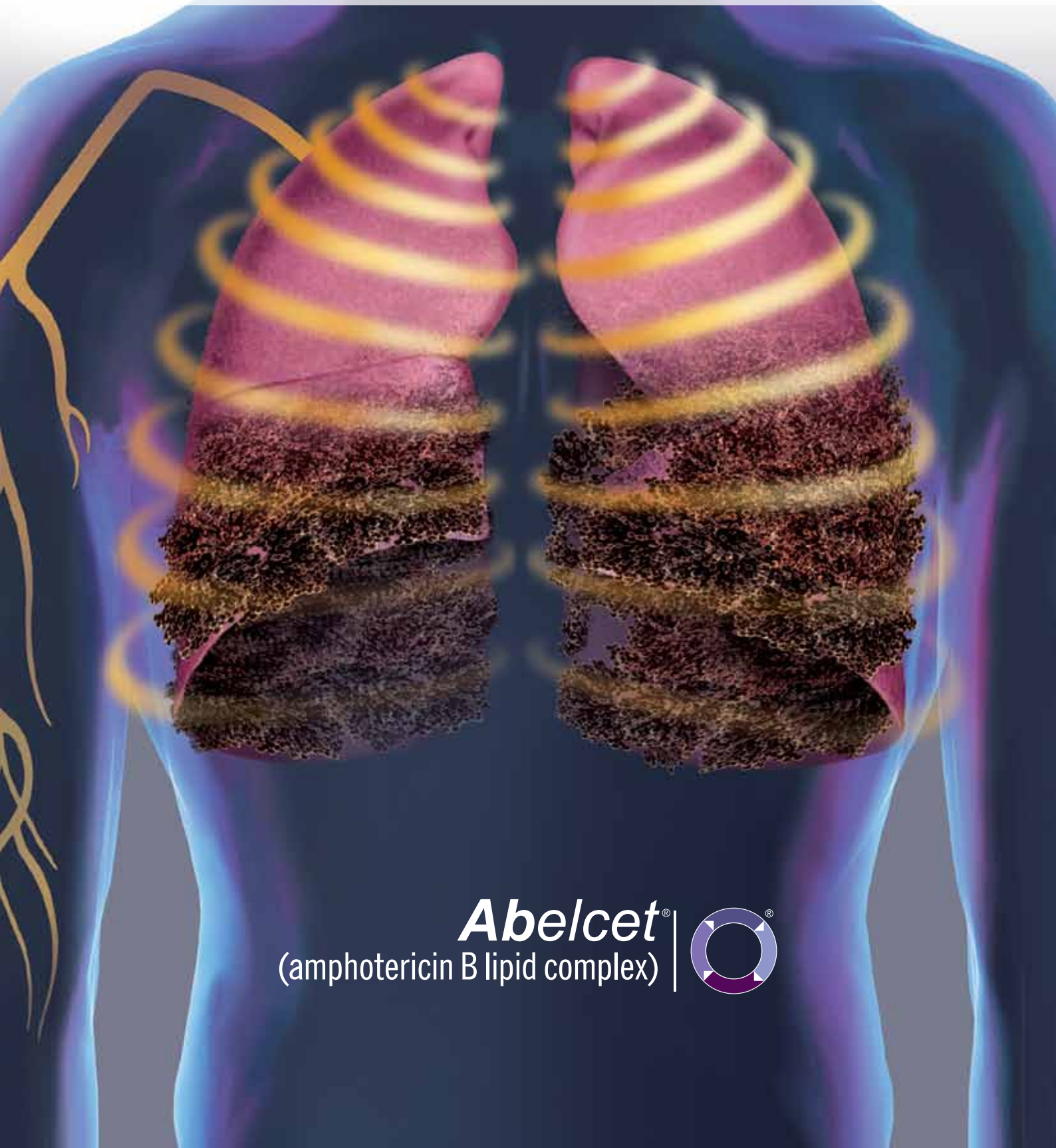



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Surgical Problems in Obesity

Dr Sankara Narayanan G
Surgeon, Amiri Hospital



The epidemic of obesity has become more prevalent and one of the major health issues of society. Though obesity related diseases are many, this article will highlight on the surgical problems in obesity.

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GYNECOMASTIA

Gynecomastia is the abnormal development of large mammary glands in males resulting in breast enlargement. The term comes from the Greek word meaning "woman breast". Obesity may cause similar enlarged appearance. In adolescent boys the condition is often a source of distress, but for the large majority of boys whose pubescent gynecomastia is not due to obesity, and when it's not severe it may shrink or disappear between the ages of 16-18.

Before treating gynecomastia in obese, other causes of gynecomastia must be excluded. Surgical excision of the breast gland is paramount and results in a permanent and consistently reliable outcome. When done correctly recurrence is rare. Medication is hardly effective for gynecomastia. Liposuction does not remove the breast gland and instead is used to remove the surrounding adipose tissue.

GASTRO-ESOPHAGEAL REFLUX DISEASE (GERD)

Gastro-esophageal reflux is a normal physiologic phenomenon experienced intermittently by most people, particularly after a meal. Gastro-esophageal reflux disease (GERD) occurs when the amount of gastric juice that refluxes into the esophagus exceeds the normal limit, causing symptoms with or without associated esophageal mucosal injury (i.e., esophagitis).

Compared to normal weight person, overweight individuals are 50% more likely to have GERD, and obese individuals are twice as likely to have the disease.

The mechanism by which obesity increases esophageal acid exposure is not completely understood. Increased intragastric pressure and gastro-esophageal pressure gradient, incompetence of the lower esophageal sphincter (LES), and increased frequency of transient LES relaxations may all play a role in the pathophysiology of GERD in patients who are morbidly obese.

Patients with GERD can exhibit various symptoms, both typical and atypical. Typical symptoms include heartburn, regurgitation, and dysphagia. Patient typically has numerous daily episodes of symptomatic reflux. Atypical symptoms include non-cardiac chest pain, asthma, night time coughing, pneumonia, laryngitis and voice changes including hoarseness.

Diagnosis is by upper GIT endoscopy, esophageal manometry and 24 hour acid monitoring.

The increasing prevalence of patients with both obesity and GERD merits evaluation of the appropriate surgical intervention for GERD and its symptoms. With the additional advantages of weight loss and resolution of weight related morbidity including GERD, bariatric procedure should be the procedure of choice in patients with medically complicated obesity.

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VARICOSE VEINS OF LOWER LIMB

Varicose veins are abnormal dilated, tortuous, elongated veins caused by persistent high pressure. There are two sets of veins in lower limb, superficial and deep. They are interconnected by small veins called perforators. The superficial veins are located beneath the skin, whereas the deep veins inside the muscles of leg. All of them have many unidirectional valves which allow blood to flow from leg to heart direction only.

Varicose veins are caused by a number of factors which lead to increased blood flow in superficial veins, thereby increasing the pressure inside it especially while walking.

Weakness of valves in veins, inborn weakness in the walls of veins, prolonged standing, clot formation in deep veins (Deep vein thrombosis), pregnancy, oral contraceptive pills, pelvic tumors, and obesity etc. cause varicose veins.

The venous disease is worse in those with a far above normal body mass index. This may be the result of raised intra-abdominal pressure which then leads to greater reflux, increased vein diameter and venous pressures.

The traditional treatment for venous disease entails surgical ligation at the groin crease and division of the saphenous trunk and all proximal tributaries followed either by a process of vein stripping or avulsion phlebectomy.

BURIED PENIS

Buried penis is a term that describes a penis of normal length that is buried below the surface of the pubic skin or within its own excessive shaft skin.

Obesity is generally a partial contributor in many of the adult patients who are referred for buried penis syndrome. As the skin and fat in the area above the pubic area increases, penile length is lost and the penis can appear to be buried.

Additionally, abdominal fat can hang over the penis, creating a moist environment conducive to bacterial and fungal growth. This environment creates a cycle of chronic infections, skin breakdown, chronic inflammation, and scar contracture that leads to a buried or trapped penis. As the scar contracts, the skin above the penis is transported over the shaft and glans and the shaft skin is pulled up and into itself. The scrotum may also be involved in this process.

Problems associated with buried penis:

Pooling of urine leads to poor hygiene and recurrent urinary tract infections.
Sexual dysfunction

Treatment

Buried penis is an unusual, difficult-to-treat condition that presents a unique challenge to the plastic surgeon and the urologist.

A combination of various techniques may be applied. In complicated and severe cases, a split-thickness skin graft to the penile shaft, reduction scrotoplasty, suction-assisted lipectomy, and/or surgical lipectomy, such as panniculectomy, may be indicated.

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GALLSTONES

Gall bladder which is situated below the liver is the storage site of bile. Bile is essential for the process of digestion. It's said the gall stones are common in fatty, fertile, flatulent females of forties and fifties.

Increased risk of gall stones formation has been linked to obesity and to episodes of rapid and significant weight loss which may be the result of treatment of obesity. In some studies gallstones were found in 70% patients after bariatric surgery. Bile salt therapy or prostaglandin inhibition (ibuprofen) after bariatric surgery does not reduce gallstone formation.

Although gallstones are relatively common in obese adults, gallstones in children and adolescents have been historically rare. When you hear of gallstones you do not tend to think of children. Teenagers who are overweight or obese are much more likely to develop gallstones, compared with peers of a healthy weight. Overweight are twice as likely as those with a healthy weight to have gallstones, while moderately obese are four times and extremely obese are six times more likely to develop gallstones.

Gall stones can be asymptomatic (Silent gall stone), present as biliary colic , (Recurrent episodes of pain starting in the right side of upper abdomen and going to back especially after a meal associated with vomiting) or present with its complications like infection (Acute cholecystitis), obstructive jaundice or biliary pancreatitis.

Treatment is removal of gallbladder along with stones which is now done laparoscopically.

INFECTIONS

The obese people are more likely than normal weight persons to develop infections of various types including postoperative infections and other nosocomial infections, as well to develop serious complications of common infections.

Surgical site infection

Infections following various surgical procedures are more common in obese compared with non-obese patients. Local changes such as an increase in adipose tissue with its reduced oxygenation increase in local tissue trauma related to retraction, lengthened operative time, and disturbance of body homeostatic balance, may contribute to the increased incidence of surgical-site infection caused by obesity. Surgical site infection risk is more if no antimicrobial prophylaxis had been administered.

Hospital Acquired Infection

Routine medical care of obese patients in everyday practice may present certain difficulties. In some instances usual diagnostic and treatment procedures must be modified. For example, some computed tomography equipment cannot accommodate obese patients above a certain weight limit. Routine care of non-ambulatory morbidly obese patients (e.g. lifting and bathing) requires adequate and trained staff. Risk of skin breakdown is increased due to immobility caused by underlying disease, improperly sized rooms and equipment, and inadequately trained staff. Due to these difficulties, obese patients may experience a prolonged length of stay, thus increasing their risk of acquiring Hospital Acquired Infection such as pneumonia and wound infection.

RISK OF CANCER

Obese people are at increased risk of cancers of the breast, colon, liver, ovary, pancreas, prostate, and uterus. (Discussed in another article in this book.)



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VOTRIENT is a new potent and selective tyrosine kinase inhibitor for the first-line treatment of patients with advanced renal cell cancer

- Offers a significant improvement in Progression-Free Survival versus placebo in:
 - Treatment-naive patients: **11.1** months vs 2.8 months¹
 - Cytokine-pretreated patients: **7.4** months vs 4.2 months¹
 - Combined population: **9.2** months vs 4.2 months¹
- Has a low incidence of grade 3 or 4 adverse events including fatigue, hand-foot syndrome and mucositis/stomatitis¹
- Maintains patients' health-related quality of life¹

Reference:

1. Sternberg CN, Davis ID, Mardiak J, et al. Pazopanib in locally advanced or metastatic renal cell carcinoma: results of a randomized Phase III trial. *J Clin Oncol* 2010; 28(6):1061-1068.

Abbreviated Prescribing Information for use in Gulf and Near East Markets based on the Prescribing Information Item Code (1000000094042) and prepared to meet the requirements of the GSK International Pharmaceutical Promotional and Marketing Policy.

Votrient™ 200mg & 400mg film-coated tablets Pazopanib. Therapeutic indications: Votrient is indicated for the first line treatment of advanced Renal Cell Carcinoma (RCC) and for patients who have received prior cytotoxic therapy for advanced disease. **Posology and method of administration:** Votrient treatment should only be initiated by a physician experienced in the administration of anti-cancer agents. **Adults:** The recommended dose of pazopanib is 800mg once daily. **Dose modifications:** Should be in 200mg increments in a stepwise fashion based on individual tolerability in order to manage adverse reactions. The dose of pazopanib should not exceed 800mg. **Paediatric population:** Pazopanib is not recommended for use in children and adolescents below 18 years of age due to insufficient data on safety and efficacy. **Elderly:** There are limited data of the use of pazopanib in patients aged 65 years and older. **Renal impairment:** No dose adjustment is required in patients with creatinine clearance above 30 ml/min. Caution is advised in patients with creatinine clearance below 30 ml/min as there is no experience of pazopanib in this patient population. **Hepatic impairment:** Administration of pazopanib to patients with mild or moderate hepatic impairment should be undertaken with caution and close monitoring due to potentially increased exposure to the medicinal product. Insufficient data are available in patients with mild hepatic impairment to provide a dose adjustment recommendation but a reduced pazopanib dose of 200mg once daily is recommended in patients with moderate hepatic impairment. Pazopanib is contraindicated in patients with severe hepatic impairment. **Method of administration:** Should be taken without food, at least one hour before or two hours after a meal. Votrient film-coated tablets should be taken whole with water and not broken or crushed. **Contraindications:** Hypersensitivity to the active substance or to any of the excipients. Severe hepatic impairment. **Warnings and Precautions:** Hepatic Effects: Cases of hepatic failure (including fatalities) have been reported during use of pazopanib. Monitor serum liver tests before initiation of treatment with pazopanib and at least once every 4 weeks for at least the first 4 months of treatment, and as clinically indicated. Periodic monitoring should then continue after this time period. Pazopanib is a UGT1A1 inhibitor. Mild, indirect (unconjugated) hyperbilirubinaemia may occur in patients with Gilbert's syndrome. For patients with pre-existing moderate hepatic impairment, pazopanib dose modification guidelines (beyond reducing the initial starting dose to 200mg per day) have not been established. **Hypertension:** Events of hypertension including hypertensive crisis have occurred. Blood pressure should be well controlled prior to initiating pazopanib. Patients should be monitored for hypertension and treated as needed with standard anti-hypertensive therapy. Hypertension occurs early in the course of treatment. In the case of persistent hypertension despite anti-hypertensive therapy, the pazopanib dose may be reduced. Pazopanib should be discontinued if there is evidence of hypertensive crisis or if hypertension is severe and persists despite anti-hypertensive therapy and pazopanib dose reduction. **QT Prolongation and Torsade de Pointes:** Events of QT prolongation or Torsade de Pointes have occurred. Pazopanib should be used with caution in patients with a history of QT interval prolongation, patients taking antiarrhythmics or other medications that may potentially prolong QT interval, or those with relevant pre-existing cardiac disease. When using pazopanib, baseline and periodic monitoring of electrocardiograms and maintenance of electrolytes within normal range is recommended. **Arterial Thrombotic Events:** Myocardial infarctions, angina, ischemic stroke and transient ischemic attack were observed. Fatal events have been observed. Pazopanib should be used with caution in patients who are at increased risk of thrombotic events or who have had a history of thrombotic events. Pazopanib has not been studied in patients who have had an event within the previous 6 months. A treatment decision should be made based upon the assessment of individual patient's benefit/risk. **Haemorrhagic Events:** Haemorrhagic events have been reported. Fatal haemorrhagic events have occurred. Pazopanib has not been studied in patients who had a history of haemoptysis, cerebral, or clinically significant gastrointestinal haemorrhage in the past 6 months. Pazopanib should be used with caution in patients with significant risk of haemorrhage. **Gastrointestinal Perforations and Fistulae:** Events of gastrointestinal (GI) perforation or fistulae have occurred. Fatal perforation events have occurred. Pazopanib should be used with caution in patients at risk for GI perforation or fistula. **Wound Healing:** No formal studies on the effect of pazopanib on wound healing have been conducted. Since Vascular Endothelial Growth Factor (VEGF) inhibitors may impair wound healing, treatment with pazopanib should be stopped at least 7 days prior to scheduled surgery. The decision to resume pazopanib after surgery should be based on clinical judgement of adequate wound healing. Pazopanib should be discontinued in patients with wound dehiscence. **Hypothyroidism:** Events of hypothyroidism have occurred. Proactive monitoring of thyroid function tests is recommended. **Proteinuria:** Proteinuria has been reported. Baseline and periodic urinalyses during treatment are recommended and patients should be monitored for worsening proteinuria. Pazopanib should be discontinued if the patient develops nephrotic syndrome. **Pregnancy:** Pre-clinical studies in animals have shown reproductive toxicity. **Interactions:** **Drugs that Inhibit or Induce Cytochrome P450 3A4 Enzymes:** Inhibitors and inducers of CYP3A4 may alter the metabolism of pazopanib. **CYP3A4 Inhibitors:** Co-administration of pazopanib with strong inhibitors of the CYP3A4 family may increase pazopanib concentrations. Grapefruit juice may also increase plasma concentrations of pazopanib. Co-administration of pazopanib with a CYP3A4, P-gp, and BCRP inhibitor, such as loperamide, will result in an increase in plasma pazopanib concentrations. Combination with strong CYP3A4 inhibitors should therefore be avoided, or selection of an alternate concomitant medication with no or minimal potential to inhibit CYP3A4 is recommended. A dose reduction of pazopanib should be considered when it must be co-administered with strong CYP3A4 inhibitors. **CYP3A4 Inducers:** CYP3A4 inducers such as rifampin may decrease plasma pazopanib concentrations. Selection of an alternate concomitant medication with no or minimal enzyme induction potential is recommended. **Effects of Pazopanib on CYP Substrates:** *In vitro* studies with human liver microsomes showed that pazopanib inhibited CYP enzymes 1A2, 3A4, 2B6, 2C8, 2C9, 2C19, and 2E1. Potential induction of human CYP3A4 was demonstrated in an *in vitro* human PXR assay. Clinical pharmacology studies, using pazopanib 800mg once daily, have demonstrated that pazopanib does not have a clinically relevant effect on the pharmacokinetics of caffeine (CYP1A2 probe substrate), warfarin (CYP2C9 probe substrate), or omeprazole (CYP2C19 probe substrate) in cancer patients. Pazopanib resulted in an increase of approximately 30% in the mean AUC and C_{max} of midazolam (CYP3A4 probe substrate) and increases of 53% to 64% in the ratio of dextromethorphan to dextromethorphan concentrations in the urine after oral administration of dextromethorphan (CYP2D6 probe substrate). Co-administration of pazopanib 800mg once daily and paxlovid 80 mg/m² (CYP3A4 and CYP2C8 substrate) once weekly resulted in a mean increase of 26% and 23% in paxlovid AUC and C_{max}, respectively. **Effects of Pazopanib on Transporters:** Pazopanib may increase concentrations of drugs primarily eliminated through UGT1A1 and OATP1B1. **Effect of Food on Pazopanib:** Pazopanib should be administered at least 1 hour before or 2 hours after a meal. **Pregnancy and Lactation:** Pazopanib should be not be used during pregnancy unless the clinical condition of the woman requires treatment with pazopanib. If pazopanib is used during pregnancy, or if the patient becomes pregnant while receiving pazopanib, the potential hazard to the foetus should be explained to the patient. Women of childbearing potential should be advised to use adequate contraception and avoid becoming pregnant while receiving treatment with pazopanib. Breast feeding should be discontinued during treatment with pazopanib. **Adverse Reactions:** Thrombocytopenia, Neutropenia, Hypothyroidism, Anorexia, Weight decreased, Headache, Transient ischaemic attack, Dysgeusia, Ischaemic stroke, Myocardial ischaemia, QT prolongation, Torsade de Pointes, Myocardial infarction, Cardiac Dysfunction (such as a decrease in ejection fraction and congestive heart failure), Hypertension, Epistaxis, Haematuria, Pulmonary haemorrhage, Gastrointestinal haemorrhage, Cerebral haemorrhage, Diarrhoea, Nausea, Vomiting, Abdominal pain, Dyspepsia, Lipase elevations, Gastrointestinal perforation, Gastrointestinal fistula, Alanine aminotransferase increased, Aspartate aminotransferase increased, Hepatic function abnormal, Hyperbilirubinaemia, Hair depigmentation, Rash, Alopecia, Skin depigmentation, Palm-plantar erythrodysesthesia syndrome, Proteinuria, Fatigue, Asthenia & Chest pain. **Overdose:** Pazopanib doses up to 2,000mg have been evaluated in clinical trials. Grade 3 fatigue (dose limiting toxicity) and Grade 3 hypertension were each observed in 1 of 3 patients dosed at 2,000mg and 1,000mg daily, respectively. There is currently limited experience with overdose in pazopanib. Further management should be as clinically indicated or as recommended by the national poisons centre, where available. Haemodialysis is not expected to enhance elimination of pazopanib because pazopanib is not significantly renally excreted and is highly bound to plasma proteins. Abbreviated Prescribing Information was prepared on 15.08.2011, from GDS Version Number: 04, Version Date: 07. June 2010.



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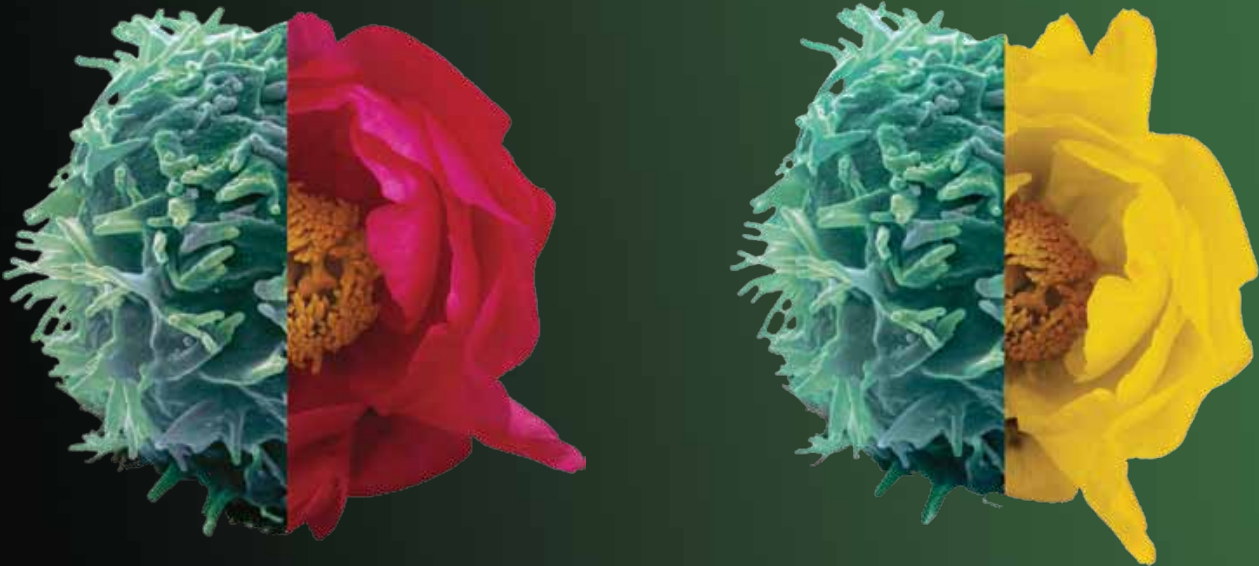
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- Tykerb™ plus letrozole (aromatase inhibitor) as first line oral treatment significantly prolongs PFS in postmenopausal women with HR+/ErbB2+ MBC versus letrozole alone (**8.2 months** versus 3 months, HR= 0.71, p=0.019).³



References:

1. Xia W, Mullin R, Keith B *et al.* Anti-tumor activity of GW572016: a dual tyrosine kinase inhibitor blocks EGF activation of EGFR/erbB2 and downstream Erk1/2 and AKT pathways. *Oncogene* 2002;21:6255-6263.
2. Geyer CE, Forster J, Lindquist D, *et al.* Lapatinib plus Capecitabine for HER2-Positive Advanced Breast Cancer. *NEJM* 2006;355:2733-43.
3. Johnston S, Pippen J, Jr., Pivat X, *et al.* Lapatinib combined with letrozole versus letrozole and placebo as first-line therapy for postmenopausal hormone receptor-positive metastatic breast cancer. *J Clin Oncol* 2009;27:5538-46.

Abbreviated Prescribing Information for use in Gulf and Near East Markets based on (GDS_V11) and prepared to meet the requirements of the GSK International Pharmaceutical Promotional and Marketing Policy.

Tykerb 250mg tablets: Lapatinib Ditosylate Monohydrate. **Therapeutic indications:** Tykerb is indicated for the treatment of patients with breast cancer, whose tumours overexpress HER2 (ErbB2); "In combination with capecitabine for patients with advanced or metastatic disease with progression following prior therapy, which must have included anthracyclines and taxanes and therapy with trastuzumab in the metastatic setting. "In combination with an aromatase inhibitor for postmenopausal women with hormone receptor positive metastatic disease, not currently intended for chemotherapy. The patients in the registration study were not previously treated with trastuzumab or an aromatase inhibitor. **Dosage and Administration:** The daily dose of Tykerb should not be divided. Tykerb should be taken either at least 1 hour before, or at least 1 hour after food. Missed doses should not be replaced and the dosing should resume with the next scheduled daily dose. **Tykerb / capecitabine combination dosing:** The recommended dose of Tykerb is 1250mg (i.e. five tablets) once daily continuously. The recommended dose of capecitabine is 2000mg/m²/day taken in 2 doses 12 hours apart on days 1-14 in a 21 days cycle. Capecitabine should be taken with food or within 30 minutes after food. Please refer to the full prescribing information of the co-administered aromatase inhibitors for dosing details. **Dose delay and dose reduction Cardiac events:** Tykerb should be discontinued in patients with symptoms associated with decreased LVEF that are NCI CTCAE grade ≥ 3 or if their LVEF drops below the institutions lower limit of normal. Tykerb may be restarted at a reduced dose (1000 mg/day when administered with capecitabine or 1250 mg/day when administered with an aromatase inhibitor) after a minimum of 2 weeks and if the LVEF recovers to normal and the patient is asymptomatic. **Interstitial lung disease / pneumonitis:** Tykerb should be discontinued in patients who experience pulmonary symptoms which are NCI CTCAE grade ≥ 3. **Other toxicities:** Discontinuation or interruption of dosing with Tykerb may be considered when a patient develops toxicity ≥ grade 2 on the NCI CTCAE. **Renal impairment:** No dose adjustment is necessary in patients with mild to moderate renal impairment. Caution is advised in patients with severe renal impairment as there is no experience of Tykerb in this population. **Hepatic impairment:** Tykerb should be discontinued if changes in liver function are severe and patients should not be retreated. Administration of Tykerb to patients with moderate to severe hepatic impairment should be undertaken with caution. **Paediatric Population:** Tykerb is not recommended for use in the paediatric population due to insufficient data on safety and efficacy. **Elderly:** There are limited data of the use of Tykerb and capecitabine in patients aged ≥ 65 years. No overall differences in efficacy and safety of the combination of Tykerb and letrozole were observed between subjects ≥ 65 years of age and subjects < 65 years of age. **Contraindications:** Hypersensitivity to the active substance or to any of the excipients. **Warnings and Precautions:** Caution should be taken if lapatinib is to be administered to patients with conditions that could impair left ventricular function. LVEF should be evaluated in all patients prior to initiation of treatment with lapatinib and should continue to be evaluated during treatment to ensure that LVEF does not decline to an unacceptable level. Patients should be monitored for pulmonary symptoms indicative of interstitial lung disease/pneumonitis. Hepatotoxicity has been observed in clinical trials and postmarketing experience. The hepatotoxicity may be severe and deaths have been reported, although the relationship to lapatinib is uncertain. The hepatotoxicity may occur days to several months after initiation of treatment. Liver function tests (transaminases, bilirubin, and alkaline phosphatase) should be monitored before initiation of treatment, every 4 to 6 weeks during treatment, and as clinically indicated. If changes in liver function are severe, therapy with lapatinib should be discontinued and patients should not be retreated with lapatinib. Diarrhoea, including severe diarrhoea, has been reported with lapatinib treatment. Proactive management of diarrhoea with anti-diarrhoeal agents is important. Severe cases of diarrhoea may require administration of oral or intravenous electrolytes and fluids, and interruption or discontinuation of lapatinib therapy. Concomitant treatment with inhibitors or inducers of CYP3A4 should proceed with caution due to risk of increased or decreased exposure to lapatinib, respectively. **Interactions:** Lapatinib is predominantly metabolised by CYP3A4. Therefore, inhibitors or inducers of these enzymes may alter the pharmacokinetics of lapatinib. Coadministration of lapatinib with known inhibitors of CYP3A4 (e.g., ketoconazole, itraconazole or grapefruit juice) should proceed with caution and clinical response and adverse events should be carefully monitored. Coadministration of lapatinib with known inducers of CYP3A4 (e.g., rifampin, carbamazepine, or phenytoin) should proceed with caution and clinical response and adverse events should be carefully monitored. Lapatinib is a substrate for the transport proteins Pgp and BCRP (Breast Cancer Resistance Protein). Inhibitors and inducers of these proteins may alter the exposure and/or distribution of lapatinib. Lapatinib inhibits the transport protein Pgp in vitro at clinically relevant concentrations. Caution should be exercised when dosing lapatinib concurrently with medications with narrow therapeutic windows that are substrates of Pgp. Concomitant administration of lapatinib with capecitabine, letrozole or trastuzumab did not meaningfully alter the pharmacokinetics of these agents (or the metabolites of capecitabine) or lapatinib. The bioavailability of lapatinib is affected by food. **Pregnancy and Lactation:** There are no adequate and well-controlled studies of lapatinib in pregnant women. The effect of lapatinib on human pregnancy is unknown. Women of childbearing potential should be advised to use adequate contraception and avoid becoming pregnant while receiving treatment with lapatinib. It is recommended that breast-feeding be discontinued in women who are receiving therapy with lapatinib. **Adverse Reactions, Clinical Trial Data:** The following adverse reactions have been reported to be associated with lapatinib: anorexia, decreased LVEF, interstitial lung disease / pneumonitis, diarrhoea, nausea, vomiting, hyperbilirubinaemia, hepatotoxicity, rash (including dermatitis exfoliative), nail disorders including paronychia, hypersensitivity reactions including anaphylaxis, fatigue. The following additional adverse reactions have been reported to be associated with lapatinib in combination with capecitabine: dyspepsia, dry skin. In addition, the following adverse reactions were reported to be associated with lapatinib in combination with capecitabine but were seen at a similar frequency in the capecitabine alone arm: stomatitis, constipation, abdominal pain, palmar-plantar erythrodysesthesia, mucosal inflammation, pain in extremity, back pain, headache, insomnia. The following additional adverse reactions have been reported to be associated with lapatinib in combination with letrozole: epistaxis, alopecia, dry skin. **Overdosage:** There is no specific antidote for the inhibition of EGFR (ErbB1) and/or HER2/neu (ErbB2) tyrosine phosphorylation. The maximum oral dose of lapatinib that has been administered in clinical trials is 1800mg once daily. Asymptomatic and symptomatic cases of overdose have been reported in patients being treated with lapatinib. Symptoms observed include known lapatinib associated events and in some cases sore scalp, sinus tachycardia (with otherwise normal ECG) and/or mucosal inflammation. Haemodialysis would not be expected to be an effective method to enhance the elimination of lapatinib. Further management should be as clinically indicated or as recommended by the national poisons centre, where available. Please refer to registered full prescribing information for Tykerb. Abbreviated Prescribing Information was prepared on 22.08.2010, from GDS Version Number: 11, Version Date: 25 February 2010.



GlaxoSmithKline
Oncology

For full prescribing information please refer to data sheet or contact
GlaxoSmithKline, Gulf and Near East PO Box 50199 Dubai, United Arab Emirates

OBESITY AND CANCER

Dr Sreedharan PS

Department of Medical Oncology; KCCC

Dr Yamini Krishnan

Department of Medical Oncology; KCCC



Malignancies and Obesity

- Obesity increases the risk of multiple types of cancers.
- Specific biologic mechanisms pertinent to specific organ sites have been identified.
- Several global mechanisms also implicated across multiple organ sites.
- Act through steroid hormones, insulin and insulin-like growth factor (IGF) pathways.
- Alterations in immune system function.
- Obesity induced pro-inflammatory state.

Breast Cancer

- Most common cancer in women.
- Obesity is an established risk factor for postmenopausal breast cancer.
- Risk increases by 18% per 5 kg/m² increase in body mass.
- Adipose tissue is primary source of endogenous hormones in post-menopausal women by aromatization of androstenedione (a male sex hormone) to estrone (female sex hormone).
- Obese post-menopausal ladies have higher levels of circulating estrogen.

Colon cancer

- Obesity is an established risk factor in both men and women.
- Adverse impact on cancer risk is more for distal than proximal colon.
- Visceral adiposity has higher risk than abdominal adiposity.
- Obesity leads to insulin resistance, characterized by higher circulatory insulin levels, which promote cell proliferation and tumor growth through the Insulin-like growth factor (IGF) pathways.

Endometrial cancer

- Linear trend present between obesity and endometrial cancer among post-menopausal women.
- Fifty pounds of excess body weight confers a relative risk of ten times that for women of normal weight.
- Endometrial cancer is hormone-dependent due to unopposed estrogen (female sex hormone) action on endometrium.
- Obese postmenopausal ladies have higher circulatory estrogen with no progesterone.

Adenocarcinoma of esophagus

- Largest risk is seen in patients who have been consistently heavy for a prolonged period of time.
- Obese people have higher incidence of gastro-esophageal reflux disease and subsequent Barrett's disease. This predisposes them to adenocarcinoma of lower esophagus.

Kidney cancer

- High blood pressure, diabetes mellitus and high BMI are independent risk factors for renal cell carcinoma.
- 7% increase in risk is seen per unit increase in BMI.

Pancreatic cancer

- Risk factors include obesity, diabetes mellitus, glucose intolerance and hyperinsulinemia.
- For every 5 kg /m² increase, pancreatic carcinoma risk increases by 10%.

Gall bladder carcinoma

- More common in women than men.
- Major risk factor is gall stones, which is associated with estrogen.

Non-Hodgkin's lymphoma

- Extreme obesity associated with diffuse large B cell lymphoma.
- No relation with low grade lymphomas like follicular lymphoma.

Prostate cancer

- Obesity may be protective for early stage disease; however it is associated with increased risk of aggressive prostate cancer.

Summary

- Obesity associated with increased risk of multiple cancers.
- Many questions still need to be answered.
 - What is the age at which physical activity produces the most benefit?
 - Does purposeful weight loss during adult years, lower the risk for cancer?



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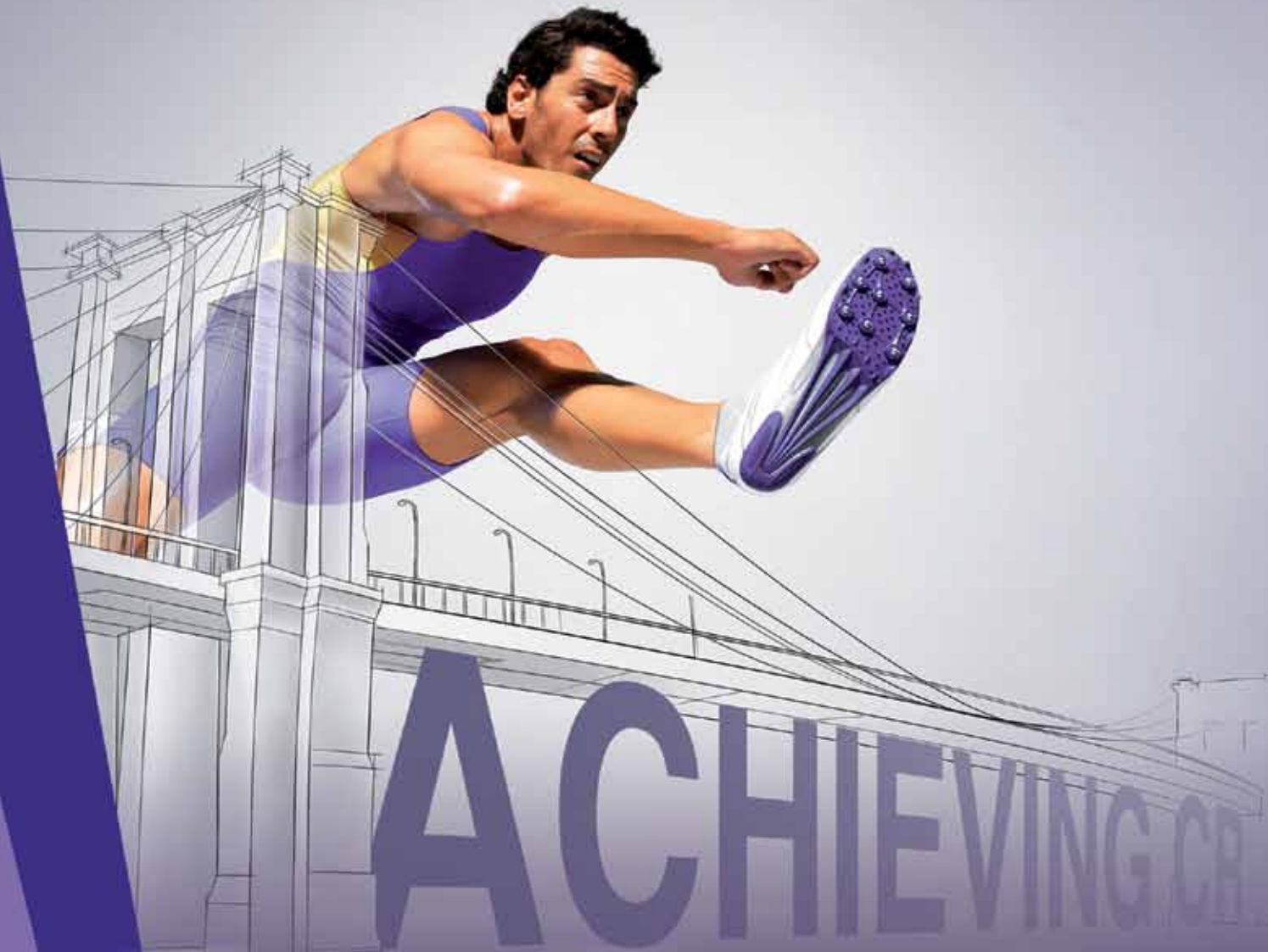
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References

1. Niesvizky R et al. Br J Haematol 2008;143:46-53
2. Kyrtonis MC et al. Asia Pacific J Oncol Hematol 2010;2:29-39



OBESITY AND THE WOMAN



Obesity and Polycystic Ovary Syndrome



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Polycystic Ovary Syndrome (PCOS)

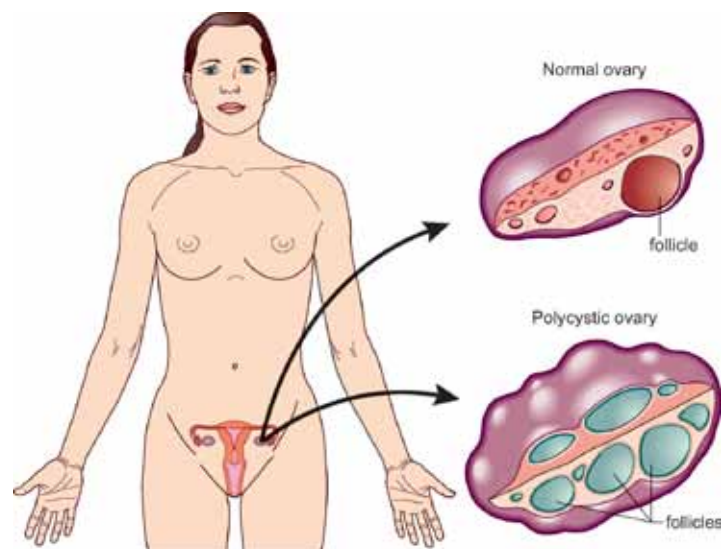
Polycystic ovary syndrome (PCOS) is a condition that causes irregular menstrual periods because monthly ovulation is not occurring and levels of androgens (male hormones) in women are elevated. The condition occurs in about 5 to 10 percent of women. The elevated androgen levels can sometimes cause excessive facial hair growth, acne, and/or male-pattern hair thinning. Some, but not all, women with PCOS are overweight or obese, and they are at a higher than average risk of developing diabetes and obstructive sleep apnea. For women with PCOS who want to become pregnant, fertility pills or injections are often needed to help women ovulate.

Although PCOS is not completely reversible, there are a number of ways to reduce or minimize bothersome symptoms. Most women with PCOS are able to lead a normal life without significant complications.

There appears to be an epidemic of both obesity and Polycystic Ovary Syndrome (PCOS) in the world today. Though obesity is not a cause of PCOS, obesity is present in 50% of women with PCOS. Reproductive function in women with PCOS is strongly dependent on bodyweight and metabolic status.

What are Polycystic Ovaries?

Polycystic ovaries are slightly larger than normal ovaries and have twice the number of follicles (small cysts). An ultrasound scan can show polycystic ovaries. It affects 20 in 100 (20%) of women. Having polycystic ovaries does not mean that you have PCOS. Around 5-10% of women with polycystic ovaries have PCOS.



Symptoms of PCOS

- Irregular periods or no periods at all.
- Difficulty in becoming pregnant (Infertility).
- Having more facial or body hair than is usual for you (hirsutism).
- Loss of hair on your head.
- Being overweight, rapid increase in weight, difficulty in losing weight.
- Oily skin, pimples (acne)
- Depression and mood swings

How is PCOS diagnosed?

- Irregular, infrequent periods or no periods
- More facial or body hair than usual
- Blood tests which shows higher testosterone than normal
- An ultrasound scan which shows polycystic ovaries

What causes PCOS?

The cause of PCOS is not yet known. It runs in families. Obesity is not a cause of PCOS, as there is a high prevalence of PCOS in relatively thin population. Symptoms of PCOS are due to abnormal hormone levels. Male hormone, testosterone, is slightly higher than normal and causes symptoms like hirsutism, loss of hair, etc.

Insulin is a hormone that regulates level of glucose in blood. In PCOS, the body may not respond to insulin (known as insulin resistance) and so the level of glucose in blood is higher. To prevent blood glucose levels becoming higher, the body produces more insulin (hyperinsulinemia). High levels of insulin can lead to weight gain, irregular periods, infertility and higher levels of testosterone.

What is the effect of obesity on PCOS?

Obesity, especially abdominal obesity, has a major influence on the symptoms of PCOS and infertility. About 50% of PCOS are overweight. When compared to normal weight PCOS, obese PCOS women have more severe clinical features like menstrual abnormalities, absence of ovulation & hirsutism.

A gain in weight is associated with worsening of symptoms, while weight loss will improve the disease profile and its symptoms. Obesity exacerbates many aspects of PCOS especially cardiovascular risk factors such as glucose intolerance and dyslipidemia (increased cholesterol). It is also associated with a poor response to infertility treatment and an increased risk for pregnancy complications in women who conceive. Miscarriages, still births, and congenital anomalies are more in women with PCOS and BMI > 25kg/m². This is due to increased insulin resistance and impending or undiagnosed diabetes.

Metabolic Effect of Obesity on PCOS

Insulin Resistance is an important marker of metabolic effect of obesity. Abdominal obesity may be partly responsible for insulin resistance and high level of insulin in women with PCOS. Increased insulin at the level of ovarian tissue may favor excess male hormone (Androgen).

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Certain markers in Obese PCOS (Blood Test)

- ❖ Increased fasting blood glucose
- ❖ Increased fasting insulin
- ❖ Increased total testosterone
- ❖ Increased free androgen index
- ❖ Decreased sex hormone binding globulin (SHBG)
- ❖ Worsened lipid profile

This suggests that prevention and treatment of obesity is important for the management of PCOS.

Benefits of Weight loss in Obese PCOS women

Several studies have shown that even a modest loss of 5-10% of total body weight can achieve a 30% reduction of central fat, an improvement in insulin sensitivity, reduction in androgen level and an improvement in fertility. Weight loss prior to conception improves live birth rate in women with PCOS.

In short the benefits of weight loss are:-

- A lower risk of insulin resistance and developing diabetes
- A lower risk of heart problems
- A lower risk of cancer of uterus
- More regular periods
- An increased chance of becoming pregnant
- Reduction in pimples (acne) and decrease in excess unwanted hair growth
- Improved mood and self-esteem.

Life style modification (Diet and exercise) is clearly a key component for the improvement of reproductive function in overweight, anovulatory women with PCOS. Exercise and weight loss have so far been the best way to improve insulin sensitivity and metabolic abnormalities seen with the syndrome.

Key Messages

Weight loss is considered as the first line therapy in obese women with PCOS. It may include lifestyle modification (Diet and exercise), drug treatment and bariatric surgery.

Aim should be to keep body mass index (BMI) between 19 and 25.

Many women with PCOS successfully have managed their symptoms and long term health risks without medical intervention. They do this by eating healthy diet, exercising regularly and maintaining a healthy lifestyle.





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Fertility Issues in Obesity

Dr Annie Roy Cherian

Department of Obstetrics & Gynecology
Farwaniya Hospital



*Hot chips, mayonnaise, and chocolate - We get it.
But if you want to have a child,
Know that being overweight, especially significantly so -
Can affect your fertility.*



With rising infertility rates—nearly 10% of all couples in the United States are affected by infertility—more experts are pointing the finger at another growing phenomenon among the nation's population: obesity. The rates of obesity in America are rising; in 2004, 33% of American women were defined as medically obese.

A person is defined as being obese if thirty per cent of his /her body weight is made up of fat tissue.

Is it TRUE, Can being overweight affect fertility?

Yes, a woman's weight can affect fertility. Women who have a normal body mass index (BMI) are more likely to conceive and to have a normal pregnancy than those who are not of the correct weight for their height.

How serious is the link between obesity and infertility?

Women with BMIs of 35 kg/m² were 26 percent less likely to become pregnant over the course of a year than women with normal BMIs, whereas severe obesity indicated by a BMI of 40 kg/m² decreased pregnancy odds by 43 percent. Female obesity is also associated with poorer outcomes following fertility treatments according to recent studies.

How can obesity reduce my chances of getting pregnant?

The mechanism by which female obesity contributes to infertility is not fully understood. Obesity-related infertility may be related to chronically-high insulin levels causing hormonal disturbances that disrupt ovulation. In some cases, obesity is associated with polycystic ovary syndrome, PCOS, a condition which also causes ovulation to be disrupted, thus contributing to infertility.

The causes of infertility among obese, ovulatory women are not known, but the metabolic hormone leptin may play a key role.

A BMI over 25 is considered overweight and a BMI over 30 is considered obese.

Fertility issues with obesity

- Irregular or infrequent menstrual cycles
- Increased risk of infertility
- Increased risk during fertility surgery
- Increased risk of miscarriage
- Decreased success with fertility treatments

Body weight and safety of IVF procedures

Another issue related to body weight and IVF is safety for the patient at egg collection. When a woman is significantly overweight, the ovaries are usually pushed up high away from the top of the vagina by the extra fatty tissue that is in the pelvis. If the ovaries are too high, this makes the egg collection procedure extremely difficult.

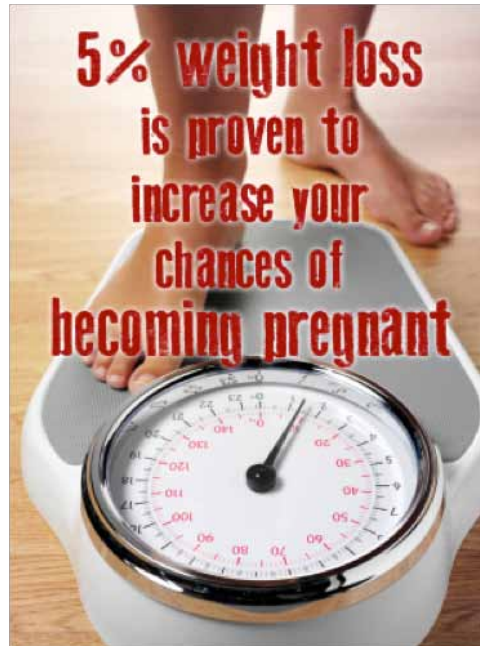
Does obesity affect male fertility?

Men who are overweight or obese have significantly lower sperm counts than men of normal weight. Overweight men who had a BMI over 25 had a nearly 22% lower sperm concentration and 24% lower total sperm count compared with healthy weight men.

Benefits of weight loss

- Weight loss of 5% to 10% may dramatically improve ovulation and pregnancy rate
- Improved health including reduced risk of high blood pressure, diabetes
- Improved self – esteem.





How can I lose weight?

- Before you start
 - Motivation is crucial: no weight loss plan will work unless you have a serious desire to lose weight. You need to be ready and motivated.
 - Monitor your current food intake: it is helpful to know exactly how much you currently eat. Keeping a detailed diary of everything that you eat and drink over an average week is more helpful.
- Aim to lose weight gradually: it is best not to lose weight too fast. Aim to lose an average of 0.5 to 1 kg per week (about 1-2 lb per week).
- Set clear goals with a realistic timescale: it is important to set a clear and realistic weight loss goal. As mentioned above, in most cases, health benefits can be gained from losing the first 5-10% of your weight.
 - Aim to eat a healthy balanced diet



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• Cut junk food



• Be careful about what you drink



• Increase your physical activity levels



• Monitor your behavior and progress/ Get help and support.



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Is Pregnancy an Excuse to Overeat? How Your Weight Is Important In Pregnancy



Dr Ananthapriya Vaidya

Department of Obstetrics & Gynecology
Farwaniya Hospital, Kuwait

- “Why are you pecking at your food? Now that you are pregnant, you should eat for two!”
- “If you eat lots of ghee your delivery will be easy- the baby will just slip out!”
- “Hey you are pregnant-take complete rest” -----

This is ancient wisdom coming from your well-wishers as you await your bundle of joy to arrive, and they must be right--- Wrong!

All you women who think that pregnancy is an excuse to over-indulge in food, think again! Being overweight gives rise to some problems in pregnancy both for you and your baby.

When and how do you know whether you are overweight or obese?

You need to calculate your Body Mass Index (BMI) early in your pregnancy to know your status.

Now that you know how fit you are, let's find out what happens if you are overweight or obese during pregnancy.

Problems for the Overweight Mother

1. Thrombosis (commonly known as blood clots): Pregnancy itself increases the risk of blood clots being formed in your veins which can then get lodged in the lungs giving rise to serious consequences. Obesity compounds this risk of thrombosis.
2. Gestational diabetes: Normally about 1 in 20 women develop Diabetes (high blood sugar) in pregnancy also known as Gestational Diabetes. However, if you are obese (BMI>30) then your risk increases three fold.
3. High blood pressure and pre-eclampsia: Some women develop high blood pressure in pregnancy (Pregnancy Induced Hypertension). If this is associated with loss of protein in the urine, it is called Pre-eclampsia. this condition poses a risk to the mother and baby. If a pregnant woman's BMI is over 35, her risk of developing this condition is twice that of a normal weight woman.

Problems for the Baby Growing in the Overweight Mother

1. Neural tube defects: These are developmental defects of the brain and spinal cord of the baby and happen to one expectant mother out of a thousand, However if you have a BMI of over 40 your risk is thrice that of a normal weight woman,
2. Miscarriage: If your BMI is more than 30, your risk of miscarriage is 25% compared to 20% in normal weight people.
3. Overweight baby: Your risk of having a baby weighing more than 4 kilos is twice that of normal weight woman if your BMI falls in the obese category.(14% in obese against 7% in normal weight) Consequently you and your baby can face problems in labour as we'll see later.

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4. Stillbirth: Obese women have an increased risk of delivering a still born baby compared to non-obese women.
5. Baby in future: Babies born to obese mothers are more likely to be obese themselves and develop diabetes as adults.

Problems in Labor:

1. Premature delivery.
2. Long duration of labour
3. Difficulty in delivering the shoulders: Also known as shoulder dystocia this happens when the baby is big and the shoulders are bigger than the baby's head.
4. The likelihood of having an emergency caesarian delivery is higher especially because of the baby being big.
5. In case you do end up in a C-Section, complications like bleeding and infection occurring in the wound are higher if you are obese.
6. Problems during anaesthesia, especially general anaesthesia are more frequent in obese women.
7. Heavy bleeding following delivery or during caesarian is more likely in obese mothers.

SUMMARY

MOTHER	BABY	LABOR
<ul style="list-style-type: none"> ➤ Thrombosis ➤ Gestational diabetes ➤ High blood pressure and pre-eclampsia 	<ul style="list-style-type: none"> ➤ Neural tube defects ➤ Miscarriage ➤ Overweight baby ➤ Stillbirth ➤ Future risk of obesity and Diabetes 	<ul style="list-style-type: none"> ➤ Premature delivery ➤ Prolonged Labor ➤ Shoulder dystocia ➤ Emergency C-section ➤ Bleeding and infection ➤ Anaesthetic problems

I do not mean to scare you by telling you about all these problems! Very few of us are in the obese zone early in pregnancy, and if anyone falls in this category, there are always remedial measures.

Traditional wisdom forced upon us says that pregnant women need to gain loads of weight. While this is true to an extent, there is a limit to the amount of weight to be gained.

Do you know where all the weighed gain goes?

Here's where:

- Baby: 7-8 pounds (3-4 kg)
- Placenta: 1-2 pounds (about 1 kg)
- Amniotic fluid: 2 pounds (about 1 kg)
- Uterus: 2 pounds (about 1 kg)
- Maternal breast tissue: 2 pounds (about 1 kg)
- Maternal blood : 4 pounds (about 2 kg)
- Fluids in maternal tissue: 4 pounds (about 2 kg)



- Maternal fat and nutrient stores: 7 pounds (3-3.5 kg)
- Fluids in maternal tissue: 4 pounds (about 2 kg)
- Maternal fat and nutrient stores: 7 pounds (3-4kg)

Based on BMI before pregnancy the weight gain should be:

- BMI of 18.5-24.9 ----- 24 to 25 pounds (11 to 15 kg)
- BMI of less than 18.5.(underweight) ----- 28-40 pounds (12 to 18 kg)
- BMI of 25-29.9. (overweight)----- 15-25 pounds (7 to 11 kg)
- BMI of over 30.(obese)----- 11-20 (5 to 9 kg)

How much extra food do you need in pregnancy?

In the first 3 months, almost no additional calories are required. As the pregnancy progresses, the energy requirements rise and in the last 3 months an additional 200 to 300 calories are required. (Roughly amounts to half a meal extra).

However, you need to take supplements of the vitamin, folic acid at a dose of 5 mg if you are obese and less if you are not. Some women may also need iron supplements if they are anaemic and calcium and vitamin D supplements if they do not get enough in their diet.

The Million dollar question is – “what do you eat?”

- The easiest thing to do is to eat as you normally would with a little extra, however it is good to regulate the kind of food you eat, not only in pregnancy but even otherwise.
- Your staple food should contain cereal like rice or wheat. Avoid highly polished rice and maida and rely on more fibrous food like oats, jawar and whole grain wheat. Rice eaters can eat brown rice.
- Proteins can be sourced from lentils (different kinds of dal), dairy products, egg-whites, lean meat and fish.
- Eat at least five portions a day of different kinds of fruits and vegetables.
- Avoid extra oil and fried foods, -so, bye-bye to “grandmother’s theory of ghee helping you with a quick delivery!”
- Also avoid food with added sugar like confectionaries and juices, and processed food like that available in ready to eat meals like instant noodles.

If you are overweight or obese I am sure the one question buzzing in your mind now is --- “Can I or should I diet in pregnancy?”

Restricting calories and going on a diet is not advisable in pregnancy because poor weight gain in pregnancy has its own problems. However avoiding excessive weight gain is helpful. Simple changes in your food habits like I mentioned previously will be very helpful in keeping fit even after your delivery.

What about the theory of “complete rest”?

You certainly do not need “complete rest”! (Unless you have bleeding.) Moderate exercise is advisable in pregnancy. Those who have been physically active before pregnancy can continue with

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their exercise as before. However it is best to avoid high impact exercises and stick to moderate intensity work outs like walking, cycling, swimming, yoga and low impact aerobics. If you have led a



sedentary lifestyle before pregnancy, it is best to start mild activity lasting about 15 minutes initially and then increasing it as you get used to it. Do not overwork yourselves. One way of knowing if you are overdoing it is the "talk test". You should be able to hold a normal conversation while exercising; if you are breathless it means you need to reduce the intensity.

To put it in perspective:

- Obesity in pregnancy can have bad consequences for mother and baby.
- There is no need to "eat for two".
- Limiting weight gain and adopting healthy nutritional alternatives will be helpful if you are obese.
- Folic acid and Vitamin D supplements are necessary particularly if you are obese.. Iron supplements are necessary if you are anaemic.
- Mild to moderate low impact exercise is recommended in pregnancy.

So the next time someone gives you unsolicited advice...
Be pre-warned and pre-armed with this information!

Have a safe and enjoyable confinement!

- Sources:
- Information for you -Why your weight matters during pregnancy and after birth. RCOG patient information November 2011. (<http://www.rcog.org.uk/files/rcogcorp/CMACERCOGJointGuidelineManagementWomenObesityPregnancy.pdf>.)
- <http://www.americanpregnancy.org/pregnancyhealth/pregnancynutrition.html>
-



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OBESITY MANAGEMENT ASPECTS

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Nutrition, Food, Diet & Prevention of Obesity



Maria Ranjini Rajan
Dietician

Are you a slave to food?

The small Gulf state of Kuwait has grown over the decades from a modest, slow paced, pearl-farming community into one of the world's richest countries per capita, thanks to its abundant reserves of oil.

But too much of a good thing, may not necessarily be good. It can be problematic.

Kuwait ranks the 13th on global scale in obesity, according to the World Health Organization.

In recent years, Kuwaiti waistlines have swollen to make them among the most obese people on the planet. Nearly 70% of Kuwaiti males over 15 are overweight or obese, according to the World Health Organization. For women, the figures are even worse - slightly over 80%.

Though Kuwait is a tiny little country but yet it's filled with loads and loads of food and not much of activity!! Kuwait is one of the easiest places in the world to be inactive and eat delicious (mostly unhealthy) food day and night. Bringing into consideration the extreme climatic conditions of the region, leave alone exercising or even walking to a nearby place, of course people here struggle to stay healthy or lose weight. Just like America, Kuwait too is easily becoming one of the fattest countries in the world.

The food culture and eating behavior of the region has an important role to play in the increased rise in the rate of obesity in Kuwait. And here in Kuwait it is such that, no event or occasion goes by where food does not play an integral and important role, be it an office event or even just a get together at home.

Waistlines are expanding, clothes seem to be shrinking faster than normal and weighing scale readings freak you out and you're wondering- What happened? Where did I go wrong? You need to consider what you are eating! Is what going into your mouth helping you or destroying you? Are you a slave to food?

In the next few pages, we are going to concentrate on the food we eat and other factors concerning our eating habits and how it's related to obesity.

Calorie overload?

Dietary Energy Supply (DES): It is the food available for human consumption, usually expressed in kilocalories per person per day. Dietary energy supply is correlated with the rate of obesity.

It's no secret that the amount of calories people consume is directly proportional to their weight. If you consume the same amount of calories that the body burns in a day, the weight stays stable, if the calorie consumption is less than the calories burnt, the weight drops. If the calorie consumption is greater than the calories burned, the weight increases.

- 1 gram fat contains 9 calories
- 1 gram carbohydrate contains 4 calories
- 1 gram protein contains 4 calories

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From the above calorie content of the macronutrients it is clear that if you eat anything in excess, there is a conceivable possibility that it will be more than what is required by your body and it ends up getting stored as fat and leads to weight gain.

Insight: 1 kg body fat contains approximately 3850 calories, which means you need to cut down around 550 from your energy requirement every day for a period of 7 days to lose around 1 kg body weight.

Skipping meals?

If you miss breakfast, you're missing out big time.

Everyone (or so I assume) knows that breakfast is the most important meal of the day, but how many of us actually have breakfast every day?

But breakfast is not supposed to bloat the waistband; it's supposed to help get the brain going in the morning. Life sometimes gets busy, and it's quite easy to get caught up with all the mundane activities, that you feel there is hardly any time to even eat a proper meal and hence decide to skip it. Skipping breakfast is one of the main reasons contributing to weight gain. What happens is, your body sort of goes through a mini fast at night and when you wake up and rather than feeding your body, you end up opting for a cup of tea/coffee, you only end up leaving your body crave for more energy and you in turn end up snacking on sugary items or unhealthy snacks throughout the day which only satisfies your hunger temporarily and before you know it you are reaching out for the next one. For healthy eating and maintaining a healthy lifestyle, nutrition experts recommend that you eat all 3 meals along with 2 snacks every day and the main reason behind this advice is that eating frequently throughout the day, keeps your body's metabolism elevated and leaves the body energized. And those of you who eat breakfast, do you think it's a healthy breakfast? If your breakfast mainly consists of sugary cereals, or breakfast bars or a processed fruit juice you need to reconsider it as they are packed with sugars.

Snacking unhealthy?

With the many ready to eat snacks available in the stores, people here in Kuwait find it difficult to make healthy food choices. Snacks should be part of your total calorie requirement for the day and not add extra calories to it. If you are the kind of person that when you feel hungry, you tend to get a hold on a packet of chips, a chocolate maybe or cheese sticks. If you think of yourself to be a health freak and opt for the sugary cereal bar, or some other processed food- be cautioned it is loaded with trans fat and sugars. Even a cereal bar which you might consider to be healthy is in fact not. Probably you are better off not eating that stuff.

What kind of snacks are you sending your child to school with?

Hotdogs? nuggets? chips? a packet of fruit juice? If you routinely choose unhealthy snacks and make equally unhealthy choices for meals, don't be surprised if you start packing on the pounds. In short, if your snacks add a lot of calories that are not offset by eating less at other times or increasing physical activity, it will cause weight gain.

Is fast food becoming a necessity?

There is no dearth when it comes to fast food restaurants in Kuwait. It has also been found that most of the people in Kuwait eat out at least 4 times a week and it is not necessarily healthy dining. It's almost like eating takeaways has become a norm for many. After a hard day at work, you don't feel like cooking yourself or your family a meal and hence decide to dine out or order a takeout and you end up opting for fast food instead of other healthy choices because fast food is economical, reasonably priced and this makes it even more preferable. Fast foods when combined with sedentary habits and lack of exercise are important factors causing obesity.

Fast foods though delightfully appetizing are unfortunately packed with loads of calories, sugars and unhealthy fats. People who consume fast foods on a regular basis are less likely to eat fruits, vegetables, milk etc. This change in eating habits can easily lead to obesity cause of lack of fiber in the daily diet. According to a research, if you consume fast food 2 times a week, your obesity risk increases by 50%! So...Think twice before you decide on what to order next time! I'm not suggesting that you need to cut fast food out completely but there is always an option of considering less fattening choices.

Surviving on sweetened beverages?

Can I have a coke please?- This is probably one of the first few things you say when you step into a restaurant or diner. It's become a trend nowadays to drink coke/red bull, any other soft drink or energy drink. And being in a country where petrol is way cheaper than water it comes as no surprise that people here hardly drink much water! Water is very vital for one's health and plays a very important role in maintaining your body's metabolic activity. True to the saying, water is definitely the elixir of life. The human body is made up of 75% water. Studies have shown that increasing your water consumption helps in increasing your metabolic rate and hence increases the rate at which your body burns calories.

The truth about juice: Many people here in Kuwait have incorporated juice as an essential part of their diet. You send your kids off to school with a packet of juice along with their snack; you probably drink a packet of juice for breakfast or sip on it during office intervals. However, juice isn't as healthy as people think it is. Drinking a lot of juice doesn't usually cause fullness, but the excess calories from juice can cause weight gain. It's much healthier to eat the fruit rather than drink the juice. For example, one and half glass of orange juice, which is the juice of two to three oranges, has about 180 calories, while one orange contains only 80 or 90 calories. So you might as well help yourself cut down on calories by eating the fruit than consume more calories by having it in the form of juice, which is loaded with sugars.

The truth about sodas: Sodas and other sweetened drinks are full of sugar such as high-fructose corn syrup. Many also contain caffeine, which is a diuretic that can cause dehydration. The main problem with sweetened beverages is that the body doesn't register it is full after drinking hundreds of calories. There is a hormone in your stomach called ghrelin that lets you know when you're hungry. When the hormone increases, you feel hungry. When you eat, the hormone goes down. However, this mechanism only works with solid food and not with liquids. Drinking soda, juice, sports drinks and other sugar-sweetened liquids does nothing for your hunger, even if you consume hundreds of calories. As a result, sugar-sweetened beverages are often wasted calories or so called empty calories which has not much nutrient value but only aids weight gain.

According to a research article from the New England Journal of Medicine it was found that the genetic association with adiposity appeared to be more pronounced with greater intake of sugar-sweetened beverages.

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Quick fixes for temporary weight loss?

As your weight increases, your quest for a diet to help shed those extra kilos also increases, and you search and search and get so frustrated that you end up eventually settling down for any diet that you may come across without even giving it a second thought, and mostly they end up being diets which suggest rapid weight loss within a very concise period of time. But the fact is that you need to understand there is no such magic pill, diet or medication that burns fat or slims you down instantly without requiring some effort or discipline from your side.

Here are a few points to consider:

Stay away from diet that suggests rapid weight loss. If you lose weight quickly, you'll lose muscle, bone and water. You also will be more likely to regain the pounds quickly once you get back to your normal way of eating.

Avoid any diet that eliminates or severely restricts entire food groups, such as carbohydrates. Every nutrient, be it carbohydrate, fat or protein is vital for normal body functions and activity. Even if you take a multivitamin, you'll still miss some critical nutrients.

Shelves and fridge stacked with processed foods?

Gone are the days when people spent time painstakingly cooking food and ensuring that their family is well fed on healthy meals. In fact very few households actually practice this in the present time. Old is always gold! We live in such a fast world that even the time required to cook food has drastically decreased, that, sometimes it makes one wonder how many people actually make most use of their kitchen or even step into it other than the sole purpose of making coffee. How many persons know how to cook since mostly everything is already available in the pre-cooked or pre-processed form? Processed foods such as sausages, nuggets, packet soups and noodles (just to name a few), are all laden with sodium. Too much of sodium in your body will tend to cause water retention over a period of time and leads to weight gain. And if you are having them as part of your diet more than twice a week it is not favorable.

Eating Habits: How do you eat?

Most of you might not be practicing commendable eating habits for a long time that it has become a part of your lifestyle and you don't even realize that they are unhealthy. When it comes to eating habits, a considerable amount of discipline will definitely go a long way. Here are a few things that you might need to change:

Watching TV while eating? It is not good nutritional practice to eat in front of television. You might become so involved in the program, you fail to notice what you are eating, or how much food is going in and you might not be responding to your body's cues to hunger and satiety and most likely tend to overeat without being aware of it because you are not paying attention.

No fixed meal times? It is better if you try to align yourself to certain fixed times during which you have your meals and snacks so that you do not tend to eat outside of those timings and hence do yourself a favor by cutting down on excess calories.

Do you gulp your food down? Eating the right food is important, but eating the right food and eating it in the right manner is essential for lifelong weight loss. There is a direct relationship

between chewing and weight loss. Eating too quickly leads to overeating. This is because the food you have eaten has not yet reached your stomach and the brain does not tell you are full. Chewing slower and longer causes the brain to release histamine, resulting in decreased food intake. Practice chewing at least 20-30 times per mouthful.

Large Portions? Mega-meals can add up on your waistline and take a toll on your health. According to the National center for Chronic Disease Prevention, people will consume more food at a sitting if the portion is larger. If this is your story, using a smaller plate or adding less to your plate will help.

Eating late? The number of hours of sleep and nutrition are related, where studies revealed that sleeping late at night causes obesity, compared to people who sleep early.

When you don't get enough sleep, leptin levels go down, (leptin is produced by fat cells. It sends signals to your brain when you're full) which means you don't feel as satisfied after you eat. Lack of sleep also causes ghrelin (as mentioned earlier, ghrelin is the hormone that stimulates your appetite) levels to rise, which means your appetite is stimulated, which makes you crave more food. And these two actions when combined together set the stage for overeating which in turn leads to weight gain.

If you have answered "yes" to most of the questions above, you may need to do something about it. Acknowledging and admitting that you are struggling when it comes to food is the first and best step that you can take towards leading a healthy lifestyle. Life is already complicated enough. Limiting food choices or sticking to rigid meal plans can be an overwhelming, distasteful task. Before you embark on any new diet, always ask yourself: "Can I eat this way for the rest of my life?" If the answer is no, the plan is not for you!



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Dietary Management of Obesity

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If you consume more calories than you burn, you will gain weight, ultimately leading to obesity. This happens due to a combination of inactivity and unhealthy diet and eating habits.

Management of Obese Patients

Goal of obesity treatment is to reach and stay at a healthy weight by introducing better eating habits and activity. One can start feeling better and see improvement in health by just an initial weight loss of 5 to 10 per cent of your total weight.

The management includes:

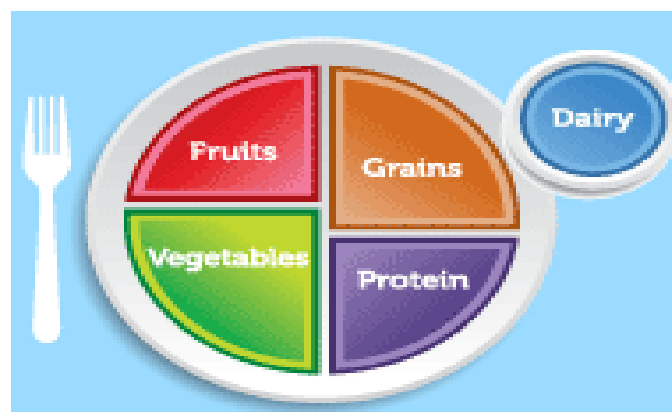
- Dietary changes
- Exercise and activity
- Behavioral changes
- Prescription of weight loss medications
- Weight loss surgery

Dietary Changes

Reducing calories and eating healthy are vital to overcoming obesity. A slow and steady loss of 1 to 2 pounds of weight per week is considered the safest way to lose weight and to keep it off permanently. Avoid crash diets.

Based on one's age, weight, sex, height and activity, a typical reducing diet will be 1000 to 1600 calories per day.

Adopting a Healthy Eating Plan



This figure above summarizes the rough portions of various food group that make up each meal. Manage the quality and quantity of your calorie intake by the following methods:

1. Increase the Intake of:

- Plenty of fiber like high fiber breakfast cereals, pulses, beans, potatoes with skin, oats, fruits and vegetables.
- Prefer eating healthy breakfast cereals (which have less sugar and more fiber) for breakfast five days a week. This way we can cut down fats found in other breakfast foods.
- Whole grains like whole wheat bread, whole wheat pasta, and brown rice.

2. Limit the Intake of:

- White bread, white rice and white pasta.
- Granulated sugar (it should be around 10 % of the total calorie intake), Sugar may be substituted by non-caloric sweeteners such as splenda, aspartame, xylitol and stevia.
- Salt/sodium consumption from all sources; ensure the salt is iodized.
- Fat and oil.
- Eliminate trans-fat such as margarine.

3. Eat Preferably:

- More than five portions of fruits and vegetables (excluding potatoes without skin, corn)
- Eat more vegetables during meals as water rich foods like zucchini, tomatoes and cucumbers reduce your overall calorie consumption. Some other water rich foods include soups and salads.
- Use vegetables to make hefty meals like pasta. Load salads with vegetables like broccoli, carrots, and tomatoes. Same applies to stir fries. Add vegetables to make a fluffier omelet.
- Oily fish such as tuna, mackerel and salmon, once or twice a week to promote vascular health.
- Use skim milk and low fat yogurts, spreads and cheese such as Edam or cottage cheese.
- Switch to ordinary coffee made with skim milk and brewed with good beans; tastes great and has fewer calories.
- Consider substituting red meat, with vegetable proteins like pulses or soya.

Avoid the Following:

- Pastries, sugared sodas and other highly processed foods.
- Fatty meat products such as sausages, salami and meat pie.
- High fat dairy products, such as full cream milk, butter, or full fat cheeses.
- Saturated fats (those that become solid at room temperature), such as coconut oil, palm oil, and most animal fats, including those found in red meat and dairy.

Additional Points to Remember:

- Minimize delay between cutting fruits, vegetables to eating them.
- Do not overcook vegetables, steaming is preferable to boiling, these measures preserve the vitamin content.
- Boil, steam, or bake foods in preference to frying.



- When cooking with fat, use unsaturated oil, e.g., olive or sunflower oil. Prefer unsaturated fats (which remain liquid at room temperature and are predominant in most plant based oils and food).
- Choose lean meat, remove excess fat and poultry skin, and pour off the fat after cooking.
- Drink at least 2 to 3 liters of fluid each day.
- Water is the best source of liquid; avoid sugary drinks and limit the intake of juices, coffee, tea and artificially sweetened drinks, 100 % fruit juices. Eat fruits in place of fruit juices, as this will keep you satisfied for a longer time and juices are high in calories.
- Sports drinks are recommended for people who exercise more than an hour at a stretch.
- Drink a large glass of water before meals to reduce the urge to overeat.
- Eat small, frequent meals, carry healthy snacks like cut-up veggies and avoid junk food. Eating small meals helps the body to release less insulin which leads to control hunger.
- Prefer flavorings like hot sauce, salsa, and Cajun seasonings rather than butter and creamy sauces. These flavorings provide flavor with no fat and fewer calories. And spicy ones also cause your bodies to burn more calories.

Behavioral Changes

- Keep small plates for serving food, because a study shows that less food put in front of us the less we will eat. So downsize your food plates and coffee mugs.
- Prefer having meals at home.
- Try to eat slowly and put your fork and spoon down after every bite. If you eat slowly, you will feel contented with your meal.
- Eat only when your stomach wants food. Usually people eat out of boredom, nervousness and habit or frustration.
- It is probably a craving and not hunger.
- Prefer not eating in large group, probably because we spend more time at the table.
- Skip watching TV for an hour, and go for a walk instead.
- Take most of your calories before noon, because studies say that more you eat in the morning the less you eat in the evening.
- Moreover, we have more chances of burning those early day calories than late night calories.
- Examine your current habits to find out what factors, stresses or situations may have contributed to your obesity, and make suitable changes.
- Indian foods that cut fat: Turmeric, cardamom, chillies, curry leaves, garlic, mustard oil (in limited quantities), cabbage, sprouted moong daal, buttermilk.

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Behavioural Management in Childhood and Adolescent Obesity

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Physical Medicine and Rehabilitation Hospital, Kuwait



Obesity has become the most common paediatric chronic disease in the modern era. Early prevention and treatment of childhood and adolescent obesity is mandated. Obesity in childhood and adolescence may be associated with a range of medical and psychological complications, and can predispose individuals to serious health problems in adult life, including type 2 diabetes, hypertension, dyslipidaemia and non-alcoholic steatohepatitis.

Obesity interventions for which there is some evidence include family support, long-term behaviour modification, dietary change, and increased physical activity and decreased sedentary behaviour. Prevention of obesity in children and adolescents requires a range of strategies involving changes in both the microenvironment (e.g., housing, neighbourhoods, recreational opportunities) and the macro environment (e.g., food marketing, transport systems, urban planning).

The use of behavioral change techniques, such as decisional balance charts, goal setting, self monitoring, problem solving barriers and rewards, have been shown to be successful in managing lifestyle changes in children, and have been recommended in recent evidence based guidelines. Behavioral change techniques are now considered to be central to behavioral treatment of obesity. Most of these techniques are employed within lifestyle change programs to assist the child and family in raising their awareness and focus on the aspects of their lifestyles which require change, to motivate the child and family to make lifestyle changes and then to monitor those changes.

The essence of interventions in obesity is to ensure a participatory role for the child and the family in the problem analysis and planning of treatment, rather than given a set of advices that are to be followed. This methodology is more likely to succeed in tackling the problem.

Behavioral Techniques:

Decisional Balance (Exploring Readiness to Change)

Decisional balance involves comparing the perceived pros (benefits) and cons (costs) of making lifestyle changes. This process involves asking the child and their parents to consider the personal benefits of making lifestyle changes and 'slimming down' (e.g. be able to wear fashionable clothes, not being bullied at school or be able to run faster) and the perceived cons (costs) of changing behavior (e.g. do not like playing outside when it is raining, do not want to give up sweets or watching TV). The aim of the decisional balance is to help the family realize that the pros outweigh the cons, which in turn helps motivate them to change behavior.

Problem Solving Barriers

Encouraging families to identify barriers preventing behavior change and for them to explore ways to overcome these barriers is a useful strategy to promote behavior change and increase motivation to change lifestyle.



Self-Monitoring of Lifestyle

The recording of lifestyle by the child or family (for example the amount of TV viewing) is regarded as being a key component of behavioral change which enhances motivation to change lifestyle by increasing self awareness. Monitoring the child's diet, activity and sedentary behavior in a diary raises awareness of his/her current lifestyle and can be used to identify changes that could be made to the child's current lifestyle and allows the family to monitor progress towards their goals.

Goal Setting by the Client

Goal setting is frequently used in lifestyle programs to increase and maintain the child and family's motivation for behavior change. Goal setting involves allowing the child to take responsibility for identifying the lifestyle changes they feel able to make and setting goals for these behavior changes. It is suggested for the health professional and their parents to assist with goal setting by ensuring that the goals are SMART – Small, Measurable, Achievable, Recorded, and Timed.

Contracting

The signing of a 'contract' between the child, parent and health professional may help to reinforce the commitment to meeting the lifestyle change goals which the child and parent have set in the allotted time period.

Rewards for Reaching Goals

Allowing the child to choose a 'reward' for achieving the agreed lifestyle change goals has been found to be helpful as a positive reinforcement to both the setting and attainment of goals. Rewards should be inexpensive, non-food items, such as a book, magazine or a family excursion.

Environmental/Stimulus Control

The environmental/stimulus control involves controlling stimuli or cues that encourage or sustain the 'unhealthy behavior' and providing cues that support/promote the new necessary lifestyle changes. For example the parent avoids buying and bringing into the home high sugary/high fat snacks or the child avoids walking home from school past a local sweet shop.

Preventing Relapse

Relapse prevention involves helping the child and family to identify possible 'high risk' situations where sticking to goals could be difficult e.g. holidays, parties and wet weather and then helping them to develop strategies to cope with these high risk situations (e.g. participating in an indoor activity during wet weather). This may be carried out as a paper exercise or as simulation and role play. Relapse prevention is particularly important at the end of the program to ensure that the child and family maintain behaviour/lifestyle changes in the long-term. Planning ahead for difficult situations and continuing with or returning to goal setting and self-monitoring would be useful.

Peer Learning

Targeting the peer group by motivation and providing healthy life style choices and information to the peer group to which the child belongs helps to reinforce the program effectiveness. This can be

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effective through the school health programs, magazines, seminars, use of social networking sites and social groups.

Recommendations for Parents to Prevent Childhood Obesity

- Discourage eating meals or snacks while watching TV. Eating in front of the TV may make it difficult to pay attention to feelings of fullness and may lead to overeating.
- Buy fewer high-calories, low-nutrient foods. Help children understand that sweets and high-fat treats (such as candy, cookies, or cake) are not everyday foods. Don't deprive children of occasional treats, however. This can make them more likely to overeat.



Figure 1. Avoiding Junk foods

- Avoid labeling foods as “good” or “bad.” All foods in moderation can be part of a healthy diet.
- Involve children in planning, shopping, and preparing meals. Use these activities to understand children’s food preferences, teach children about nutrition, and encourage them to try a wide variety of foods.



Figure 2. Involving the children in cooking

- Make the most of snacks. Continuous snacking may lead to overeating. Plan healthy snacks at specific times. Include two food groups, for example, apple wedges and whole grain crackers. Focus on maximum nutrition - fruits, vegetables, grains, low-sugar cereals, low fat dairy products, and lean meats and meat alternatives. A reasonable amount of juice is 4-8 ounces per day.
- Encourage physical activity. Participate in family physical activity time on a regular basis, such as walks, bike rides, hikes, and active games. Support your children’s organized physical activities. Provide a safe, accessible place outside for play.





Figure 3. Increase physical activities

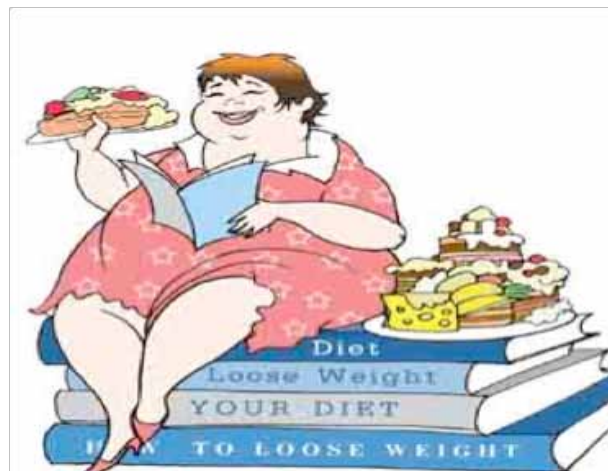
- Limit the amount of time children watch television, play video games, and work on the computer to 1 to 2 hours per day. Reducing sedentary activities helps in increase physical activity.



Figure 4. Reduce the time spent in watching TV

Suggested further reading on these web sites:

- www.obesityaction.org
- <http://kidshealth.org>
- www.cdc.gov/healthyyouth/obesity/facts.htm
- www.betterhealth.vic.gov.au



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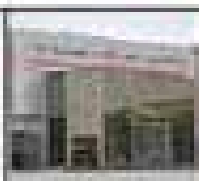
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Latest Trends in Medical Treatment of Obesity

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Along with diet, exercise, and behaviour modification, drug therapy may be a useful component of treatment of overweight or obese patient's. However there is concern about efficacy, safety and observation that the body weight lowering slows and then plateaus with continued treatment and most patients regain weight when weight loss drugs are stopped.

The decision to initiate drug therapy in overweight subjects should be made only after careful evaluation of risks and benefits along with measurements of body mass index and waist circumference and investigation for co-morbid conditions such as diabetes, hypertension, dyslipidemia and heart disease.

The following is a consistent approach to management of overweight and obese patients based on guidelines and results of meta analysis. (Evidence based).

- 1) Counsel all overweight patients ((BMI: 25 -29.9 Kg/m²) and Obese patients (BMI > 30 Kg/m²) on diet, lifestyle, and goals for weight loss
- 2) Pharmacologic therapy may be offered to:
 - A) Those with BMI >30 Kg/m², and
 - B) Those with BMI 25-29.9 Kg/m² along with waist circumference >40 inches (102 cm) men, >35 inches (88 cm) in women
 - C) Those with BMI 27-30 Kg/m² and co-morbidities who have failed to achieve weight loss through diet and exercise alone.

Goals of Therapy

The ideal outcome is to return to normal body weight, but this is unrealistic as few achieved some weight loss, none their dream weight.

Success may be measured by degree of weight loss and improvement in associated risk factors.

Weight loss should exceed 2 Kg during the first month of drug therapy (one pound per week) Fall more than 5% below baseline by 3-6 months and remain at this level to be considered effective.

In drug trials weight loss of 10%-15% is considered a very good response and 15% an excellent.

This degree of weight loss should have substantial co-benefits lowering blood pressure, improving serum lipid concentration, increasing insulin sensitivity and reducing hyperglycaemia (Diabetes Status).

The maximum duration of published treatment results is four years (Orlistat).

Patients are advised when maximal therapeutic effect is achieved, weight loss ceases, and when drug therapy is discontinued weight may be regained.

Pharmacologic Options

These include Orlistat, Lorcaserin, Phentermine and Diethylpropion. Phentermine and Diethylpropion have potential for abuse and are only approved for short term use.

1. Drugs that alter fat digestion (Orlistat)
2. Serotonin Agonists (Lorcaserin)
3. Sympathomimetic Drugs (Phentermine, Diethylpropion}
4. Not Recommended
 - Antidepressants (Bupropion, Fluoxetine)
 - Antiepileptic Drugs (Topiramate Zonisamite)
 - Diabetes Drugs (Metformin, Pramlintide, Exenatide, Liraglutide.
 - Hormones (Human Chorionic gonadotropin)
 - Dietary Supplements (Ephdra, green tea, chromium, chitosan and guar gum)
5. Experimental Drugs
 - Leptin, Peptide YY, Oxytomudulin, Melanocortin-4 receptor agonists

For obese patients orlistat is recommended as first line pharmacologic therapy given its excellent cardiovascular safety profile and beneficial effects on serum total and LDL cholesterol concentrations. Recent treatment guideline suggest up two years of treatment. In the United States the Food and Drug Administration (FDA) has approved orlistat for four years of use.

Bariatric surgery should be considered for patients with BMI >40 Kg/m² who have failed diet, exercise (with or without therapy) and individuals with BMI>35 Kg/m² and co morbidities are also potential surgical candidates.

1. DRUGS THAT ALTER FAT DIGESTION

Orlistat

This is currently the only drug available for the long term treatment on obesity. it alters fat digestion by inhibiting pancreatic lipases, as a result ingested fat is not completely hydrolyzed to its constituent fatty acids and glycerol and consequently faecal fat excretion is increased. In normal subjects eating a diet that contains 30% fat,. 50 to 200 mg doses of orlistat with each meal causes a dose dependent increase in faecal fat excretion that peaks when approximately 30% of ingested fat is not digested. In diabetic patients orlistat resulted in significantly more weight loss and decrease in HBA1C at one year than placebo.

Less than 1 % of an oral dose of orlistat is absorbed. What little is absorbed is degraded into two metabolites.

Orlistat doesn't alter the pharmacokinetics of digoxin, phenytoin, warfarin, glyburide, oral contraceptives, alcohol, furesimide, captopril, nifedipine or atenolol.

Absorption of vitamin A.D.E may b slightly reduced

Orlistat Improves some lipids {total and LDL cholesterol are reduced by 5 to 10%}.

Dosage: Orlistat is available in 120 mg capsules. The recommended dose is 120 mg three times daily. A lower dose 60 mg is available over the counter and approved in US.

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Adverse Effects:

Mainly are gastrointestinal including flatus, cramps, oily spotting, increased borborygmi (bowel movement sounds).

Liver injury has been reported rarely with the use of orlistat: patient who develops jaundice, itching, pale colour stools or anorexia should contact their treating physician.

Oxalate induced acute kidney injury has also been reported so not recommended in kidney stones patients.

2. SEROTONIN AGONISTS**Lorcaserin**

Serotonin reduces food intake in human beings and thus agonists of serotonin receptors are potentially valuable drugs. It reduces appetite and thereby reduces body weight in men and women.

In 2012 the United States Food and Drug Administration (FDA) approved Lorcaserin as an addition to a reduced calorie diet and exercise for patients who are obese (BMI >30 Kg/m²) or overweight (BMI >27 Kg/m²) with at least one medical co morbidity such as type 2 diabetes, hypertension, high cholesterol or sleep apnoea.

In one of the longer randomised trials 3182 obese adults (BMI 36) were randomly assigned to Lorcaserin or placebo twice daily for one year, followed by one year extension period. All subjects participated in lifestyle modification including nutritional and exercise counselling. Those on Lorcaserin lost 5% or more of their baseline body weight after one year than placebo (47.5 versus 20.3). Other beneficial effects in addition to weight loss were decrease in systolic and diastolic blood pressure, fibrinogen, fasting glucose and insulin levels.

Adverse effects:

Milder included headache, upper respiratory infections, nasopharyngitis, dizziness and nausea. In patients with type 2 diabetes lorcaserin induced weight loss may increase the risk of symptomatic hypoglycaemia, necessitating a reduction in dose of diabetic medications.

Dosing and contraindications:

The recommended dose is 10 mg lorcaserin twice daily, if patients don't lose 5% of body weight in 12 weeks the drug should be discontinued.

It is contraindicated in pregnancy, also if creatinine clearance is less than < 30 ml/min. Mild renal and liver impairment are not contraindication for its use.

3. SYMPATHOMIMETIC DRUGS

They are approved for short term use up to 12 weeks. They reduce food intake by causing early satiety. Although phentermine is the most widely prescribed weight loss drug, but should be used cautiously because of potential for abuse and side effects.

Contraindicated in coronary heart disease, hypertension, and hyperthyroidism and in patients with drug abuse.

Side effects: can increase heart rate blood pressure, insomnia, dry mouth, constipation & nervousness.

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4. DRUGS NOT RECOMMENDED

Topiramate

it is approved for use as an antiepileptic drug and for the treatment of migraine. In clinical studies its use was associated with weight loss, prompting of its efficacy and safety as an anti obesity agent. In 6 months dose ranging trial, topiramate produced a net weight loss versus placebo of 3.7 Kg. In meta-analysis the average six months weight loss was 6.51 percent.

Side effects:

Paraesthesias somnolence, difficulty in concentrating and metabolic acidosis. Not recommended as a single agent for management of obesity.

Combination Drugs: QSYMIA

In 2012 the US FDA approved a preparation of phentermine and extended release topiramate in one capsule QSYMIA for adults with a body mass index $>30 \text{ kg/m}^2$ or with a BMI >27 with atleast one weight related comorbidity e.g. hypertension, diabetes and dyslipidemia. This combination has been shown to enhance weight loss in the first year of use. A combination of controlled-released phentermine-topiramate (7.5/46 mg or 15/92 mg) was compared with placebo in 2487 adults with BMI of 27-45 kg/m^2 with 2 or more co morbidities. After one year mean weight loss was greater in those assigned to active treatment (8-10 kg versus 1.4 kg) with placebo equal 8-10% versus 1.2% of baseline body weight.

In another trial men and women with BMI $>35 \text{ kg/m}^2$ were randomly to controlled release phentermine-topiramate (3.75/23 mg or 15/92 mg) or placebo. After 56 weeks among those assigned to active treatment 45-67% lost 5% of baseline weight compared with only 17% of placebo patients.

Adverse effects: Dry mouth, constipation and parasthesia. There was dose related increase in depression and anxiety with increase in heart rate.

It is contraindicated during pregnancy due to risk of orofacial clefts, also contraindicated in hypertension/coronary artery disease, hyperthyroidism, glaucoma and on those on MAO inhibitors.

It can also produce renal stones to use cautiously with history of renal stones

Diabetic Drugs

METFORMIN is a biguanide that is approved for the treatment of Diabetes mellitus, a disease that is exacerbated by obesity and weight gain.

In one trial of patients with obesity and the metabolic syndrome, patients receiving metformin lost significantly more weight (1-2 Kg) than the placebo group.

After a mean follow up up to 2.8 yrs in Diabetes Prevention Programme with impaired glucose tolerance average weight loss was 0.1, 2.1 and 5.6 Kg in the placebo, metformin, and lifestyle intervention groups respectively. In a follow up study the modest weight loss with metformin was maintained during the 10 yr observation period.

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Gastrointestinal side effects are common. It does not cause hypoglycemia, it can rarely cause lactic acidosis. Do not use if renal impairment (124 micromol/l in females, 133 micromol/l in males, decreased tissue perfusion such as infection/heart failure, concurrent liver failure or alcohol abuse.

DIETARY SUPPLEMENTS

Over the counter dietary supplements are widely used by individuals attempting to lose weight, but evidence to support their efficacy and safety are limited.

Guar Gum: derived from Indian cluster bean has been promoted as weight reduction agent. The presumed mechanism of action is an increase in the viscosity of gastric contents, leading to postprandial fullness. However in meta analysis of 20 clinical trials guar gum was not effective for weight loss.

Evidence and safety data are unclear for Green tea ginseng, chromium and conjugated linoleic acid.

Compounded Diet Pills: imported from Brazil Emagrace diet pill and Herbathin dietary supplements have been shown to contain amphetamines, benzodiazepines and fluxotene, 2/3 of users among brazilian immigrants in US reported adverse effects. FDA has issued warning against their use.

EXPERIMENTAL DRUGS

Leptin is a peptide produced primarily in adipose tissues. Absence of leptin is associated with massive obesity in mice and humans. In mice and rare humans with leptin deficiency, administration of physiological doses of leptin decreases food intake and causes weight loss. Obese adults have leptin resistance based upon the fact that they have high serum leptin concentrations. Leptin therapy is effective in some patients with lipodystrophy.



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Managing Obesity in Children and Adolescents - Special Issues

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Obesity in children is different from obesity in adults in some important respects. The main difference is that all children and adolescents need to grow; for example during puberty a child's weight will double and their height increase by 20%. When considering the prevention and treatment of childhood obesity, dietary energy restriction, increases in activity and decreases in sedentary behaviour must not compromise normal growth and development.

Obesity Management in Children & adolescent differs from adults in following aspects:

- It should address lifestyle within the family and in social settings. It would include restriction in
 - High fat foods eaten outside the home
 - Decrease in physical activity and a rise in sedentary behaviour
 - Reductions in the amount of physical education and sport carried out at school and at home due to space constraints
 - Marked rise in sedentary behaviour especially watching television, playing computer games, surfing the internet and using the telephone
- Body mass index (BMI) (adjusted for age and gender) is a practical estimate of overweight in children and young people, but needs caution because it is not a direct measure of adiposity.
- Referral for children who are overweight or obese and have significant comorbidity or complex needs (for example, learning or educational difficulties).
- Multicomponent interventions are the treatment of choice. Weight management programmes should include behaviour change strategies to increase people's physical activity levels or decrease inactivity, improve eating behaviour and the quality of the person's diet and reduce energy intake.
- Very few drugs are licensed for use in children and young people. orlistat, and metformin are most commonly used at present: only orlistat (for children 12 yr of age) is FDA approved for the treatment of obesity in adolescents.
- Bariatric surgery can be considered for post pubertal adolescents with very severe to extreme obesity. Bariatric surgery as a treatment option for adults is seldom used for children.

Myths and Misconceptions about Obesity

Before we talk about managing obesity in children and the young let us clear some of the myths and misconceptions.

"I am overweight because I have a slow metabolism"

- This is a common myth among dieters who are struggling to lose weight. Individuals do not have a fast or slow metabolism and there is no way that doctors can test the speed of your metabolism.



- Studies have shown that resting metabolism - the number of calories used by the body at rest - actually INCREASES as people become heavier. The larger you are the more calories you use to keep your body going.
- Being fit and increasing your lean muscle tissue is one way to increase your metabolism. Essentially, the fitter you are, and the more lean muscle mass you have, the more calories you burn both at rest and during exercise thus making weight maintenance and weight control easier.

“I’m not overweight, I’m just big boned”

- This is partly true. Some people have bigger skeletal frames than others. It’s better to say that someone has a small, medium or large frame rather than being big boned. However having a large frame in the terms of weight management will not have a huge impact. An adult skeleton only weighs between 2 and 4 kg, whereas an adult male in the healthy weight range has a total weight of around 70 kg.

“It’s just puppy fat”

- Many parents dismiss weight gain as “puppy fat” and that their children will grow out of it in their next growth spurt. However children are more likely to continue to put on weight and not grow out of it.

“Childhood obesity is the parents’ fault”

- If your child is overweight it is important to remember it is not a blame game.
- As a family, if a child is overweight, every member has to be committed to the child’s weight problem, especially the parents or primary caregiver. The person responsible for buying the food that’s in the house and which is provided at meal times has a key responsibility to provide healthy options for all occasions. However it must be recognised that there are other people who will feed your child. Children are also away at school for several hours a day. This means that there are periods of time where parents do not have control over their children’s choices.

“Childhood obesity is caused by fast food”

- No single category of food causes obesity. It is the consumption of too many calories over a sustained period of time which causes a person to become obese.
- There are plenty of opportunities for us to tuck into high-calorie foods from fast food chains, or supermarkets; it is the knowledge of what we are eating v/s what our bodies need; managing this is our responsibility.
- Burgers and fries don’t make you fat; it’s the decision to eat too much too often and not maintain a healthy lifestyle that can cause us to over consume calories and store excess fat.

“Childhood obesity is caused by too much TV and video games”

- As a nation we don’t do enough exercise. Kids especially need to be very active, getting out of breath for at least an hour each day.
- It’s not TV and video games that cause obesity; it is displacing the time spending being active which does.
- Screen-time is ‘weight gain time’ so it is important that parents should limit the amount of time the whole family watch telly and encourage involvement in physical activity whilst being a great role-model for being active.

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Management of obesity in children and young people

If a child is obese, weight management should start in childhood, rather than being deferred until adolescence or adulthood. Absolute weight loss is generally not necessary in young children. In young children, weight management generally requires only weight maintenance until the weight percentile moves closer to the height percentile using normal height- growth potential. This will avoid possible adverse growth effects in children who have not completed their pubertal growth spurt and overweight and obese children may 'grow into their weight. Most children managed will have 'simple' obesity with no underlying medical cause, and many will have no co morbidity. The treatment goals for children and young people should be determined by the extent of weight or BMI change which would reduce obesity-related comorbidities.

The conventional components of weight management in children and adolescents are:

- Reduction in energy intake by dietary means with modification of the components of the diet and a reduction in the serving or portion size.
- Increase in energy expenditure through an increase in both planned and lifestyle activity
- Increase in energy expenditure through a decrease in sedentary behaviour
- Modification of behaviours and habits associated with eating and activity
- Involvement of the family in the process of change.

The goal of obesity treatment is to reach and stay at a healthy weight. You may need to work with a team of health professionals, including a nutritionist, dietitian, therapist or an obesity specialist, the initial goal is a modest weight loss 5 to 10 percent of your total weight. All weight-loss programs require changes in your eating habits and increased physical activity which depends on your level of obesity, your overall health and your willingness to participate in your weight-loss plan. These include:

- Dietary changes
- Exercise and activity
- Behavior change
- Prescription weight-loss medications
- Weight-loss surgery

Dietary changes

Reducing calories and eating healthier are vital to overcoming obesity. Although you may lose weight quickly at first, slow and steady weight loss of 1/2 to 1 kg a week over the long term is considered the safest way to lose weight and the best way to keep it off permanently. Avoid drastic and unrealistic diet changes, such as crash diets, because they're unlikely to help you keep excess weight off for the long term.

Dietary ways to overcome obesity include:

- A low-calorie diet. The key to weight loss is reducing how many calories you take in
- Feeling full on less. By eating larger portions of foods less packed with calories such as fruits and vegetables instead of high in energy density such as desserts, candies, fats and processed foods, you reduce hunger pangs, take in fewer calories and feel better about your meal, which contributes to how satisfied you feel overall.

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- Adopting a healthy-eating plan. Eat more plant-based foods, such as fruits, vegetables and whole-grain carbohydrates. Eat lean sources of protein, such as beans, lentils and soy, and lean meats. Include fish twice a week. Limit salt and added sugar. Stick with low-fat dairy products. Eat small amounts of fats from heart-healthy sources, such as nuts and olive, canola and nut oils.
- Meal replacements. You replace one or two meals with low-calorie shakes or meal bars and eat healthy snacks and a healthy, balanced meal that's low in fat and calories.
- Be wary of quick fixes. To lose weight and keep it off you have to adopt healthy eating habits that you can maintain over time. You may lose weight on a crash diet, but you're likely to regain it when you stop the diet.

To Help Children and young adults to maintain a healthy weight, encourage parents and caregivers

Treatment for managing childhood obesity should be family based, involving at least one parent/carer and aim to change the whole family's lifestyle.

- ensure their children have regular meals, including breakfast, in a sociable atmosphere without distractions
- whenever possible, eat meals with their children
- comfort children with attention, listening and hugs instead of food
- separate eating from other activities such as watching television or using the computer
- encourage their children to listen to internal hunger cues and to eat to appetite
- avoid classifying foods as good or bad
- Keep foods that child should be avoiding out of the house.

PHYSICAL ACTIVITY FOR CHILDREN AND YOUNG PEOPLE

Exercise and activity

Increased physical activity or exercise also is an essential part of obesity treatment. Most people who are able to maintain their weight loss for more than a year get regular exercise, even simply walking. To make your own exercise goal more doable, break it up into several sessions throughout the day, doing just five or six minutes at a time. Regular aerobic exercise is the most efficient way to burn calories and shed excess weight; any extra movement helps burn calories. Making simple changes throughout your day can add up to big benefits.

- Children and young people should be encouraged to increase their physical activity to help manage their weight and because of the other known health benefits, such as reduced risk of type 2 diabetes and cardiovascular disease.
- Children should be encouraged to do at least 60 minutes of moderate to vigorous activity each day. This can be accumulated in short bouts. Children who are already overweight may need to do more than 60 minutes activity, but should build up their physical activity time gradually.
- Parents should be aware that more than two hours of sedentary behaviour, particularly of screen time (TV watching, computer use and playing video games), for children per day should be discouraged.
- Children should be given the opportunity and support to be more active in their daily lives

(such as walking, cycling, using the stairs and active play such as skipping) and supported to do more regular, structured physical activity (such as football, swimming or dancing).

- The choice of activity should be made with the child, and be appropriate to their age, ability and confidence.
- Encourage people to try to be more active as a family - for example, walking and cycling to school and shops, going to the park or swimming.
- Lifestyle Interventions
- Diet: total energy intake needs to be reduced for weight loss to occur in overweight and obese children
- Physical Activities: An increase in 'lifestyle' physical activity levels have a better long term effect on weight than structured exercise.
- Decreasing sedentary behaviour: Decreasing sedentary behaviours can positively affect weight management.
- The reduction in TV viewing, together with a decrease in other 'screen activities' such as use of computers and videos games is essential. Sedentary behaviours (screen time) should be reduced to no more than two hours per day or 14 hours over the week

BEHAVIORAL INTERVENTIONS

Behavioural problems in Children

- They spent a lot of time alone eating, watching television, playing computer games and taking care of pets.
- They may have unhealthy sleeping, eating and exercise habits
- .Peer victimization may be a barrier to physical activity.
- Overweight children who are criticised are less prone to enjoy sports than their peers and have reduced physical activity levels.
- Loss of control in eating may lead to higher anxiety, more depressive symptoms and lower body esteem.
- Obese children have lesser athletic competence than their normal weight peers. The mechanics of moving a larger body may be a contributing factor, as may be the attitudes of teachers or embarrassment which is enhanced if performance is poor in the eyes of peers
- The negative self- esteem with obesity is more apparent in girls than boys. It may increase with age from pre-adolescence into young adulthood.
- Body dissatisfaction arises from socio-cultural attitudes and norms than actual weight.
- The degree of weight and shape concern, rather than the weight status is associated with psychological problems in overweight children. It is more pronounced among girls and is independent of actual weight.
- Obese children are often subject to social rejection, discrimination and negative stereotyping. Weight-related teasing increases body dissatisfaction.
- Overweight and obese boys and girls are more likely to be the victims of verbal, physical, and relational bullying (withdrawing friendship, spreading rumours or lies) than their normal weight peers. Peer-initiated victimisation may lower self- esteem and low self-esteem invites victimisation.
- Weight-based teasing in adolescents may cause disordered eating patterns including unhealthy

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weight control methods, frequent dieting and binge eating.

- Psychosocial stressors in the household such as financial strain, maternal BMI, mental and physical problems of the caregiver and neglect, being exposed to impoverished environments in addition to being overweight is associated with lowered self-esteem.

Before you start

- Motivation is crucial: no weight loss plan will work unless you have a serious desire to lose weight. You need to be ready and motivated.
- Monitor your current food intake: Keeping a detailed diary of everything that you eat and drink over an average week is more helpful.
- Aim to lose weight gradually: it is best not to lose weight too fast. Aim to lose an average of 0.5 to 1 kg per week.
- Set clear goals with a realistic timescale: it is important to set a clear and realistic weight loss goal. Health benefits can be gained from losing the first 5-10% of your weight.

PHARMACOLOGICAL TREATMENT IN YOUNG PEOPLE:

Few anti-obesity medications are licensed for use in young children.

- Your doctor may recommend weight-loss medication if:
- Other methods of weight loss haven't worked for you
- Your body mass index (BMI) is 30 or greater
- Your body mass index (BMI) is greater than 27 and you also have medical complications of obesity, such as diabetes, high blood pressure or sleep apnea
- You need close medical monitoring while taking a prescription weight-loss medication. Weight-loss medication may not work for everyone. Its effects tend to level off after six months of use like any other method of weight loss. When you stop taking a weight-loss medication; you're likely to regain much or all of the weight you lost.

WEIGHT-LOSS SURGERY

Bariatric surgery can be considered for post pubertal adolescents with very severe to extreme obesity and severe comorbidities. Weight-loss surgery limits the amount of food you're able to comfortably eat or decreases the absorption of food and calories, or both.

Finally Preventing weight regain after obesity treatment

The best ways to prevent regaining the weight you've lost is

- get regular physical activity
- Keep track of your physical activity
- Do additional activities and exercise to give a boost.
- Be vigilant about your weight
- Do not overeat or eat foods laden with fat and calories.
- Find a healthier way of living that you can stick with for the long term.

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Endoscopic Methods for Weight Loss in Obese Patients

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After successful control of communicable diseases and improving lifestyle and nutrition, obesity has become the next disease scourge of this millennium adversely affecting health and well-being of people around the world. It has emerged as next frontier confronting the health professionals worldwide, as obesity and its related complications account for one of the largest cases of mortality in Western countries, second only to coronary heart disease. Recent reports suggest that Kuwait has the dubious distinction of having the largest number of obese individuals compared to its population, and the remaining Gulf countries are not far behind, having similar demographic profile.

Along with the rise of obesity, so has paralleled the innovation in methods of addressing this pertinent issue. The traditional method of weight loss involves dietary and lifestyle modifications along with suitable exercise regimen. However, this is impeded by only modest weight reduction and difficulty with adherence to these measures on a long term basis. Hence, a host of surgical procedures have gained popularity with their relative ease and availability and that too achieved in lightning short time that afford substantial weight loss (> 25%) and also control or even freedom from its related diseases.

However, these surgical procedures have their own pitfalls, primarily among them the risk of anaesthesia and the surgery itself, need for incisions and resulting scars and complications thereof. These are mostly irreversible and there is usually little room for revision surgeries later on, if the primary operation fails.

Endoscopic techniques

This is where the Endoscopic techniques have begun to gain more popularity and acceptance, due to the benefits they present in patient recovery, as these are mostly undertaken as day-care procedures with light sedation and most importantly no incisions needed. This translates into quicker recovery time for the patient, less risks, like infections or other complications. These can be used both as a primary weight loss procedure, and as a pre/post-surgical procedure as a bridge therapy to ready very obese patients for follow-up interventions later on.

It involves introducing a flexible, long tube with a camera and a lighting source at its tip called an endoscope, into the body of the patient, through the mouth. Once inside, the Endoscopist can look around using the scope, and perform operations and procedures utilizing the same tube to insert surgical instruments. The procedures include the following:

Intragastric Balloon

It's the most commonly used device for weight loss. It's a relatively simple procedure that involves placement of a soft silicone balloon, through an endoscope, which is then inflated with 500 ml saline solution. This helps to partially fill the stomach so that patient feels full sooner, and ensures consumption of smaller portions during a meal. On average, patients lose about 15-20 Kg in weight over 6 months.

It is designed to stay inside the body for only 6-12 months, after which it should be removed.





Endoluminal Sleeve

It is a 10 cm long, impermeable sleeve or tube placed in the duodenum placed endoscopically which can be even removed later on, if needed. This sleeve blocks absorption of food by preventing duodenal mixing of food with biliary and pancreatic secretions, and food passes directly into intestine, without adequate digestion. This brings out similar outcome as the classical weight-loss major operation (Roux-en-Y gastric bypass), though on a much, lesser scale.



TOGa Transoral Gastroplasty Procedure

It is performed entirely through the mouth, without making any external incisions, whatsoever. Multiple suturing and stapling devices have been developed that uses the endoscope to approximate the opposing walls of the stomach together. It's designed to alter the anatomy of stomach by creating a small pouch, to give a sense of fullness after only small meals. So far, these procedures are still in clinical trials.



POSE (Primary Obesity Surgery, Endoluminal)

It is one of the new, popular procedures that reduce the size of the stomach by deploying multiple suture anchors endoscopically, to create multiple, random tissue folds in the stomach wall, which greatly diminishes the capacity of stomach and reduces its volume.



Experimental Techniques

Novel devices, such as totally implantable intragastric prosthesis, Neurohormonal alterations (e.g. by botulinum toxin injection etc) to influence stomach functions and capacity, are still currently at the experimental stage.

Key Messages

There is a growing demand for less-invasive approaches to the treatment of obesity. Endoluminal approaches including implants, suturing, and stapling have shown good promise in the treatment of obesity. However, weight loss achieved by them is still unpredictable and falls much shorter to those achieved by the surgical procedures. More clinical experience and technical improvements are still necessary before recommending their widespread use. After these procedures, patients still need continued nutritional support, vitamin supplements, proper exercise regimens and physicians experienced in the management of obese patients.

According to a recent, new white paper supported by the American Society for Gastrointestinal Endoscopy (**ASGE**) and the American Society for Metabolic and Bariatric Surgery (**ASMBS**) endoscopic bariatric therapies are safe and effective, and they have great potential in becoming an accepted outpatient alternative to bariatric surgery in near future.



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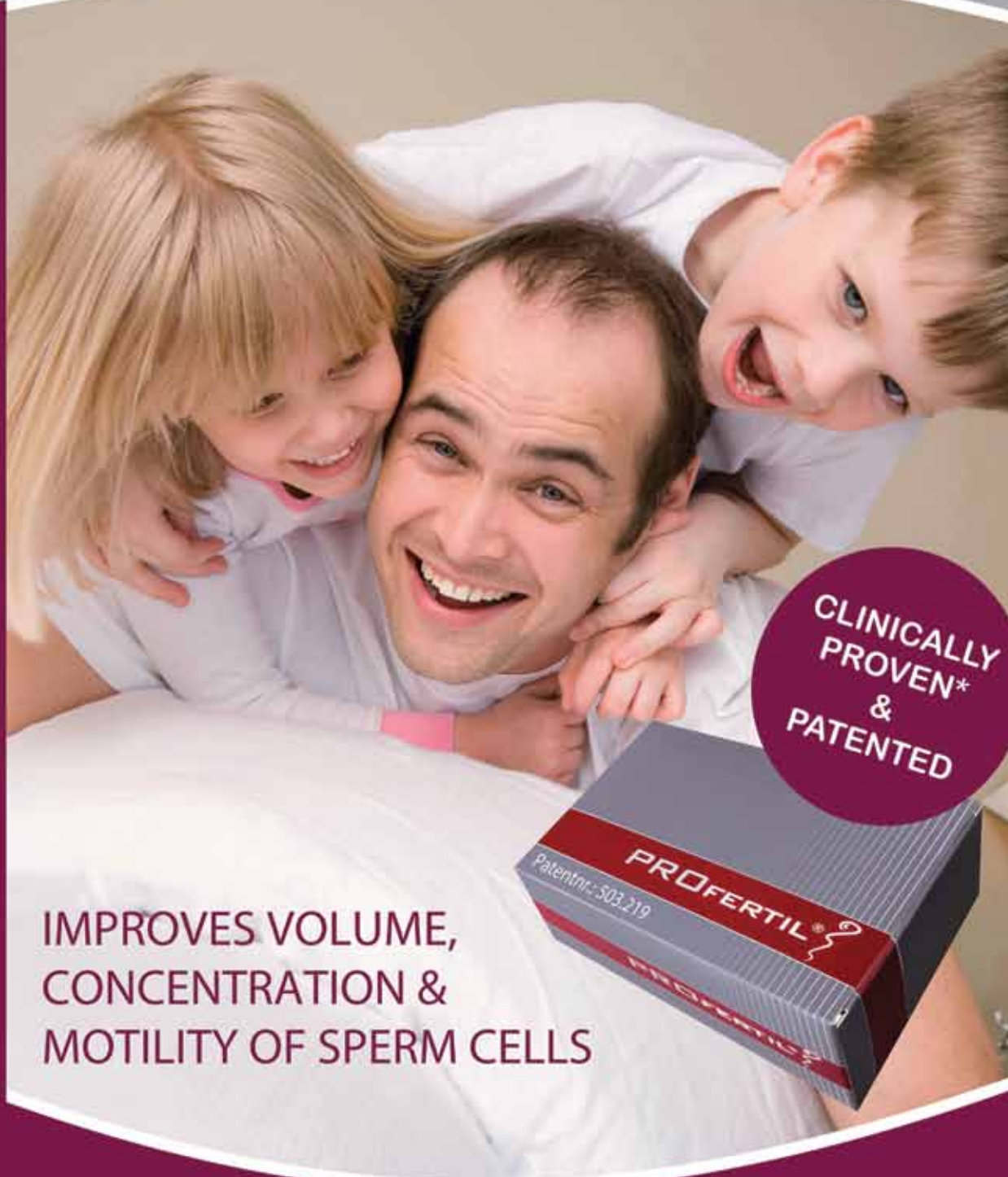
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OBESITY - SURGICAL ASPECTS

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Obesity and Anesthesia

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Obesity means the accumulation of excess body fat. The Body mass index (BMI), which is calculated by dividing the weight in kg by height in meter squared, is used as a tool to quantify obesity. Weight alone cannot be a measure of obesity unless it is correlated with the height of a person. You can measure your BMI and decide if you are normal (BMI =22-25), overweight (BMI = 25-30), obese (BMI = 30-35) or morbidly obese (BMI = 35-40).

An obese person may need anesthesia for incidental surgery or for bariatric surgery (surgical treatment of obesity). Obesity is an enemy of the surgeon as well as the anesthesiologist.

The surgeon has to really struggle with this huge amount of fat that he has to cut through. His patient is at an increased risk for poor wound healing and deep vein thrombosis (DVT) which can sometimes be fatal. He is also prone for neuropathies due to difficulty in positioning. There is much difficulty in lifting these patients onto and off the operation table. Positioning them for surgery is equally difficult.

For the anesthesiologist, the first difficulty is in finding a vein to inject drugs.

Most obese patients have many associated diseases like diabetes, high blood pressure, heart disease, asthma, etc. These associated diseases increase the risks associated with anesthesia and surgery to a great extent.

The risk of heart disease rises sharply as BMI increase above 30. They generally snore and have obstructive sleep apnea. This can create a lot of difficulty in controlling their breathing during and immediately after the operation.

The process of intubation (passing a tube into the windpipe to assist and control breathing) may be very difficult and sometimes cause fatal complications.

Obese persons are more prone for aspiration of gastric contents into the windpipe causing serious complications like ARDS.

They require a larger amount of anesthetic drugs which can then delay their recovery from anesthesia.

Sometimes they may have to be admitted into the ICU for further management. Since they are reluctant to move around, they are more prone to complications such as pneumonia and pulmonary embolism.

Recently, a large number of obese patients who have failed to reduce their weight by all other means opt for bariatric surgery to help them. They are desperate to reduce their weight in spite of all risks associated with anesthesia and surgery.



Bariatric surgery is an option in severely obese patients, where lifestyle/medication have been evaluated but found not to be effective. Surgery can be combined with other treatments.

Pre-operative discussion is important and there would be the need for follow-up immediately and long term.

The two most commonly performed surgeries are 'sleeve gastrectomy' and 'gastric by-pass'-discussed in separate article.

Some patients loose weight very rapidly after their surgery and comeback for other cosmetic operations called abdominoplasty, brachyplasty or gluteoplasty. They again face the same risks when they undergo repeated surgeries.

In order to reduce your risks of anesthesia and surgery, everyone must try to keep their BMI under control and indulge in healthy diet and moderate physical activity. They must avoid additional risk factors such as smoking and alcohol and drug abuse.

For more information you may refer to the following websites:

- American Obesity Association – www.obesity.org
- Anesthesia Patient Safety Foundation – www.apsf.org



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Surgery for Morbid Obesity

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Laparoscopic surgery has revolutionized the surgical management of morbid obesity (BMI >40). Weight loss surgery (Bariatric Surgery) is the most effective treatment for morbid obesity producing desirable and sustained weight loss and improvement or remission of obesity related diseases like diabetes, hypertension, obstructive sleep apnea, osteoarthritis etc.

Relative risk of death at the age of 50 years among men and women with BMI >40 who have never smoked is 3.82 and 3.79 respectively. Among severely obese young men, mortality rate is 12 times that of young normal-weight men. Increasing body weight impairs quality of life (QOL) and reduces life expectancy. At least one in 13 annual deaths in the EU are likely to be related to excess weight.

The Justification

Weight-loss surgery is the most effective treatment for morbid obesity, producing durable weight loss, improvement or remission of co-morbid conditions, and longer life (level I, grade A medical evidence). Recent long-term studies show that there is a substantial reduction in mortality after bariatric surgery, as well as decreased risk of developing new health-related co-morbidities, decreased health-care utilization and decreased direct health-care costs. Bariatric surgery is an established and integral part of the comprehensive management of morbidly obese patients.

Surgery for morbid obesity is reasonably safe. Most of the complications are minor like wound infections. Major complications occur in 3.6% of gastric bypass and 2.2% of sleeve – the two operations commonly done. The risk of death following the operation is 0.25% overall; that means one in every 400 patients operated has a chance of death.

The Procedures

The types of operations done can be mainly classified as:

1. Those that reduce the capacity of the stomach so that the patient does not eat much and get satiated early, these are called restrictive procedures. E.g. Laparoscopic adjustable gastric band (LAGB), Vertical banded gastroplasty (VBG), Gastric plication, and Lap sleeve gastrectomy (LSG).
2. Those that bypass the food to reach the absorbing intestine lower down to reduce the absorption, these are called absorptive type of procedures. E.g. Roux En Y Gastric bypass (LRYGBP) and Bilio-pancreatic diversion (BPD).
3. Combination of the above two (Both restrictive and Absorptive) e.g. Bilio-pancreatic diversion with duodenal switch.

Requirements for Undergoing Surgery

- Patients should have a BMI of more than 40 or between 35 and 40, along with morbidity associated conditions like diabetes, hypertension, sleep apnea, joint or back problems, infertility etc.



- The patient should be relatively fit to undergo anesthesia for the procedure.
- The patient must be able to understand the procedure and agree to have a long term follow up.
- Patients should be between 19-60 years of age.

What Tests should be done before surgery?

Apart from the usual blood tests and hormonal tests, the patients should have an upper gastrointestinal endoscopy (visualizing the stomach and the duodenum), a sonar (ultrasound) of the abdomen to detect any gallstones.

The procedures in brief:

1. Lap Sleeve Gastrectomy (LSG)

This is the most common procedure being performed today. Basically about 80-85% of the stomach is removed by cutting it vertically. The remaining stomach is like a tube rather than a bag. It is safe, simple to perform and results in the least malabsorption. It is as effective as gastric bypass in terms of weight reduction.

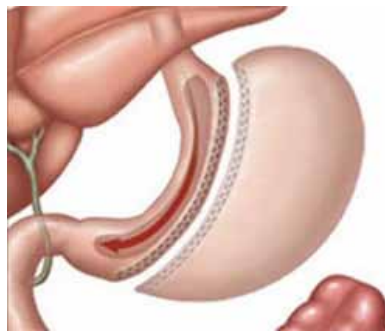


Figure 1. Lap Sleeve Gastrectomy

2. Laparoscopic Adjustable Gastric Band (LAGB)

Here a band is used to create a pouch in the beginning of the stomach with a narrow outlet. As the pouch becomes full, the patient feels satiated. So functionally the capacity of the stomach is reduced. Although very popular at one time, it has largely been abandoned because of complications of slippage and erosion of the band into the stomach.



Figure 2. Lap Band

3. Gastric Plication

It is a procedure in which the capacity of the stomach is reduced by infolding the stomach from outside using sutures in 3 to 4 layers. In effect it is like sleeve gastrectomy but the stomach is not removed and it is reversible. However it has not enjoyed the popularity of sleeve gastrectomy.

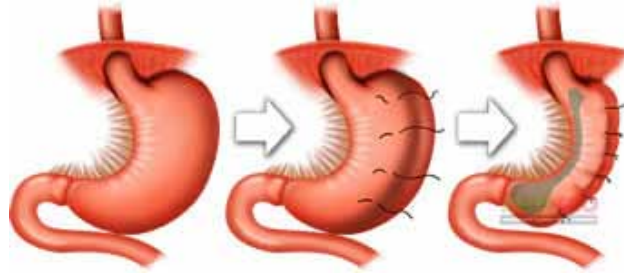


Figure 3. Gastric Plication

4. Vertical Banded Gastroplasty (VBG)

The popularity of vertical banded gastroplasty (VBG), a restrictive procedure popular two decades back, has now been on the decline because of the poor long-term weight loss and complications.

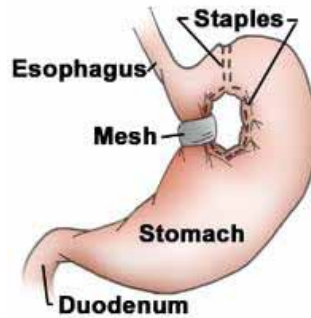


Figure 4. Vertical Banded Gastroplasty

5. Laparoscopic Roux EN Y Gastric Bypass

One of the main operations for morbid obesity gives very good results in terms of sustainable weight loss but it is being replaced by Lap sleeve gastrectomy as a primary operation for morbid obesity. However it can be performed for failures of Lap sleeve gastrectomy.

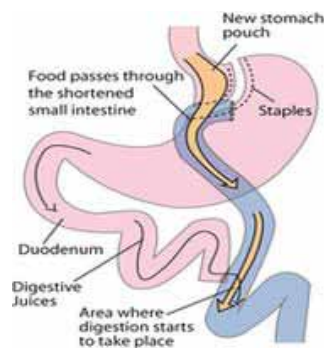


Figure 5. Laparoscopic Roux En Y Gastric Bypass

6. Bilio-pancreatic Diversion (BPD)

This is one of the older methods of weight loss surgery; but is now performed laparoscopically. Here the path of food and the absorptive juices is separated till very near the colon where only limited digestion and absorption can take place. It is highly effective in terms of weight loss (up to 70% of excess weight loss), but is technically more demanding procedure and has higher complication rate. Malnutrition is more frequent, as well as foul smelling diarrhea. It is usually performed for super-obese and super-super-obese (BMI>50, and BMI>60 respectively.)

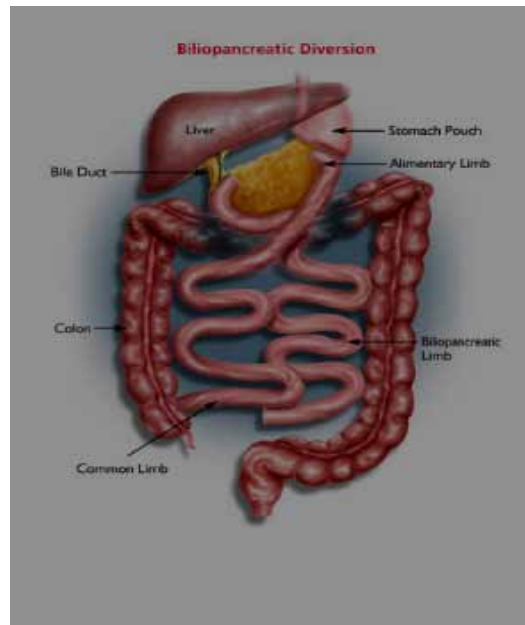


Figure 6. BPD

7. Bilio-pancreatic Diversion with Duodenal Switch (BPD+DS)

It is similar to the previous operation but pyloric valve of stomach is preserved so the dumping syndrome is less (crampy abdominal pain, fainting, sweating etc.)



Figure 6. BPD with DS

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Patients need to be in the hospital usually for about 3-5 days after bariatric surgery and have to observe a strict protocol regarding diet at least in the beginning. Moreover they have to have very long term follow up for any nutritional deficiencies that may occur, and needs to be treated promptly with supplements. (Details are given in the next article.)

Key Points to Remember

- In summary, surgery is the modality of choice for morbid obesity. It is done laparoscopically (key-hole).
- Lap Sleeve Gastrectomy is rapidly becoming the first procedure of choice even in super-obese patients to begin with. Its easy to perform, gives quite good results without severe malabsorption.
- In severe cases wherein LSG does not give satisfactory results, it can be converted to Gastric Bypass or duodenal switch later on.
- Surgery for morbid obesity in patients <18 years of age is a contentious issue as the effects on organ maturity are not clearly known, although in terms of weight loss it gives excellent results.
- In patients >60 years of age the relative risks of operating in that age against the expected benefits must be carefully weighed on individual basis.



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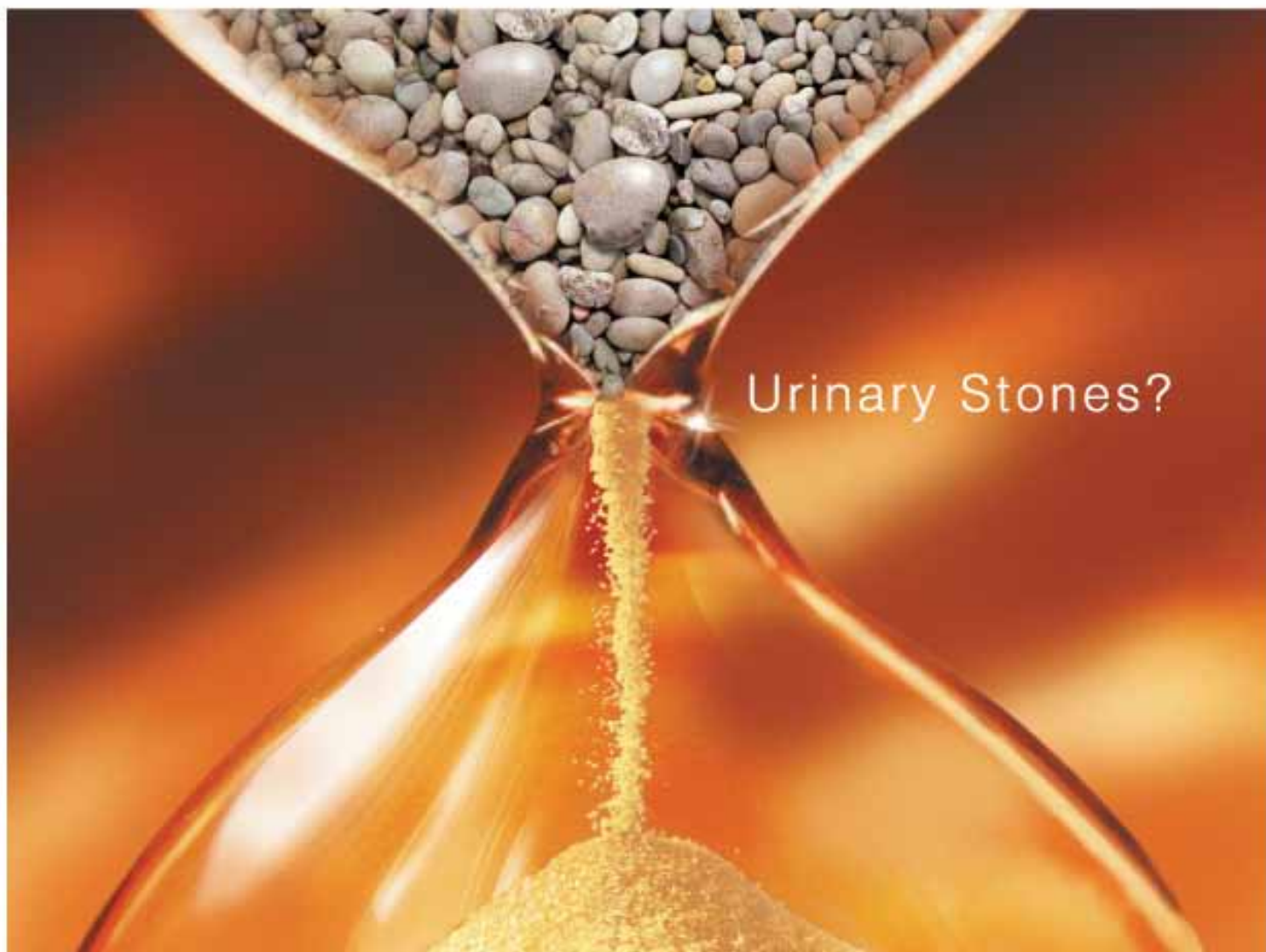
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Post-Operative and Long Term Follow Up after Obesity Surgery – What to Expect?

Dr Nazim Parkar

Department of Surgery

Jaber Al-Ahmed Armed Forces Hospital, Kuwait



POST-OPERATIVE DISCHARGE INSTRUCTIONS & FOLLOW-UP

You should be ready to go home on the second or third day after surgery unless your surgeon tells you that he/she plans to extend your hospital stay. If you are having a Lap Band procedure, you may go home the same day of surgery.

It is fairly common to feel weak and tired immediately after discharge from the hospital. The body is recovering from the stress of a major operation and because weight loss is occurring during this time the feeling of weakness may be somewhat prolonged.

Follow up after surgery is extremely important. The operation is only one part of the course to a good result. Success is not determined at the time of discharge. Weight loss will occur for 12 to 18 months following the operation.

For Gastric Bypass, Duodenal Switch and Sleeve Gastrectomy patients the first postoperative visit will be 7 to 10 days after discharge. Visits will then be at every 4-week for the first 6 months, then every 3 months for the 1st year and then every 6 months to one year for life. Follow-up after this surgery is forever, and will need to be arranged if you leave the area.

For gastric banding patients, the first postoperative visit will be 7-10days after discharge and the second, 5-6 weeks after discharge. Then visits are scheduled every 2-4 weeks until the LAP-BAND is adjusted appropriately for you. We then recommend monthly follow-up visits for the first year, every 3 months for the second year and yearly starting the third year after surgery.

DIET

Counseling by the clinical dietician is provided to each patient before discharge. At this time all the food groups will be discussed, with special emphasis on the need to take small bites and swallow slowly. During the hospital stay, the diet will be as follows:

Gastric Bypass/Duodenal Switch

- Day 1 after surgery; No food or drink
- Day 2 after surgery; May be progressed to clear liquids and water if no signs of a leak and after approval from surgeon. Then 1-2 ounces every 20 minutes while awake.
- Day 3 after surgery; May be progressed to pureed foods if clear liquids are tolerated. Then, for one week after surgery or until you start to feel better, one ounce of a pureed food OR one to two ounces of liquid no more frequently than every 20 minutes while awake.
- Gastric Bypass patients must continue on pureed foods for the first 4 weeks after surgery.
- Duodenal Switch patients continue on pureed foods for 3 weeks after surgery but can also add in some soft solid foods. The pureed diet, as well as diet progressions, will be discussed in detail by the dietitian.

Gastric Banding/Sleeve Gastrectomy

- Day 1 after surgery; Clear liquids and water after approval from surgeon. Then 1-2 ounces every 20 minutes while awake.
- Day 2 after surgery; May be progressed to pureed foods if liquids are tolerated. Then, for one week after surgery or until you start to feel better, one ounce of a pureed food OR one to two ounces of liquid no more frequently than every 20 minutes while awake.

You must continue on pureed foods for the first 2 weeks after surgery. The pureed diet, as well as additional diet progressions, will be discussed in detail by the dietitian.

CARE OF YOUR INCISION

If still in place, remove the outer bandage 3 days after surgery. Do not remove the steri-strips (i.e. adhesive strips) over the incision for one week or until they become loose. They will curl and fall off. If they are still in place 2 weeks after your surgery, gently peel them off. You can do this in the shower. Some itching at the incision is normal during healing. Do not scratch the area.

Can I shower or bathe?

It is OK to shower with soap. Pat the incision dry after showering.

Things to be brought to the notice of your treating surgeon;

1. Increasing redness, swelling, heat or pain in the incision.
2. Discharge from the incision
3. Fever greater than 101 F
4. Abdominal pain.

ACTIVITY/ EXERCISE

No driving after surgery for 2 to 3 weeks or until there is pain or discomfort. Stop any strenuous activity during the first month. Overstraining your muscles may increase the risk of developing a hernia. In general, lifting anything over 10 lbs. during the first month may overstrain your muscles.

If you work at a desk, you will be allowed to return to work when you feel up to it. Your surgeon will require you to stay out of work for 6 weeks after open gastric bypass; 4 weeks after lap gastric bypass or 2 weeks after Lap-Band if your job is more physically demanding.

Exercise is the key to success with the Bariatric surgery. Your short term goal is to walk 30 minutes per day, 7 days per week. Your long term goal is to exercise 45 minutes to one hour daily, longer if possible.

If you have joint problems or arthritis and cannot walk distances, swimming may be easier on your joints. Ask your surgeon when it is okay to swim (usually 3 to 4 weeks after surgery). You may go up and down stairs as tolerated.

MEDICATIONS

You will need to take the following medications as directed after discharge. Keep in mind that unless liquid medications are used, all pills better to be crushed. Capsules can be opened and the powder added to the food.

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- **Pain Medications:** You will be discharged with pain killers like Tramadol, but take only as needed and according to the directions of the surgeon. Once your pain decreases, Paracetamol may be used instead every six hours or as needed.
- **Anti-Acid Medicines:** These medicines are advised in all cases of Gastric Bypass and Sleeve Gastrectomy for a period of up to 6 months, or even longer in some cases. These medicines help to reduce the amount of acid produced in the stomach which not only helps in healing of the resected margins of the stomach, but also prevents complications like ulcer formations.
- **Vitamins/ Minerals:** Daily vitamins and minerals and calcium with vitamin D are necessary for the rest of your life to prevent deficiencies. Gastric Bypass patients will have to take iron and vitamin B12 and Duodenal Switch patients iron and ADEK's (the fat soluble vitamins A, D, E and K) also.

Vitamin and mineral levels in the blood must be monitored at least yearly. This is one reason that you must return to see your surgeon and dietician at least once a year for a follow-up visit.

Do I have to take my Other Medicines as before?

Medical problems related to the obesity generally improve as weight reduction occurs. Blood pressure, blood chemistry like glucose for diabetics and blood fat in patients with hyperlipidemia will be routinely followed. Patients are encouraged to visit their primary medical doctors at regular intervals for adjustments in medications.

POSSIBLE PROBLEMS

Vomiting/regurgitation- Eating too fast, too much, or drinking with meals may cause vomiting. Most patients will, at some point, vomit. If you vomit, stop and think about what may have caused it. For example, did you eat too fast; did you eat too much? Keeping a food diary will help you determine if vomiting is caused by the types of foods you are eating or if there is a problem. If the answer is "no" or if you are unsure, see the surgeon so as to look for any pathological causes.

Gas Problems are also common after the weight loss surgery.

Constipation after Gastric Bypass surgery is not uncommon and is more likely to occur if you are taking iron. It may be necessary to take a stool softener for the first month or so, until you can drink more fluids and eat more fiber. Other ways to improve regularity include:

- Drink lots of water.
- After 4 weeks, eat more fruits, vegetables, beans and whole grains (e.g. cereals with 5 g or more of fiber per serving).
- Exercise daily.

If problem persists try a Milk of Magnesia (2 tablespoons, twice a day), Dulcolax suppository or Fleets enema. If any of these problems continue, see your surgeon.

Dumping Syndrome is severe diarrhea, nausea, light headedness, and stomach cramps. Dumping syndrome is caused by eating and drinking at the same time and by eating sweets or foods high in sugar. DO NOT drink fluids with your meals and NEVER EAT SWEETS.

LONG TERM EXPECTATIONS OF WEIGHT LOSS

Weight loss after surgery is gradual and occurs at the greatest rate in the first few months after

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surgery. The consistency rather than the rate of weight loss is most important in the long run.

After the first few months the rate of weight loss will decrease, this is related to the decrease in the amount of fat. Very few patients will reach ideal body weight. Patients who come within 50 percent of the ideal body weight are considered successes. The heaviest patients must lose the most weight to become successful.

THE MOST COMMON REASONS FOR FAILURE TO LOOSE WEIGHT ARE POOR FOOD SELECTIONS, AND LACK OF EXERCISE. Patients may lose track of the new eating habits and return to some of the bad eating habits which contributed to their obesity in the first place. In most cases, these bad habits can be corrected through early intervention by a dietician and minor changes in the diet. This is why regular follow-up is so important after this type of surgery.

Pregnancy

You **must avoid** getting pregnant for **18 months** after surgery. Pregnancy would be very dangerous for you and for your baby during the first year after surgery and may cause birth defects. For this reason, you need to take precautions to prevent pregnancy. **Rapid weight loss increases fertility**, so you will need to be **extra careful**. Effective birth control used properly is essential to avoid pregnancy.

Complications in the long run:

- Oesophagitis & Gastritis
- Gallstones
- Port Site Hernias
- Intestinal Obstruction due to Internal Herniation in Gastric Bypass Surgery.

Redundant Skin: It is not a complication of surgery but a sequel of weight loss and needs to be addressed for cosmetic reasons. After significant weight loss there will be redundant or loose skin all over the body especially the Tummy, Arms and Thighs. This can be dealt with by the Plastic Surgeon at a later date once the weight loss has stabilized.

Will I Regain the Lost Weight?

The weight loss will keep occurring on an average up to 18 months followed by stability in weight. There are chances of weight gain in the long run especially after 2 years of surgery. Partly it is due to increased food intake as compared to before and partly due to the increase in size of the pouch or sleeve as a result of distention. But the weight gain will not be as much as before surgery.

Participation in the behavior modification program is VITAL to the long term maintenance of weight loss achieved. Counseling by the dietician is important in making the transition from pureed to solid foods. This will help emphasize the importance of appropriate food choices to maintain a balanced diet and avoid high calorie liquids and soft foods, which can defeat the purpose of the operation.

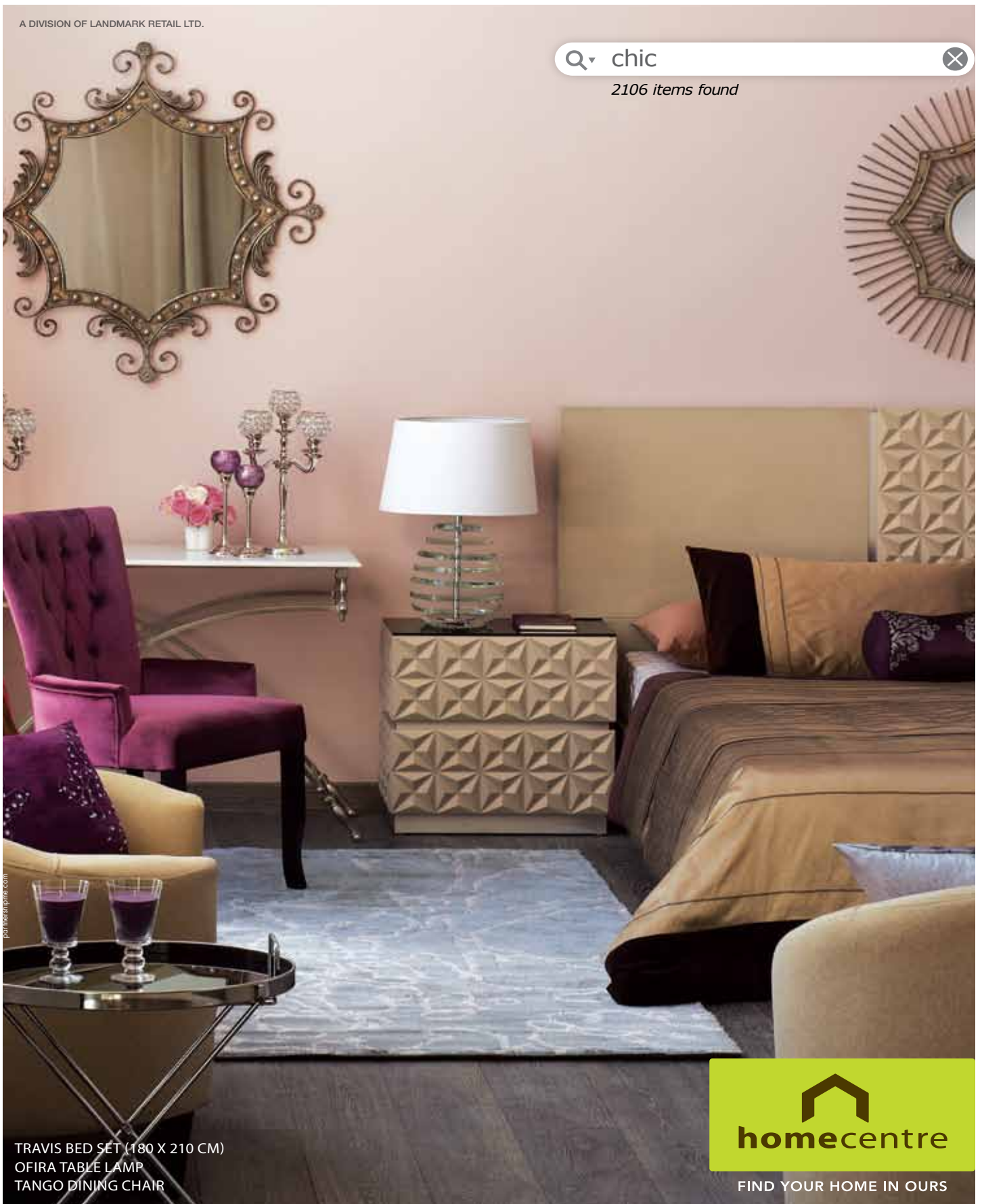
Emotional Changes

Be prepared for emotional ups and downs after surgery. Some patients feel like they are on an "emotional roller coaster". These feelings are completely normal and usually go away. Sometimes it helps to talk with gastric bypass nurse or another gastric bypass patient.

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Abdominoplasty

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The abdominal contour varies in relation to age, sex, body weight and muscle tone in an individual person. An ideal abdominal contour has been described as concave anterior abdominal wall with slim waist line in all cultures & fashions. The diet, exercise and healthy life style are considered appropriate means to maintain slim waist line, but it is always not possible. Therefore, acquired abdominal contour deformities due to weight fluctuation, pregnancy, prior abdominal surgery, genetics, hormones, medication and age related changes may necessitate surgical intervention.

The term "Abdominoplasty or Tummy tuck" is surgical procedure which involves removal of excess skin and fat from abdominal wall (particularly from the lower abdomen) in non-obese as well as obese individual and tightening of abdominal muscles & fascia. Abdominoplasty has been in vogue for over a century, but recently the increase incidence of obesity and awareness among public, this surgery has become quite popular. It is emphasized again and again that the appropriate treatment for generalized obesity is diet control, regular exercises and modification of the life style. The surgical intervention in form of Bariatric Surgery is indicated in grossly obese person. Abdominoplasty is indicated in post bariatric surgery case having sagging excess tissues. Other category of patients for abdominoplasty are those who in spite of above mentioned measures fail to achieve ideal weight and dissatisfied with abdominal contour. It is appropriate to carry out this surgery in patients of normal or near normal weight but having sagging skin & fat.

Indications

The decision for abdominoplasty surgery is based on:

- Abdominal skin quality, tone, laxity, presence of striae gravidarum, and previous surgical scar.
- Excessive fatty tissues (Adipose layers) deposition either generalized or localized.
- Musculo-facial layer weakness, diastasis, and presence of hernia.

The abdominoplasty is indicated:

- Pregnancy related deformities:
 - ❖ Multiple pregnancies with lax and weak abdominal wall
 - ❖ Presence of striae gravidarum
 - ❖ Protuberant abdomen with hanging apron
 - ❖ Weak musculature and divarication of rectus muscles
- Anterior abdominal wall hernia
- Obesity due to age related deformities, medication, and hormonal therapy
- Post weight loss, redundant lax tissues either due to conservative methods or by bariatric surgery



Contraindications

- Severe co-morbid conditions e.g. Heart disease & Diabetes (Uncontrolled).
- Future plan for pregnancy
- Morbid obesity BMI >35
- Cigarette smoking
- Previous surgical scar especially in the upper abdomen
- History of thromboembolic disease
- Unrealistic patient's expectations

Procedure

Abdominoplasty is a major surgery and it takes several hours of operative time. The pre-operative preparation measures include:

- Patient should stop smoking at least 4 weeks prior to surgery
- Control of diabetes & hypertension
- Practice of breathing exercises at least 4 weeks prior to surgery
- Mini heparin is started day before surgery and continued for 3 days post op to prevent the deep vein thrombosis (DVT) and blood clot formation

The classical Abdominoplasty is as follows:

- The patient is put in supine position.
- The intermitting inflatable compressive leg stockings are applied to prevent DVT.
- Antibiotic is given as one dose pre-operative and two doses post-operative for all the patients.
- An incision is made from one hip (anterior superior iliac spine) to other hip just above the pubic area.
- Another incision is made to free the navel (umbilicus) on pedicle from the surrounding skin.
- The skin plus fat (sub cutaneous tissues) is dissected at the level of aponeurosis from the abdominal wall to reveal the muscles and fascia to be tightened. The dissection extends superiorly to xiphisternum and costal margins.
- If there is any hernia it is repaired.
- The musculo-fascial abdominal wall is tightened by vertical midline plication in multiple layers preferably by non-absorbable sutures.
- Liposuction of the midline and the flanks is carried out as an adjunct for contour sculpturing.
- The umbilicus is relocated through an incision in the abdominal wall.
- Excess skin & fat is excised. A drain is inserted and wound is closed using subcuticular stitches or staples (clips).
- Wound dressing is applied.
- Compression garment is applied and continued for up to six weeks.



Figure 1. Pendulous Abdomen



Figure 2. Post-operative appearance



Figure 3. Post-operative scar

There are several modified abdominoplasties such as:

- ❖ Mini or partial abdominoplasty: The mild skin laxity and limited muscular flaccidity primarily limited to the infraumbilical region is treated by smaller incision and limited dissection.
- ❖ Extended abdominoplasty: A complete abdominoplasty plus a lateral thigh lift.
- ❖ High lateral tension tummy tuck: The muscles are tightened in vertical line as well as in horizontal line. This technique produces flat abdomen with significantly better-defined waistline.
- ❖ Circumferential abdominoplasty: It is an extended abdominoplasty plus buttock lift. The resulting scar runs all the way around the body like a belt therefore, called as Belt Lipectomy or Body Lift. This operation is appropriate for patients who have undergone massive weight loss.

Complications or Possible Risks

- Bleeding during surgery and afterward or hematoma formation.
- Seroma or Serous fluid accumulation under the skin after the drains have been removed is a common problem. A collection can be aspirated.
- Deep Venous thrombosis (DVT) & Pulmonary embolism is a serious complication. Therefore early mobilization is done to minimize the risks of DVT & Pulmonary embolism.
- Skin & / or Fat necrosis is infrequent complication. The diabetics and smokers have an increased risk. If skin necrosis or fat necrosis occurs it will need further surgery.
- Wound Infections usually delay the healing process and may cause wound separation. Infection is usually treated with antibiotics and drainage.
- Scarring resulting from abdominoplasty is permanent. (Scar will never become invisible). It normally takes six to twelve months before scars fade out.
- Skin numbness of the lower abdomen is noted in some patients.
- Asymmetry of the abdominal wall.

Recovery

Initially there may be bruising and discomfort. A supportive abdominal binder or compression garment can minimize swelling, bruising, and support the repaired tissues. This compression garment is also effective in helping the skin in the treated area conform to its new shape.

Patients are advised to avoid smoking for 6 weeks during recovery period.

Heavy activity is best avoided for six weeks after surgery.

The scars appear red and prominent at first, but with proper care, they heal into a thin, silvery line. The fading of the scar may take six months.

Patients should maintain their body weight following surgery. If they lose weight post-operatively, the skin may sag again.

It can give gratifying results if proper patient's selection is carried out.

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1- Taylor H and Leitman R. Men with erectile dysfunction (ED) want improved relations with their partners Harris Interactive online survey 2001; 1-4.



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Non-Invasive Body Contouring (NIBC)

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Over the past 5 to 10 years, there has been considerable growth in body size and patient Body Mass Index (BMI) worldwide and so is the market growth in advances in technology devoted to nonsurgical management of fat and body contouring. Non invasive body contouring technology is the fastest growing segment of aesthetic capital equipment space.

Since the advent of liposuction in the late 1970s and early 1980s body contouring surgeries has witnessed the development of less invasive and more effective liposuction techniques.

Liposuction remains the number one aesthetic surgical procedure performed worldwide. Many patients, no matter how less invasive liposuction may appear, will not submit, nor are they interested in a liposuction procedure. Many patients seek mild to moderate body contour improvements through diet and exercise and adjunctive noninvasive body-contouring procedures.

There is a strong public demand for safer body contouring procedures with less discomfort, less side effects and fast recovery. Driven by these realities, less invasive body contouring options are developed to suit the need of those who seek to avoid the drawbacks of current aesthetic surgical options like hospitalizations, anesthetics, pain, prolonged recovery and other inherent risks associated with surgery.

Traditional suction-assisted liposuction is (SAL) still considered as the gold standard in nonexcisional bodycontouring. But recent developments in energy based liposuction like third generation ultrasound assisted lipolysis (UAL), laser assisted lipolysis (LAL), and radiofrequency assisted liposuction (RFAL) offers reduced ecchymosis, swelling, pain, enhanced skin contraction and shorter postoperative recovery than SAL.

Patients, naturally seek safer alternatives and are quick to embrace the option of losing fat quickly without having to undergo surgery. With this in focus, several technologies have emerged in the NIBC market which offering noninvasive, transcutaneous delivery of energy for lipolysis.

BASIC SCIENCE BEHIND NIBC:

The adipocyte (fat cell) is a very important cell involved in energy storage (intermediate and long term energy storage depot), hormonal regulation, and a host of other endocrinological functions. The adipocyte has a large amount of cytoplasm that serves as a storage depot for triglycerides, which are composed of glycerol and free fatty acids. When caloric intake exceeds caloric output, adipocytes then swell with triglycerides. As adipocytes continue to enlarge within their intralobular and interlobular fascial compartments, they create bulges or convex distensions of soft tissue that then modify our contours.

The basic science of the noninvasive modulation and modification of the adipocyte involves one of the following several mechanisms:

1. Thermal augmentation of normal metabolic pathways: Adipocyte experiences a periadipocyte



thermal environment induced by transepidermal delivery of some energy and this heat increases the localized metabolic rate of the fat, evacuating, enhancing, and augmenting the natural egress of triglyceride out of the fat cell, resulting in a diminishment of the convex distension and a measurable circumferential reduction in fat. There is also some thermal-related dermal tightening. Most of these thermal technologies do not, in fact, kill the fat cell.

2. Thermal or cavitational destruction: Either a pulse of high-voltage RF current, or a focused high-frequency ultrasound energy disables or destroys the adipocyte by permanently damaging the cell membrane, or coagulating or disrupting and releasing the adipocyte cell contents.
3. Biochemical alterations: Low-level light laser therapy, create temporary disruptions in the cell membrane of the adipocyte creating a cell membrane pore allowing a temporary egress of the triglyceride from the cytoplasm, but the cell membrane then rights itself again.

So, through these mechanisms, sizes of the adipocytes are either temporarily or permanently reduced and/ or the number of adipocytes are reduced, which when translated over hundreds of thousands or millions of fat cells, will result in a measurable reduction of fat and a circumferential reduction of the body contour area in the treated area.

CLASSIFICATION:

The various technologies available for NIBC can be classified based on the type of energy delivered transepidermally by a particular technology in modifying the adipocyte.

1. Suction: Massage Devices
 - a. Endermologie
2. Suction-Massage: Thermal Devices
 - a. TriActive (Cynosure, USA)
 - b. Smoothshapes (Cynosure, USA)
3. Radiofrequency Energy Devices
 - a. VelaSmooth, VelaShape (Syneron, USA)
 - b. Thermage_ (Solta Medical, USA)
 - c. Accent (Alma Lasers, USA)
 - d. TiteFX (Invasix, Israel)
4. High-Frequency Focused Ultrasound Energy Devices
 - a. UltraShape (Ultra Shape, Israel)
 - b. LipoSonix (Medicis, USA)
5. Cryolipolysis Energy Devices
 - a. Zeltiq (Zeltiq Aesthetics, CA, USA)
6. Low-Level Light Laser Therapy Devices
 - a. Zerona (Erchonia Medical, US)

INDICATIONS AND CONTRAINDICATIONS OF NONINVASIVE BODY CONTOURING:

In general, all the noninvasive body-contouring technologies share the same relative indications and contraindications for treatment.

Indications:

1. Realistic expectations of a modest reduction of localized fat, modest cellulite improvement
2. Compliance with multiple visits
3. Reasonable BMI and lifestyle
4. Opposed to a surgical procedure

Contraindications:

1. Pregnancy
2. Pacemaker
3. Medically unwell
4. Unrealistic expectations
5. Large BMI.

COMPLICATIONS OF NONINVASIVE BODY-CONTOURING

All of the noninvasive body-contouring technologies mentioned here are extremely safe. Rare reports of focused ultrasound thermal injuries over thin bony prominences can be avoided by following the recommended techniques and protocol set out by the companies. The thermal injuries from the RF devices are very rare with instances far less than 1%. With the cryolipolysis technology, a temporary, but annoying, dysethesia can happen in up to 20% of patients, but there are no reports of permanent sensory loss.

Even when the safety and efficacy of these noninvasive body-contouring devices have been proven and documented, by far the most common complication is patient dissatisfaction. Patients who present to the plastic surgeons or dermatologists office for noninvasive body contouring are often thinking they will receive liposuction-like results. So, it is critical to educate patients on the modest significance of 2 to 4 cm of circumferential improvement in body contour.

CONCLUSION:

Although it is impressive that we can achieve 4-cm or more reductions with most of the technologies in the truncal region, those patients who present with large BMIs, or individuals with large focal fatty deposits, will see only limited benefit. Reductions of 4, 5, or 6 cm still leave behind most of the fatty tissue causing the convex distention in these patients. Hence, Patients wanting noninvasive body contouring need to be judiciously selected and the procedures should not be over promoted. The best candidates and indications for noninvasive body contouring are those patients who are very accepting of a mild to moderate result or those who state they will be happy with any measurable reduction in fat or those who are not willing to undergo any form of liposuction or bodycontouring surgery, as these factors will give the best results. With proven safety and efficacy, the future of noninvasive body contouring looks bright.





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Liposuction – Its Role in a Shapely Body

Dr. James Roy Kanjoor

Department of Plastic Surgery
Canadian Medical Center, Sharq, Kuwait.



Fat reduction and maintaining a proportionate body is a rational dream of everyone. A shapely body with ideal weight is not only an aesthetic asset but also a physical comfort in daily chores. Psychological boost is an untold reward to balance ones confidence.

How to achieve an ideal body weight with right proportions?

There is no shortcut or magic. Hard work is the answer. Proper diet regime and a planned training is the only way (Nowadays-Bariatric surgery-helps the so called morbidly obese persons-who are a failure in all these regimes)

Adequate calorie intake and burning should target a gradual loss of weight. This time bound weight loss is of significant importance in getting our skin gradually redrape instead of sagging from the body frame. Crash programs result in hanging aprons of skin envelope which needs again a Plastic Surgeon to tailor a perfect fit.

When does one need a Plastic Surgeon's intervention?

In spite of good lifestyle maintenance by diet and exercise, some fatty areas in the body are resistant. Those are lower abdomen, waist, outer thighs and buffalo hump area in the neck. Liposuction can help shed this extra local fat to give shape.

Principles of liposuction

The number of fat cells is constant in ones body. They can hypertrophy or enlarge in size when there is calorie excess, shrink during weight reduction. These fat cells can be sucked surgically at a negative pressure of one atmosphere, which can be achieved by specially made suction machines. Through a small stab incision over hidden areas of the body, a narrow caliber cannula can suck out this extra fat, leaving the minimum required amount of fat for the viability of skin envelope.

The overlying skin cells take time to redrape or shrink and cover the body area. This time depends on the elasticity of the skin. Young skin is more elastic. Anyway age is no bar for liposuction, old age takes longer time-6 months and more to gradually shrink. Beware! Liposuction can not give a makeover overnight.

Recent advances saw other forms of energies - Ultrasound and Laser probes are used to lyse the fat cells before suction. They are useful in small fat deposits and expensive.

Limitations of Liposuction:

Having said that fat cells can be sucked out easily, does not mean that it is as simple as that. When the safety limits are stretched too much by suctioning more than 5 liters of pure fat-called Megaliposuction,-complications can occur and have happened. Safety first always.

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Liposuction is a surgical procedure - should be done in a certified centre by an experienced Plastic Surgeon. One need not be admitted, can be done as a **Daycare** procedure which means - after liposuction patient can be discharged after four hours of monitored observation.



Complications of Liposuction:

- If the safety limits are not followed, hypotension and shock can happen.
- Infection
- Fat necrosis
- Aesthetic insufficiencies like asymmetry, wavy skin folds, saggy skin fold



Extended use of Liposuction:

- Lipoabdominoplasty is probably one of the most useful combination developed recently which helps achieve a safe at the same time a better method to achieve a harmonious aesthetically pleasing abdomen with faster and painless recovery.
- Autologous fat graft: Fat is not only a volumizer but a wonderful rejuvenator of skin. The suctioned fat can be used to augment breast and buttock. Asymmetries following surgery, trauma can be contoured by fat filling. Lipomodelling of breast is a fast becoming method in aesthetic surgery.

Fat is used in non-healing wounds especially post radiation wounds.

Key messages

Liposuction is a very useful safe procedure in body contouring. It is never an optional weight reduction method.

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Weight Loss Surgery for Children

Dr Sunil Kumar Yadav

Department of Pediatric Surgery
Ibn Sina Hospital



Weight Loss Surgery – often referred to as Bariatric Surgery – offers adults or children a surgical option for weight loss management when non-surgical approaches prove to be ineffective in achieving sustained results. Weight loss surgery is not an easy solution for obesity and alone does not cure obesity. It is a drastic undertaking and carries the usual pain and risks of any major surgical operation. It requires family support and a lifelong commitment from the adolescent to maintain their new diet and exercise habits.

Surgical treatment of childhood obesity

The best methods for prevention and treatment of obesity are a balanced diet and exercise. In some cases of extreme obesity when diet and exercise have failed, weight loss surgery (bariatric surgery) is considered as a treatment modality. Recommendations for bariatric surgery in children are currently restricted to adolescents (aged 14 through 18 years). Risk and benefits of surgical procedures should be discussed in detail with parents and children.

Indications and Contraindications for Bariatric Surgery in Adolescence

Indications:

Obese girls (aged 13 -18 years) or boys (aged 14 to 18 years) who fulfil any of the following criteria are considered candidates for bariatric surgery:

- ❖ Failure of at least 6 months of organized, medically supervised weight loss attempts.
- ❖ BMI 40 with presence of severe obesity-related comorbidity like type 2 diabetes, hyperlipidemia, sleep apnoea etc.
- ❖ BMI 50 with less severe obesity-related comorbidities

Contraindications:

- ❖ Substance abuse problem within the preceding year.
- ❖ Psychiatric diagnosis that would impair ability to adhere to post-operative dietary or medication regimen (e.g., psychosis.)
- ❖ Medically correctable cause of obesity.
- ❖ Inability or unwillingness of patient or parent to fully comprehend the surgical procedure and its medical consequences.
- ❖ Inability or refusal to participate in lifelong medical surveillance.

Preparing children for weight loss surgery

Most children who have weight loss surgery will meet with several specialists before surgery is scheduled. This often includes a dietician, mental health counsellor (child psychologist), a pediatrician who specializes in care of obese people, and a pediatric surgeon who performs weight loss surgery. Children and their parents may need to work with these providers for several weeks or months before surgery.



- ❖ The nutritionist will explain what and how much you will be able to eat after surgery. You may also need to lose a small amount of weight before surgery.
- ❖ The child psychologist will help you to cope with stress and other factors that can make it harder to lose weight or trigger you to eat.
- ❖ The pediatrician will determine whether you need other tests, counselling, or treatment before surgery. He or she might also help you begin a medical weight loss program so that you can lose some weight before surgery.
- ❖ The pediatric surgeon will meet with children and their parents to discuss the surgeries available to treat obesity. He or she will also make sure you are a good candidate for surgery.

How does weight loss surgery work?

There are three types of bariatric surgical procedures.

- ❖ Restrictive procedures – They decrease the size of the stomach so a person feels full quickly. After surgery, the stomach holds about one cup of food. A normal stomach holds 4 to 6 cups.
- ❖ Malabsorptive procedures – They decrease the absorption of calories in the small intestine. These procedures bypass a certain length of intestine so that the food and digestive juices come in contact in only a short length of bowel causing malabsorption of the food and thus weight loss.
- ❖ Combined procedures – These procedures use both restrictive and malabsorptive method of weight reduction.

What kinds of weight loss operations are performed on Children?

There are different types of weight loss surgeries. These can be performed by open surgery or laparoscopically, wherein small instruments guided by a small telescope are passed through the body wall. The instruments are held and manipulated by the surgeon who controls their movements, while watching them on a video screen. There are several types of weight loss surgeries, the most common being done in children are lap banding, gastric bypass, and gastric sleeve.

1. Lap Banding

Laparoscopic adjustable gastric banding (LAGB), or lap banding, is a surgery that uses an adjustable band around the opening to the stomach (Figure 1). This reduces the amount of food that you can eat at one time.



Figure 1: Adjustable gastric banding

Lap banding is done through small incisions, with a laparoscope. The band can be adjusted after surgery, allowing you to eat more or less food. Adjustments to the size and tightness of the band are made by using a needle to add or remove fluid from a port (a small container under the skin that is connected to the band). Adding fluid to the band makes it tighter which restricts the amount of food you can eat and may help you to lose more weight.

Lap banding is a popular choice in children because it is relatively simple to perform, can be adjusted or removed, and has a low risk of serious complications immediately after surgery. However, weight loss with the lap band depends on your ability to follow the program closely.

You will need to prepare nutritious meals that “work with” the band, not against it. For example, the lap band will not work well if you eat or drink a large amount of liquid calories (like ice cream). The band will not help you to feel full when you eat/drink liquid calories.

Weight loss ranges from 45 to 75 percent after two years. As an example, a person who is 120 pounds overweight could expect to lose approximately 54 to 90 pounds in the two years after lap banding.

2. Gastric Bypass

Roux-en-Y gastric bypass, also called gastric bypass, helps you to lose weight by reducing the amount of food you can eat and reducing the number of calories and nutrients you absorb from the food you eat.

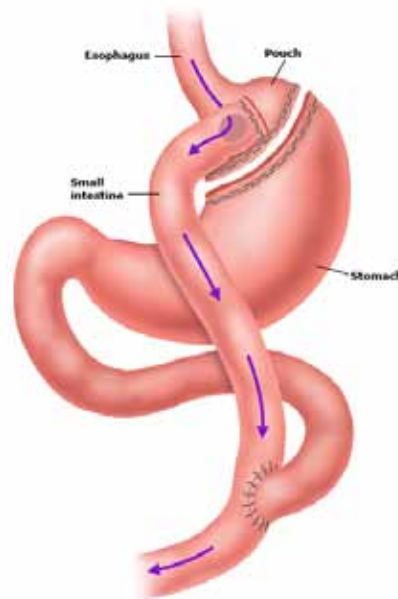


Figure 2: Roux-en-Y gastric bypass (RYGB)

To perform gastric bypass, a surgeon creates a small stomach pouch by dividing the stomach and attaching it to the small intestine (Figure 2). This helps you to lose weight in two ways: The smaller stomach can hold less food than before surgery. This causes you to feel full after eating a very small amount of food or liquid. Over time, the pouch might stretch, allowing you to eat more food.

The body absorbs fewer calories, since food bypasses most of the stomach as well as the upper small intestine. This new arrangement seems to decrease your appetite and change how you break down foods by changing the release of various hormones.

Gastric bypass can be performed as open surgery (through an incision on the abdomen) or laparoscopically, which uses smaller incisions and smaller instruments. Both the laparoscopic and open techniques have risks and benefits. You and your surgeon should work together to decide which surgery, if any, is right for you.

Gastric bypass has a high success rate, and people lose an average of 62 to 68 percent of their excess body weight in the first year. Weight loss typically levels off after one to two years, with an overall excess weight loss between 50 and 75 percent. For a person who is 120 pounds overweight, an average of 60 to 90 pounds of weight loss would be expected.

3. Gastric Sleeve

Gastric sleeve, also known as sleeve gastrectomy, is a surgery that reduces the size of the stomach and makes it into a narrow tube (figure 3). The new stomach is much smaller and produces less of the hormone (ghrelin) that causes hunger, helping you feel satisfied with less food.

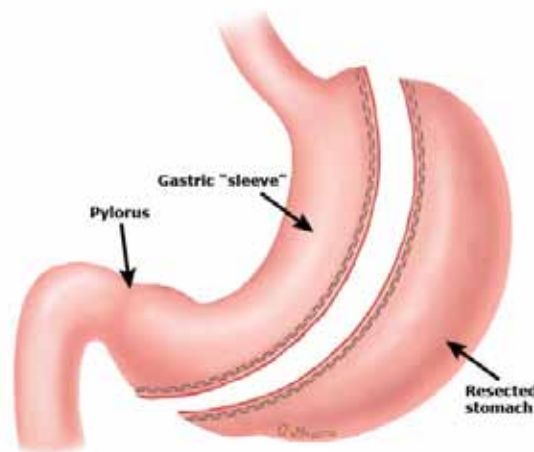


Figure 3: Sleeve gastrectomy

In a sleeve gastrectomy, the stomach is cut down in size and made into a banana shape. The new stomach is smaller and doesn't stretch, which helps with controlling appetite and losing weight. Sleeve gastrectomy is safer than gastric bypass because the intestines are not rearranged, and there is less chance of malnutrition. It also appears to control hunger better than lap banding. It might be safer than the lap banding because no foreign materials are used.

The gastric sleeve has a good success rate, and people lose an average of 33 percent of their excess body weight in the first year. For a person who is 120 pounds overweight, this would mean losing about 40 pounds in the first year.

Complications of Weight Loss Surgery

Weight loss surgery is generally a safe procedure although a variety of complications can occur like any other surgical procedure. The risks of surgery depend upon which surgery you have and any medical problems you had before surgery. Some of the more common early surgical complications (one to six weeks after surgery) include dumping syndrome in about 20% (bloating and diarrhoea

after eating, necessitating small meals or medication). Other complications are bleeding, infection, incisional hernia, and blockage or tear in the bowels and need for further surgery.

Important medical complications after surgery can include blood clots in the legs or lungs, heart attack, pneumonia, and urinary tract infection.

Complications are less likely when surgery is performed in centers that are experienced in weight loss surgery. In general, centers with experience in weight loss surgery have experienced pediatrician and pediatric surgeon, a team of support staff (dietitians, counsellors, and nurses), long-term follow-up after surgery and hospital staff experienced with the care of weight loss patients. This includes nurses who are trained in the care of patients immediately after surgery and anesthesiologists who are experienced in caring for the morbidly obese.

After Weight Loss Surgery

You will need to stay in the hospital until your team feels that it is safe for you to leave (on average, one to three days). One should not do any physical exertion till wounds are healed. Begin exercising as soon as possible once you have healed; most weight loss centers will design an exercise program for you. Once you are home, it is important to eat and drink exactly what your doctor and dietician recommend. You will see your doctor, nurse, and dietician on a regular basis after surgery to monitor your health, diet, and weight loss. You will be able to slowly increase how much you eat over time, although it will always be important to eat small, frequent meals and not skip meals, chew your food slowly and completely, avoid eating while “distracted” (such as eating while watching TV), stop eating when you feel full, drink liquids at least 30 minutes before or after eating, avoid foods high in fat or sugar and take vitamin supplements, as recommended to avoid deficiencies of vitamins and minerals.

It can take several months to learn to listen to your body so that you know when you are hungry and when you are full. You may dislike foods you previously loved, and you may begin to prefer new foods. This can be a frustrating process for some people, so talk to your dietician if you are having trouble. It usually takes between one and two years to lose weight after surgery. After reaching their goal weight, some people have plastic surgery (called “body contouring”) to remove excess skin from the body, particularly in the abdominal area.

Key Messages to Remember

Childhood obesity is a tremendous burden for children, their families, and society. Obesity prevention remains the ultimate goal, but rapid development and deployment of effective medical means to treat obesity are not currently available given the complexity of this disease. In the meantime, hundreds of thousands of our world’s youth are facing discrimination, a poor quality of life, and a shortened lifespan from the burdens of this illness.

Bariatric surgical options for adolescent obesity have been proven to be safe and effective and should be offered. Weight loss following bariatric surgery is variable but substantial, ranging from 30 to 70 percent of excess weight on average. The surgical procedure should be individualized for each patient based on their disease severity and risk factors. Long-term cooperation between families, schools, communities, government, health care professionals, media, insurers, and industry is essential in addressing the prevention and treatment of childhood obesity.





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WHAT'S NEW IN OBESITY ?



Antibiotics, AD-36 Virus And Obesity

Dr Deepthi Nair
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Obesity is one of the major health issues worldwide and it has been engulfing man in large numbers for the past few years, irrespective of whether it is an adult or a child.

Obesity has often been referred to as a lifestyle problem where people eat junk foods and have no exercise. It is now seen that obesity is not related to life style alone. A few new causes of obesity have surfaced in recent times. Recent studies point to a potentially new culprit in the obesity epidemic and guess what?.. The culprit turns out to be the use of antibiotics in early life.

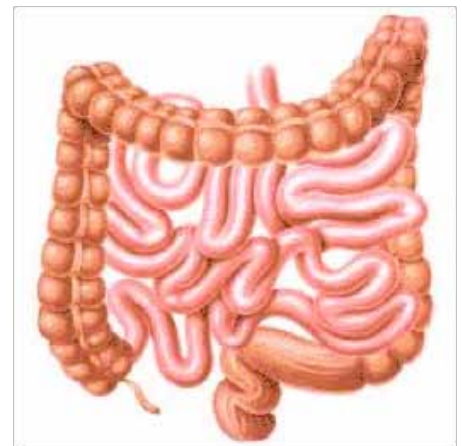


Antibiotics, especially when taken by infants less than 6 months old, may shift the balance of bacteria in the gut and may set the stage for obesity. The first study of its kind which appeared in the International Journal of Obesity, found that infants treated with antibiotics before 6 months of age were 22% more likely to be overweight when they were just over 3 years old. A relative study in mice showed that antibiotics affect gut bacteria involved in digesting nutrients, resulting in increase in fat mass. These findings were first published in the journal Nature.

Antibiotic exposures in early life disrupt the normal bacterial flora in the intestines changing their metabolic capabilities which may influence the absorption of calories. These changes have downstream effects on metabolism, including genes related to energy storage, according to microbiologist Martin Blaser of New York University, the author of both the above mentioned studies.

Role of intestinal microbes in inducing obesity in the long term

The human intestine harbours a large number of micro-organisms. These organisms are said to play an important role in obesity through energy extraction from the diet with variable efficiency and by influencing metabolism in the body. Gut microbes are said to communicate with the brain using endocrine signals to co-ordinate energy intake and expenditure. They can also regulate the endocrine cells in the intestine and influence the release of the gut hormones. Recent studies have shown that gut bacteria can initiate the low grade metabolic inflammation which is considered an important component of obesity.



Use of antibiotics by farmers

Antibiotics have for long been used in agriculture and in the animal industry as growth promoters. Farmers therefore, are said to have a role in the fat epidemic. The indiscriminate use of antibiotics by farmers for livestock to increase the muscle mass in animals not only promotes the spread of antibiotic resistance, but can get into our food chain and affect the homeostasis of our gut micro-flora. The growth promoting effects of antibiotics were first discovered in 1940s and it is said that livestock antibiotics could have greatly contributed to human obesity.



Obesity and dosing of antibiotics



Obesity influences the dosing of antibiotics. Physiological changes in obesity can alter both the volume of distribution and clearance of many commonly used antibiotics. Obese patients may require larger doses of antibiotics to achieve similar concentrations in the body as those of patients who are not obese. Optimal antibiotic dosing for treating infections in obese patients is a challenge for clinicians. Microbes that are resistant to antibiotics are a genuine concern. Dosing of antibiotics tailored to the weight of the individual should be considered for effective treatment of infections and to control the emergence of antibiotic resistance.

Role of the immune system in obesity

Gut bacteria are under constant selective and adaptive pressure from the immune system, which basically keeps them in check. One important component of the innate immune system in the gut is Toll-like receptors which sense bacteria in the gut. The immune system therefore keeps the bacterial population in check and shapes the species composition. There is a clear difference in the gut microbes in the obese and the lean. It is observed that the bacteria in the intestine of the obese process carbohydrates better than in the lean. As a result, there is more extraction of calories from food in the obese than in the lean making the fat grow fatter. The immune system by controlling the types of bacteria inhabiting our intestine plays a role in metabolism and thereby in obesity.

Response to vaccines in obesity

Vaccines administered to prevent infections fail to produce adequate response in obese individuals. A study conducted by Weber et al found a failure to detect adequate antibodies to Hepatitis B virus in health care workers who were obese (or those with a high body mass index). Another study demonstrated a similar response of reduced antibody production in individuals immunised with the tetanus vaccine.

Can infections lead on to obesity?

Just as obesity can be a risk factor for infection, experimental studies on animal and human viruses have shown that infections too can lead on to obesity. Certain viruses like SMAM-1 and adenovirus 36 are found to be potentially related to obesity. The mechanism of infection leading on to obesity is not yet clear. It is believed that adenovirus affects DNA and gene function in adipocyte cells bringing about increased storage of fat in these cells. The fact that infection can be a cause of obesity comes to light through a study done by researchers in the University of California where children exposed to a particular strain of adenovirus (AD36) were found to have developed a higher body mass index when compared to those who had no exposure to the particular virus strain.

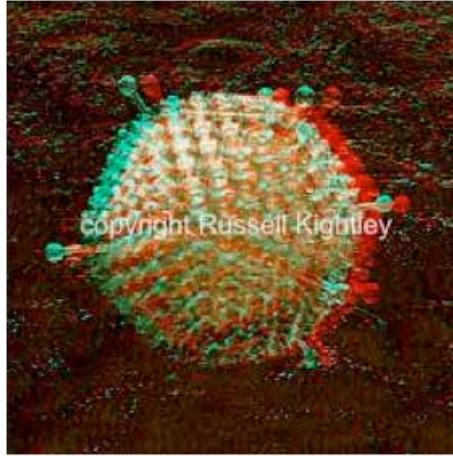


Fig 1. Adenovirus under electron microscope

Adenoviruses are a group of viruses responsible for causing respiratory tract infections like common cold and bronchitis. They can also cause eye infections like conjunctivitis. Adenoviral infections can occur at any age. There are about 52 types of adenoviruses that can cause infections in humans. Of these, adenovirus 36 has been found to be linked to the microbial causation of obesity. It has been otherwise referred to as the 'obesity bug'.

We have to now be aware of the novel emerging causes of obesity. In addition to a healthy food intake and regular exercise, we need to keep in mind the correct use of antibiotics in children below six months of age and the infections caused by viruses like adenovirus – 36. It is therefore, a gentle reminder to parents not to request doctors to prescribe antibiotics to their little ones at the onset of minimal infection. This reminder may prevent your babies, to a certain extent, from the clutches of the fat epidemic and keep them healthy. Consumption of meat is another factor to be kept in mind because of the excessive use of antibiotics in the animal industry to make the animals obese. The antibiotics enter the human food chain through animal meat and again contribute to human obesity through its growth promoting effect. So, let us finally say a 'NO' to obesity and keep ourselves fit and healthy.

For more information please read:

- Bytesizebio.net/...../obesity-the-role-of-the-immune-system/- Cached
- www.jci.org/articles/view/58109





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Vitamin D and relationship with Obesity

Dr V Alexander

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Vitamin D commonly known as 'SUNSHINE VITAMIN' has many healthy effects which go beyond its long held recognized action on bone and musculoskeletal system.

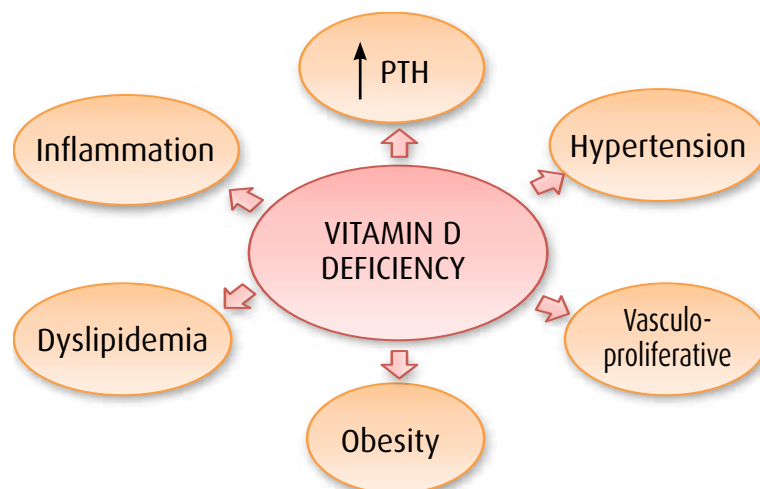
Vitamin D is known to have distinct activities on various body tissues like a 'hormone' which regulates more genes and bodily functions than any other hormone yet discovered.

How is Vitamin D Produced in the Body?

Vitamin D is produced as a pro-hormone in your skin after sunlight exposure, and is then converted to the potent hormone form. Other sources of vitamin D include fortified dairy products and certain foods.

Why is Vitamin D so Important, Anyway?

- ❖ Vitamin D could rightly be described as a "miracle nutrient" for your immune system, as it enables your body to produce well over 200 antimicrobial peptides, which are indispensable in fighting off a wide range of infections.
- ❖ Furthermore, when your organs convert the vitamin D in your bloodstream into calcitriol, which is the hormonal or activated version of vitamin D, they can then use it to repair cellular damage, including damage associated with cancer cells and tumors.
- ❖ Vitamin D deficiency plays a part in a host of diseases, including heart disease, diabetes, immunological, neurological diseases, certain cancers, influenza, colds, respiratory tract infections, depression and more.



Why You Need more of this Crucial Vitamin if You are Heavy?

Vitamin D is stored in adipose fat tissues, making it unavailable for the body to use; as a result, people who are overweight are already more likely to have low levels of serum vitamin D.

Is there a Link between Low Vitamin D Levels and Obesity?

Vitamin D might play a role in the regulation of body fat growth, metabolism and gene activity. Healthy vitamin D levels improve weight loss if you're following a reduced-calorie diet.

Obesity Plus Low Vitamin D may Add up to a Greater Risk of Diabetes

The combination of obesity and vitamin D deficiency may put people at even greater risk of insulin resistance and for Type 2 diabetes than either factor alone. In obese individuals with vitamin D deficiency, insulin resistance was nearly 32 times more common. Vitamin D deficiency leads to raised parathyroid hormone (PTH) level, which is known to cause insulin resistance and hypertension.

What is the Correct Dose of Vitamin D to treat Deficiency?

Based on contemporary research, an average adult needs to elevate his or her levels above 80 nmol/L - the bare minimum requirement necessary for disease prevention. Ideally, you'll want your levels to be between 100-150 nmol/L. Some studies even report maintenance of a high normal vitamin D level (150-200 nmol/L) to protect against heart disease and cancer.

What are Options to Tackle Vitamin D Deficiency Epidemic?

- Increased awareness of the issues involved with vitamin D deficiency is necessary at the primary-care level.
- If sun exposure is not an option.... then you should take an oral vitamin D3 supplement – and this is where the dosage becomes of crucial importance.
- Vitamin D deficiency is not corrected by and may in fact become exacerbated following weight reduction e.g. gastric by-pass surgery.
- High prevalence of vitamin D deficiency in general population may have an influence on weight gain affecting large numbers of people.
- The safety, low cost, and ready availability of vitamin D make it worthy candidate of further study.





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'Defeat Obesity' Campaign – The Role of Corporate and Private Sectors in the Prevention of Obesity

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Dr Jayachandran Palsamy

Medical Division; HSE Department
Kuwait National Petroleum Company, Kuwait



Kuwait National Petroleum Company (KNPC) is an internationally reputed multinational company in the field of oil refining business. The in house Medical Division of the company provides a broad range of medical services to more than 5000 employees working for KNPC. The employees are considered as the most valuable asset of the company and all efforts are exerted/ implemented/ extended to maintain good health among the employees. All employees are subjected to pre-employment medical examination undergoing special medical tests as per job specification.

Once certified fit and employed by the company, the employees undergo routine periodic medical examination (PME) annually or once in two years. During such periodic medical examination visits, the following are performed:

- Height & weight measurements and body mass index (BMI).
- Vital signs (pulse & blood pressure).
- Relevant medical history.
- Detailed laboratory investigations: CBC, lipid profile, fasting blood sugar, liver and renal function tests, uric acid, & HbA1c.
- Routine urine and stool analysis.
- Audiogram, spirometry & ECG.

Through the Occupational Health Surveillance, the health of the employees are monitored to detect new cases of diabetes, hypertension, and overweight/obesity at an early stage and advice remedial measures. The teams follow up employees with chronic diseases and educate/counsel them. 'Overweight' and 'Obesity' were an area of concern and hence the top management decided to take remedial action by initiating the '**Defeat Obesity**' campaign.

Periodic Medical Examination (PME)

In KNPC we have the periodicity of PME is determined by age; with increase in age more frequent PMEs are conducted. The outcome of PME steers the health promotion programs. PME findings showed that more than nearly 2/3rd of the employees who took up the PME were either overweight or obese

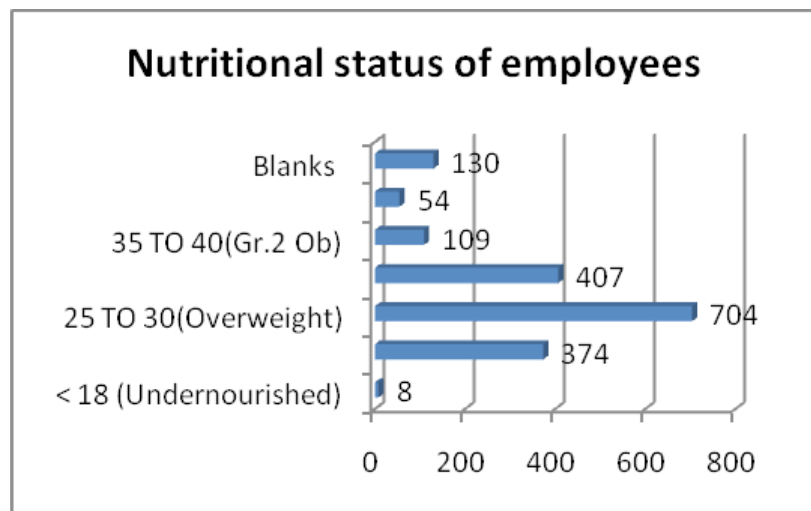


Chart 1. Nutritional status of employees

(See Chart 1)..

Since Obesity is the root cause of many of the chronic life style diseases, we looked at the other comorbid conditions among these obese employees. These are provided under charts 2 and 3.

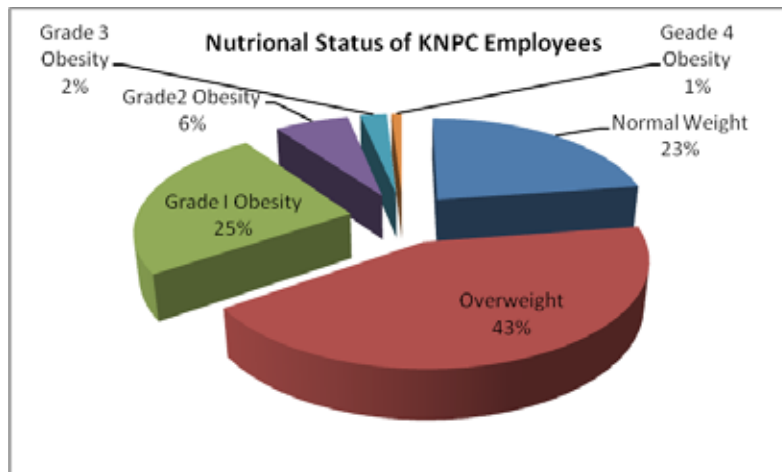


Chart 2. Patterns of obesity

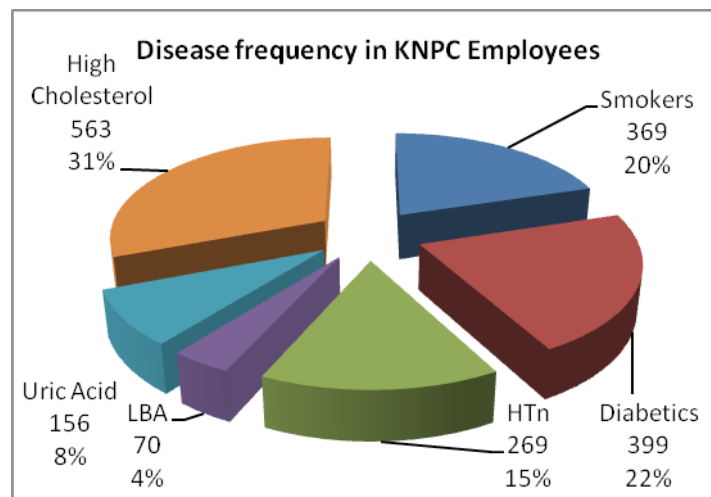


Chart 3. Comorbidities of Obesity

Plan of Action

Hypercholesterolemia, Diabetes and Hypertension were the major medical problems. Since these employees are future candidates for heart diseases, the morbidity and mortality due to heart disease and stroke have to be minimized in future. Hence the target was to prevent the root cause of these diseases, "Obesity". Many health promotion campaigns were conducted to bring awareness among the workers. But the yield from such programs was not enough to reduce the prevalence of chronic diseases.

Focusing the root cause in a novel way

The medical division decided to attack obesity among the workers by a program called "Defeat Obesity". In this program an announcement was made in the Webmaster encouraging the obese employees to participate by enrolling and proving to the management that they have reduced their weight against time (Figure 1, 2 and 3). It was decided to reward the employees proportional to



weight reduction. Accordingly employees registered with the concerned refinery clinics and Head Office clinic. 20 employees registered for this competition. Their details are given below in **Table 1**.

Announcement from HSE Department

Obesity is an ever growing problem in Kuwait and is the root cause of several life style diseases such as Diabetes, Hypertension, Heart Ailments and some types of cancer in addition to its negative demoralizing effects.

In order to motivate obese employees to reduce weight, the company management wishes to reward those who have challenged and defeated obesity by reducing their weights significantly.

Valuable rewards will be given to the first (10) employees ranked in the order of "lost weight percentage" and registered with KNPC Physicians.

Rewards will be presented to the winner at the "Anti-Obesity" campaign actively organized by HSE Dept. - Medical Division under the slogan (**Defeat Obesity**) and planned to be launched on **Sunday 10th October 2011 at Head Office Auditorium 10:00 hrs.**

To get your prize, please fill the attached form and follow the instructions inside.

إعلان من دائرة الصحة والسلامة والبيئة

البدانة مشكلة دائمة التور في دولة الكويت وهي السبب الرئيسي للعديد من الأمراض المزمنة التي من بينها ارتفاع ضغط الدم، أمراض القلب والشرايين وبعض أنواع السرطان بالإضافة إلى أنها تسبب التعب.

ورغبة في تشجيع موظفي الشركة فررت دائرة الصحة والسلامة والبيئة برنامجاً ونجحوا في تحقيقه. سيتم توزيع جوائز قيمة لأول (10) موظفين تمكنوا من خسارة نسبة ما يقرب من وزنهم بعد أن قاموا بتسجيل أوزانهم عند بدء انشاء شركة الترفيل الوطنية الكويتية.

سوف تمنح الجوائز خلال فعاليات برنامج التوعية الصحية الذي ينظمه القسم الطبي بدائرة الصحة والسلامة والبيئة تحت عنوان (**تغلب على البدانة**) والذي سوف تنطلق فعالياته يوم الأحد الموافق 10 أكتوبر 2011 الساعة العاشرة صباحاً على صالات القاعة الرئيسية بالترافيل المتصل على جانبيه برحى لخدمة التوزيع الترفيل والتابع ما يه من المنشآت.

Fig 1. Announcement of the Campaign by Webmaster

Invitation

Medical Division is pleased to invite you to attend and participate in the Health Awareness Program under the name

Defeat Obesity

The Program activities are:

- Awarding employees who have reduced their weight significantly.
- Gifts distribution to the attendees.
- Consultant's lectures on the topic.
- Drug & medical equipment's companies exhibition with discounts on their products

دعوة

يتشرف القسم الطبي بدعوتكم لحضور برنامج التوعية الصحية تحت عنوان:

تغلب على البدانة

اليوم في قاعة المسرح في العاشرة صباحاً.

فعاليات البرنامج:

- تكريم الفائزين في مسابقة لخفيض الوزن.
- تقديم هدايا للحضور
- محاضرات من إستشاريين عن موضوع البدانة.
- معرض لشركات الأدوية والأجهزة الطبية ذات العلاقة مع خصوصيات على منتجاتهم.

Figure 2. Invitation to the employees

OPTIONAL REGISTRATION FORM نموذج تسجيل اختياري

أرغب في تسجيل أسمى اختياريًا في مسابقة الناجحين في خفض أوزانهم حيث تم خفض وزني من () كيلو جرام إلى () كيلو جرام في مدة () وذلك من خلال برنامج غذائي صحي تم إعداده:

بنفسي:
بواسطة أخصائي التغذية:
بواسطة الطبيب المعالج:

الاسم: الرقم الوظيفي: الدائرة:

يرجى العلم بأنه:

- 1- سوف يتم استبعاد انقاص الوزن عن طريق الطرق الغير صحية أو عن طريق العمليات الجراحية.
- 2- سوف يتم اعتماد وزن المتقدمين فقط عن طريق البيانات المسجلة في ملفاتهم من نتائج الفحص الطبي الدوري لموظفي الشركة.

التوقيع بعد قراءة شروط التسجيل والموافقة عليها: التاريخ:

* يرجى تسليم النماذج المعبئة إلى مكتب الاستقبال في عيادات مصافي الشركة أو المكتب الرئيسي.

I volunteer to register my name for the (weight loss contest). I have reduced my weight from () Kg. to () Kg. within the period () days through a healthy diet program prepared by:

Myself:
Dietitian Name:
Doctor's Name:

Name: Emp. No.: Dept.:.....

Please note:

1. Weight reduction due to Bariatric surgery or unhealthy procedures will be excluded.
2. Weight reduction will be accredited only by examining applicant's periodic medical examination results recorded in their files.

I have read and accepted the registration conditions:

Signature: Date :

Note: Please submit the filled up Forms to the respective Clinic's Receptions in each Refinery/Head Office.

Figure 3. Registration of employees for the program

From this list 9 employees who showed reduction in weight due to natural means, were selected for rewards (**Table 2**). A meeting ceremony was organized in the Head Office where the DMD chaired the session. The Head of Obesity Society in Kuwait who is an Endocrinologist explained and talked about medical complications of obesity. The Company Dietician talked about the food pattern for obese individuals. A bariatric surgeon talked about the surgery as a last option for treatment of obesity. After the talks the employees who reduced maximum weight over a period of time by natural means (Diet & Exercise) were honored with rewards in front of all by the DMD.



Table 1. Defeat Obesity Program 16.10.2011

SR#	Employee Name	Employee #	Reduced Weight		Reduced Weight	Period of Reduced Weight	Dept
			From	To			
1			87	78	9	3 Months	
2			100	93	7	2 weeks	
3			89.5	84.5	5	4 Months	
4			96	81	15	2.5 Months	
5			98	90	8	4 Months	
6			84	79	5	10 Months	
7			99	83	16	1.5 Months	
8			138	111.5	26.5	9-10 Month	
9			103	80	23	2 Months	
10			101	82.5	18.5	3 Months	
11			118	85	33	5 Years	
12			107	88	19	11 Months	
13			140	107	33	1.5 Years	
14			100	82	18	2 weeks	
15			87	82	5		
16			120	114	6	10 Months	
17			89	76.2	12.8	8 Months	
18			95.2	80.4	14.8	1.5 Months	
19			125	67.5	57.5	2 Years	
20			148	94	54	2 Years	

Table 2: Defeat Obesity Program 16.10.2011- Winners

SR#	Employee Name	Employee #	Reduced Weight		Reduced Weight	Period of Redcued Weight	Dept	Email ID
			From	To				
			125	67.5	57.5	2 Years		
2			148	94	54	2 Years		
3			140	107	33	1.5 Years		
4			118	85	33	5 Years		
5			138	111.5	26.5	910- Month		
6			100	74	26			
7			133	110	23	5 Months		
8			107	88	19	11 Months		
9			100	82	18	2 weeks		

Sustainability of the program and consolidation of gains achieved

To make this program a sustainable and to encourage others who are yet to loose significant amount of weight, this program has been made an ongoing campaign under which the following schedules were designed:

1. Employees can register every year for this award winning competition.
2. Company dietitian will be available for counseling throughout the year.
3. KNPC is giving 50% discount on the charges for fitness clubs.

Further additional measures were adopted by the company to overcome 'overweight' and 'obesity' amongst its employees:

- Dietitian consultation provided at all KNPC clinics.
- Special diets provided for employees for snacks and meals served by the company for employees.
- Health Gymnasium facility provided at all KNPC worksites.
- To motivate the employees to join private health clubs located close to their area of residence, the company is willing to pay 50% of the total membership charges.
- Free membership in KNPC Health Club.
- Regular lectures & booklets on the hazards posed by obesity conducted for all employees.

Another outcome of Defeat Obesity Program:

On seeing the good result of Defeat Obesity Program the medical division has taken up this year to look at the comorbidities (Diabetes/ Hypertension/ Hypercholesterolemia). In the year 2012 we targeted the Diabetics in the company by the name Know your Number (HbA1C). All Diabetics in the company are targeted and we conducted screening campaign for them to evaluate the complications of diabetes and also to look at the Cardiac Risk Scoring (As per Framingham's Risk Score.)

Key Messages

This campaign for decreasing weight and thus eliminating the health hazards caused by obesity is an example of how private and corporate sectors can participate in health promotion campaigns in society. Creation of awareness, encouraging employees to actively participate in ongoing campaigns and suitably rewarding successful employees will go a long way in promoting health of employees.



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Overweight in School Children – Myth or Reality!!

Dr Usha Rajaram

Department of Pediatrics & Neonatology
Al-Jahra Hospital, Kuwait



A very popular nursery rhyme goes,

Chubby cheeks, Dimple chin,

Rosy lips, Teeth within -----

conjuring a cherubic child with chubby cheeks, smiling shyly with bright eyes, biting on his index finger!

International pediatric associations are taking a second look at these chubby cheeks, in an attempt to scientifically predict abnormalities in weight in later childhood as a first step into adult obesity and its associated metabolic syndromes and some psychological and dysfunctional physiological states. The parameters of height and weight for age are resolved into body mass index (BMI) values using accepted percentile charts for the BMI, for boys and girls from 2 years to 18 years. This percentile classifies the children into categories of normal weight, risk for overweight, obese and underweight.

In fact, the BMI has become a novel tool in newborn practice too with BMI charts developed for newborn babies! This is emphasizing the statement of the well known pathologist physician Dr. Boyd, Atherosclerosis is a song that starts in the cradle!

Objectives

Indian Doctors Forum, with its interest in community health and school health, plans to establish a data base of BMI for a cross section of school children in Kuwait. This data base will serve as the basis for planning school health care programs, especially for identified children with abnormal BMI indices. Subsequently, one-to-one, root cause analysis and counseling sessions will be planned for children and their families along with health education through lectures, workshop, nutrition counseling, for parents and children will follow the initial analysis.

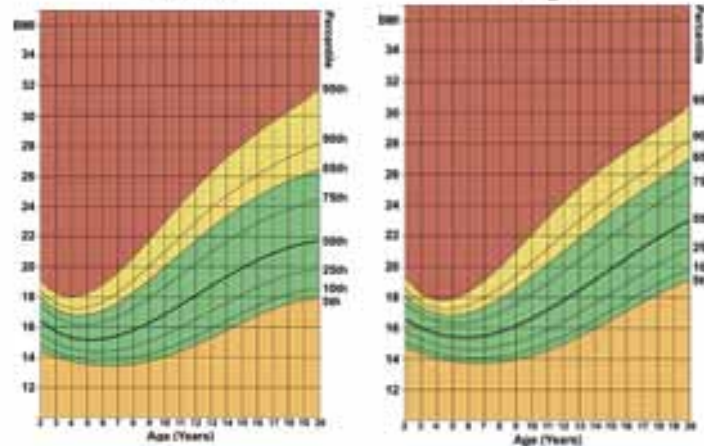
Material and methods

As a first pilot step, we analyzed the data from 500 children from Indian schools in Kuwait to establish the existence of the problem in reality, and quantify the percentage of deviations from normal BMI for age and gender.

Data of height, weight, and gender was obtained for children of Class 5 and Class 6. This group was chosen since there is a wide variability in growth data after the ages of 10 to 13 years depending on the pubertal development and the associated adolescent spurt. The BMI as a measure of childhood obesity does not directly measure body fat and muscular teens may be incorrectly labeled as having a weight problem. Most of these younger children with high BMI are really overweight, and have excess body fat.

1. The BMI for each child was calculated as per the BMI metric tables (Fig 1.) (pediatrics.About.com)
2. This BMI value was used to determine the BMI percentile on a girls BMI chart or boys BMI chart as appropriate (Figure 2). (CDC-charts)

Children's BMI-for-Percentile Graph



3. The children were then classified under various weights according to internationally accepted criteria as given below:

- Underweight: BMI less than the 5th percentile.
- Healthy weight: BMI between 5th and 85th percentiles
- Risk of overweight: BMI between 85th and less than 95th percentile
- Overweight: BMI greater than or equal to 95th percentile.

Results

Table 1 shows the results of BMI percentile related weight categories for children aged 10 to 11 years of class 5.

Section	Total	Underweight	Normal weight	Risk for Overweight	Overweight
Group A	40	2	19	6	13
Group B	40	3	19	11	7
Group C	38	3	19	8	9
Group D	40	1	22	7	9
Group E	39	1	27	6	5
Group F	41	3	20	8	10
Total(no)	238	13	126	46	53
Percentage		5.46%	52.94%	19.32%	22.26%

Table 2 shows the results of BMI percentile related weight categories for children aged 11 to 12 years of class 6.

Section	Total Students	Underweight	Normal weight	Risk of Overweight	Overweight
Group A	32	0	24	0	9
Group B	29	1	19	1	8
Group C	31	2	14	4	11
Group D	27	2	16	2	7
Group E	25	2	12	4	7
Group F	28	4	18	5	1
Group G	27	2	14	6	5
Group H	31	2	17	3	9
Total (no)	230	15	134	22	57
Percentage		6.5%	58.2%	9.56%	24.78%

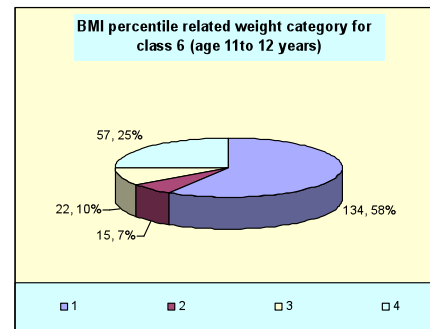
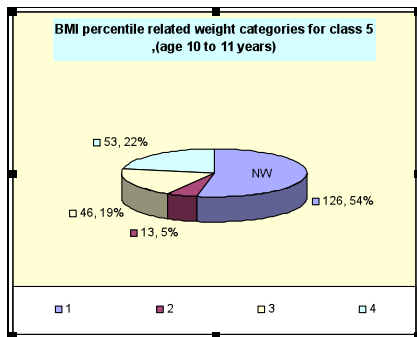


Discussion

Overweight and obesity (defined as an excess of body fat due to positive energy balance) has become the most common nutritional disorder in children throughout most of the world, with enormous psychosocial and economic repercussions. Its presence is increasing both in industrialized and developing countries. Obesity is associated with significant health problems in the pediatric population that translates into increased morbidity and mortality in adult life.

Literature review shows abnormal weight pattern in school children in various national and international studies. In the analysis of causative factors, three factors dominate:

- High calorie food intake;
- Lack of normal physical activity; and
- Children homebound and adjusting to parental work timings.



The above tables indicate that about 50 to 60% of school children (52.94% and 58.2% in class 5 and 6 respectively) are in the normal healthy weight range. **The disturbing fact is that almost 47.6% of 11 year-old and 41.8% of 12 year-old children are in the abnormal weight category.**

The Risk of Overweight is an important category since, once tagged this group of 19.28 % in class 5 and 9.56% in class 6, is the children who will benefit from appropriate intervention at this point and obesity can be prevented in the large group. They qualify for root cause analysis and obesity prevention programs namely nutritional counseling and stratified physical activity programs.

The Group of Overweight (22% and 24.78% respectively in class 5 and 6) need more intensive intervention for prevention of obesity in adult life. These children should visit their pediatrician or family physician for further evaluation. The work up will include a complete physical examination, a detailed recording of nutrition and activity details, biochemical and endocrinological tests depending on the clinical evaluation to determine if the overweight is endogenous or exogenous. If exogenous, motivation for weight reduction and admission into a detailed and more focused organized school health nutrition and activity programs should be advised. If the obesity is endogenous the pediatrician will provide the plan of management.

Conclusions

This preliminary study clearly reveals the high prevalence of childhood overweight among Indian school children living in Kuwait. It is a great task for a combined multidisciplinary team effort of school authorities, pediatricians, organizations and all stakeholders in the welfare of children to initiate and organize appropriate actions to prevent childhood obesity – which is indeed a **reality** in the present millennium.

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