Obesity management through daily habits and nutrition

Dr. Anurag Sachan

Abstract
According to World Health Organization, in 2010 there were over 1 billion overweight adults worldwide with 400 million adults who were obese. Obesity is a major risk factor for diabetes, cardiovascular disease, musculoskeletal disorders, obstructive sleep apnea, and cancers (prostate, colorectal, endometrial, and breast). Obese people may present to the gastroenterologists with gastroesophageal reflux, non-alcoholic fatty liver, and gallstones.

It is important, therefore, to recognize and treat obesity. The main cause of obesity is an imbalance between calories consumed and calories expended, although in a small number of cases, genetics and diseases such as hypothyroidism, Cushing’s disease, depression, and use of medications such as antidepressants and anticonvulsants are responsible for fat accumulation in the body. The main treatment for obesity is dieting, augmented by physical exercise and supported by cognitive behavioral therapy.

Keywords: Obesity management, daily habits and nutrition

Introduction
India is facing a serious burden of obesity as well as malnutrition, according to a global report which shows that while half the country’s women suffer from anaemia, at least 22% of adult women are overweight. The Global Nutrition Report 2017, which looked at 140 countries including India, found ‘significant burdens’ of three important forms of malnutrition used as an indicator of broader trends. These include childhood stunting, anaemia in women of reproductive age, and overweight adult women. Latest figures show that 38 per cent of children under five are affected by stunting — children too short for their age due to lack of nutrients, suffering irreversible damage to brain capacity.

About 21 per cent of children under 5 are defined as ‘wasted’ or ‘severely wasted’ — meaning they do not weigh enough for their height. Over half of women of reproductive age — 51% — suffer from anaemia — a serious condition that can have long term health impacts for mother and child. More than 22% of adult women are overweight, a rising concern as women are disproportionately affected by the global obesity epidemic, according to the report.

While the country has shown some progress in addressing under-5 stunting, it has made no progress or presents worse outcomes in the percentage of reproductive-age women with anaemia, and is off course in terms of reaching targets for reducing adult obesity and diabetes, the report said.

“The Global Nutrition Report highlights that the double burden of under nutrition and obesity needs to be tackled as part of India’s national nutrition strategy,” said Purnima Menon, independent expert on the Global Nutrition Report.

“For under nutrition, especially, major efforts are needed to close the inequality gap,” said Menon, Senior Research Fellow in the International Food Policy Research Institute (IFPRI)’s South Asia Office in New Delhi.

The Global Nutrition Report 2017 calls for nutrition to be placed at the heart of efforts to end poverty, fight disease, raise educational standards and tackle climate change.

“We know that a well—nourished child is one third more likely to escape poverty,” said Jessica Fanzo, Professor at Johns Hopkins University in the US.

“They will learn better in school, be healthier and grow into productive contributors to their economies. Good nutrition provides the brainpower, the ‘grey matter infrastructure’ to build
the economies of the future,” said Fanzo, also the Global Nutrition Report Co-Chair. The report also found that 88% of countries studied face a serious burden of two or three forms of malnutrition. It highlights the damaging impact this burden is having on broader global development efforts. The report found that overweight and obesity are on the rise in almost every country, with two billion of the world’s seven billion people now overweight or obese and a less than one per cent chance of meeting the global target of halting the rise in obesity and diabetes by 2025. In India, 16% of adult men and 22% of adult women are overweight. (The Hindu, 7 Nov. 2017).

Definition of obesity
Obesity can be defined as an excessive amount of fat that increases the risk of medical illness and premature death. A simple and convenient way of defining obesity and overweight led by the World Health Organization (WHO) and the National Institute of Health (NIH) is based on body mass index (BMI). BMI is derived by dividing one’s weight in kilograms by the square of one’s height in meters. Classification of overweight and.

Diseases from Obesity
Gall Bladder Disorder: Obesity is one of the risk factors for the formation of gall stones. The super saturation of bile with cholesterol in obese individuals makes them prone to have gall stones.

Musculo-skeletal problems: Abdominal obesity increases the risk of back pain, because of the extra load on the spinal column. Obesity is also associated with the development of osteoarthritis. The extra stress on the weight bearing joints is a contributing factor.

Infertility: Obese women are more prone to suffer from menstrual disorders, infertility.

Sleep disorder: One of the common problems that obese males & females suffer from is sleep disorder-knows as sleep apnea.

Causes for Obesity
Eating Disorders
Obession with slimming, especially in the adolescent age group may result in eating disorders like anorexia nervosa, bulimia nervosa & other eating disorders. These are psychiatric disorders primarily affecting adolescent girls, who start developing a paralyzing fear of becoming fat. Anorexia Nervosa is a psychological eating disorder characterized by somatic delusions that one is too fat- refusal to maintain normal weight for height and age. It is a condition characterized by voluntary self-starvation & emaciation. Bulimia Nervosa is characterized by repeated episodes of binge eating followed by inappropriate compensatory methods such as purging -including self-induced vomiting or misuse of laxatives, non-purging - including fasting or engaging in excessive exercise.

Management of Obesity
Management of Obesity should be taken up with a clear understanding of the harsh realities of the problem & its outcome. Thus, the goal of treatment of obesity has shifted from mere "weight loss" to "weight management". The management of obesity basically comprises-

- Dietary modifications
- Physical Activity
- Behaviour and Life Style Modifications.

Dietary Modifications
Dietary Modifications serve as a guide for the obese to make healthy food choices. Dietetic principles must be considered, when planning for weight reduction.

Energy
Energy Calorie intake is the key factor, which determines the outcome of dietary management. Energy has to be restricted to the level that enables mobilization of fat stores for carrying out the daily activities of the body.

Proteins
Adequate amount of protein should be included in the diet to ensure proper metabolism. Protein rich foods provide a higher satiety as compared to those rich in carbohydrates. Emphasis should be laid on the inclusion of protein rich foods from plant origin rather than from animal sources as the former are low in fat but high in dietary fibre.

Fats
Fats, being a concentrated source of energy need to be restricted. Excess dietary fat promotes much more weight gain than carbohydrate or protein. Include fat in the form of vegetable oils, so that sufficient essential fatty acids are supplied in the diet & at the same time, the risk of developing coronary artery disease can be minimized. Foods rich in saturated fatty acids such as red meats, whole milk & its products should be strictly avoided.

Carbohydrates
Carbohydrates in the form of non-starch polysaccharides provide bulk & satietyvalue to the reducing diets. They're also important for regular bowel movements. Include liberal amounts of fibre vegetables & fruits preferably raw and with their edible peels in the diet.

Vitamins
If adequate amount of fresh fruits & vegetables are included in the diet, the body stores of water-soluble vitamins are usually not depleted. Fluids Liberal amount of water should be included in the diet.

Dietary Counseling
In a global scenario eating out and missing home food is a fashion. As a result, an individual gradually develops an early affliction of degenerative diseases. Proper dietary counseling gives the patient a clearer understanding regarding the association of food with weight gain/ loss, Behaviour modification can result only through repeated counseling sessions.

Diet Counselling is a very important aspect of a successful weight reduction programme. The person who attempts weight loss should be suitably motivated. Individual counseling is of prime importance as it is associated with motivation and psychological support. It is also important to take the diet history of the patient and to know about his food habits and pattern of living for prescribing the diet schedule. The counselling session helps in increasing knowledge regarding food facts.

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Physical Activity
Exercise plays an important role in initiating and sustaining weight loss with dietary & lifestyle modifications. Exercise promotes a sense of well being & increases bone density as well as cardiovascular strength. It helps in increasing the lean body man in proportion to fat. Exercise burns glycogen stores paving the way for fat to be used as fuel. Daily 30 minutes or more of moderate exercise is best for maintaining ideal weight, healthy feeling, longevity & good immunity.

Behaviour and Life Style Modifications
Behaviour and lifestyle modifications are an integral part of the weight management plan. They are based on analysis of behaviour associated with appropriate as well as inappropriate thinking & eating habits. The following strategies related to lifestyle modifications are very helpful:
- Have regular meal times. Irregular eating habits put a lot of strain on the body.
- Do not read or watch television while eating
- Do not keep nibbling between meals
- Eat slow, chewing the food properly.
- Avoid drinking of alcohol & smoking.
- Handle stress in a positive manner through yoga.

Conclusions
Overweight and obesity are increasing at an alarming rate globally and has reached epidemic proportions in almost every country. Obesity has a significant contribution toward cardiovascular diseases, metabolic disorders, gastrointestinal disorders, and cancers. Yet in early stages of weight gain, when a person is overweight, its progression to morbid obesity can be arrested through diet and exercise, without the need for medication, endoscopic, or surgical procedures.

References