

## **Obesity – much more than a cosmetic problem!!!**

**The problem is not that people are eating too much, but rather, people are not burning off enough calories.**

### **BURNING OFF ENOUGH CALORIES!**

Obesity is an ever expanding problem being the most prevalent nutritional and complex disorder of modern times. Its prevalence has increased so significantly in recent years that as medical professionals, we consider it a major health epidemic. The National Health and Nutrition Examination Survey (NHANES) indicates that obesity is increasing in all age groups, in both sexes, and in almost every ethnic and racial group.

Many factors, including genetics, environment, metabolism, lifestyle, and eating habits, play a role in the development of obesity. However, in more than 90% of people the cause is not known, less than 10% being associated with hormonal or genetic causes.

Obesity can have an adverse impact on health at each stage of the life cycle. In young women, obesity has an impact on psychological health leading to depression, behavioral changes and menstrual disorders. As she gets married and desires a pregnancy, obesity itself may come in the way of getting pregnant. It is a well known scientific fact that losing at least 10 % of her weight helps an obese woman to get pregnant faster. Obesity is also associated with polycystic ovaries in young girls and is present in 80 % of girls having polycystic ovaries. Heavy and irregular periods are commonly seen in obese women leading to anaemia and tiredness. Obesity also imposes a number of serious risks during pregnancy such as pregnancy induced hypertension and diabetes.

In older women, obesity is associated with the emergence of a number of related chronic diseases, such as type 2 diabetes and cardiovascular disease, and an increased risk for almost all types of cancer. Of concern in the elderly is the increasing evidence that obesity is also a risk factor for Dementia and Alzheimer's disease. Obesity has a marked impact on life expectancy. The medical risks associated with obesity in women are also important for the woman's children and future generations.

### **Obesity increases the risk for:**

- Type 2 diabetes
- High blood pressure
- Coronary artery disease
- High cholesterol
- High levels of triglycerides (fat) in the blood
- Heart failure
- Respiratory problems (such as sleep apnea)
- Circulatory problems (such as varicose veins)

- Gallbladder disease
- Breast cancer (after menopause) and endometrial cancer
- Prostate cancer
- Colorectal cancer
- Osteoarthritis
- Depression.

### **Obesity is usually the result of:-**

- Eating high calorie and fat food
- Lack of exercise, sedentary life style.
- Generally, some people have a greater tendency to store fat rather than burn it.
- As people age, they gain weight, because they tend to be less active and lose muscle mass, replacing it with fat.
- Medical problems: such as osteoarthritis, or problems which force us to become less active.
- Prenatal environmental factors: There is emerging evidence that adult men and women who were born low weight are more likely to be overweight or obese than those who were of normal size at birth. Maternal smoking and excess weight gain is also associated with obesity in her offspring.
- Consuming medications like steroids.

**Body mass index (BMI)** is the measurement which labels us as overweight or obese. BMI is calculated by dividing weight in kilogram (kg) by the square of height in metres (m<sup>2</sup>).

- BMI : 18.5 and 24.9 – healthy weight.
- : 25 and 29.9 – overweight.
- : **30 or more – obese.**

Waist and Hip measurements are also taken. If you are a man, your chance of developing health problems is higher if your waist measurement is more than 94 cm (37 inches), and higher still if it is more than 102 cm (40 inches). If you are a woman, your chance of developing health problems is higher if your waist measurement is more than 80 cm (31.5 inches), and higher still if it is more than 88 cm (34.5 inches).

### **Losing weight:**

#### **Lifestyle changes is the secret of losing weight:**

Moderate physical activity for over 30 minutes or 5 days and more in a week is highly recommended. Exercise not only contributes to weight loss, it also decreases abdominal fat and improves cardiac health, lowers blood pressure, and helps keep blood sugar levels in check.

- Increasing activities such as brisk walking, cycling or climbing stairs, swimming, yoga, walk after meals and decreasing the amount of being inactive i.e. less time in front of the television or computer should be part of our daily routine.
- Physical activity varies from person to person and also depends on any disability if present.

Children should do 60 minutes of moderate activity each day. It is important to encourage them in sports, dancing and other outdoor activities rather than only attending school/ college, coaching classes and

studying! Because childhood obesity usually ends with adult obesity.

### **A healthy diet consists of:**

- Fibre-rich foods such as oats, beans, peas, lentils, grains, seeds, fruit and vegetables, whole weight grain bread. It is important to choose low-fat foods and a low calorie diet,
- Avoiding foods containing a lot of fat and sugar, such as fried food, sweetened drinks, sweets and chocolate, helps tremendously.
- Healthy eating means we should not skip meals/breakfast, but instead eat the right foods.
- Alcohol can be a large source of hidden calories.

### **Medications:**

Researchers think that polyphenols found in **green tea** extract may boost metabolism and help burn fat. However, studies have shown mixed results so far. In addition, the extracts used in the studies have contained caffeine, which can increase metabolism and promote weight loss.

**Calcium** may play an important role in fat burning. Population studies show that higher dietary calcium levels are associated with lower BMIs.

**Zinc** (15 - 20 mg per day) -- may increase lean body mass and reduce or stabilize the amount of fat. The reason may be that zinc increases levels of leptin, a hormone in the body that helps us feel full.

**Some medications:** are available which helps to reduce appetite or to lower fat absorption but they do have their own side effects, and work only temporarily.

### **Surgery:**

**Bariatric or weight loss surgery** may be considered in cases where people are severely obese, or where the BMI is over 35.

Various procedures are carried out which basically reduce the size of the stomach so that a restricted amount of food can be consumed. They definitely help in reducing obesity very quickly, but are associated with some surgical risks and complications

- Roux-en-Y procedure (gastric bypass) -- permanently reduces the size of the stomach; vomiting is the most common side effect.
- Gastric banding -- An adjustable silicone band is placed around the stomach, decreasing the amount of food that can be eaten. The band can be adjusted or removed.
- Laparoscopic vertical sleeve gastrectomy -- The stomach is restricted by stapling and dividing it vertically and removing more than 85% of it.

Eating and exercise habits are very difficult to change. Many people are able to lose weight but only few can maintain that weight loss for a longer period of time. We must remember that having a normal BMI can be a perfect remedy for most of the health problems and only a strong will and determination will help us achieve our goal towards a better quality of life.

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