

OBESITY: CAUSES AND SOLUTIONS.

By

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Obesity is the term given to the condition of being excessively fat. Obesity is bad for health and, because the condition is generally perceived as physically unattractive, obese people often encounter discrimination, and suffer from low self-esteem. The incidence of obesity is increasing in all developed countries. Both understanding its causes and developing strategies to deal with the condition are proving to be difficult problems to solve.

How is obesity defined? Body-mass index (BMI) is frequently used as an indicator. BMI is defined as the weight of a person in kilograms divided by the square of his/her height in metres. A common view holds that people with BMIs between 18 and 22 are the healthiest. This is a stringent criterion and, for example, fewer than 20% of Americans lie in that category (I have no figures for Ireland). According to this criterion, the ideal weight for a six-foot tall person would lie between 132 and 162 pounds. Other research indicates that the healthiest BMI range is between 22 and 27. The commonest medical definition of obesity is a BMI greater than 27. In other words, if you are 6 feet tall and weigh more than 200 pounds, you are at risk.

Obesity is a major causative factor in disorders such as hypertension, osteoarthritis, cardiovascular disease, some forms of cancer, and it plays a role in triggering non-insulin dependent diabetes. It is also well known that people who are perceived to be physically unattractive suffer a lot of social discrimination. This can sometimes have bizarre results. Recently, a Tennessee woman took legal action against a cinema when she was refused a seat. The cinema claimed she posed a fire hazard.

How do we gain weight? In overall terms, this is easy to understand. We take energy into our bodies in the form of food. If our various activities don't burn up all of this food energy, the balance is converted into fat and we gain weight. We burn up our food energy in 3 main ways. First of all we have to expend a certain amount of energy in order to digest and absorb the food. Secondly we continually expend energy at a basic rate just by staying alive - energy is needed to pump blood, to breathe, to maintain body temperature, etc. This is called the basal metabolic rate. Thirdly, we burn up energy when we exercise and do work. If you are an adult and you maintain a constant weight, this means that the energy expenditure in the 3 processes that I have described exactly balances the energy content of your food intake. If your energy expenditure were to decline you would gain weight, and if your energy expenditure were to increase, you would lose weight, assuming your food intake remains constant.

People who are obese obviously eat far more food than they burn up. Are there special factors that predispose some people to become obese? Clearly if the fundamental mechanisms that the body uses to burn up food energy are less efficient in some people than in others, the less efficient 'burners' will tend to be fatter. However, it turns out, rather surprisingly, that the 3 basic mechanisms for burning up food energy seem to be as efficient in obese people as in people of normal weight. It follows therefore that people who are obese simply eat more food than people of normal weight.

People have an in-built mechanism that produces a feeling of 'fullness' when an optimum amount of food, just adequate to meet physiological demand, has been ingested. Therefore, if you stop eating as soon as you feel full, you will not become overweight. The problem with obese people

however seems to be that they must eat a lot more food than non-obese people in order to get the same feeling of fullness. Therefore, advising an obese person to stop eating as soon as he feels full can be a prescription for over-eating.

So, how can you return to normal weight if you are obese? In the great majority of cases, the only feasible answer is to reduce the food intake. You might think that it would be possible to work on the other side of the equation and to burn off the food through physical exercise. However, physical exercise is not a very efficient way to burn up stored fat and the amount of exercise necessary to significantly reduce the weight of an obese person, given that the food intake remained high, would be very strenuous.

I used an exercise gymnasium for the first time recently. I worked up what I thought was a considerable sweat for 30 minutes on an exercise bicycle. The machine had a calorie-counter which measures the amount of energy burned up. I only got rid of the 2 half-coated chocolate biscuits that I had eaten after my lunch.

There are extreme measures that can be taken to reduce food intake. These include wiring the jaws together, or surgically reducing the size of the stomach. These measures would only be used in cases where there is severe medical urgency to effect a guaranteed early weight loss. Such measures would certainly not be the first line of attack if you felt you were starting to develop a bit of a pot-belly! And so we come to the conventional answer for the average person, which is, of course, to go on a diet.

Diets are getting quite a bad reputation. In so many cases they just don't work. For so many people the efficiency of dieting is summed up in the Henny Youngman joke - 'My wife has been on a diet for weeks - all bananas and apples. She hasn't lost any weight, but you should see her climb a tree'. It isn't that dieting in itself is ineffective. The problem is that people will not stay on the diets, and after a short period of disciplined eating and weight-loss they go back to their old eating habits.

People who over-eat are, by definition, somewhat obsessed with food. In my opinion, this preoccupation is the major part of the problem. The reason why dieting is so hard to stick with is that it further accentuates this focusing on food. You may be eating less, but you are thinking about food more. The trick is to think less about food. If you can do this, it will be far easier to maintain a dieting regime. So, you have to focus outwards and occupy your mind with things other than your own 'problem'. What's needed is something that really grabs the interest. For some, a hobby or a sport will do the trick. Others may need to become involved in community affairs, charitable organisations or political affairs, etc. It is also very important to take regular aerobic exercise. You feel much better when you are physically fit and strenuous exercise has a depressing effect on appetite.

You can look up information on ideal body weight for height and sex in any medical reference book. If you are obese you should take urgent action to reduce weight and to become aerobically fit. However, even with the best will in the world some people find it extremely difficult, because of genetic predispositions, to bring their weight right down into the 'ideal' category. There is no need to worry about this. Once you are physically fit, there is no danger in being slightly chubby.

Unfortunately, modern advertising puts intense pressure, particularly on women, to achieve an

idealised physical shape. This is just not possible for many people. It is also a waste of time. An attractive appearance is not embodied in an idealised physical shape. An attractive appearance is almost entirely to do with the glint in the eye, the healthy tone of the skin, and, above all, the personality that shines through from the inner essence. Unfortunately, there is no known diet that will give you an attractive personality. Wherever that comes from, it's not from the box of diet cereal.

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