DELFAT

Deletes Excess Fat

Obesity

Excess body weight and obesity, a prelevent and costly threat to public health, is now at epidemic proportions.

Overweight and obesity are defined as abnormal or excessive fat accumulation that may impair health.

WHO :World Health Organization

BMI

Body mass index (BMI) is a simple index of weight-for-height that is commonly used in classifying overweight and obesity in adult populations and individuals.

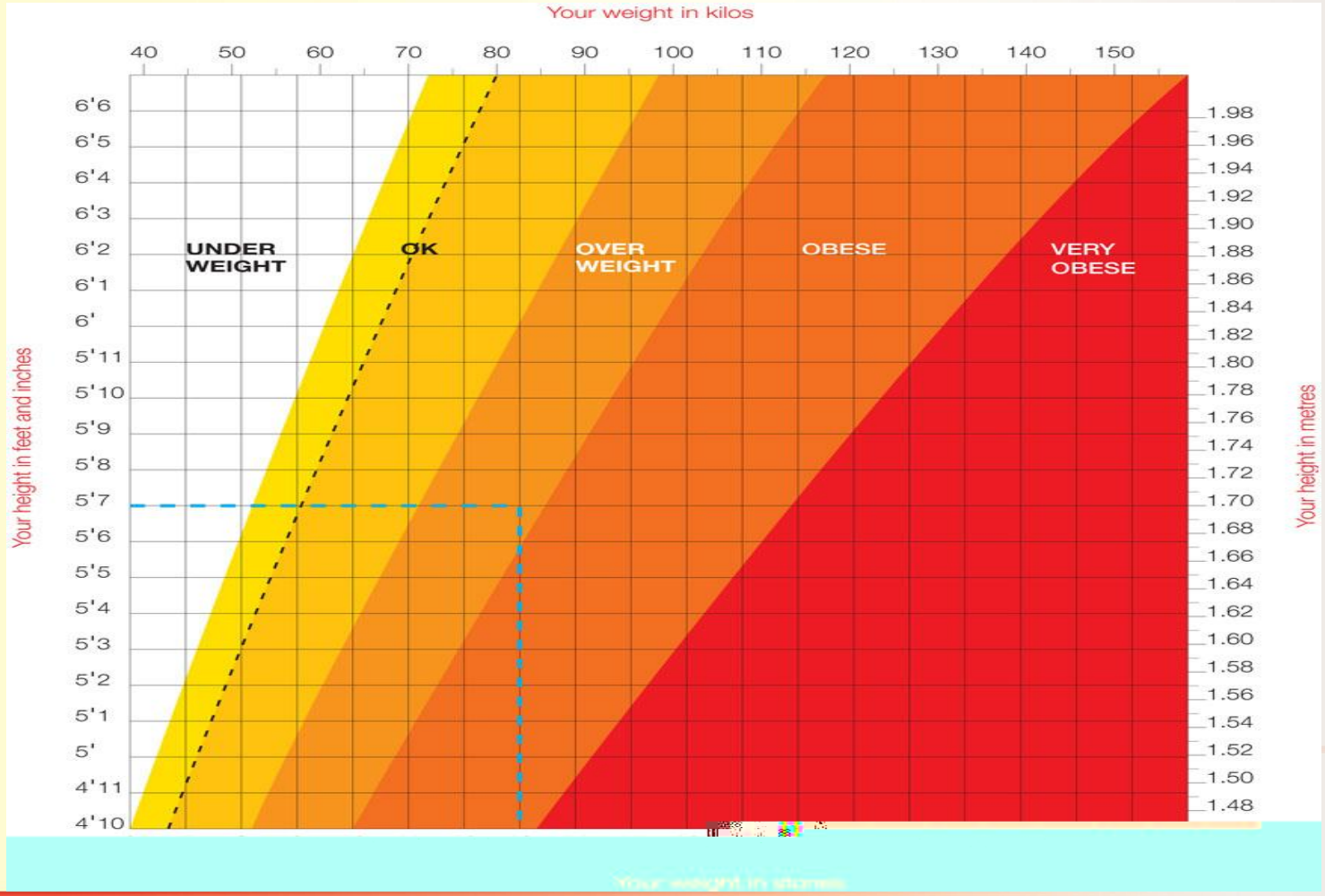
It is defined as the *weight* in *kilograms* divided by the *square of the height in meters* (kg/m2).

WHO :World Health Organization

BMI

The World Health Organization (WHO) defines "overweight" as a BMI equal to or more than 25, and "obesity" as a BMI equal to or more than 30. These cut-off points provide a benchmark for individual assessment, but there is evidence that risk of chronic disease in populations increases progressively from a BMI of 21.

WHO :World Health Organization


Your weight in kilos
40
50
60
70
80
90
100
110
120
130
140
150
6'6
6'5
6'4
6'3
6'2
6'1
6'
5'11
5'10
5'9
5'8
5'7
5'6
5'5
5'4
5'3
5'2
5'1
5'
4'11
4'10
UNDER WEIGHT
OK
OVER WEIGHT
OBESE
VERY OBESE
Your height in feet and inches
1.98
1.96
1.94
1.92
1.90
1.88
1.86
1.84
1.82
1.80
1.78
1.76
1.74
1.72
1.70
1.68
1.66
1.64
1.62
1.60
1.58
1.56
1.54
1.52
1.50
1.48
Your height in metres

What causes obesity and over weight?

The fundamental cause of obesity and overweight is an energy imbalance between CALORIES CONSUMED on one hand, and CALORIES EXPENDED on the other hand. Global increases in overweight and obesity are attributable to a number of factors including:

WHO :World Health Organization

What causes obesity and over weight?

- A global shift in diet towards increased intake of energy-dense foods that are high in fat and sugars but low in vitamins, minerals and other micronutrients.

and

- A trend towards decreased physical activity due to the increasingly sedentary nature of many forms of work, changing modes of transportation, and increasing urbanization.

WHO :World Health Organization

Fat Digestion

What is fat ?

Fat is essential constituent of food for the human body.

It is twice caloric values that of carbohydrates.

Fats are compounds made up of glycerol and fatty acids.

They are insoluble in water.

Fat Digestion

What is fat ?

Dietary fats (triglycerides) are composed of various fatty acids.

Most of the ingested fat through diet is absorbed (95%).

Fat is stored in specialized connective tissues called adipose tissues.

Mechanism of fat digestion

Stomach act to initiate fat digestion processes.

Fat is mainly digested by pancreatic lipase enzyme in duodenum & small intestine.

This is helped by the bile salts.

Bile salts are made from cholesterol, bile pigments & electrolytes , secreted by bile duct.

Mechanism of fat digestion

Bile salts emulsify the fat, so it increases the surface area on which the lipase enzyme acts.

Fat is digested into fatty acids & glycerol by break the chemical bonds holding triglycerides together.

What are dietary fibers

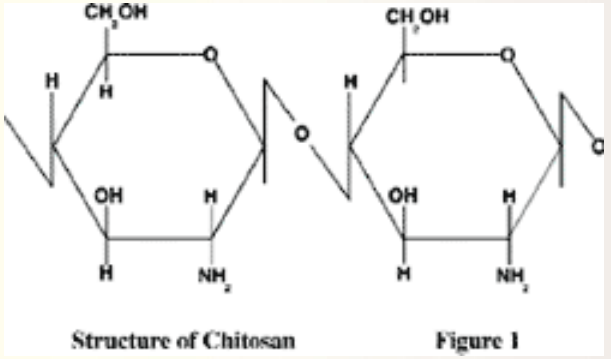
Plant material that cannot be digested by the human digestive enzymes.

Fibers add bulk to the gut contents as they absorb water.

The presence of fibers in diet has been found to reduce the amount of cholesterol in blood.

Chitosan

Structure of Chitosan



Structure of Chitosan Figure 1

Chitosan is a natural product called ,derived from chitin, a polysaccharide found in the exo-skeleton of shellfish like shrimp or crabs.

What is DEL**FAT**

DEL**FAT** (Chitosan) is a :

Natural , Safe and Effective formula to reduce dietary fat and calories intake.

Reduces Carbohydrates cravings, prevents constipation and improves digestion.

What is DELFAT

Mechanism of action:

DEL**FAT** Dissolves in the stomach and mixes with the dietary fat.

Cationic charges of chitosan amino group bind to the negative charges on bile acids and fatty acids lead to:

Reduce absorption of fat

Decrease serum cholesterol level

What is DELFAT

Mechanism of action:

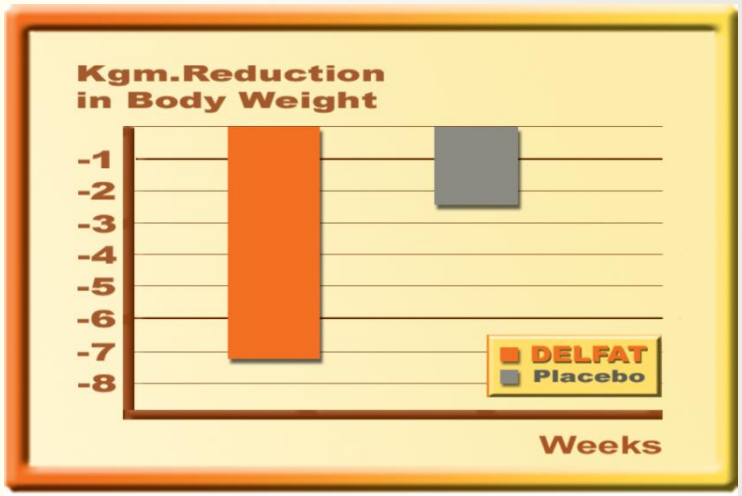
Being a dietary fiber Chitosan increases the viscosity, giving a filling effect.

In small intestine, DEL**FAT** binds to the miscelles and disturbs the structure of the fat-bile acid complex.

What is DELFAT

DEL**FAT** reduces body overweight

100 subjects who were 10-25 % overweight (4 weeks study) subjects receiving chitosan demonstrated significant weight loss (7.3 kg v 3.0 kg).



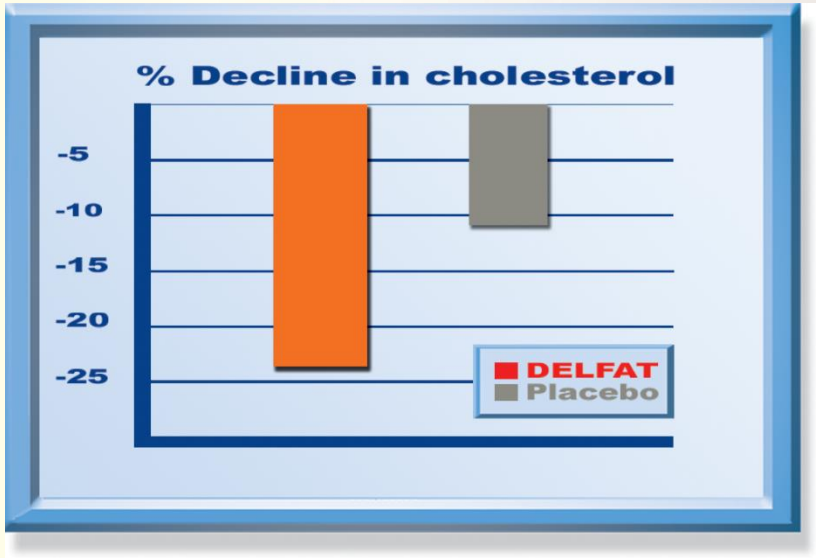
Sciutto AM, Colombo P. Acta Toxicol Ther 16;4:215-229, 1995.

Bile Acid Sequestration

In addition to binding to fatty acids and monoglycerides, DELFAT also binds bile acids. DELFAT thereby directly reduces the uptake of cholesterol, reducing the total blood cholesterol level.

DEL**FAT** Maintains healthy Cholesterol

Total Cholesterol in the Chitosan group declined by 23.3 % versus 11.1 % for pkacebo group, with similar results also noted for LDL cholesterol and triglycerides.



What is DELFAT

Each Capsule Conatins:
Chitosan 500 mg

1-2 Capsules before meals twice / day

DELFAT works best when taken just prior to eating a high calorie meal.

Can be taken as a part of calorie controlled diet designed to help reduce body weight.

What is DELFAT

Natural, Safe and Effective to Reduce Body Over weight.

Lowers Fat Intake.

Reduces Calories.

Prevents Conistipation.

Improves Digestion.

Thank You