

DIET FOR OBESITY

Introduction:

- Obesity is a term used to describe somebody who is very overweight, with a lot of body fat.
- There are many ways in which a person's health in relation to their weight can be classified, but the most widely used method is body mass index (BMI).
- BMI is a measure of whether you have a healthy weight for your height.

Classification of adults according to BMI:

Classification	Popular Description	BMI (kg/m ²)	Risk of co-morbidities
Underweight	Thin	<18.5	Low (but risk of other clinical problems increased)
Normal range	Normal	18.5 – 22.9	Average
Overweight		23 – 24.9	
Pre-obese	Overweight	25 – 29.9	Increased
Obese Class I	Obese	30.0 – 34.9	Moderate
Obese Class II	Obese	35.0 – 39.9	Severe
Obese Class III	Morbidly Obese	> = 40.0	Very severe

- BMI is not used to definitively diagnose obesity – as people who are very muscular sometimes have a high BMI, without excess fat – but for most people, it can be a useful indication of whether they may be overweight.

- A better measure of excess fat is waist circumference, and can be used as an additional measure in people who are overweight (with a BMI of 23 to 29.9) or moderately obese (with a BMI of 30 to 34.9).
- Generally, men with a waist circumference of 94cm(37 inches) or more and women with a waist circumference of 80cm(31.49 inches) or more are more likely to develop obesity-related health problems.

Risks of obesity:

- Taking steps to tackle obesity is important because, in addition to causing obvious physical changes, it can lead to a number of serious and potentially life-threatening conditions, such as:
 - type 2 diabetes.
 - coronary heart disease.
 - some types of cancer, such as breast cancer and bowel cancer.
 - stroke.
- Obesity can also affect your quality of life and lead to psychological problems, such as low self-esteem or depression.

Causes of obesity:

- Obesity is generally caused by eating too much and moving too little.
- If you consume high amounts of energy from your diet, particularly from fat and sugars, but do not burn off the energy through exercise and physical activity, much of the surplus energy is then stored by the body as fat.

1.High Calories intake:

- The average physically active man needs about 2,500 calories a day to maintain a healthy weight, and the average physically active woman needs about 2,000 a day.
- This may sound high, but it can be easy to reach this limit if you eat certain types of food. For example, eating a large takeaway hamburger, fries and a milkshake can total 1,500 calories – and that's just one meal.
- Another problem is that many people are not physically active, so lots of the calories they consume end up being stored in the body as fat.

2.Poor diet:

- Obesity does not happen overnight. It develops gradually over time, as a result of poor diet and lifestyle choices, such as:
 - Eating large amounts of processed or fast food that is high in fat and sugar.
 - Drinking too much alcohol – alcohol contains a lot of calories, and people who drink heavily are often overweight.
 - Eating out a lot – you may be tempted to also have a starter or dessert in a restaurant and the food can be higher in fat and sugar.
 - Eating larger portions than you need – you may be encouraged to eat too much if your friends or relatives are also eating large portions.
 - Drinking too many sugary drinks – including soft drinks and fruit juice.
 - Comfort eating – if you feel depressed or have low self-esteem, you may eat to make yourself feel better.
- Unhealthy eating habits tend to run in families, as you learn bad eating habits from your parents when you are young and continue them into adulthood.

3.Lack of physical activity:

- Many people have jobs that involve sitting at a desk for most of the day. They also rely on their cars, rather than walking or cycling.
- When people relax, they tend to watch TV, browse the internet or play computer games, and rarely take regular exercise.
- If you are not active enough, you do not use the energy provided by the food you eat, and the extra energy you consume is stored by the body as fat.
- The Department of Health recommends adults to do at least 150 minutes of moderate-intensity aerobic activity, such as cycling or fast walking, every week. This doesn't need to be done in one go, but can be broken into smaller periods. For example, you could exercise for 30 minutes a day for five days.
- If you are obese and trying to lose weight, you may need to do more exercise than this. It may help to start off slowly and gradually increase the amount of exercise you do each week.

4.Genetics:

- Some people claim there is no point in trying to lose weight because "it runs in my family" or "it's in my genes".
- While there are some rare genetic conditions that can cause obesity, such as Prader-Willi syndrome, there is no reason why most people cannot lose weight.
- It may be true that certain genetic traits inherited from your parents – such as having a large appetite – may make losing weight more difficult, but it certainly doesn't make it impossible.
- In many cases, obesity is more to do with environmental factors, such as poor eating habits learned during childhood.

5.Medical reasons:

- In some cases, underlying medical conditions may contribute to weight gain. These include:
 - An underactive thyroid gland (hypothyroidism) – where your thyroid gland does not produce enough hormones.
 - Cushing's syndrome – a rare disorder that causes the over-production of steroid hormones.
- However, if conditions such as these are properly diagnosed and treated they should pose less of a barrier to weight loss.
- Certain medicines, including some corticosteroids, medications for epilepsy and diabetes, and some medications used to treat mental illness – including antidepressants and medicines for schizophrenia – can contribute to weight gain. Weight gain can also sometimes be a side effect of stopping smoking.

Diet recommended for combating obesity:

- Eat more fiber. Fiber gives you a satiated feeling, helping you to curb food cravings. It also keeps your colon healthy, and aids in proper digestion. Research has shown that obesity puts you at higher risk for colorectal cancer, primarily due to a low-fiber, high-calorie, processed food diet. Incorporate ground flax seed in smoothies, soups, and favorite cereals to increase your fiber intake.
- Add virgin coconut oil to your diet. The natural saturated fat in virgin coconut oil can help stabilize blood sugar levels, facilitate proper thyroid function, and aid in weight loss.

- Eat more vegetables and fruits. Not only are they a good source of fiber, but they contain many naturally occurring vitamins, minerals, and amino acids necessary for maintaining optimal health and weight. Watch out for fruit juices, they often contain added sugars that can increase your calorie intake dramatically. Opt for water, or diluted fruit juice (three quarters water and one quarter juice).
- Eat frequent meals. Eating five to six small meals throughout the day helps to speed up your metabolism. On the other hand, eating large meals only once or twice a day will actually slow down your metabolism.
- Choose high-quality, organic, hormone- and antibiotic-free “grass-fed” meats.
- Increase your omega-3 essential fatty acids by selecting wild-caught salmon, minimal-mercury tuna, and fish oil.
- Choose organic, cage-free eggs.
- Choose unpasteurized, raw dairy items that have live, active cultures (probiotics), such as yogurt.
- Choose sprouted foods such as sprouted whole-grain bread and sprouted nuts and seeds.
- Drink plenty of purified water throughout the day. Chronic dehydration can slow down metabolism.
- Don't skip breakfast. Fasting activates the starvation response, slowing your metabolism and increasing the chances that excess fat will be stored to fuel your nutrient-depleted body. Studies now show that women who eat cereal for breakfast maintained their weight better than those who skipped breakfast. The plus of whole grain cereal is that it is a low-calorie, fiber-rich food. Obese people tend to lack necessary fiber in their diets.

Foods to AVOID when treating obesity:

- All simple or refined carbohydrates (white flour, white rice, white bread, pasta, cookies, cakes, crackers, processed snack foods, etc.) should be avoided.
- All foods containing refined sugar or synthetic sugar-substitutes such as aspartame, Splenda, etc. These may actually contribute to weight gain, rather than aid in weight loss. Studies now show that artificial sweeteners

trick the body into associating sweetness with zero calories. As a result, there's a tendency to splurge on the "real thing," because the body loses its ability to associate sweetness with a sense of fullness. Choose a natural sweetener like Xylowest instead.

- Avoid the low-fat food products. Most of the low-fat, processed foods in grocery stores are typically high-carb foods that are loaded with sugar, salt, artificial sweeteners, and synthetic fat substitutes. Many of these ingredients cause weight gain, rather than reduce it.
- Alcoholic beverages in excess since they hinder the functioning of the immune and digestive systems.
- Carbonated soft drinks that cause blood pH levels to become acidic.
- Bottom crawlers such as oysters, clams, and lobster that may contain toxic levels of mercury.
- Deep-sea fish such as tuna, mackerel, and swordfish that may contain toxic levels of mercury. Choose minimal-mercury tuna instead.
- Farm-raised fish do not contain enough omega-3 essential fatty acids, due to their land-based diets. Choose wild-caught salmon instead.
- Sodium nitrite found in processed foods such as hot dogs, lunch meats, and bacon.
- Monosodium glutamate (MSG) found in many foods as a flavor enhancer.
- Hydrogenated or partially hydrogenated oils (trans fats) found in many processed foods, deep-fried foods, fast foods, and junk food.
- Excessive caffeine intake. While moderate amounts of caffeine may be beneficial in boosting metabolism, excessive caffeine consumption can disrupt the body's systems, causing insomnia and digestive irregularity (constipation or diarrhea).

Exercise

- Reducing the amount of calories in your diet will help you lose weight, but if you want to keep off the weight, you have to combine a calorie-controlled diet with regular exercise.
- Moderate-intensity physical activity is any activity that increases your heart and breathing rate and may make you sweat. Examples include:
 - Fast walking.
 - Jogging.
 - Swimming.

- Tennis.
- Using a step-trainer (or similar) at the gym.
- Choose physical activities that you enjoy, as you are more likely to continue doing them.
- You should aim to start gradually. For example, start off by doing 15 to 20 minutes of exercise five times a week and then build on it.
- The Department of Health recommends most adults should do at least 150 minutes of moderate-intensity exercise every week. However, if you are obese and trying to lose weight, or have successfully lost weight and want to keep it off, you probably need to do more exercise. In most cases, up to five hours a week is recommended.

Other useful strategies Tips for Treating Obesity:

- Evidence has shown that weight loss can be more successful if it involves other strategies, in addition to diet and lifestyle changes. This could include things like:
 - Get proper sleep. Sleep deprivation slows metabolism. If you have trouble falling asleep or staying asleep, try fast-acting melatonin. If sleeping problems are resistant to a quick fix, then see your healthcare professional to rule out any chronic conditions that may be causing insomnia.
 - Try light therapy. Circadian Rhythm Disorder can cause hormone imbalances and disrupt your body's natural hormone production schedule. This may hinder your ability to control your weight effectively.
 - Consider removing mercury dental fillings. If you have silver fillings, get an evaluation from a mercury-free dentist who specializes in the safe removal of mercury amalgam fillings. Mercury in the body damages immune cells, which can be a contributing factor for weight gain and obesity-related chronic conditions.
 - Setting realistic weight loss goals – even losing just 3% of your original body weight can significantly reduce your risk of obesity-related complications.
 - Eating more slowly and being mindful of what and when you are eating (for example, not being distracted by watching TV).
 - Avoiding situations where you know you may be tempted to overeat.

- Involving your friends and family with your weight loss efforts, as they can motivate you.
- Monitoring your progress – for example, weigh yourself regularly and note your weight in a diary.
- You may also find psychological support from a trained healthcare professional helps you change the way you think about food and eating, through techniques such as cognitive behavioral therapy (CBT).

• **SAMPLE DIET:**

Following is a Generalized 1200 Cal Vegetarian Diet Chart:

Timing	Foods To Eat	Calories
Early Morning	Lukewarm Water with Lemon 1 glass	0
	Tea without Sugar + 2 Biscuits	90
Breakfast	2 Rotis + 1/2 cup Paneer Curry	330
	OR	
	Brown Bread Upma 1 plate + Milk 1 cup	300
Mid-Morning	1 Banana/1/2 cup Melon/20 Grapes	50
Lunch	Brown Rice 1 cup (195 gm) + Mixed Vegetables 1/2 cup + Salad 1 bowl + Raita 1 small bowl	345
Evening	Butter Milk 1 cup	35
Dinner	2 Rotis + Vegetable Soup 1 bowl + Salad 1 bowl	370

Total	1220/1190 Cal
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Following is a Generalized 1200 Cal Non-vegetarian Diet Chart:

Timing	Foods To Eat	Calories
Early Morning	Lukewarm Water with Lemon 1 glass	0
	Tea without Sugar + 2 Biscuits	90
Breakfast	2 Hard boiled Eggs + 2 Slice Brown Bread	290
	OR	
	2 Scrambled Eggs + 1 Slice Brown Bread+ Skimmed Milk 1 cup (240 gm)	310
Mid-Morning	1 Banana/1/2 cup Melon/20 Grapes	50
Lunch	Brown Rice 1 cup(195 gm) + Chicken(100 gm) + Mixed Vegetables 1/2 cup + Salad 1 Bowl	360
Evening	Butter Milk 1 cup	35
Dinner	1 Roti + Fish(50 gm) + Lentils Dal 1/2 cup+ Raita 1 small bowl	380
Total		1205/1225 Cal

- **MYTHS:**

Myth 1: Small, continued changes in our caloric intake or how many we burn will accumulate to create a larger weight change over the long term.

- Fact: Little changes in caloric intake or burning do not build-up indefinitely. Body mass changes eventually cancel out any change in calorie burning or intake.

Myth 2: Realistic goal-setting in obesity treatment is essential. If no goals are met, patients can become frustrated and lose less weight.

- Fact: Some data points out that people achieve more by setting more challenging goals.

Myth 3: Slowing losing weight is better than shedding the pounds quickly. Quick weight losses are likely to be gained back.

- Fact: People who lose weight quickly are actually more likely to weigh less after many years.

Myth 4: You will only lose weight when you are "ready" to do so. Health-care professionals should measure each patient's diet readiness.

- Fact: Among people who seek weight loss treatment, research suggests that examining readiness does not predict weight loss or helps to make it happen.

Myth 5: Childhood gym classes in their current state, play an important role in the prevention of childhood obesity.

- Fact: Physical education classes currently, do not appear to counteract obesity.

Myth 6: Breastfeeding helps prevent future obesity for the breastfed baby.

- Fact: Although breastfeeding has advantages for both mother and child, data does not confirm that it protects against obesity.

Myth 7: One act of sex can burn up to 300 Kcals per person.

- Fact: In reality, it is just about one-twentieth of that on average, and not much more than resting on the couch.