



Winning the Battle with Overweight & Obesity

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Body Mass Index

When contemplating overweight and obesity, one term we need to understand is Body Mass Index (BMI). BMI is how much you weigh (in kilograms) divided by the square of how tall you are (in meters²). This allows us assess whether someone is overweight or obese. Naturally, someone who is taller should weigh more than one who is shorter, and BMI helps us to keep that perspective. There are six generally recognized classifications of weight:

Underweight	BMI less than 18.5
Normal	BMI 18.5 – 24.9
Overweight	BMI 25-29.9
Obesity Class 1	BMI 30-34.9
Obesity Class 2	BMI 35-39.9
Obesity Class 3 (morbid obesity)	BMI 40 or greater

For a person who is 5 feet 5 inches tall:

Underweight	≤ 110 pounds
Normal	111 – 149 pounds
Overweight	150 – 180 pounds
Obesity Class 1	181 – 210 pounds
Obesity Class 2	211 – 240 pounds
Obesity Class 3	> 240 pounds

If you want to calculate your BMI, simply search for “BMI Calculator” on your web browser’s search engine, and input your height and weight, and it will calculate your BMI.

What weight should you aim for? The ideal BMI for women is between 21 and 23, and for men is 21 and below. This is the weight where there is the least health complications secondary to one’s weight.

Overweight & Obesity Health Consequences

Cardiovascular	Cancer	Other
Ischemic heart disease	Breast	Diabetes
Hypertensive heart disease	Colon/Rectal	Liver/Gall Bladder
Ischemic stroke	Endometrial	Sleep Apnea
Hemorrhagic stroke	Esophageal	Osteoarthritis
	Kidney	Abnormal Menses / Infertility
	Leukemia	Varicose Veins
	Liver	Chronic Kidney Disease
	Ovarian	Low Back Pain
	Pancreatic	
	Thyroid	

Uterine

The Cause?

Overweight & Obesity have been increasing rapidly across the population. Stephen O'Rahilly, professor of clinical biochemistry and medicine at Cambridge University says, "Nothing genetic explains the rise in obesity. We can't change our genes over 30 years." This leaves us with environmental (lifestyle) causes, such as eating too much, eating the wrong foods, eating at the wrong times, and living sedentary lives.

In simple terms, weight gain is the result of having more energy come into your body (in diet) than what goes out of it (in exercise and metabolism). Conversely, weight loss is the result of having less energy come into your body (in diet) than what goes out of it (in exercise and metabolism).

Exercise

For weight loss, you should participate in the three areas of exercise: flexibility, cardiovascular, and resistance.

For flexibility, you should stretch each muscle group for about 30 seconds before and after each exercise period. Make sure you only stretch until you feel a pulling sensation. Avoid straining or pain with stretching.

For cardiovascular exercise, you should exercise at least 60 minutes a day, 5 days each week. The 60 minutes of exercise can be broken up into several shorter exercise periods but should not include exercise periods of less than 15 minutes duration. During your cardiovascular exercise, your heart rate and breathing rate should increase and stay elevated during the duration of the exercise period.

How intense does your exercise need to be? If you have heart problems, start at a low intensity and work your way up to medium intensity over the next 1-3 months. If you don't have heart problems, you can start at a medium intensity (see the Poor Man's Intensity Guide below). Avoid high intensity exercises when you begin a new exercise routine. You need to work up to high intensity over a period of weeks to months.

What are examples of cardiovascular exercises? Cardiovascular exercises include simple activities such as walking, biking, swimming, hiking, jogging, gardening, and similar activities. One of the best cardiovascular exercises is walking. If you are exercising and losing weight, and then your weight loss plateaus, increase the time or intensity of your exercise to start losing more weight.

Poor Man's Intensity Guide:

Low Intensity	Can sing
Medium Intensity	Can talk, but not sing
High Intensity	Can talk, but short of breath
Very High Intensity	Cannot talk, gasping for air

Resistance exercise should include all major muscle groups (arms, shoulders, back, chest, abdomen, glutes & thighs, & legs) and should be performed at least twice each week. You should begin with a weight that you can lift 10 times in a row without significant difficulty, rest for a minute or two, and then repeat another 10 times.

To be cautious, you may wish to begin your weight lifting routine without any weights. You can simply go through the routine without any weights, helping your muscles and joints go through the motions and begin to limber up and become a little more prepared for the weight when you start using weights with the exercise.

As you are able, you increase the number of times you lift the weight in a row from 10 to 15, with a break, and then repeat the same number again. When you can lift the weight relatively easily 15 times in two sets, then increase the weight and begin lifting the new weight in 2 sets of 10 repetitions. You continue this pattern as your muscles strengthen over time.

Weight Loss Nutrition

Calorie Density

A concept that helps significantly in losing weight is calorie density. Calorie density refers to how many Calories a food contains in a certain weight of that food. For example, if you wanted to eat 200 Calories of a cheeseburger, you can only eat 75g of a cheeseburger, or about half of a small cheeseburger. But in order to get 200 Calories of honeydew, you would have to eat 553g, or about half of a honeydew. After eating half of a small burger, you would still have plenty of space to eat a full meal. But after eating half of a honeydew, you would be quite full and only have room for a little more food.

To eat 200 Calories of Doritos chips, you would only get 41g of the Doritos, or a small child's bag of Doritos. But if you wanted 200 Calories of an apple, you would need to eat about four whole apples! After the small Doritos bag, you would still be hungry enough to eat a full meal. But after four apples, you would be pretty full and not able to eat much more.

To eat 200 Calories of a Snicker's bar, you would have to cut off the last 1/5 of the Snicker's bar and eat the rest. But if you wanted 200 Calories of broccoli, you would have to eat 588g, or 3 full heads of broccoli! I don't know about you, but I have never eaten that much broccoli in one setting! You would be absolutely stuffed after that much broccoli. But less than one Snicker's bar? That is just a teaser. You could still eat a full meal after that Snicker's bar.

Finally, to eat 200 Calories of butter, you would only get 1 tablespoon of butter. But if you wanted 200 Calories of celery, you would have to eat 1,425g (3.1 pounds) of celery! If you ate that much celery, you would probably roll away from the table, unable to believe you ate so much celery. But one tablespoon of butter is about what you would spread on one or two slices of bread.

In these examples, the cheeseburger, Doritos, Snicker's, and butter are all calorie-dense foods. They have a lot of Calories in a small space, so when you eat them, you don't fill up very fast, but you accumulate Calories quickly. And the more Calories that you eat, the more weight you gain. But the other foods, like the honeydew, apples, broccoli, and celery, are not calorie dense. You can eat a lot of them, get filled up, but not eat many Calories.

Calorie dense foods usually contain lots of fat, sugar, sweeteners, or processed carbohydrates, and include foods such as meats, dairy, candies, desserts, chips, fried foods, white flour products, and other fast food items. Foods that are not Calorie dense are foods that contain lots of fiber and water, and include foods such as vegetables, roots, beans, peas, lentils, fruits, herbs and whole grains.

<u>Foods</u>	<u>Calories per Pound</u>
Oils	3,900
Potato Chips / French Fries	2,600
Meat	2,000
Cheese	1,600
White Bread	1,300
Chicken & Turkey (white meat)	900
Fish	800
Eggs	700
Whole Grains (wheat & rice)	600
Starchy Vegetables (potatoes & corn)	350
Beans	350
Fruits	250
Green Vegetables	100

You can eat more food and lose weight if you switch to eating foods that have a low calorie density. The feeling of satiety (feeling like you have consumed a sufficient amount of food) after you eat is highly dependent upon stretch receptors in the stomach. As you eat food and the stomach is stretched by that food, it signals to the brain that you have had enough. If you eat low calorie dense foods (like salad), you can fill the stomach, trigger the stretch receptors, feel satisfied, but you have only eaten a few Calories. However, you can eat the same amount of calorie dense food (like French Fries, pizza, and meat), fill the stomach, trigger the stretch receptors, feel satisfied, but you have eaten many more Calories in the process, which will contribute to weight gain.

Steps in Overcoming Overweight & Obesity

Step 1 - Avoid calorie dense foods, eat nutrient dense foods

As we discussed above, if you switch to nutrient-dense foods (such as fruits, vegetables, whole grains, legumes, herbs, etc.), they have fewer Calories in them. So, when you eat the same amount of food and are satisfied, you have eaten fewer Calories, and therefore you lose weight. This was my experience. As my wife and I cut animal products out of our diet, I lost 50 pounds without trying to lose weight, because the foods we were eating were less Calorie dense, and therefore we were consuming fewer Calories.

Step 2 - Eat a big breakfast, a medium lunch, and skip supper

When you skip breakfast, your metabolic rate is set lower so that you don't burn as much energy throughout the day. But when you eat a big breakfast, your metabolic rate is set higher. Use this to your advantage. Studies show that if you eat the same number of Calories, but eat them earlier in the day, you are more likely to lose weight than if you eat those Calories later in the day. The meal that contributes the most to weight gain is supper. Late in the day, your metabolic rate is dropping, and you are transitioning to bed time, when your metabolic rate will be quite low. The food that you digest at this time will mostly be converted into fats that will be stored in your fat cells and contribute to weight gain. Skip supper, and that will help you a lot with your weight loss.

Step 3 – No snacks

Only drink water or unsweetened, caffeine-free herbal teas between meals. Don't even eat "healthy" snacks, such as vegetables, fruits, and nuts. Any food between meals only increases the Calories that you are consuming. But it also delays the digesting and emptying of your stomach and contributes to digestive problems such as gastritis, reflux disease, ulcers, etc.

Step 4 – Eat unprocessed plant foods as often as possible

Plants contain lots of water and fiber and are low in Calories, so as often as you can, eat unprocessed plant foods. The more processed the foods are, the more Calorie dense they become and the worse they are for you. Baked potatoes are much better for you than French fries and potato chips, and they contain far fewer Calories. But watch what you put on your baked potatoes. If you load them with sour cream, cheese, butter, and bacon, you have just loaded your potato with Calories and made your meal Calorie-dense.

Step 5 – Avoid animal products and byproducts

Avoid flesh foods of all kinds, eggs and dairy products. These all contain lots of fat, and therefore are very Calorie-dense. These foods also contribute to cancer, diabetes, heart disease, and many of the other major diseases that kill people in this world. You are far better off not eating these foods and will enjoy much greater health when you cut them out.

Step 6 - Eat some raw, and start your meal with the raw foods

Raw, or fresh, foods typically have the least Calorie density, so include these fresh foods in your diet. Include some fresh vegetables and fruits, some raw nuts and seeds, as well as fresh herbs and sprouted grains and

legumes. Since raw foods have the least Calorie density, begin your meal eating your raw foods, and you will fill up on the foods that have the least Calories, thus contributing to weight loss.

Step 7 – Use smaller plates and bowls

There is something satisfying about seeing your plate or bowl full of food. If you have a large plate and a small portion of food on it, you feel cheated out of a full meal and are likely to believe that you are not satisfied. But if you put the same amount of food in a smaller bowl or on a smaller plate, it looks like a full serving, and you are more likely to be satisfied. Some of the increased Calories that we consume today is because our plates and bowls and cups are larger than they used to be. Put this psychology to good use. Purchase and use smaller plates and bowls and you will eat smaller portions. You will, therefore, consume fewer Calories.

Step 8 – Fast 1-2 days each week

If you fast one day each week and only drink water on that day, you will cut out 1/7 of your total calories for the week. And if you fast two days each week, you will cut out 2/7 of your total calories. This can go a long way toward your weight loss goals. And fasting has a number of other benefits in addition to weight loss, such as blood sugar and blood pressure control, clearer mental function, and improved immune function.

Step 9 – Exercise daily

As mentioned above, plan on getting at least 1 hour of cardiovascular exercise 5+ days each week, and resistance exercises at least 2 times each week. This will increase the Calories you burn and therefore contribute to your weight loss. But if you start resistance exercises at the same time you change your diet, you may not see weight loss for a while, as you will be adding muscle weight at the same time you are losing fat weight. But don't worry. As long as your clothes are fitting more loosely, you are heading in the right direction. You will eventually start losing weight when the muscle mass increase slows down but the fat loss continues.

Step 10 – With prayer, stop eating when satisfied, not full or stuffed

If you are like me, you need divine strength to stop eating on time. We have the tendency to keep eating until we feel full. But our satiety signals lag about 10-15 minutes behind, and our stomachs are fuller than we realize when we stop eating. If we only stopped eating when we were satisfied or even a little hungry still, we would feel full (but not stuffed) in about 10-15 minutes. Pray and ask God to give you indications when you should stop eating, and then stop eating at that point. You can train yourself to a new level of satiety and not overeat so much. This will help cut down on extra Calories as well.

Step 11 – If weight loss plateaus, decrease quantity or frequency of food or increase exercise

If you are using this plan and are losing weight, but your weight loss plateaus and you are no longer losing weight, there are a few things you can do to push yourself back into weight loss. First of all, you can decrease the amount of food you eat. This can be done by decreasing portion sizes or increasing the amount of raw foods you consume. You can also decrease the frequency of eating by skipping meals or fasting more often. And, finally, you can increase the amount and/or intensity of exercise. All of these will help you to start losing weight again.

Step 12 – Only drink water or herbal teas

Water and unsweetened herbal teas have no (or virtually no) calories in them, so you can consume them freely throughout the day and even between meals. It is healthy to remain hydrated, and water is your key to hydration. If you are hungry, and it isn't time to eat yet, drink water. That can help quench your hunger and help you feel satisfied again.

Step 13 – Never go shopping on an empty stomach

We have probably all been here before. You go shopping on an empty stomach, and everything looks so tasty. You are tempted to buy so many different things, because your hunger is driving your purchases. Then those

foods go home with you and are available for you to binge on later. Plan to do your shopping after you have eaten so that you aren't so tempted to buy those unnecessary food items which will be a temptation to you later.

Step 14 – Prepare food at home

Investigations have shown that if you eat the same meal (spaghetti with marinara sauce, for example) at a restaurant as opposed to home, the restaurant meal will typically contain twice the amount of fat and salt as what you would make at home. This means that the food will be more Calorie-dense than if you prepared it at home. So, plan on preparing your food at home in an effort to lose that weight you need to lose.

So, in summary, to win the battle with overweight and obesity, you should:

1. Avoid calorie-dense foods
2. Eat a big breakfast, a medium lunch, and skip supper
3. No Snacks
4. Eat unprocessed plant foods as often as possible
5. Avoid animal products and byproducts
6. Eat some raw, and start your meal with the raw foods
7. Use smaller plates & bowls
8. Fast 1-2 days each week
9. Exercise daily
10. With prayer, stop eating when satisfied
11. If weight loss plateaus
 - decrease quantity of food and/or frequency of meals
 - increase fasting, and/or exercise
12. Only drink water or herbal teas
13. Never go shopping on an empty stomach
14. Prepare food at home



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