

## Achieving a Healthy Weight

What is a healthy weight?

Every person would have a different answer to this question. Healthy, physically fit bodies come in all shapes, and sizes. Not even the popular Body Mass Index (BMI) charts can accurately predict the ideal weight for a physically fit individual. BMI uses a ratio of your weight and height as a predictor of health risk. Weight and height are only 2 of many factors used to define healthy weight. Other factors include: body fat, muscle mass, bone structure, bone density, gender, age, heredity, disease risk, eating preferences, physical demands (illness or injury), and social pressures.

When choosing a goal weight it is important to be realistic about the change your own body is capable of maintaining. Rather than start with a goal of achieving an arbitrary number on the scale, why not focus on developing healthy habits that will lead to a healthy weight. It is a way of giving your own body the power to reach it's top potential.

Some key habits affecting weight include:

1. Proper meal timing and portions
2. Adequate hydration
3. Balanced nutrition
4. Balanced exercise routine

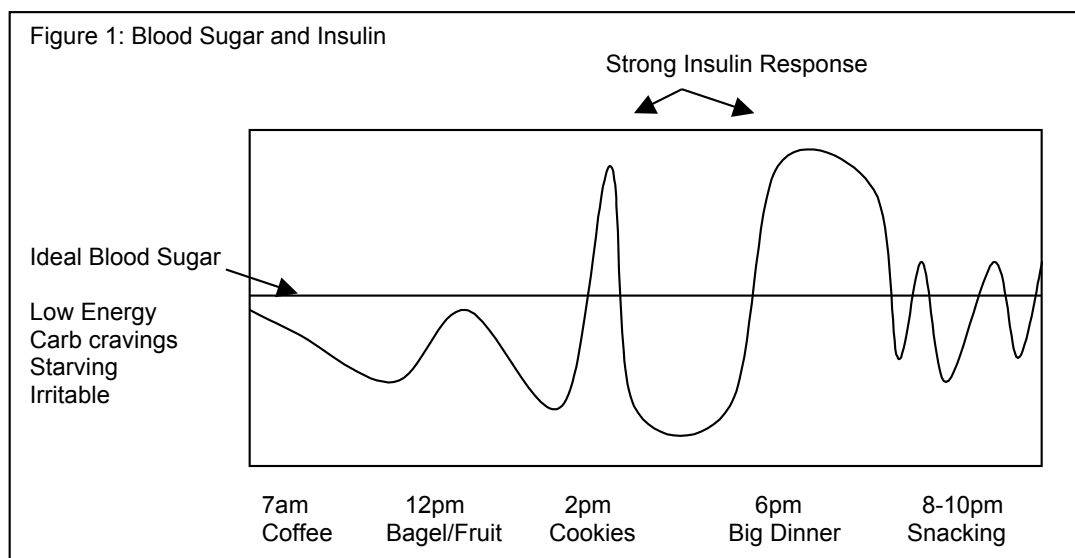
Changing habits does not happen overnight and therefore finding the best weight for your body will take time. If you give yourself at least a one year commitment to the pursuits of healthy eating and exercise habits you will be well on your way to achieving your ideal weight.

## Optimal Meal Timing

What if one simple eating strategy could help you to achieve an optimal weight, increase energy, reduce body fat, avoid overeating, reduce cravings for carbohydrates, reduce cholesterol, and improve exercise performance and recovery? The suggestion sounds almost too good to be true. However, all of these health benefits are associated with the simple tool of maintaining blood glucose levels, or blood sugars. You can do this through *proper meal timing*.

Blood glucose is a measure of sugars circulating in the blood. When we digest food, sugars are broken down and absorbed into the blood stream. These sugars are essential for normal brain function and survival. Therefore the body strives to maintain a stable blood glucose level (also called blood sugar level) throughout the day. Stable blood sugars are achieved through a combination of glucose from food, hormone regulation and stored energy stores (glycogen and fat).

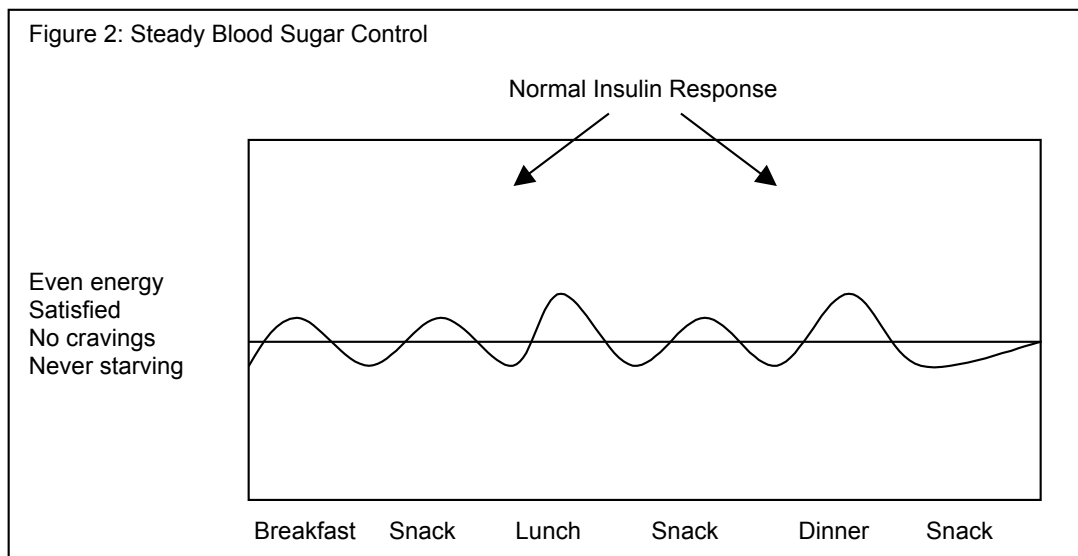
Figure 1 illustrates how daily blood sugars can fluctuate. Symptoms of low blood sugar are also noted to the left of the graph.



Notice how skipping breakfast can cause blood sugars to drop resulting in low energy, cravings for carbohydrate and a propensity to overeat in the evening. The afternoon bagel and fruit provide a short boost in energy however, due to lack of protein, blood sugar levels fall soon after and create another carb-craving. The cookies raise blood sugar rapidly triggering a strong insulin response. Insulin is a hormone that brings blood sugars down. However, a strong insulin response can sometimes overshoot and leave you feeling low soon after a snack or meal.

The most common symptom of poor meal timing is overeating at dinner. If you are “starving” when you start your meal you will be more likely to overeat. Excess calories from the large meal along with high levels of insulin will promote the storage of body fat. Some people may even experience carb cravings and urges to snack in the evening. This may be the result of an insulin “over-shoot” from the large dinner. And to think, all of this could have been avoided by eating breakfast and planning balanced small meals and snacks!

Figure 2 demonstrates this ideal meal timing and balance. Blood sugar levels are kept stable by small meals and snacks every 3-4 hours.



Energy is steady, while cravings and hunger are satisfied. Less insulin is required to regulate blood sugars. (Insulin is a storage hormone that promotes body fat storage and cholesterol production). The effect of lower insulin levels may be one of the reasons why frequent, small meals has been shown to reduce cholesterol by as much as 10% in individuals with high cholesterol. In addition, lower insulin and smaller meals will promote body fat burning by increasing metabolism, and not overeating.

## Adequate Hydration

Water is the foundation of performance in exercise and in daily life. The body is made up of 65-75% water. It is an essential daily nutrient needed for almost every major bodily function. During exercise, water forms the liquid portion of your blood which helps carry oxygen and nutrients to working muscles, while taking away wastes to be eliminated in the urine. It is also the foundation for sweat production to regulate body temperature during exercise. Blood pressure and heart rate are affected by hydration along with organ cushioning and joint lubrication.

How much do we need?

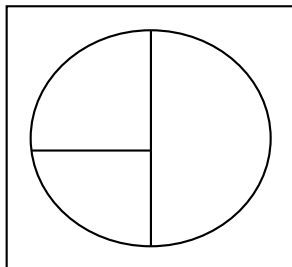
We've all heard that we should "drink 8 glasses of water a day". Well, it's a good rule to live by, and a pretty good estimate of how much water adults need each day to stay hydrated, and healthy. To be more accurate, adults need *1 ml of water per calorie consumed*. For example, if you consume 2000 calories per day, you need 2000 ml of fluid, or 8 cups. In addition, you need to drink both during and after exercise. Aim for 2-4 cups of fluid per hour of exercise and 3 cups of fluid for every pound of weight lost during exercise.

## Achieving the Right Balance

Focus on making balanced food choices each time that you eat. Any balanced meal is one that contains carbohydrate and a source of protein. The carbohydrate provides you with some quick energy and the protein helps to make that energy last longer. For example, a piece of fruit (carbohydrate) will provide you with energy for only 1-2 hours. If you combine the piece of fruit with a piece of cheese (protein) you may stay satisfied for 3-4 hours. This combination helps to maintain a slow rise and fall in blood sugars.

Satisfying snacks should be low in sugar with a source of fibre. The sugar raises blood glucose rapidly triggering a strong insulin response and possibly leaving you feeling low even 30 minutes after the snack. Conversely, fibre slows the rise in blood glucose and therefore helps to extend the energy of the snack. For example, whole wheat bread is a better carbohydrate than white bread.

**Tip: Aim for a balanced plate!**



In scientific terms, individuals who exercise need a 55-65% of calories from carbohydrate, 12-15% of calories from protein, and 20-25% of calories from fat. Scientific terms are useful for scientists but when it comes to serving up your dinner meal, percentages of nutrients may be hard to measure (and no fun either!). One method to achieve the right balance is to aim for a dinner plate that is 3/4 carbohydrates (vegetables, grains, fruits) and 1/4 protein (meats, beans, soy, dairy).

Even though this looks like 75% carbohydrate, carb sources are bulkier and also contain some protein so that is actually closer to the recommended percentages above.