

Triple strategy to overcome Syndrome X

- 1. Reduce high insulin levels**
- 2. Help insulin to work better**
- 3. Improve your liver function**

All the above will facilitate weight loss

1.Reduce Insulin Levels

To lower insulin levels, we need to lower blood glucose levels and keep them stable so preventing wild fluctuations of blood glucose. If the blood glucose is persistently high, the pancreas will pump out high and sustained amounts of insulin thus elevating blood insulin levels. If the blood glucose becomes excessively low, this causes the release of other hormones such as adrenalin and cortisol from the adrenal glands. These hormones cause the blood glucose to rise again, which will then stimulate the pancreas to pump out more insulin so that the blood glucose levels fall again. Thus the blood glucose levels go up and down precipitously, causing extreme cravings for sugar and carbohydrates and sometimes for alcohol. These cravings are very powerful, so that the sufferer becomes addicted to sugary foods and is unable to stay away from these problem foods.

It is important to stabilize the blood glucose levels, thus reducing the blood glucose highs and lows. This prevents the very high levels of insulin and other hormones such as adrenalin and cortisol. High levels of adrenalin and cortisol can elevate the blood pressure, cause anxiety, headaches, tremors and sweating. High levels of the hormone insulin make you very hungry so that you need larger amounts of food to feel satisfied. Some people with Syndrome X feel so hungry they could eat the door off the refrigerator!

Eating plan summary

Reduce refined carbohydrates

The most important carbohydrates to reduce are those that are refined and made from white sugar and white flour. Refined carbohydrates are those with a high Glycemic Index (GI). The Glycemic Index (GI) is a standard scale used to measure the ability of specific carbohydrate foods to elevate blood glucose levels. Pure glucose is used as the standard measure of the GI and is given the number of 100 on the GI at scale. Foods with a lower number on the scale have a lower GI. For example lentils and beans are much lower on the GI scale than bread men and sweets, while meat, eggs, seafood and poultry are virtually zero.

Foods that have a high GI number are typically refined or simple carbohydrates, and will cause elevation of blood glucose and insulin levels, especially if they are eaten alone without protein or fat.

Refined carbohydrates are found in many highly processed breads, many packaged cereals, sweet cakes, biscuits and cookies, chips, pastry, some types of pasta, candies, chocolate, ice-cream, and packaged snack foods. Overeating carbohydrates can prevent a higher percentage of fats from being used for energy, which leads to an increase in fat storage. Your body has a limited ability to store excess carbohydrates, and it will convert these excess carbohydrates into body fat.

There are many versions of the popular high protein/low carbohydrate diet, and their carbohydrate content varies considerably. I recommend around 40% of your daily calories, come from complex carbohydrates. In general, your carbohydrate intake should be roughly equal to your protein intake. As you progress with weight loss, you can gradually increase carbohydrates to approximately 20% more than your protein intake.

The tolerance to carbohydrates varies greatly between individuals, from 60 grams daily to 300 grams daily. This depends upon body weight, amount of exercise, and insulin metabolism, and some experimentation may be needed to determine what is best for you. Refined carbohydrates should ideally be eliminated. Refined carbohydrates stimulate the production of insulin much more than complex carbohydrates do. If the carbohydrates are complex they contain fiber and nutrients, which will slow down the rapid rise in blood glucose and insulin levels.

By limiting carbohydrate intake, we can increase fat burning to provide an efficient source of energy.

Eat first class protein with every meal

First class protein suitable for Syndrome X is found in the following food groups

- All seafood - such as fish, shellfish, squid, octopus
- Poultry (free range is best)
- Meats - red and white (must be very fresh and lean)
- Eggs (boiled, poached, scrambled, or omelette)
- Protein powder (whey protein has the highest protein content)

Combination of any 3, from the following 4 groups –

- 1) Legumes (beans, lentils, peas)
- 2) Unrefined grains
- 3) Nuts
- 4) Seeds.

If you eat 3 of these 4 groups at the SAME TIME, you will be getting all of the essential amino acids at one meal.

If you are vegetarian, you will mainly be getting your protein intake from eggs and combining the food groups (legumes, grains, nuts and seeds)

By eating carbohydrates with some fat and protein at the same meal, we are able to

reduce the rapid insulin-stimulating rise in blood glucose.

Refined carbohydrate foods stimulate the secretion of the fat producing hormone insulin, whereas non-carbohydrate foods - fats and proteins do not stimulate the production of insulin.

Eat some raw plant food with every meal

This includes all raw fruits and vegetables. A maximum of 3 pieces of fruit daily is allowed if you are overweight. An unlimited amount of green vegetables is allowed. Raw food increases fiber, improves digestion, and provides the best source of antioxidants. The consumption of raw food with every meal is vital in Syndrome X, as raw foods contain natural vitamins and active enzymes to revitalize the impaired metabolism. By eating more vegetables you will reduce your total consumption of fat and calories, and lower blood glucose and insulin levels. This will increase your chances of a longer life.

2. Help Insulin to work better

It is possible to help the body to respond better to the effects of insulin. We can achieve this by improving the sensitivity of the body cells to insulin, and by preventing excessively high levels of blood glucose. By doing this we will reduce the need for the pancreas to produce excess amounts of insulin, which will assist weight loss. There are specific herbs and nutrients that have been proven to improve glucose and insulin metabolism.

Another way to increase the sensitivity of your cell membrane receptors to insulin is to ensure that your diet contains abundant **essential fatty acids** of the omega 6 and omega 3 variety. These essential fatty acid can be supplemented by taking cold pressed flaxseed oil in a dose of one table spoon daily, and also by grinding whole flaxseeds in a coffee grinder into a fine powder. You can add one tablespoon of this powder to your cereal, smoothies or desserts, to provide extra omega 3 essential fatty acids. Cold pressed Flaxseed Oil is also available in capsule form.

Hemp seed oil is another good source of omega 3 and 6.

You can take a table spoon of this cold pressed organic oil a day instead of the Flax seed or fish oils.

You should also eat plenty of oily fish such as salmon, sardines and tuna, which also provide first class protein as well as omega 3 fatty acids.

I also recommend that you eat raw nuts and seeds regularly, as these are high in essential oils. Supplements of evening primrose oil, blackcurrant seed oil and borage oil, will further boost your intake of the essential omega-6 fatty acids.