



Do You Have Metabolic Syndrome?

Some 25 million Americans have a condition that dramatically increases their risk of developing degenerative diseases like diabetes, heart disease and strokes. It is a contributing factor in high blood pressure and a major cause of obesity. The problem goes by many names: metabolic syndrome, syndrome X, hyperinsulinemia, cardiometabolic syndrome, and insulin resistance syndrome. Whatever name you give it, if you match three or more of the following criteria, you have this problem:

Abdominal Obesity: Waist circumference greater than 40" in men or 35" in women.

High Triglycerides: Blood triglycerides higher than 150 mg/dL.

Low HDL Cholesterol: HDL less than 40 mg/dL in men or less than 50 mg/dL in women.

High Blood Pressure: Blood pressure higher than 130/85.

High Fasting Glucose: Blood glucose greater than 100 mg/dL.

If you have metabolic syndrome, you can improve your health and potentially prolong your life using the information found in this newsletter. If you don't personally match these criteria, chances are that someone you know does, so please share this information with them.

Understanding Metabolic Syndrome

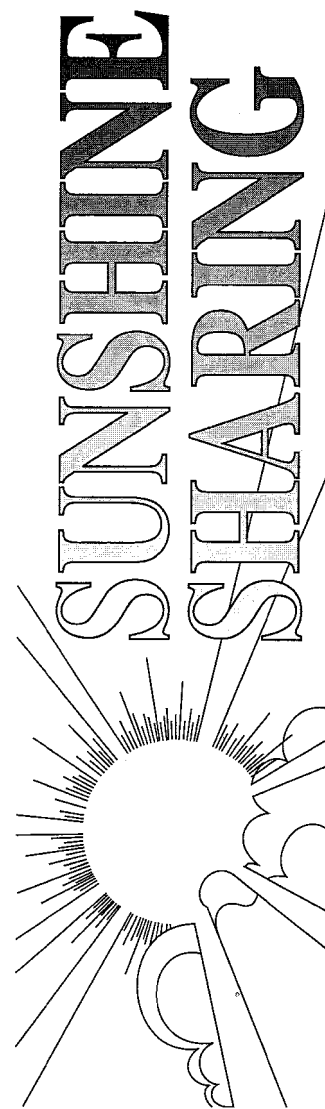
Metabolic syndrome involves cellular resistance to insulin, a peptide hormone that regulates carbohydrate and fat metabolism and enables cells to utilize glucose. When cells start to become resistant to the effects of insulin, you will develop high insulin levels in your blood, a condition known as hyperinsulinemia. The insulin resistance means that glucose can't get into the cells, which causes a growing cascade of imbalances in your body.

First, the body usually starts storing the excess glucose as fat, causing weight gain around the mid-section. Not everyone with insulin resistance gains weight and not everyone who is overweight is insulin resistant, but in the majority of people these two conditions are linked.

Having insulin resistance greatly increases your risk of high blood pressure, arteriosclerosis, heart attacks and stroke. In fact, hyperinsulinemia is a much more serious risk factor for cardiovascular disease than high cholesterol. Furthermore, as the insulin resistance gets worse, it eventually leads to the development of type 2 or adult onset diabetes. Diabetes further increases your risk of cardiovascular disease and is the leading cause of blindness and amputations.

High levels of insulin cause other problems as well, such as increasing inflammation, increasing water retention and depressing neurotransmitters in the brain, which contributes to depression. Insulin resistance may also be a factor in Alzheimer's disease, polycystic ovary disease, sleep apnea, non-alcoholic fatty liver disease and even cancer.

Clearly, if one has signs of hyperinsulinemia or metabolic syndrome, it's time to do something to reverse it. So start now by looking inside and reading about how you can overcome insulin resistance, improve your health and reduce your risk of numerous degenerative diseases.



Your guide to better health the natural way.

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Important Notice

The information in *Sunshine Sharing* is for educational purposes only and should not be used to diagnose and treat diseases. If you have a health problem, we recommend you consult a competent health practitioner before embarking on any course of treatment.

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Overcoming Metabolic Syndrome

If you have metabolic syndrome (see criteria on page one), you can overcome it by changing your diet and lifestyle and taking the appropriate supplements. Here are the key steps you need to do this.

Make Good Food Choices

Since insulin resistance is caused by diet, it makes sense that the first thing you need to do to overcome it is to change the way you eat. Start by lowering the amount of sugar that is entering your bloodstream after a meal. You can do this by reducing the amount of sugars in your meals. Remember that starches are converted to sugars in your digestive tract, so this means you want to eliminate sugary and starchy foods from your diet. Basically, you want your diet to consist primarily of vegetables, with some type of quality protein and some fresh fruit.



Start by filling your plate 2/3 full of vegetables when you have a meal. You want to use fresh vegetables wherever possible, with frozen vegetables being a backup option. Select vegetables that are low in starches, such as squashes, zucchini, green beans, peppers, tomatoes, lettuce, broccoli, cauliflower, Swiss chard and kale. It's best for a while to avoid starchy vegetables like potatoes until your blood sugar and insulin levels become more stable.

Next, select some high quality proteins to go with your vegetables. These can include poultry, eggs, fish and red meat. Ideally, you want to look for grass-fed or pastured animals, preferably organic. Have a 3-4 ounce portion of protein with your vegetables.

Third, you can also eat whole fruits. Avoid fruit juices, as they are too sugary. If you are obese, it's best to avoid sugary fruits and stick with low glycemic fruits, which include all types of berries, apples, cherries and apricots.

It's also important to get some good fats in your diet. Replace margarine, shortening and vegetable oils with healthy fats like butter, coconut oil and olive oil. It is also helpful to take **Super Omega-3 EPA**, as omega-3 essential fatty acids reduce insulin resistance.

Avoid all simple sugars, including refined sugar, brown sugar, raw sugar and high fructose corn syrup. Also avoid all processed grain products (white flour and white rice). Some people can tolerate moderate amounts of whole grains, but if you really want to decrease insulin resistance and lose weight, avoid all grain products for at least two to three months until your blood sugar becomes more stable, then re-introduce whole grains (preferably gluten-free grains like rice, quinoa and millet) in moderate amounts.

Additional Help and Information

For more information on metabolic syndrome, contact the person who gave this newsletter to you. You can also consult the following sources:

The Comprehensive Guide to Nature's Sunshine Products by Tree of Light
Reversing Diabetes webinar by Steven Horne and Thomas Easley (available from Tree of Light)

Get Physically Active

A 2006 study published in the International Journal of Sport Nutrition and Exercise Metabolism suggests that combining resistance training (using weight machines, free weights and calisthenics) with cardiovascular (aerobic) exercise is ideal for getting rid of abdominal fat – a key indicator of insulin resistance. Abdominal fat is the deepest layer of belly fat (the fat you can't see or grab). These "visceral" fat cells produce hormones that contribute to the development of diabetes, obesity and heart disease. The risk increases because they are located near other organs in the abdominal cavity.



Resistance exercise trains the muscles to take up glucose without the need for insulin, thereby decreasing insulin requirements. It also stimulates the development of small proteins in muscle cells, which in turn enhance your muscles' ability to generate force. Exercise reduces stress and insulin levels, which reduces cortisol production and fat deposits. A program consisting of three workouts per week will help correct metabolic syndrome and reduce your risk of developing degenerative diseases.

The key to successful exercising is consistency. Make it a priority in your life and schedule the time. Thirty minutes is all that is needed. If you've been sedentary for a long period, the first week will be tough, but hang in there! As you work through fatigue, pain and shortness of breath, exercising will gradually become easier and you'll feel much better.

Reduce Stress Levels

Stress plays a role in the development of insulin resistance by stimulating the release of cortisol from the adrenal glands. So, doing things that reduce stress hormones is an important key for overcoming insulin resistance and reversing metabolic syndrome. As previously mentioned, exercise is one of the things that helps.

Adaptogenic herbs are very helpful for reducing stress levels and have been shown to help balance blood sugar levels or even reduce insulin resistance. **Eleuthero root** is a good choice for just about anyone who is under a lot of stress. If you tend to be cold, tired, pale and have low sex drive, **Korean Ginseng** may be a better choice. If you have weak digestion, are starting to feel old and tend to run a little warmer metabolism **American Ginseng** is a good option. **Mineral Chi Tonic** is another good adaptogenic formula.

It is also important to get a good night's sleep, especially when taking adaptogens. Here are some tips that can help you sleep:

Don't watch TV or do other stimulating activities in the evening
Avoid caffeine and other stimulants

Make your room as dark as possible or wear a sleep mask;
darkness stimulates melatonin production

Eat a small protein snack at bedtime; avoid sugars and spicy foods in the evening; don't eat big meals in the evening

Go to bed and wake up at a regular time; this helps to set the body's hormonal rhythm.

If you need help relaxing and getting to sleep, try taking **Herbal Sleep** and/or **Kava Kava** about one hour before bedtime. If you are tired during the day, but have restless and disturbed sleep, try **Nervous Fatigue Formula**, an adaptogenic formula that reduces stress hormones, increases energy, improves sleep and helps to balance blood sugar levels.

5-HTP Power can also be helpful for sleep and can also help reduce your cravings for sugar and other simple carbohydrates. 5-HTP is the precursor to serotonin, a mood-elevating neurotransmitter. The formula also contains three adaptogenic herbs shown to reduce stress levels and help balance blood sugar.

Use Appropriate Supplements

There are herbs and supplements that can be very helpful for reducing cravings for sugar and carbohydrates, balancing blood sugar levels and decreasing insulin resistance.

Taking **Licorice Root** and **Super Algae** can help stabilize your blood sugar levels and reduce cravings for sugar. Take 2 capsules of each at breakfast and lunch and again in the afternoon if you experience an energy slump. Do not use licorice root if you have high blood pressure. Replace the licorice with **Eleuthero Root**. You can also take **Stixated** when you experience sugar cravings.

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Understanding Insulin Resistance

The chart below shows how insulin resistance develops. The process starts with an excess consumption of high glycemic foods. These are foods that are high in carbohydrates (sugars and starches) and low in nutrient density (minerals and vitamins). The worst culprits here are refined sugar, high fructose corn syrup, white flour and white rice, because these foods are completely lacking in fiber and nutrients, but are loaded with calories. However, fruit juices, excessive consumption of whole grains and even excessive consumption of starchy vegetables like potatoes can contribute to insulin resistance.

As the sugars from these foods enter the blood stream after a meal, they cause a dramatic rise in glucose or blood sugar (hyperglycemia). Since the body has limited capacity to store carbohydrates, excess carbohydrates are converted into fats, which also increases the level of fatty acids (triglycerides) in the bloodstream. Excessive amounts of glucose (blood sugar) and fatty acids are harmful to the body, so it takes steps to counteract this.

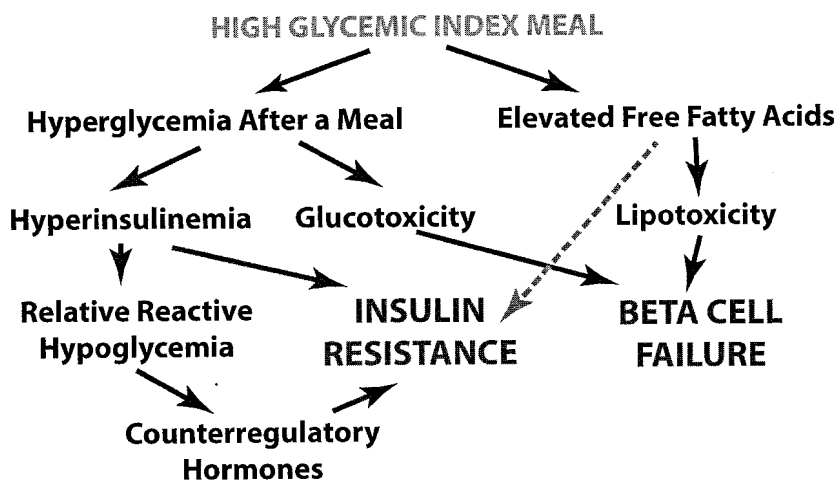
To counteract the rapid rise in blood sugar, the pancreas secretes large amounts of insulin, which causes hyperinsulinemia. Insulin moves glucose out of the blood stream to be stored in the muscles and liver as glycogen. Excessive amounts of glucose (beyond what can be stored as glycogen) are converted to fat and stored. Unfortunately, high levels of insulin suppress a hormone called glucagon. This pancreatic hormone is what releases glycogen stores from the liver to bring blood sugar levels up when they are down.

The suppression of glucagon causes blood sugar levels to drop too low a couple of hours after a meal. This reactive hypoglycemia (low blood sugar) causes the adrenals to release cortisol to bring blood sugar levels back to normal. It also throws other hormones out of balance and causes a person to crave sweets, which starts the cycle over again.

Insulin resistance is created by hyperinsulinemia (high insulin levels), the hormones released to counter the reactive hypoglycemia and the elevated free fatty acids. Essentially, the cells become resistant because they are saying, "We have enough fuel already! Please stop! We don't need any more!" Certain nutrient deficiencies also contribute to this insulin resistance, such as deficiencies of omega-3 essential fatty acids and the minerals magnesium, chromium, vanadium and zinc.

The imbalances in insulin, cortisol and other hormones (and the nutrient deficiencies) can also cause the body to become resistant to leptin. Leptin is a hormone produced by fat cells, which depresses hunger. As fat stores increase, leptin normally reduces a person's appetite, but the resistance to leptin causes a person to still feel hungry even when they've eaten enough calories.

Finally, the high levels of glucose and fatty acids can cause toxicity in the body that contributes to the failure of the beta cells in the pancreas that produce insulin. This means that once a person becomes diabetic from too much insulin, they can gradually lose the ability to produce insulin, making the problem even worse.



In addition to the problems shown in the chart, high insulin levels also do the following. First, they interfere with the conversion of thyroid hormone T-4 to T-3, which can result in functional hypothyroidism. T-3 is necessary to burn fats, which makes it hard to lose weight. High insulin levels also depress the production of prostaglandins that control inflammation. Finally, the adrenal glands become exhausted from excess sugar and caffeine consumption, and they lose their ability to control inflammation. Chronic inflammation sets in, leading to heart disease, cancer and other life-threatening conditions. Reversing this insulin resistance is the key to overcoming metabolic syndrome.

25% of Americans Have Metabolic Syndrome—Do You?

Metabolic syndrome increases your risk of degenerative diseases like heart disease, diabetes and stroke. Fortunately, you can reverse metabolic syndrome with appropriate diet and lifestyle changes, as well as the right herbs and nutritional supplements.

Learn what steps you can take to reverse metabolic syndrome inside.

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This product reduces these cravings and helps you stick to your nutritional program.

If you experience frequent thirst and urination, a sense of “dryness” in your body, hot flashes, night sweats and/or burning sensations in your hands and feet, try **HY-C**. The herbs in this formula help to balance blood sugar, reduce insulin resistance and help your cells to hydrate better.

There are several minerals that reduce insulin resistance. One of these is chromium, which plays a role in creating the glucose tolerance factor, a hormone-like compound that works with insulin to transport glucose into the cells. If your energy levels tend to be low, try taking **Chromium GTF**. Three other minerals that are helpful for reducing insulin resistance are magnesium, zinc and vanadium. Since most people are deficient in magnesium, people



with Metabolic Syndrome will probably benefit from taking 1-2 capsules of **Magnesium Complex** daily. Another nutrient that helps overcome insulin resistance is **Vitamin D3**.

SugarReg contains both chromium and vanadium in a base of herbs that reduce insulin resistance, including cinnamon, bitter melon, gymnema and nopal. It can be helpful for those with metabolic syndrome or type 2 diabetes. Another good formula to consider is **Target P-14**, which contains zinc and chromium chelated to amino acids that target them to the pancreas and blood sugar issues.

Avoiding diabetes, reducing your risk of heart disease, losing weight, having more energy and potentially lengthening your life are well worth the effort to make the changes suggested above. If you need further help and assistance talk to the person who gave this newsletter to you.