

Diabetes and Syndrome X

Over 55% of North Americans are overweight.

20% of the population is obese.

In the past eight years the incidence of type II (adult onset) diabetes has risen 33% (from 4.9% to 6.5% of the population).

The greatest increase has been among 30 – 39 year olds where there has been a 70% increased incidence in eight years.

Children are now developing Type II diabetes due to excessive sugar intake.

The average annual sugar intake in North America is 148 lbs. This is up from 5 lbs in 1900.

It takes 16 inches of 1" diameter sugar cane to make 1 teaspoon of refined white table sugar. A 15 ounce can of soda may contain up to 13 teaspoons of sugar which is equivalent to 208 inches or 17 feet of sugar can per can.

SYNDROME X

35% of adult North Americans are estimated to have this condition.

Symptoms of Syndrome X

Increased waist to hip ratio

Obesity

Hypertension

Sarcopenia (loss of muscle mass)

Increased blood pressure

Causes of Syndrome X

- Low fat diet (fats delay stomach emptying and slow uptake of sugars)
- Elevated omega 6 to omega 3 fats in the diet (too much vegetable oil and not enough fish oil)
- High saturated fats from commercially raised cattle.
- Deficiencies of chromium, vanadium, manganese, B vitamins and magnesium
- Eating a high glycemic diet that raises the blood sugar fast - includes all processed and refined grains and cereals as well as candy, sodas and other empty calories
- Eating late in the evening – causes output of insulin and hence cellular anabolism (building) at the time when muscle repairing Growth Hormone should be released.

TREATMENT OF DIABETES AND SYNDROME X WITH DIET

30% complex carbohydrates from whole grains such as rice, quinoa, buckwheat, millet, corn, amaranth, oats, barley

40 – 50 % protein (50 – 75 g daily) from fish, wild / range fed meat, free range chicken / turkey, nuts, eggs

20 - 30% fats in the form of oily fish (wild salmon, sardines, mackerel, tuna etc) eaten three times a week and supplemented on the other days with 1 – 3 tablespoons of cod liver oil. Eat also avocados, nuts and nut butters, and full spectrum, cold processed, organic olive oil. Cook in olive or cold pressed coconut oil. Coconut butter can be used in place of shortening for baking and pastry. Do not use vegetable oils (corn, canola, sunflower, soy) because they have too much omega 6 fatty acid and convert poorly to the desirable eicosapentanoic and docosahexanoic acids (EPA and DHA) found in fish.

Do not eat any processed, hydrogenated or *trans* fats. This means no margarines, baked goods, commercial salad dressings, fried foods or prepared and packaged foods.

Avoid dairy foods as they are a trigger in auto-immune (type 1) diabetes.

Eat low on the glycemic index. No refined sugars at all. Fruit juices should be kept to a minimum. Eat high-inulin root vegetables such as sunchokes and burdock root. Avoid white potatoes. Aim for 6 servings of vegetables and 2 – 3 servings of fruit daily.

SUPPLEMENTS FOR SYNDROME X AND DIABETES

Chromium

Chromium (200 mcg./day) or brewers yeast
(9 grams or 3 tbsp per day)

Vitamin B complex

High potency B complex (100 mg. of each per day). B12 1 mg./week

Manganese

2 - 4 mg./day

Vitamin C

Supplemented to bowel tolerance

Vitamin E

800 iu of *d-alpha tocopherol* and *tocotrienols*

Magnesium

300 - 500 mg. per day

Zinc

30 – 50 mg. per day of zinc picolinate

Co-enzyme Q10

200 mg

Vanadium

Up to 7 mg./day

HERBS FOR SYNDROME X AND DIABETES

Allium cepa (Onions) (bulb)
Allium sativa (Garlic) (bulb)
Arctium lappa (Burdock) (root)
Daucus carota (Wild Carrot) (aerial parts & seeds)
Galega officinalis (Goat's Rue) (aerial parts)
Geranium maculatum (Cranesbill) (whole herb)
Iris versicolor (Blue Flag) (rhizome)
Momordica charantia (Bitter Melon) (fruit)
Ocimum sanctum (Holy basil) (root)
Oplopanax horridum (Devils Club) (root bark)
Panax spp. (Ginseng) (roots)
Potentilla aurea (Alpine Cinquefoil) (aerial parts)
Rhodiola rosea (Arctic root)
Rhus aromatica (Sweet Sumach) (berries)
Syzygium/Eugenia jambolana (Jambul) (fruits)
Trigonella foenum-graecum (Fenugreek) (seeds)
Vaccinium myrtillus (Bilberry) (leaves and fruits)
Vinca spp. (Periwinkle) (aerial parts)

Momordica charantia (Bitter melon)

A tropical vegetable, widely cultivated in Asia, Africa and South America. Traditionally used for 'sugar sickness', the fresh juice, aqueous extract and dried extract of the unripe fruits contain several hypoglycemic agents. Active constituents include Charantin a mixed steroid compound which increases insulin production and insulin function. Polypeptide P, an insulin like protein in Momordica is undergoing research as an injectable substitute for insulin.

Trigonella foenum-graecum (Fenugreek)

The seed contains the alkaloid trigonelline, nicotinic acid and coumarin. It has the ability to reduce fasting and post-prandial blood levels of glucose, glucagon, insulin, total cholesterol and triglycerides while also raising HDL and pancreatic function.

Vaccinium myrtillus (Blueberry / Bilberry)

The leaf contains the glycoside myrtillin that has a long acting hypoglycemic effect. The anthocyanidin pigments of the berries increase capillary integrity, inhibit oxidative vascular damage and improve venous tone. They are considered especially beneficial for visual damage and diabetic retinopathy.