Diabetes is a chronic metabolic disorder, characterized by insufficient insulin entering the bloodstream to regulate the circulating glucose.

In other words, diabetes is a result of abnormal levels of glucose in the blood. Insulin resistance is a cardinal sign/symptom of diabetes. The disease either involves specific pancreatic cell death or pancreatic receptor sites clogged up by fat and cholesterol. (which could be linked to cardiovascular disease and/or fatty liver disease).

Insulin receptors are located on the outer part of a cell, that allow the cell to bind with insulin in the blood. When the receptors are clogged up, the cell cannot bind glucose from the blood and use it for energy.

Researchers do know that long-term intake of a poor diet with trans-fat, and processed food is one of many risk factors associated with clogged up insulin receptors sites, leading to high blood glucose.

Normally, when food is consumed it is converted into glucose, which is used for energy. Insulin is produced by the pancreas to move the glucose from the blood stream into cells where it is needed for growth and energy. In healthy humans, the right amount of insulin is created by the pancreas. However, people with diabetes have too little or no insulin. Without insulin, the glucose will build up and exit the body through urine, leaving a diabetic with no energy.

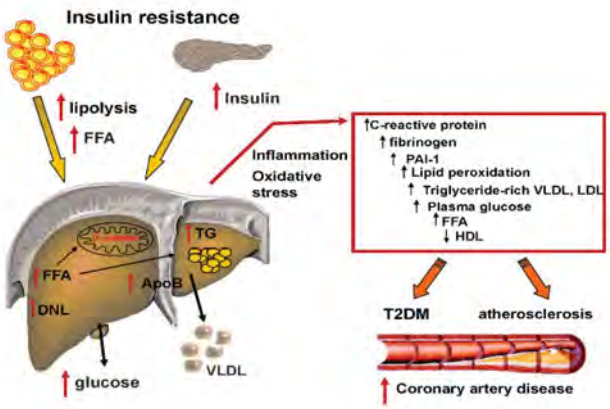

Figure A

Link between insulin resistance and metabolic dyslipidemia. Insulin resistance is associated with an increase of free fatty acids (FFAs) flux that contributes to increased TG production that, in turn, stimulate assembly and secretion of VLDL in hepatocytes. Fat accumulation in the liver is associated with oxidative stress and lipid peroxidation. Furthermore, non-alcoholic fatty liver disease - subjects have increased secretion of inflammatory markers, plasma glucose and a decrease in HDL concentration. The consequence of this physiological dysfunction is increased risk for the development of diabetes and atherosclerosis and increased risk for coronary artery disease.

BILBERRY

Due to bilberry's rich nutritional composition, it is beneficial for a myriad of disorders. Consisting of protein, water, dietary fiber, carbohydrates, vitamins A, C, thiamine, riboflavin, niacin, vitamin B6, folate, pantothenic acid, and beta-arotene, calcium, iron, magnesium, phosphorus, potassium, sodium, zinc, copper, manganese, selenium and chromium, Bilberry is thus a valid anti-inflammatory, antioxidant, collagen stabilization and astringent. The fruit contains anthocyanosides, which have the capability of improving night vision and can effectively inhibit macular degeneration, which aids in the natural treatment of retinal problems, glaucoma, and cataracts, which are often seen in diabetes complications.

Bilberry extract is highly beneficial for health conditions such as;

- Gastrointestinal disorders
- Renal problems
- Urinary tract infection
- Hemorrhoids
- Metabolic syndrome
- Arthritis
- Diabetes
- Retinopathy
- Gout
- Cardiovascular disease

Control of Diabetes with Bilberry

Bilberry's extract benefits against diabetes because of its nutritional composition that works to lower blood glucose levels. The high fibrous content of bilberry helps to curb blood sugar spikes.

Diabetics suffer from oxidative stress and stiffness in the aorta. Bilberry juice is rich in antioxidants protects the body from oxidative damage systemically, which includes cardiovascular system.

Cayenne Pepper

Cayenne pepper is made from the red chili peppers. Chili peppers contain capsaicin, which helps increase metabolism, acts as an anti-inflammatory, relieves certain types of headaches and acts as an antibacterial agent.

Cayenne Pepper and Diabetes

Cayenne has been a traditional treatment for diabetes for years. Aiding in circulation, cayenne is a very important food for diabetic patients to supplement their diet with. Also, known to help with nerve pain associated with diabetes.

Juniper Berries

Juniper berries are known to have potent blood sugar lowering capabilities and should therefore, be taken 3 hours away from other medications. We also know how potent juniper berries are as an antioxidant, with regards to SOD (superoxide dismutase), glutathione and catalase. Antiviral and antibacterial, as well as digestive aid, juniper berries are beneficial in cases of diabetes.

European Mistletoe

There have been studies confirming the effect of E. Mistletoe as potent antioxidant system on lipid peroxidation. Research also shows that it is able to reduce levels of blood glucose and stimulates production of insulin in pancreatic cells. It is therefore, an aid for those that suffer from diabetes.

Uva Ursi

Quite commonly, urinary tract infections start in the bladder and urethra, which are the lower portions of the urinary system. Uva Ursi naturally contains active ingredients, such as hydroquinone and arbutin, which provide antiseptic, anti- inflammatory and antibacterial properties useful in prevention of urinary tract infections. If you need to take products containing Uva Ursi long-term, consult a Health Care Practitioner and always make sure to take a month off from taking supplements with Uva Ursi in them.

Benefits of marshmallow root and horsetail herb Tops in diabetes

Both Marshmallow root and Horsetail herb tops lower blood sugar levels and must take precautions to avoid taking diabetes meds at least 2-3 hours away from any product that contains marshmallow roots & horsetail herb tops, which includes Strauss Kidney & Blood Pressure formula.

Goldenseal contains Berberine

In theory, goldenseal may lower blood sugar and cause blood sugar to become too low if taken by people with diabetes who are controlling their blood sugar with insulin or medications. When supplementing with products containing goldenseal, it is advised to take it 2-3 hours away from other medications.

In TCM, it has been studied for centuries that Berberine has several pharmacological activities, including anti-microbial, glucose- and cholesterol-lowering, anti-tumoral and immunomodulatory properties. The main mechanism by which BBR exerts a protective role in atherosclerosis relates to its cholesterol-lowering activity via the liver. BBR, in addition to this, has several other athero-protective effects including; anti-inflammatory and anti-oxidant properties, inhibition of vascular smooth muscle cell proliferation and improvement of endothelial dysfunction. BBR also increases glucose utilization in adipocytes and myocytes, while decreases glucose absorption in intestinal cells, resulting in a net hypoglycemic effect. BBR significantly decreases LDL and total cholesterol (TC) levels and reduces aortic lesions, (this is an effect similar to that of statin drugs). BBR significantly improves glucose tolerance, a significant reduction of TC, triglycerides and LDL with a significant increase of HDL levels, without major adverse effects. These findings, together with the good tolerability, suggest that supplements containing BBR might be recommended by a HCP in cases of hypercholesterolemia or diabetes.

Golden Rod Herb Tops

Goldenrod is a plant used as a traditional herbal approach to diabetes, gout, and arthritis. Traditionally regarded as a natural approach for supporting the body against a wide range of issues, its ability to aid and soothe the urinary tract has been extensively studied. In fact, modern science supports its use as a protector of urinary tract and kidney health.

Facts About Goldenrod and Kidney Health

Goldenrod has diuretic properties that help to release excess water from your body by increasing urine flow through the kidneys and bladder. This irrigates the kidneys and helps to remove renal deposits which otherwise might develop harmful stones. Goldenrod is a soothing and toning agent for the urinary tract, by its ability to reduce swelling. Less inflammation or swelling, allows for an easier release of mineral buildups, which could otherwise lead to kidney or bladder stones.

Stinging Nettle and Managing Blood Sugar

Stinging Nettles possesses both hypoglycemic and hyperglycemic constituents. Human studies have shown decreased inflammation markers and improved levels of fasting glucose. In short, it balances blood sugar levels whether high or low. Nettles are also known to aid in kidney functions due to its diuretic and anti-inflammatory effects.

Ginger

Ginger has been shown to modulate insulin release and it promotes glucose clearances in insulin responsive peripheral tissues, which is crucial in maintaining blood glucose balance. Thus, gingerol has been shown to improve glucose balance in diabetes. Several studies stated that ginger has marked effects of reducing lipids, and accordingly, increases insulin sensitivity. If hyperglycemia persists chronically, nerve damage may become apparent. This often times is a complication on diabetes.

The health benefits of ginger are largely due to its glucose regulation, antioxidants and anti-inflammatory properties, along with the benefits from its therapeutic compounds such as gingerol, shogaol, paradol and zingerone. Ginger is known to be antiviral, antibacterial, antifungal, as well as it soothes digestive tract.

CONCLUSIONS

Overall, benefits of incorporating Strauss Heartdrops, as well as Kidney Support Drops formula, is recommended in cases of diabetes, both as prevention of complications, as well as minimizing daily symptoms.

If you would like more information about our products please check out our website or contact us directly.

References available upon request.