TermiDM

VitaAiD® Professional Therapeutics

For blood glucose control and protection against diabetic complications | VA-081

Key Features:

- Helps to control blood glucose levels via different mechanisms that enable reaching the therapeutic goal more effectively.
- Contains Mulberry leaf extract that inhibits glucosidase, which digests disaccharides to glucose.
- Contains aqueous cinnamon extract that is clinically proven to reduce the glucose level by increasing both the insulin sensitivity and the insulin secretion.
- Contains milk thistle and alpha lipoic acid to help balance glucogenesis and glycolysis in the liver, as well as reduce the risk of neurogensis pathology of diabetic complication.

Indications:

Recommended dose:

- For people with pre- or mild hyperglycemia (serum glucose levels 7-9 mmol/L) - Take 1-2 capsule three times a day just before or with meals, or as directed by a health care practitioner.

Focus dose:

- For patients with moderate hyperglycemia (serum glucose levels 10-12 mmol/L) Take 2-3 capsules three times a day (with close blood sugar monitoring) just before or with meals, or as directed by a health care practitioner.

Quantity: 84 Vegetarian Capsules

Ingredients (per capsule):

Mulberry Extract (8:1) (*Morus alba*) (leaf).....77.5 mg
(equivalent to 620 mg dried herb)
Bitter Melon Extract (10:1) (*Momordica charantia*) (fruit).....85 mg
(5% triterpenoids) (equivalent to 850 mg dried herb)
Fenugreek Extract (*Trigonella foenum-graecum*) (8:1).....24 mg
(seed) (2% 4-hydroxyisoleucine) (equivalent to 180 mg dried herb)
Cinnamon Extract (*Cinnamomum cassia*) (10:1) (aqueous)....100 mg
(bark) (8% flavonoids) (equivalent to 1000 mg dried herb)
Gymnema Extract (*Gymnema sylvestre*) (18:1) (leaf).....22.2 mg
(75% gymnemic acids) (equivalent to 390 mg dried herb)
Milk Thistle Extract (*Silybum marianum*) (40:1) (seed).....75 mg
(80% silymarin; 30% silybin) (equivalent to 3000 mg dried herb)
Alpha Lipoic Acid.....50 mg
Chromium (from chromium AAC (glycine)*).....70 mcg

Non-medicinal Ingredients: Silicon dioxide, L-leucine, pullulan/ hypromellose (capsule)

Suggested Use: Adults - Take 2 capsules before or with a meal, frequency as directed by your health care practitioner, or once per day.

Description:

TermiDM combines a number of herbal remedies for synergized blood glucose control. It helps to control blood glucose levels through a number of mechanisms, including inhibiting glucosidase, improving insulin sensitivity and enhancing insulin secretion.

TermiDM controls hyperlipidemia as well by reducing the concentration of VLDL cholesterol and increasing the concentration of HDL-cholesterol. It also exerts potent direct and indirect antioxidant effects to protect against the degenerations of beta-cells, peripheral nerves and blood vessels caused by oxidative stress. All of which contribute to reduced risk in diabetic complications, such as neurodegeneration and atherosclerosis.

Mulberry Leaf

Mulberry leaf contains 1-deoxynojirimycin (DNJ), a potent glucosidase inhibitor which suppresses abnormally high blood glucose levels by inhibiting the enzymes that break carbohydrates down to glucose.

A human clinical study demonstrated that the oral administration of 3.6 g of mulberry leaf powder/day significantly suppressed the elevation of postprandial blood glucose in 12 subjects after 38 days of treatment.[1]

Mulberry can also treat diabetes-associated hyperlipidemia. A study where 3 g/day of mulberry leaf powder was administered to diabetic patients for 4 weeks resulted in significantly decreased concentration of serum total cholesterol (12%), triglycerides (16%), plasma free fatty acids (12%), LDL-cholesterol (23%), VLDL-cholesterol (17%), plasma peroxides (25%), and urinary peroxides (55%), while increasing HDL-cholesterol by 18% and significantly reducing fasting blood glucose concentrations.[2]

Bitter Melon

Bitter melon has been shown to significantly reduce blood glucose levels, as well as increase concentration of plasma insulin. Triterpenoids, the active ingredient of the bitter melon, has insulin mimetic activity.

A systematic review[3] of patients with type 2 diabetes have reported immediate beneficial effects on blood glucose with the intakes of bitter melon juice and its insulin-like extract. Two other open trials also reported positive effects on glycaemic control after 7-11 weeks of using bitter melon.

Fenugreek Seed

Fenugreek extract (standardized with 4-hydroxyisoleucine) can stimulate insulin secretion inhibit the activities of alpha-amylase and sucrase.

A study showed that fenugreek seeds reduced insulin resistance in patients by decreasing insulin levels approximately 7% and increasing insulin sensitivity approximately 56%.[4]

Fenugreek also minimizes some of the complications of diabetes,

such as high cholesterol and atherosclerosis. A clinical study conducted to evaluate the hypolipidemic effect of fenugreek showed that 25 g of fenugreek seed extract administered over 20 days decreased serum cholesterol, triglycerides, LDL, and VLDL by over 25%.[5] 50 g of fenugreek seed extract yielded even better results, decreasing each parameter between 33% to 40%.

Cinnamon Bark

Aqueous extracts of cinnamon bark have been shown to increase glucose uptake and glycogen synthesis, and increase activation of the insulin receptor, leading to an increase in insulin sensitivity.[6]

In a clinical study, subjects underwent an Oral Glucose Tolerance Test (OGTT) after being supplemented with either 5 g placebo, 5g of cinnamon, or 5g cinnamon taken 12 hours prior.[7] The results showed that the plasma glucose responses were decreased in both groups that took cinnamon supplements (cinnamon right before decreased by 12.9% and cinnamon 12 hours before decreased by 10%). The study also showed that insulin sensitivity was elevated in both cinnamon groups.

TermiDM uses aqueous extract of cinnamon bark to eliminate the content of cinnamaldehyde - a common irritant present in ethanolic extracts.

Gymnema Leaf

Gymnema leaf extracts have been reported to possess a variety of anti-diabetic actions such as reduction in insulin requirement, improving blood glucose homeostatsis, inducing better control of hyperlipidemia associated with diabetes, reducing amylase activity in serum, and increasing beta-cell function.[8]

A clinical study was conducted where patients with Type 1 diabetes were administered 400 mg of gymnema extract along with insulin for periods ranging from 2 to 30 months.[9] It was observed that insulin dosage in the group receiving gymnema had to be reduced by approximately 25% after 6-8 months and by approximately 50% after 26-30 months. Reductions in serum amylase, lipids and HbA1c levels were also observed with gymnema treatment.

Milk Thistle

It has been reported that milk thistle inhibits insulin secretion in response to glucose stimulation. This effect may inhibit hyperinsulinemia and subsequent insulin resistance, which in turn leads to a reduced need for exogenous administration of insulin. Milk thistle is also a powerful antioxidant, preventing diabetes complications due to free radicals.

A clinical trial[10] examined cirrhotic patients with Type 2 diabetes who received 600 mg of milk thistle extract for 12 months. Mean fasting-blood-glucose declined from 190mg/dl at baseline to 165 mg/dl at the end of the trial. HbA1c declined from 7.9% at baseline to 7.2% at the end of the trial. Mean daily insulin requirement also decreased from 55 units/day at baseline to 42 units/day.

Alpha Lipoic Acid

Alpha-lipoic acid (ALA) is an antioxidant largely present in the peripheral nerves. Several studies have also established the neuroregenerative and neuroprotective effects of ALA.

A clinical study involving diabetic patients used ALA to treat diabetic mononeuropathy of the cranial nerves.[11] After 60 days of treatment, peripheral, ocular cranial and cardiovascular neuropathic symptoms improved significantly.

Chromium

Chromium, the glucose tolerance factor, is required for the maintenance of normal glucose metabolism. It potentiates the action of insulin, activates insulin receptors and postpones the removal of plasma insulin by the liver. Chromium is also a powerful antioxidant. Supplementation with chromium can improve insulin sensitivity and lead to more efficient glucose uptake.

Reference:

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6. Khan A, Khattak KN, Safdar M, Anderson RA, and Ali Khan MM. Cinnamon improves glucose and lipids of people with type 2 diabetes. Diabetes Care. 2003; 26: 3215-3218.
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9. Shanmugasundaram ER, Rajeswari G, Baskaran K, Rajesh Kumar BR, Radha Shanmugasundaram K, and Kizar Ahmath B. Use of Gymnema sylvestre leaf extract in the control of blood glucose in insulin-dependent diabetes mellitus. Journal of Ethnopharmacology. 1990; 30 (3): 281-294.
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Caution

Do not take if you are pregnant or breastfeeding. Monitor blood glucose levels regularly when taking this product. Consult a health care practitioner prior to use if you have diabetes. Discontinue use if hypersensitivity occurs. Discontinue use and consult a health care practitioner if you experience symptoms of hypoglycemia including feelings of anxiety, dizziness, tremor, sweating, nausea or headache. May cause irritation of the gastric mucous membranes and reflex.

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