



Nopal

Stock #475-3 (100 capsules)

Nopal, perhaps more commonly known as prickly pear, is native to Mexico and the Southwest and has been naturalized in semi-tropical areas throughout the world. Nopal can also be found growing throughout the Plains, with at least one variety even found along the Atlantic coast.

In Mexico, nopal fruit is used to make preserves and an alcoholic drink. The split stems, or pads, are often tied around injured limbs as a first-aid measure. In South America, the large, thorny pads, or stems, are boiled and drank as a tea for bladder problems, fever, high blood pressure, and malaise. The fresh juice from nopal pads are recommended to ease childbirth, while the pads themselves are eaten for arthritis.

Nopal flowers are astringent and reduce bleeding and hemorrhaging. Nopal flowers are often used for conditions affecting the gastrointestinal tract, especially colitis, diarrhea and irritable bowel syndrome. The flowers are also recommended for treating an enlarged

prostate gland.

Nopal fruit is very nutritious and is a rich source of mucilage and pectin, fruit sugars, beta-carotene, and vitamins B1, B2, niacin (B3) and C. Nopal also contains the minerals calcium, iron, and magnesium, and the electrolyte minerals potassium and sodium. Nopal provides easily-digested protein in the form of 17 amino acids, including the 8 essential amino acids. Nopal also contains insoluble plant fiber such as lignin, which helps provide a feeling of fullness, suppresses cravings and the urge to binge, and facilitates healthy gastrointestinal functioning. Nopal focuses much of its therapeutic action on the digestive system, including the colon, liver, and pancreas.

Perhaps the most notable medicinal benefit of this cactus concerns the glandular functioning of the liver and pancreas—two organs which contribute to the regulation of blood sugar levels in the body. Nopal has been shown to normalize and maintain healthy blood sugar levels by enhancing the body's sensitivity to insulin and stimulating pancreatic production of insulin. Studies show maximum blood sugar-lowering effects last approximately 4-6 hours after nopal is given to both Type II diabetics and non-diabetics. Furthermore, nopal's fiber content is also beneficial, as fiber has been shown to play a key role in controlling blood sugar levels. Side effects associated with diabetes, including blood vessel, nerve, and optical tissue damage, may be improved with the use of nopal based on the plant's impressive nutritional content of vitamins involved in both tissue protection and repair.

Researchers at the National Polytechnic Institute in Michoacan, Mexico, have confirmed nopal's benefit to individuals with diabetes. In one study conducted at the institute, insulin-dependent diabetics were given 60mg of nopal pectin daily and were able to markedly reduce their insulin requirements. When compared to the effects of other plant pectins, nopal produced effective results at much lower dosages.

According to scientists at the University of Arizona, the pectin content in nopal fruit has also been shown to reduce LDL cholesterol and the risk of heart disease in animal experiments. Pectin is believed to reduce cholesterol by increasing the number of LDL receptors in the liver which are responsible for binding with low-density lipoproteins and eliminating them from the body. Along with dietary fiber, nopal's content of niacin (B3), and various amino acids are believed to also contribute to the plant's ability to inhibit the conversion of excess blood sugar into fat, metabolize fat and fatty acids, and decrease the amount of bile acids which in excess, can be converted into cholesterol. Furthermore, the antioxidants in nopal, namely beta-carotene and vitamin C, have been shown to reduce oxidative damage to vessel walls and inhibit plaque formation associated with arteriosclerosis. An article published in the Arizona Daily Star noted that the American Heart Association-Arizona chapter has awarded the university a \$70,000 grant to further investigate the cardiovascular benefits of nopal.

Nopal is also beneficial for healthy gastrointestinal functioning due to its store of mucilage, lignin, pectin, and other vegetable fiber which aid in neutralizing hyperacidity and protecting mucous membranes along the gastrointestinal tract. These soluble and insoluble vegetable fibers also help absorb toxins from the bowel, give bulk to the stool, and reduce bowel transit time. Nopal is a healthy alternative for those unable to take psyllium.

NSP's Nopal supplement contains two varieties of this cactus: *Opuntia streptacantha* and *Opuntia ficus-indica*. Each capsule of Nopal provides 400mg of nopal fruit.