



DESERT FOODS for a HEALTHY LIVING

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The mission of Native Seeds/SEARCH (Southwestern Endangered Aridland Resources Clearing House) is to conserve, distribute, and document the adapted and diverse Varieties of agricultural seeds, their wild relatives and the role these seeds play in cultures of the American Southwest and Northwest Mexico.

Desert foods such as chia, nopales, tepary beans, and mesquite offer many health benefits, particularly for those who are diagnosed or susceptible to type 2 diabetes. Many of these foods are considered “slow release foods” because they are high in soluble fiber that are digested and absorbed slowly. These traits help to control blood sugar levels and provide increased endurance.

Desert foods also contain natural sugars, healthier than processed sugars, that can satisfy a sweet tooth. Regardless of your diabetes risk, individuals wishing to adopt a healthy diet will find many benefits of desert foods. The slow-release characteristics, high vitamin and mineral content, and cholesterol lowering effects of many desert foods are beneficial for all people.

More information about these foods can be found at www.nativeseeds.org.

ACORNS

The naturally occurring tannin in acorns help flatten blood sugar peaks after a meal and are one of the most effective traditional foods in controlling diabetes. The Emory Oak (*Quercus emoryi*), a native tree to the Southwest, produces acorns that are far less bitter than those produced by other oaks. Acorns from Emory Oaks require no special processing to eat. Other species produce acorns with a high tannin content that must be leached via boiling or soaking in order to make them edible and less bitter.

In the Southwest region acorns are known as bellotas. The best tasting Emory acorns will have a yellow or cream colored meat when shelled. Bellotas can be gathered in mid-elevations in the Southwest in July and August.

AMARANTH

Amaranth (*Amaranthus spp.*) has many health benefits. The grain is very high in protein as well as lysine, an amino acid absent from many other grains. It has high levels of vitamins A and C. When ground, it can be used as a supplemental flour for tortillas, breads, or pasta. Studies have also shown that consumption of amaranth grain (whole) leads to increased insulin levels and decreases in blood sugar. Amaranth greens also offer nutritional benefits as they are high in calcium and iron.

Amaranth can be wild harvested during the summer monsoon season. Young, tender leaves can be eaten raw or cooked like spinach. Some varieties (*Amaranthus cruentus*) produce golden blond seeds which are the best type to use as an edible grain. The varieties that produce black, red, or orange seeds can also be consumed as a grain. Amaranth can also be grown in the garden or found commercially in many health food stores.

BEANS

Beans, including teparies, kidneys, pintos, limas, garbanzos, black-eyed peas and lentils, are the quintessential “slow release” food. Because they digest slowly, the converted sugars from the starches travel into the bloodstream over a period of 4-6 hours, as opposed to many processed foods, which move sugar into the bloodstream during a quick half hour energy fix. Beans are also a good source of low-fat protein and iron, and a good alternative to red meat. Tepary beans are especially helpful for controlling blood sugar, as they contain fewer carbohydrates than other beans.

Dried beans are easy to include in the diet because they are available at low cost and the diversity of recipes and flavors makes it easy to find new ideas for preparation. Many varieties of beans have been grown in the desert for centuries and are adapted to the heat and drought conditions of the Southwest. They are easy to grow in your own garden.

CACTI

Prickly pear cactus pad, or nopalitos, and fruit, or tunas, can help lower blood sugar and cholesterol. When you cut open the inside of a cactus pad you can see the sticky, almost soapy, gooey pectin. The gooey inner substance of the pad helps the cactus hold onto the water it needs for survival in the dry desert. Within the body, this process is mimicked and the gooey inner substance of cacti acts to slow down digestion and absorption of sugars, thereby lowering blood sugar levels. The high amounts of fiber also lower cholesterol.

Other cactus foods with similar blood sugar lowering effect include cholla buds, which are the unopened flowers of the cholla cactus.

Raw fruits from prickly pear, saguaro, barrel, and organ pipe cacti contain the same special starches as prickly pear pads. Cactus fruits are high in antioxidants, vitamins A and C.

CHILES

Chiles are rich sources of chromium, a mineral needed by the body in small amounts because it helps process sugar. Diets high in processed foods and excess sugar deplete chromium stores, contributing to insulin resistance and diabetes. A diet that includes chiles and bell peppers, as well as tomatoes, and greens, can increase chromium levels, improving the body's ability to handle sugar.

CHIA

Chia (*Salvia hispanica*) seeds are rich in a nutrient most of us are deficient in: Omega-3 fatty acids. Omega-3 fatty acids are critical for keeping down inflammation and therefore, pain in the body. Omega-3 fatty acids have also been demonstrated to reduce cholesterol and triglycerides. While the most easily digested and utilized sources of omega-3 oils are from fish, here in the desert, chia may be a more available ingredient. The seeds contain high amounts of protein, B vitamins, calcium, minerals, and are very low in carbohydrates.

You can chew them whole as a snack, use in baked goods, fruit salads, or add them to water with lime or lemon juice for a traditional "chia fresca" beverage. When chia seeds get wet they produce a little sack of mucilage, a jelly type substance which slowly releases sugar into the blood. This texture works well for weight loss as it gives a full feeling so you eat less.

MESQUITE

Many different types of beans can be gathered from native desert trees are also helpful at maintaining healthy blood sugar including palo verde, ironwood and mesquite. Mesquite in particular contains large amounts of slow-release starches, giving it a naturally sweet taste. This natural sweetness can help curb cravings for processed sugar.

Native Southwestern mesquite varieties including velvet, screwbean, and honey mesquites tend to have a sweetest flavor. Taste a pod from each tree before harvesting, looking for a sweet flavor and non-chalky texture. During the early summer, mesquite pods ripen and can be gathered by hand. Grinding can be done in a stone metate or you can take them to community milling events. Then they are ready to be used in baking or to make traditional 'oatmeal-like' porridges or dried cakes.

PLANTAGO

Plantago (*Plantago ovata*) produces edible seeds covered in a small husk that is high in soluble fiber. They decrease blood sugar levels and cholesterol. Plantago is also called Psyllium, Indian Wheat, or Plantain. Plantago grows wild in the Southwest and can easily be harvested in the spring. It is often consumed by placing a tablespoon of seeds in water or tea. Similar to chia, the seeds swell and produce mucilage that contributes to a feeling of fullness, preventing overeating.

SOURCE GUIDE

Increasingly desert foods can be found in mainstream grocery stores and regional shops. Many can be wild harvested. When wild harvesting always obtain permission from the individual or entity who owns the land. Do not harvest from areas that are polluted or contaminated by highway or high traffic road corridors or areas known or suspected to be sprayed by pesticides or herbicides.

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