

# Native Plants for Heart Health

By Elise Krohn, NWIC herbalist and educator

Close your eyes and listen - you will feel the rhythmic drum of your heart. It is easy to forget how hard it works for us every moment of our life. An adult heart can pump over 7,000 liters of blood per day, delivering vital nutrients to cells throughout our body and carrying away waste products. What we eat and drink, and how we live has a profound effect on our heart health.



Heart disease is the number one killer in our society – an epidemic that has been linked to modern foods and a modern sedentary lifestyle. Many nutrients in native foods including flavonoids and good quality fats are known to reduce the risk of heart disease. As we return to a traditional foods diet and get outside to gather the bounty of each season, we are giving our heart vitality and strength.

We celebrated American Heart Health Month this February through having a hands-on class at the Northwest Indian College at Lummi. The class was supported by a grant from DHHS, NIH, and the National Library of Medicine. Visit the Native Voices website at <http://www.nlm.nih.gov/nativevoices/>

Antioxidants – Cells are the tiniest structures in our bodies- the building blocks of life. They are constantly being attacked by molecules called oxidants and free radicals. These can tear cell membranes and damage cell components, leading to poor health or “aging” of cells. Some oxidative damage is a normal part of being alive. Yet, pollution including cigarette smoke and unhealthy food including refined food and fried food exposes us to excessive amounts. This is a contributing factor to developing type 2 diabetes, cancer, heart disease, and other chronic diseases. Antioxidants, which are found in many fruits and vegetables, stabilize free radicals. They are said to slow down aging, reduce inflammation and increase immune health. Berries are among the most potent antioxidant foods, so eat them to your hearts content!

Flavenoids – These plant pigments give berries and other fruits and vegetables their color. They protect the body in many ways including acting as antioxidants, protecting and strengthening blood vessel walls, and healing tissue. Scientific research has shown that flavonoids help protect the body from cardiovascular disease, varicose veins, Alzheimer’s disease, cataracts, glaucoma and the side effects of diabetes including diabetic retinopathy, kidney damage and vascular degeneration.

Vitamin C – This helps our body absorb Iron, heal cuts, and keep teeth and gums healthy. Our bodies do not make Vitamin C so we need to eat foods that contain it.



Fiber – Fiber helps to prevent constipation and normalizes gut health. It also lowers cholesterol and reduces the risk of heart disease and some cancers. Most adults only eat half the amount of fiber recommended by the USDA for optimum health.

# Hawthorn Berry

*Crataegus douglasii* (Native Black Hawthorn)

*Crataegus laevigata* (European Hawthorn)

Hawthorn is a large shrub or deciduous tree with branches covered in black thorns. The leaves are serrated and lobed with a medium to dark green color. Fragrant flowers are small and pinkish-white. They bloom in thick clusters. Fruits are blue black for our native variety or bright red for the European variety. They have large woody seeds. Hawthorn is in the rose family.

Hawthorn grows throughout the temperate North. There are several less common species that grow in our area. Flowers are pollinated by flies that are drawn to its' sweet, fishy aroma. Birds and small mammals prize the fruit for food.

**Preparation:** The berry, leaf and flower are all medicinal. In the spring, hawthorn leaves and flowers are gathered and dried. The red fruits are gathered in the fall and are carefully dried in baskets or in a food dehydrator. Tea – Steep leaves and flowers in boiled water for 15 minutes. The berries are steeped for 15-30 minutes or boiled for ten minutes. Drink up to three cups a day.

**Traditional uses:** Here in the Northwest, hawthorn has a variety of uses. The large black thorns were used to make fish hooks, sewing awls and lances for probing blisters, boils and for piercing ears. The wood is unusually hard and has been fashioned into tools and weapons. The berries are considered a health food and were mixed with fat and used as medicine for diarrhea. A decoction of the bark was taken for stomach problems, diarrhea, venereal disease, and to thin the blood and strengthen the heart.

Hawthorn is a tonic for the heart. It is used for a wide range of cardiovascular disorders and actually strengthens heart and blood vessel tone. Hawthorn increases the hearts ability to contract and gently relaxes outer blood vessels so the heart has less resistance to pump against. Hawthorn also relaxes smooth muscles of the coronary artery walls and allows more blood to flow into the cells of the heart. This is one of the main reasons hawthorn is said to nurture the heart. It can help balance blood pressure and alleviate acute conditions like angina or pain due to a lack of oxygen reaching the heart. Hawthorn is helpful in treating or preventing atherosclerosis (hardening of the arteries), which contributes to angina and heart attacks. Compounds called flavenoids in hawthorn help to protect and strengthen cardiovascular tissue. They are found in high quantities in the leaf, flower and berry. Hawthorn should be used with cardio-active pharmaceuticals like digoxin with close doctor supervision.



# Rosehips

*Rosa sp.*

Rose is one of the most important medicines in the Northwest. All parts of the plant are used for physical and spiritual medicine. In spring the fragrance of the pink flowers fills the air. By late summer and fall pollinated flowers transform into orange to bright red fruits called rose hips.



Rosehips are edible, but the hairy inner seeds are not eaten because they irritate the digestive system and are said to give people an “itchy bottom.” You can nibble on the sweet apple-flavored outer flesh. Seeds can be removed by hand (a labor of love) to make jam or to dry for tea, or you can use a jam mill to prepare rosehip jelly.

A tea from rosehips is prepared for sore throats, colds, diarrhea and other conditions when an astringent is helpful. Rose hips are high in vitamins C, B, E, K and A plus calcium, silica, iron, phosphorous and pectin.

## Easy Rosehip Jam

You will need de-seeded rosehips for this style of jam. They can be purchased in most natural foods stores or herb stores in the bulk tea section. Remove any sticks or dark brown rosehip tops that might be hard. Grind finely in a coffee grinder. Add apple cider or apple juice to the powder until it forms a jam consistency. Add honey to taste.



Place in a jar and refrigerate. Use as a spread on fruit or bread. This will only last 2 weeks when refrigerated, but you can freeze it. This spread is a tasty way to get vitamin C into kids during the cold season. You can modify the recipe by adding cinnamon powder, vanilla and other spices.

## Rose Hip Tea

*Just rose hips, both local Wild Rose and market Rose*

Rose hips are high in Vitamin C and bioflavenoids, making them excellent for immunity and for protecting heart and the blood vessels health. Use 1 heaping teaspoon per cup. Steep 20 minutes.



# Preparing Herbal Teas

The making of herbal teas for enjoyment, nourishment and wellness is a creative art. There is a bit of science to it as well, but brewing teas is a flexible and forgiving process.



Dried herbs are usually used for making tea. During the drying process, plant cell walls break open and dehydrate. When hot water is poured over plant material it easily rehydrates and extracts the taste, scent, nutritive and medicinal properties. Fresh herbs are fine for making tea if you want a light and aromatic brew, but it will not be as strong tasting and medicinal as dried herbal teas.

Having good quality herbs makes all the difference in the flavor and medicinal effectiveness. Harvesting your own herbs is always best. You know exactly where they come from and can connect with the plants directly. If you buy herbal teas at the store, try to purchase loose-leaf tea that has not been ground into a fine powder (these teas are not in bags). The more ground up herbs are, the more they lose their medicinal value over time. Dried herbs should look and smell something like when they were fresh. Loose-leaf teas can be put directly into a teapot, canning jar or non-aluminum pan with a lid. You can buy a strainer that fits over your teacup to catch the herbs.

**Preparing Tea:** Feel free to experiment and choose the proportion of herb to water that suits your taste. If you are using the tea as medicine, the ratio of herb to water should be enough to produce a fairly strong and medicinally active tea. A general ratio is:

- 1 ounce of dried herb per 1 quart of water or
- 1 tablespoon per cup of water

Place the herbs in a container and cover with boiling water. Cover with a lid to keep the aromatic compounds in your tea. Let steep for 10 to 20 minutes, and then pour through a strainer. Tannin-rich herbs such as black and green tea should steep for less time because they will turn bitter if steeped too long. Mineral-rich herbs including horsetail, red clover and nettle are best when steeped several hours to overnight.

**Storing Tea:** Teas are best consumed fresh, but when necessary, you can prepare larger batches and store them in the refrigerator in a tightly closed container for up to three days. Teas may also be stored in the freezer for a few weeks.

## Heart Happy Tea

*Two parts each hawthorn leaf and flower, lemon balm*

*One part each hawthorn berry, rosehips, rose petals*

*A sprinkle of lavender flower*

Rose hips and hawthorn are high in antioxidants that help to strengthen tissues in the heart, kidneys, and blood vessels. Rosehips are also high in vitamin C. Lemon balm, lavender and rose ease stress and add wonderful flavors to this tea. Steep 10- 15 minutes. Enjoy!

*Elise Krohn, Northwest Indian College, 2013*