

“HIPS, HAWS AND VITAMIN C”

by Jolene Adams

People have grown roses for many centuries and for many reasons. Today we grow roses mainly for the beauty they bring to our yards and homes. But in centuries past, the rose was revered for its value as food and medicine, as well as its beauty.

It is questionable whether the quaint prescriptions found in early manuscripts and printed herbals for concoctions such as "melroset" and "syrup of roses" would actually "strengthen the heart and taketh away the shaking and trembling thereof." But it has been proven that rose hips are a superb source of vitamin C, having a much higher content than citrus fruit.

Wild roses of many species are still abundant on the western prairies and throughout the mid-west, especially when water is anywhere nearby. They like sun. Most have pinkish blossoms, but there are white, yellowish, and pale reddish ones also. These roses, blossoming in thorny briar tangles, flower late Spring through mid-summer and then begin to set their haws, hips or berries, which are ripe by early fall. These hips, haws or berries are the cherry-sized red fruits of the rose bush left behind after the bloom has died. Although nearly all rose bushes produce rose hips, the tastiest for eating purposes come from the *Rosa rugosa* variety. The flavor is described as fruity and spicy, much like the cranberry.

Rose hips have been an important food for all Native American tribes where any kind of roses can be found. Most of them are very sweet. They are extremely high in vitamin C, much more so than oranges, for example. Dried, they keep well, and will always be available in winter. Rose hips have a tangy,

yet sweet, flavor and can be used fresh, dried, or preserved. The simplest use is to steep them for tea. Rose hip syrup, puree, jam, jelly, and sauce can be used as is or as a flavoring in other recipes.

Harvest the fruits after the first frost when they become fully-colored, but not overripe. They should yield to gentle pressure but not be soft or wrinkly. Most recipes advise removing the irritating hairy seeds before processing the fruit. When cooking with rose hips, do not use any metal pans or utensils other than stainless steel or you risk discoloration of the fruit and loss of its precious vitamin C stores.

To prepare, rinse under running water, trim off the blossom and stem ends with scissors, cut in half lengthwise, and remove the tiny hairs and seeds in the center. Dried rose hips need to be boiled about 10 minutes to make a tea of them; just pouring hot water over them results in a fairly tasteless brew. Use 2 tablespoons of hips per pint of water, boil covered. The hips must expand, split, and let the water get at the soft seeds within. The resulting tea may be pinkish, depending on the type of rose hips used. Be sure to strain the tea. The hot tea is acidic, but not as sharp as lemon juice. Some like it sweetened. A half-teaspoon of dried mint may be added to give it a different flavor. If you have purchased rose hips for tea you'll find only the hardened dried shell of the berry. Boil that 15 minutes for your tea. (Recipes for many foods using rose hips are abundant on the Internet.)

Native American women didn't brew their tea and throw away the cooked berries. These berries were used in soups and stews. The "leftovers" cooked out in a largish batch

of rose-hip tea (the berries expand a lot) are a good dinner vegetable, with butter and salt. There is still a lot of remaining food value in the cooked berries. At \$25/lb in a health food store - - who wants to throw them away?

During World War II, when the government urged householders to grow food in Victory Gardens as part of the war effort, rose hips were stressed as a high-Vitamin C food. At that time, there were plenty of recipes around for eating the actual berries, as "dinner vegetables" and as various kinds of preserves and jams. But they have gone out of fashion now, and the government would prefer you to buy ascorbic acid, for the quite inadequate Vitamin C that it states as a minimum daily requirement. (The body uses or excretes vitamin C; it is not stored. It is water-soluble, and no harm is done by "overdosing" if there is such a thing. All kinds of stresses apparently increase the need for this Vitamin. Linus Pauling believed and promoted the idea that mega-amounts promote good health and fight many diseases and effects of aging in a great variety of ways.)

It is now known that rose hips contain biologically valuable bioflavonoids. Citrus fruits -- usually cited as the best natural source of vitamin C -- have bioflavonoids too, but in the bitter white under-peel that is usually not eaten. Of course, you can buy bioflavonoid pills. Our drug industry is eager to accept your hard-earned cash.

A curious thing -- when I was reading and researching for this article, I looked at both "balanced nutritious meals, not pills" nutritionists' books and at books by the kind of dieticians who want you to swallow \$100-worth of vitamin and mineral diet supplements every day. Both types give long (meals) or short (pills) food lists for foods

that are good sources for various dietary requirements. Nobody mentioned rose hips. As mentioned -- they seem to have gone out of fashion.

Yet they are quite popular among health food buyers. By hanging around the big herbal area at the neighborhood 'natural foods store' and questioning people, I found that rose hips among these people are used only for tea -- no one considered eating them! They were quite surprised when I mentioned it could be done.

The following table is from the AGIS ethnobotanical database of Native traditional plant food phytochemicals. It's based on chemical analysis, and doesn't directly compare with USDA food nutrient analyses -- no real way to compare the parts-per-million reported with minimum daily requirements of vitamins and minerals in a certain amount of rose hip tea or cooked rose hips.

What the table shows is that rose hips are extremely high in vitamin C (ascorbic acid), have some beta carotene (plant form of Vitamin A), bioflavonoids, and considerable pectin -- a soluble form of fiber which helps to prevent intestinal cancers, lowers saturated fats and triglycerides, helps to control blood pressure and is good for the heart. But this table does not state the biochemical analysis in a way that is readily translatable into human nutrition. Nonetheless, I found it interesting.

Phytochemicals of Rosa spp			
<i>Chemical</i>	<i>Part</i>	<i>Low (ppm)</i>	<i>High (ppm)</i>

Ascorbic Acid	Fruit	1,000	12,500
Carotenoids	Fruit	100	500
Catechins	Fruit	8,000	9,100
Citric Acid	Fruit		
Flavonoids	Fruit	100	3,500
Fructose	Fruit		
Glucose	Fruit		
Isoquercitrin	Fruit		
Leucoanthocyanins	Fruit	13,500	17,500
Malic Acid	Fruit		
Pectins	Fruit	34,000	46,000
Polyphenols	Fruit	20,200	26,400
Quercetin	Fruit		
Riboflavin	Fruit		
Sucrose	Fruit		
Tiliroside	Fruit		