

## A Health Resource from Ancient Wisdom used Today

Hippocrates called the elder his "medicine chest." The fruit from this native North American and European shrub has been used for hundreds of years to relieve stress, various stomach ailments, congestion, treat wounds and to fight colds or the flu - all strains. Elderberry seems to promote a healthy complexion and generally strengthen the body's immune system.

A 1995 study published by the *Journal of Alternative and Complementary Medicine* found that nearly 90% of flu patients given elderberry extract were completely free of symptoms within two to three days, as compared to at least six days with a placebo.

The results of a clinical trial published in the *International Journal of Medical Research* in 2004, showed flu patients given one tablespoon of elderberry extract four times per day recovered in an average of 3.1 days compared to 7.1 days for those given a placebo.

**Dietary Sutherlandia and Elderberry Mitigate Cerebral Ischemia-Induced Neuronal Damage (Mouse Studies-Stroke)**  
"This study demonstrates that Sutherlandia and American elderberry botanicals ameliorate ischemia/reperfusion (stroke)-induced behavioral dysfunction, neuronal damage, and oxidative stress and inflammatory responses in microglial cells."  
<http://asn.sagepub.com/content/6/6/1759091414554946>

## Elderberry Benefits

Elderberry in various forms has long been used to boost the immune system, balance metabolism, support brain function and heart health, as well as to alleviate joint and muscle pain.

Referenced in traditional cultural practices to help against cold, flu, sore throat, coughs, various kinds of bacterial and viral infections, allergy relief and for urinary tract / bladder disorders.

High in antioxidants, vitamins and other nutrients, elderberry fruit, flowers, and some traditional preparations made from them evidence natural anti-inflammatory and anti-viral support.

A native perennial shrub, elderberry is rarely grown as a farmer's primary crop. It is often used in organic, regenerative agriculture or permaculture. Elderberry can be planted as a windbreak and to control erosion. Researchers note that it supports over 60 pollinators, most of them native.

We encourage everyone to do their own research.



Our network of about 100 growers is concentrated in the Midwest but stretches coast-to-coast.

MEC encourages consumers to buy regionally grown and processed elderberry products. We are committed to enhanced farmer profitability through economies of scale and by managing the quality supply of sustainably produced and Certified Organic elderberry and elderflower products. One goal is a broad network of regional production hubs to meet growing demand.

MEC actively helps farmers in the development and marketing of elder berry and flower ingredients supplied to many specialty products businesses and the River Hills Harvest brand. We seek to improve cultivation and harvest efficiency with the help of university and state agricultural resources, government programs and/or private initiatives.

**Bulk frozen destemmed berries**

**Bulk frozen raw berry juice**

**Dried elder berries**

**Dried elder flowers**

**Puree under development**

Please go to [midwest-elderberry.coop](http://midwest-elderberry.coop) for more information about our ingredient pricing, availability and contact.



*Christopher J. Patton, President  
Specialty Food Association's  
2018 Business Leadership Award recipient*

## Why Native North American Elderberry?

*It Tastes Better!*

An Introduction to Midwest Grown Native Elderberry Products



# Why Native Elderberries?

## North American *Sambucus (nigra) canadensis*

The stunning, aromatic flower clusters and mildly sweet, dark red-blue-black fruit of elder have been treasured for thousands of years in both the New World and Old. North American elderberry are a great source of antioxidant flavonoids, anthocyanins, quercetin and rutin adding up to seven different ones in all. Researchers have identified four similar antioxidants in the European *S. nigra* berry.

More nutrient dense than most berries, elder berries, flowers, juice and pulp possess antiviral, immune modulation and anti-inflammatory properties. Dark purple elderberries are also a good source of vitamins A, C, B6, fiber and minerals. Note the USDA table below right with more nutritional information available online.

Commercial production of elderberry is becoming a vital part of sustainable agriculture, and the number of acres dedicated to its intentional cultivation is growing. Most elderberry farmers produce other fruits, vegetables, and/or raise livestock. A growing number follow regenerative as well as certified organic practices. Regional sourcing of native elderberry offers consumers less processed alternatives through local and regional craft wineries, breweries, or specialty food / beverage businesses.

Trade data indicate that over 90% of all elderberry consumed in the USA is imported. Even most "Made in the USA" elderberry products use ingredients from imported European Black Elderberry, *Sambucus nigra*. European elderberries have bitter glycosides or proto-cyanides, so it is mostly highly processed to make safe extracts, concentrates or powders for supplements. Europeans enjoy syrups, sodas, alcoholic beverages and cordials from both elder flowers and berries that are very popular.

Native North American black elderberry grow as bunches of canes. They are often found along roadsides, forest edges and fields. Unlike European Black Elderberry, ripe native black elderberries (*Sambucus canadensis*) do not contain significant amounts of glycosides / proto-cyanides, so they are safe for most people to eat uncooked if clean and not sprayed. However, most recipes do call for some heating that provide other food safety benefits.

Midwest Elderberry Cooperative's website will give you a head start on learning more about this curious plant with many uses. You will find articles or links to general information about growing elder, the cooperative and a number of health-oriented academic research and herbalist/nutritionist resources. We have a few elderberry recipes and some botanical guides about the varieties of elderberry growing wild in North America.

For more information and reference resources go to:  
[www.midwest-elderberry.coop](http://www.midwest-elderberry.coop)

# The First International Symposium on Elderberry

Organized in June 2013 under the auspices of the International Society for Horticultural Science and hosted by the University of Missouri in Columbia, the First International Symposium on Elderberry attracted a wide variety of papers published in a peer-reviewed, stand-alone volume of *Acta Horticulturae* available for purchase online.

That the researchers shared great enthusiasm for elderberry's potential benefits to the well being of humanity and animals was evident. Most of the research has been done using European black elderberry, *Sambucus nigra*, but some of the University of Missouri's research used the North American native-grown and processed elderberry pulp and juice from *S. (nigra) canadensis*, which relates directly to the cultivation and potential health benefits of native North American elderberry.

Although a great deal of research - especially clinical studies - remains to be done, the potential health benefits of elderberry reported in their research supported its traditional use as a densely nutritional herb that has imparted a number of observed health benefits to its consumers. These results indicated the strong antiviral and anti-inflammatory properties that elderberry's flavonoid antioxidants have demonstrated in lab tests.

In summary, elder flowers and fruits provide a broad array of densely present nutrients that contribute to general health and enhance the body's ability to respond to health threats. Scientific research will take decades to explore these biological mysteries, but in the meantime the consumption of elderberry seems to do a body good. Just how good and in specifically what way, we will all need to wait and read about later.

From: <http://midwest-elderberry.coop/intl-symposium.html>



**Terry Durham of Eridu Farms  
 Pioneer Commercial Elderberry Farmer**

Eridu Farms is located near the historic Missouri River town of Hartsburg. Terry was a founding member of the Missouri Organic Association in the 1970s. He has spent many years educating growers and working with university researchers across America to establish the best commercial production practices and to provide healthy plants to new growers.

## Oxygen Radical Absorption Capacity (ORAC) of Selected Raw Berries

Raw Berry Fruit	ORAC $\mu\text{mol TE}/100\text{g}$			Total Phenolics (mg GAE/100g)
	Hydrophilic ORAC	Lipophilic ORAC	Total ORAC	
Blackberry	5802	103	5905	477
Blueberry	4633	36	4669	311
Cherry (sweet)	3730	17	3747	259
Chokeberry /Aronia	15820	242	16062	2010
Cranberry	8888	202	9090	503
Elderberry	14500	197	14697	1950
Goji berry	3173	117	3290	NM
Grape, red	1837	NM	1837	170
Raspberry	4927	138	5065	414
Strawberry	4266	36	4302	332

Note: The above data represent mean values. The actual content in any individual sample of fruit may show significant variation from the above content. The USDA database provides details of the estimated accuracy for their published results. Thus, this table's data may be relied upon to indicate the relative ORAC potential for the fruits listed.

Source: U.S. Department of Agriculture, Agricultural Research Service, 2010. Oxygen Radical Absorbance Capacity (ORAC) of Selected Foods, Release 2. Nutrient Data Laboratory Home Page: <http://www.ars.usda.gov/nutrientdata/orac>