Health and Berries

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Americans now spend an insane proportion of their income on "healthcare." When I was 12 years old (that's in 1950!), we expended an average of 4.5% of our income on healthcare, or \$4.50 out of every \$100 we earned.

In those days we also spent around 19% of our income on food, but that was mostly *real* food such as nourishing fruits, vegetables, grains, legumes and animal proteins. Because most garden soils still retained some natural fertility, their produce could well support and maintain health, energy and reproduction. When health is well maintained, little is needed for futile attempts to repair it after it's broken.

Food in those days came mostly from farmers that still stewarded their soil and fields. Meals at home were common, and Mom prepared them from scratch with meats, milk, butter, cheese and eggs that were produced locally on small farms, instead of today's typically huge animal confinement prisons. In the 1950s animals were mostly fed a natural diet of grass, hay, silage – green feed they were designed to consume. Consequently, human "healthcare" was not a major issue to the same degree it is today.

In our present decade, the USA spends close to 20% of its GDP on healthcare according to government statistics, and that "care" more closely resembles an industrial assembly line of sickness maintenance than an effective system to restore and maintain wellness.

How much is 20% of GDP? This astronomic number translates to nearly \$9000 per person. Put another way, we jointly on average, spend just short of \$25 per person per day on "healthcare" in this country, well over double of what we spend on food - much of which is but a cheap chemical imitation manufactured to look like food. Having lived and witnessed the transformation of agriculture and food and healthcare, I can't help but conclude – as many health practitioners, nutritionists, biochemists, other scientists and researches have – that the primary and most fundamental cause of our degenerating health is what we consume as "food."

Food, real food, is designed to sustain health. After all, every molecule, or every cell, of every tissue, of every organ, of every system, of out entire body is made from the food molecules we choose to ingest. Food is the raw material from which we are assembled, made, maintained, repaired and empowered.

This is prime reason why we – my farm team and I – have chosen to farm FOR health. We build and steward our soil. Plants get almost all of their nutrients from the soil. So if the nutrients, mostly minerals, are not in the soil, they can't get into plants. And if they don't get into plants, they can't get into animals and us. And if we don't get what we need, we will suffer from malnutrition, from deficiencies. Consequently, we degenerate prematurely and incur huge healthcare bills in futile attempts to regain health. Even Bill Gates, with all his wealth, cannot buy health. He has to earn it by the daily choices of food and other health-sustaining choices he makes, or suffer the degenerative consequences. So also with you and me.

So what does all this have to do with berries? I am a firm believer in "grazing widely" as healthy animals do in nature. However, there are certain plants that are exceptionally valuable in building health, and berries are some of these. Interestingly enough, some berries are particularly powerful accumulators of antioxidants, particularly useful to us who live in an era and environment that requires these in mega doses. Thus we have chosen to work particularly with dark berries. The darker the berry, the higher the antioxidants! Among these are black currants, aronia, and elderberries.

Elderberries have a particularly long, long history of use for health purposes as well as gustatory delights. In addition to wide use by ancient indigenous peoples, early mention of them in western history goes back to Egyptian medicine over 3500 years ago. Hippocrates, widely considered the father of western medicine, referred to the elderberry plant as his medicine chest. He even wrote a book on elderberry use for health purposes.

It was only in June 2013 that scientists from all over the world congregated in Columbia, MO for **The First World Symposium on Elderberries,** under the auspices of the International Society for Horticulture Science (<u>www.ishs.org</u>). There they shared among themselves and other participants. I was there for the part of it concerning their knowledge of "everything elderberry." It was superb! And you missed it!

Fortunately, Chris Patton, my elderberry partner, scholar and founding director of our **Minnesota Elderberry Cooperative (www.Minnesota-Elderberry.coop)** was also there and took detailed notes. If you log on to the Minnesota Elderberry Cooperative website, you can read a one-page synopsis of many of these presentations. (Click on "Symposium".) However, if you want the detailed science and research behind all these, you may order the official, peer-reviewed *Acta Horticulturae* (ISSN 0567-7572) of this symposium directly from the International Society for Horticulture Science (www.ishs.org). Though published in Belgium, it is written in English. Then you can spend a lot of your winter days educating yourself and digesting what the best of the best of elderberry scientists know about this berry.

Besides growing elderberries for their flowers and fruit, propagating nursery plants to make them available to local and regional growers, I also do some farmer mentoring under the MOSES mentorship program. One of the questions that often arises with new growers is how easy or difficult is it to grow elderberries vs. other, better-known berries. Here is a summary of what I recently wrote to one of my berry mentees on this issue:

- 1. Elderberries are native to our country and have most likely never become a thriving industry because there was no mechanism to easily and speedily de-stem them. With the advent of the first mechanical de-stemmer this major obstacle has been removed.
- 2. We still import 90% or more of out elderberry products from Europe. There is a huge pent-up demand for producing our own, especially with the grassroots movement for local and regional food sources and exploding demand for natural medicine.
- 3. Elderberries are one of the least demanding berry crops to grow. One does not need to attend to them on a daily basis, thus can have acreage away from home and still be successful.
- 4. Elderberries can bring a relatively quick return on investment, producing a baby crop within 15 months of planting, especially when using MaxiPlug type starts.
- 5. Elderberries are much less perishable than strawberries or raspberries.
- 6. Elderberries have a longer harvesting window. With strawberries and raspberries,

especially on hot summer days, one has to pick the ripe ones daily or risk loosing some of the crop. With elderberries, we usually harvest them 3 or 4 times a season, about a week apart – in late August and September here in east-central Minnesota.

- 7. Elderberries also have a long marketing window, both fresh and especially de-stemmed and frozen.
- 8. Elderberries lend themselves well to steam distilling with our imported Finnish steam juicer and thus efficiently and cost-effectively extract and can or bottle the concentrated juice for use as a superb beverage or medicine. We use the same steam juicer for black currants, grapes, crab apples, tomatoes and much more. A friend of ours in Utah has been using these identical steam juicers for a quarter century to produce black currant and other berry juices on a large commercial scale.

There is no perfect berry that does not require some knowledge, care and work. Work, both mental and physical, can and should actually be fun, enjoyable, and health building. Elderberries are an easy crop to start with, even for novice growers. While planting and caring for this marvelous crop provides the opportunity for some healthy physical work in fresh air and vitamin-D creating sunshine. By including some elderberries for food, drink and medicine along with other healthy food choices, who knows, you might end up with the sort of vibrant health that cannot be purchased with any amount of "healthcare" dollars. Why not grow your own health?