

# The Apple Cider Vinegar Story

• organic and unpasteurized •

## A Tale of Mineral Wealth and Health

By Tatiana Kurakin  
&  
Jim Druffel



### Background and History

Knowledge of the curative powers of Apple Cider Vinegar dates back to, at least, the time of Hippocrates (460-370 BC), but for our story we'll fast forward to the late 1950's and to a Vermont physician and "country doctor" by the name of Deforest Clinton Jarvis (1881 to 1966).

Dr. D.C. Jarvis graduated from Vermont Medical College in 1904 and by 1909 began his medical practice in Barre, Vermont where he became intrigued with the "Folk Medicine" practiced by those farmers, dairymen, mothers, wives and others that he considered "close to the soil". A renaissance man that could play any instrument he picked up, creator of intricate jewelry and gifted with a simple, honest and engaging writing style, Doctor Jarvis was probably a great guy to party with.

He became interested in the practices of those "close to the soil" Vermonters, who for generations had been correcting health problems with practices outside of the "Organized Medicine" he had been taught in medical school. Concerned that these health practices (and the science behind them) were likely to be lost forever in the onslaught of the 1950's post war era, he set about recording them for his daughter and her future family. He was not interested in the "Garlic-around-the-neck" cures often associated with "Folk Medicine" medicine, but in the practical and effective use of kelp, honey, maple syrup, castor oil, corn oil, a long list of edible leaves, herbs and yes - Apple Cider Vinegar (ACV).

Most likely with the encouragement of family and friends, Dr. Jarvis turned his private collection of notes and observations into a book titled:

*FOLK MEDICINE: A Vermont Doctors Guide to Good Health.*

Imagine his surprise when this modest collection of personal observations, experiments, theories and scientific rationale became a New York Times best-seller for two years and was reprinted 12 times between February of 1958 and July of 1959, with over four million copies sold to date.

The use of Apple Cider Vinegar was prominently featured in his book and because of its effectiveness in mitigating (or eliminating) a wide variety of maladies, along with its low cost and simple and safe formula for usage, the interest in Apple Cider Vinegar went viral.

We can only imagine the good doctor's shock and surprise when in March of 1964, the Sterling Cider Company, selling a Honey & Apple Cider mixture described in his book, had \$60,000 of inventory confiscated by the FDA for "promoting the product as a medicine". So much for Mr. Hippocrates and his admonition: "let your food be your medicine and your medicine be your food"!!!

Dr. Jarvis was not charged with any wrong-doing, but it must have delighted the nay-sayers of the Apple Cider Vinegar "movement" and certainly put a cloud over its popularity, but only for a while.

### Mineral Depletion - The Slow-Motion Health Crisis (10)

In 1936, Dr. Charles Northern warned the US Senate (Document #264) that our soils were minerally depleted. Based upon research from Yale, Rutgers, Johns Hopkins and Columbia in conjunction with the USDA, he stated it this way:

"...Countless human ills stem from the fact that the impoverished soil of America no longer provides plant foods with the mineral elements essential to human nourishment and health ..." He goes on to say: "It is not commonly realized, however, that the vitamins control the body's appropriation of minerals,

and in the absence of minerals they have no function to perform. Lacking vitamins, the system can make use of some minerals, but lacking minerals, vitamins are useless". Weighing in on the subject, years later, two-time Nobel prize-winner Linus Pauling (of vitamin C fame) comments, "You can trace every sickness, every disease and every ailment to a mineral deficiency". Both of these quotes are from Dr. Robert Thompson's book *The Calcium Lie #2*.(1)

Going back to Dr. Jarvis for a moment, he states that the mineral and trace element content of human blood is very similar to sea water.(2)

So, it's hard to imagine that we'll get the full array of minerals from our plant friends if their mineral "diet" is limited to a few synthetically produced "fertilizers" containing only Potassium, Phosphate and Nitrogen and grown in increasingly sterile soils, as Dr. Northern warned.

### The Science Behind Minerals

So, minerals and trace elements, in the opinion of Dr. Northern, Linus Pauling and many others, are critical building blocks of life and essential to vitamin formation, growth, repair, general metabolic health, nerve function and well being. Now let's bring on Hermann Aihara, the pioneer of macrobiotics in the USA, to add his perspective, and his further categorization of the major minerals contained in food as "Acid Forming" and "Alkaline Forming."

This distinction is a "big deal" in appreciating the Apple Cider Vinegar story, so bear with us as we dig a little deeper into the science:

The minerals of Sulfur, Phosphorous, Chlorine and Iodine in foods are actually ACID-FORMING when metabolized in the body.

Conversely, the minerals of Sodium, Potassium, Calcium, Magnesium and Iron in foods (which are prevalent in Apple Cider Vinegar) are actually ALKALINE-FORMING when metabolized in the body.(3)

This explains nicely how a lemon, which is very acid to the taste (or open wound) can actually be highly alkalizing when metabolized. Why? Because it contains a powerful stash of alkalizing minerals (potassium, calcium, magnesium and iron) in a citric acidic solution. It seems that these alkalizing minerals are "preserved" in an acidic fluid. Nice trick on the part of Mother Nature to provide a balance of alkalizing and acidifying influences.(4) This also explains how Apple Cider Vinegar works to mineralize and alkalize the body and why, like Lemon, it counteracts the acidity (acidosis) prevalent in our "Standard American Diet".

This is not to say that Alkaline forming minerals in food are "good" and that acid forming ones are "bad". We need all of them and both of them so the body can adjust its Acid/Alkaline balance as needed to our ever-changing metabolism.

Now we come to the big unexploded nutritional bombshell that virtually no one is talking about regarding our mineral and Apple Cider Vinegar story, and here it is:

Only minerals in their ionic and water soluble state can pass through our cell membranes and be utilized.(5) Ionic minerals, by definition, are not clumped together with other stuff and are small enough to be admitted through the outer membrane of our cells. Furthermore, these ionic minerals have an electrical charge (positive) that draws them to our negatively charged cell membranes, where they get the red carpet welcome.

*continued*

So let's complete our scientific review by following the "mineral trail" and how bio-available minerals (ionic and water soluble) get into a teaspoon of Apple Cider Vinegar and finally, into you:

1. The mineral trail starts with the soil and its cast of characters, the micro-organisms. If they haven't been poisoned or fried by synthetic chemicals, these countless little "Soil-Alchemists" we call micro-organisms are attracted to the sugars that the plant roots exude for their little friends.(6)
2. In a timeless barter system, the roots feed their sugars to the micro-organisms, and in return the micro-organisms "feed" the roots with usable, dissolved minerals (think ionic, water soluble).
3. If the roots happen to be of an apple tree, then these "pre-digested" minerals travel from the roots to the leaves and branches for growth, repair, metabolism, and in the fall of the year, they are concentrated in the seeds and flesh for the next generation - *the apple*.
4. Next, we harvest and ferment the apples, converting their sugars first to alcohol and then to acetic acid. The acetic acid is not only anti-bacterial, but preserves the concentrated bio-available minerals (and enzymes).
5. Now we dilute the Apple Cider Vinegar with water and maybe add a little raw honey. When we drink this mixture, our own "gut biome" is now awash in the usable "building blocks of life". With minimal digestive effort, the minerals can be rushed out to our cells, the ultimate mineral "audience".

On a final note: While an argument can be made that there are other fruits and vegetables high in Potassium as well as other alkalinizing minerals, Apple Cider Vinegar seems to provide the highest concentration of bio-available minerals without the baggage of sugar and starches that accompany other sources. And while it can be argued that ACV does not supply minerals in great quantities, it is our suspicion that bioavailability may be more important than quantity. Most likely, the variety and proportion of ionic minerals and trace elements present in ACV would reflect those naturally occurring in Apples.(9)

These minerals and trace elements are also suspended in a positively charged acetic acid solution (versus a solid food) and may be a greater health benefit than the raw number of minerals listed on food labels!

### **Uses of, and How to Use Apple Cider Vinegar**

If you were to ask Dr. D.C. Jarvis what Apple Cider Vinegar "cures", he probably would be at a loss to tell you what it doesn't "cure" (or help). Following is a short list of maladies addressed in his book and alleviated by Apple Cider Vinegar :

Overweight (obesity), Chronic Fatigue, High Blood Pressure, Sore Throat, Skin Problems, Poison Ivy, Shingles, Night Sweats, Shrinking Varicose veins, Impetigo and Ring Worm, for starters. His success with ACV in curing persistent Mastitis, an infection of the udder in dairy cows ( and a sure "death sentence" for them) must have made him a local hero. Besides cows and people, he also had great success with race horses, hunting dogs, minks, turkeys and chickens!

Current Medical Wisdom cautiously supports Apple Cider Vinegar for the following health benefits: (7)

1. The anti-bacterial effect of Acetic Acid
2. Lowers Blood Sugar Levels and fights diabetes
3. Helps reduce weight and belly fat
4. Lowers Cholesterol and improves Heart Health
5. May have protective effects against Cancer.

As far as the dosage of ACV, nothing could be easier, or less dogmatic. Simply add one to two teaspoons (or more) of ACV to about 8 ounces of water, and if you wish, add two or so teaspoons of raw honey. You'll get all the minerals and good things in raw honey, namely: More potassium, plus iron, copper, manganese, silica, chlorine, sodium, phosphorous, aluminum, and calcium.[8] It makes a delicious drink using warm water on a cold morning and a great evening drink for the bedside table. How often should it be taken? About 2 to 3 times a day, more when you're stressed, less when you're not.

**Suggestion:** Use different brands of organic ACV and Raw Honey, they all have differing mineral profiles based on the local soils and flowers in bloom.

So that's it. Taking Apple Cider Vinegar kind of reminds us of the joke about playing a country music song backwards; you get your girlfriend back, your dog back and your truck back. Only with Apple Cider Vinegar, you'll have a good start at getting your health back and staying healthy, even if you already are !!!

### **References:**

*Note: Some of these sources may be out of print but should be available (used) at Abe-books.com. We recommend reading them all. They're packed with great info.*

- (1) *The Calcium Lie #2* by Dr. Robert Thompson. The quotes by Dr. Northern and Linus Pauling are from Chapter one, "Minerally Bankrupt". Pg. 12 and further supported on pg. 13 mentioning a 1999 Rutgers University study on the lack of vitamins and minerals in commercial fruits and vegetables (other studies by David Thomas and Donald Davis of U of Texas generally confirm this trend. Also see McCance and Widdowson's: "The Composition of Foods") Reference (5) on ionic minerals is on pg. 186
- (2) *Folk Medicine: A Vermont Doctors Guide to Good Health* by Dr. D.C. Jarvis. The reference to seawater and human blood is on pg.133 of the hardbound book and appears in the chapter on Kelp. Reference (8) on the nutrients in honey also comes from pg. 97. Our only caution with the recommendations of Dr. Jarvis is with his use of Iodine from "Lugols" solution. We have not researched this.
- (3) *Acid & Alkaline* by Herman Aihara. The Acid and Alkaline forming elements are listed on pg. 24 in a chapter titled "Acid and Alkaline - The Western Approach". Mr. Aihara leans heavily to the all vegetarian macrobiotic approach. This is a great book with lots of easy to digest science. However, we don't agree completely with his strict dietary approach.
- (4) *The Acid Alkaline Food Guide* by Dr. Susan E. Brown. This easy-to-read book is a gold mine of current Acid/Alkaline findings and food listings. The lemon example comes from Pg. 53 and is backed up by a section titled "A Brief History of ph Food Analysis" pg. 66-69.
- (5) See reference (1)
- (6) *Drawdown* edited by Paul Hawken. In the section titled "Coming Attractions - Microbial Farming" pg. 200-201, the relation between plant root and soil micro-organisms is described.
- (7) The website healthline.com carries the article titled "6 Health Benefits of Apple Cider Vinegar Backed by Science" by Kris Gunnars, BSc
- (8) See reference (2)\_
- (9) *The Journal of Food and Nutritional Research* lists the mineral & trace elements in Apples, titled: "Monitoring the Element Contents of Three Different Apple Varieties in an Apple Tree" by Richard Horsley (and others)
- (10) For the most comprehensive and long term evaluation of mineral depletion in foods, see David Thomas's summary of the McCance & Widdowson's voluminous study: "The Composition of Foods". Thomas's summary of the McCance & Widdowson study is titled "The Mineral Depletion of Foods Available to Us as a Nation (1940-2002)."



*Vynce  
stocking  
the  
apple cider  
vinegars*



*See page 16 for Members Only  
20% OFF Specials  
on Apple Cider Vinegars*