



Vinegar Vignette

By Dr. John Glenn Clark, M.D.

“Dr. Clark, What about ‘Apple Cider Vinegar with the Mother’? How can you ignore all the health benefits and stories of recovery from its use?” This is a question I frequently encounter and will answer it as best I can in this article.

Let’s take a look at the big picture.

“God made man perfectly holy and happy; and the fair earth, as it came from the Creator's hand, bore no blight of decay or shadow of the curse. It is transgression of God's law--the law of love--that has brought woe and death.”¹

Adam never put Balsamic Vinegar on his dinner fare, and Eve never used mayonnaise to flavor her creations. They would never have known what decay or vinegar was, but sin changed all this. After the entrance of sin, food could spoil and vinegar could be produced. Rotten food was never God’s plan. With sin and decayed food came disease, pain and death.

What about foods used for medicine, which are decayed, fermented, rotted, spoiled, aged, etc, or show any other of the effects of sin in our deteriorating world, which is wearing old like a garment? Could we imagine that we are in a position to leverage sin and that these putrefying processes which entered our world after Eden can even elevate food until it possesses medicinal properties? This seems questionable to me. Personally I prefer food that has not had anyone or anything else eating on it before I get to it, especially if they are going to leave behind their waste products in it (smile). I do not believe that God is indebted to where sin and Satan have led the way for our healing.

It is true that vinegar has come to be quite widely used as a health tonic with many advertisements for it’s supposed medicinal qualities.

People ask me if it would be to their health advantage to take organic apple cider vinegar internally. I usually ask them why they wouldn’t like to be more natural and just eat the decaying rotten apples.

You do not find vinegar naturally, except as something has been fermented. It is the end product of fermentation. Few organisms can break it down any farther, so they stop with vinegar and excrete it. Because of this it is quite widely used in foods as a preservative. Bacteria seem to be turned off at finding their own waste products mixed in with what they thought was food.

How is vinegar made? In the US most vinegar is made from apples and is created by the degradation of these by yeasts and bacteria. That is correct, most vinegar *is* apple cider vinegar.

“Vinegar is the product of a mixed fermentation of yeast followed by acetic acid bacteria. Vinegar, literally translated as sour wine, is one of the oldest products of fermentation used by man. It is the acetic acid produced by the fermentation of alcohol (ethanol) which gives the characteristic flavour and aroma to vinegar.”

“It can be made from almost any fermentable carbohydrate source, for example fruits, vegetables, syrups and wine. The basic requirement for vinegar production is a raw material that will undergo an alcoholic fermentation. Apples, pears, grapes, honey, syrups, cereals, hydrolysed starches, beer and wine are all ideal substrates for the production of vinegar. To produce a high quality product it is essential that the raw material is mature, clean and in good condition.”²

“There is danger to health in the use of even sweet cider as ordinarily produced. If people could see what the microscope reveals in regard to the cider they buy, few would be willing to drink it. Often those who manufacture cider for the market are not careful as to the condition of the fruit used, and the juice of wormy and decayed apples is expressed. Those who would not think of using the poisonous, rotten apples in any other way, will drink the cider made from them, and call it a luxury; but the microscope shows that even when fresh from the press, this pleasant beverage is wholly unfit for use.”³

Vinegar contains the seeds of rot and spoilage which can contaminate and spoil other foods.

“Nicely prepared vegetables and fruits in their season will be beneficial, if they are of the best quality, not showing the slightest sign of decay, but are sound and unaffected by any disease or decay. More die by eating decayed fruit and decayed vegetables which ferment in the stomach and result in blood poisoning, than we have any idea of.”⁴

“The salads are prepared with oil and vinegar, fermentation takes place in the stomach, and the food does not digest, but decays or putrefies. As a consequence the blood is not nourished, but becomes filled with impurities, and liver and kidney difficulty appear. Heart disturbances, inflammation, and many evils are the result of such kind of treatment, and not only are the bodies affected, but the morals, the religious life, are affected.”

“I told them that unless they should change their diet, physical, mental, and moral degeneracy would surely be the result. Plain, good, substantial food must be given to our bodies, else there will be a poverty of the blood.”⁵

Many foods contain vinegar and include: bread, dressings, condiments, mayonnaise (regular and all the “vegan” ones too), ketchup, mustard, BBQ sauce, hot sauce, pickles, baked beans, potato salad, just to name a few.

Vinegar actually interferes with protein digestion making malnutrition a real risk with its use.⁶

Because vinegar is a product of fermentation it is full of toxic waste products of putrefaction such as aflatoxins⁷ and ethyl carbamate⁸, which can cause inflammation and cancer.

Aflatoxins, formed in the process of aging or fermenting,⁹ are a source of inflammation.¹⁰ Dietary sources of aflatoxins include: cheese,¹¹ wine, vinegar, and any food created by rotting or fermentation.

“Aflatoxin contamination can occur very widely. They can be found in over a hundred kinds of agro-products and foods, such as peanut, corn, rice, soy sauce, vinegar, plant oil, pistachio, tea, Chinese medicinal herb, egg, milk, feed etc.”

“Aflatoxins are highly toxic, mutagenic, teratogenic, and carcinogenic compounds.... Aflatoxin B1, for example, its toxicity is ten times of potassium cyanide, 68 times of arsenic and 416 times of melamine. Furthermore, their carcinogenicity is over 70 times than that of dimethylnitrosamine and 10000 times that of Benzene Hexachloride (BHC). And International Agency for Research on Cancer (IARC) of the World Health Organization (WHO) accepted that aflatoxin should be classified as a Group 1 carcinogen in 1987, and then AFB1 is classified as Group 1

(carcinogenic to humans) by the WHO– IARC in 1993. According to the nearest researches by University of Pittsburgh, aflatoxin may play a causative role in 4.6–28.2% of all global Hepato Cellular Carcinoma cases (liver cancer cases).”¹²

Vinegar causes inflammation and undesirable vascular permeability.¹³ It also causes increased intestinal permeability sometimes referred to as leaky gut.¹⁴ Scientists use weak vinegar solutions to cause inflammatory bowel disease in rats as a model for studying ulcerative colitis and Crohn's disease in humans.^{15,16,17}

Vinegar treated cucumbers (pickles), contain harmful carcinogenic nitrates that cause stomach¹⁸ and colorectal cancer.¹⁹ Other chemicals formed when foods are pickled²⁰ increase oxidative stress, inflammation,²¹ autoimmune disease and cancer.^{22,23}

Since vinegar is metabolized in the liver, liver cancer increases with its inclusion in the diet.²⁴

Vinegar increases the risk for bladder cancer.²⁵

We do not have an enzyme in the digestive tract that breaks down vinegar, so it goes straight into the blood stream²⁶ and is an acidifier of the blood and it causes cellular acidosis.²⁷ And because it is an acid, it can erode your teeth²⁸ and when it hits the stomach, it can cause ulcers.²⁹

Vinegar is used to demineralize bone so it can be sliced and studied under a microscope. To be legal, vinegar must contain a minimum of 4% acetic acid; calcium is taken from bone to buffer and remove this acid from the body and this causes osteoporosis.³⁰

The real down side is the effect of vinegar on the whole body.

“The mince pies and the pickles, which should never find a place in any human stomach, will give a miserable quality of blood.”³¹

Just as an illustration of how vinegar affects the blood, it raises a person's cholesterol.³²

If attempting to optimize thyroid activity or treating hypothyroidism, vinegar³³ would be counter productive, it could cause thyroid function deterioration.

In helping to recover from illnesses, returning to the natural, as could have been found in the Garden of Eden is very helpful. This means returning to a lifestyle free from the effects of sin as much as possible. This would include avoiding all the products of fermentation.

“In the country the sick find many things to call their attention away from themselves and their sufferings. Everywhere they can look upon and enjoy the beautiful things of nature--the flowers, the fields, the fruit trees laden with their rich treasures, the forest trees casting their grateful shade, and the hills and valleys with their varied verdure and many forms

of life. And not only are they entertained by these surroundings, but at the same time they learn most precious spiritual lessons. Surrounded by the wonderful works of God, their minds are lifted from the things that are seen to the things that are unseen. The beauty of nature leads them to think of the matchless charms of the earth made new when there will be nothing to mar the loveliness, nothing to taint or destroy, nothing to cause disease or death.”³⁴

Vinegar, the result of sin, does not improve your good fresh food, your brain, your thinking or your judgment. One of the effects of vinegar is to dull the mind. This is the reason Jesus refused it.

“In another prophecy the Saviour declared, ‘Reproach hath broken My heart; and I am full of heaviness: and I looked for some to take pity, but there was none; and for comforters, but I found none. They gave Me also gall for My meat; and in My thirst they gave Me vinegar to drink.’ Psalm 69:20, 21. To those who suffered death by the cross, it was permitted to give a stupefying potion, to deaden the sense of pain. This was offered to Jesus; but when He had tasted it, He refused it. He would receive nothing that could becloud His mind. His faith must keep fast hold upon God. This was His only strength. To becloud His senses would give Satan an advantage.”³⁵

But people have acquired a taste for this product of putrefaction. It makes the food exciting, because it usually contains excitotoxins like mono-sodium glutamate. Once the taste is acquired the substance becomes addictive.

“In this fast age, the less exciting the food, the better. Condiments are injurious in their nature. Mustard, pepper, spices, pickles, and other things of a like character, irritate the stomach and make the blood feverish and impure. The inflamed condition of the drunkard's stomach is often pictured as illustrating the effect of alcoholic liquors. A similarly inflamed condition is produced by the use of irritating condiments. Soon ordinary food does not satisfy the appetite. The system feels a want, a craving, for something more stimulating.”³⁶

Beware, vinegar can be addictive and it can be a real struggle to recover from its use.

“There was a time when I was in a situation similar in some respects to yours. I had indulged the desire for vinegar. But I resolved with the help of God to overcome this appetite. I fought the temptation, determined not to be mastered by this habit.”

“For weeks I was very sick; but I kept saying over and over, The Lord knows all about it. If I die, I die; but I will not yield to this desire. The struggle continued, and I was sorely afflicted for many weeks. All thought that it was impossible for me to live. You

may be sure we sought the Lord very earnestly. The most fervent prayers were offered for my recovery. I continued to resist the desire for vinegar, and at last I conquered. Now I have no inclination to taste anything of the kind. This experience has been of great value to me in many ways. I obtained a complete victory.”

“I relate this experience to you for your help and encouragement. I have faith, my sister, that you can come through this trial, and reveal that God is the helper of His children in every time of need. If you determine to conquer this habit, and will fight it perseveringly, you can obtain an experience of the highest value. When you set your will resolutely to break off this indulgence, you will have the help you need from God. Try it, my sister.”³⁷

Are there any healthy alternatives to vinegar? Lemon juice is very healthy, containing citric acid as apposed to acetic acid, and can be used in most recipes with good result in place of vinegar. Give it a try.

Vinegar may delight your senses and increase your appetite for certain foods, but don't let the pleasure of taste allure you to spoil your health.

This is a donation supported ministry.

Thank you for your support.

<http://northernlightshealtheducation.com/pages/Donate.html>

References:

- ¹ White, E. G., Steps to Christ, (Washington, D. C.: Review and Herald Publishing Association, 1908), pp.9.
- ² FAO (Food and Agriculture Organization of the United Nations) 7.1 Vinegars
<http://www.fao.org/docrep/x0560e/x0560e00.htm>
- ³ White, E.G., Counsels on Diet and Foods. 1938. Washington, D.C.: Review and Herald Publishing Association, 1976. pp. 436 .
- ⁴ White, E.G., Counsels on Diet and Foods. 1938. Washington, D.C.: Review and Herald Publishing Association, 1976. pp. 309.
- ⁵ White, E.G., Manuscript Releases. Vol 2. Silver Spring, MD: Ellen G. White Estate, 1981, pp. 143-4.
- ⁶ Patel N, Welham SJ. Peptic digestion of beef myofibrils is modified by prior marination. Food Nutr Res. 2013 May 23;57.
- ⁷ Peiwu Li, Qi Zhang, Daohong Zhang, Di Guan, Xiaoxia, Ding Xuefen Liu, Sufang Fang, Xiupin Wang and Wen Zhang (2011). Aflatoxin Measurement and Analysis, Aflatoxins - Detection, Measurement and Control, Dr Irineo Torres-Pacheco (Ed.), ISBN: 978-953-307-711-6, InTech, Available from: <http://www.intechopen.com/books/aflatoxins-detection-measurement-and-control/aflatoxin-measurement-and-analysis>
- ⁸ Kim YK, Koh E, Chung HJ, Kwon H. Determination of ethyl carbamate in some fermented Korean foods and beverages. Food Addit Contam. 2000 Jun;17(6):469-75.
- ⁹ Hinton DM, Myers MJ, Raybourne RA, Francke-Carroll S, Sotomayor RE, Shaddock J, Warbritton A, Chou MW.

Immunotoxicity of aflatoxin B1 in rats: effects on lymphocytes and the inflammatory response in a chronic intermittent dosing study. *Toxicol Sci.* 2003 Jun;73(2):362-77.

¹⁰ Roy RN, Russell RI. Crohn's disease & aflatoxins. *J R Soc Health.* 1992 Dec;112(6):277-9.

¹¹ A case-control study of ulcerative colitis in relation to dietary and other factors in Japan. The Epidemiology Group of the Research Committee of Inflammatory Bowel Disease in Japan. *J Gastroenterol.* 1995 Nov;30 Suppl 8:9-12.

¹² Peiwu Li, Qi Zhang, Daohong Zhang, Di Guan, Xiaoxia , Ding Xuefen Liu, Sufang Fang, Xiupin Wang and Wen Zhang (2011). *Aflatoxin Measurement and Analysis, A flatoxins - Detection, Measurement and Control*, Dr Irineo Torres-Pacheco (Ed.), ISBN: 978-953-307-711- 6.

¹³ Sakthivel KM, Guruvayoorappan C. Protective effect of *Acacia ferruginea* against ulcerative colitis via modulating inflammatory mediators, cytokine profile and NF- κ B signal transduction pathways. *J Environ Pathol Toxicol Oncol.* 2014;33(2):83-98.

¹⁴ Liu L, Cai X, Yan J, Luo Y, Shao M, Lu Y, Sun Z, Cao P. In Vivo and In Vitro Antinociceptive Effect of *Fagopyrum cymosum* (Trev.) Meisn Extracts: A Possible Action by Recovering Intestinal Barrier Dysfunction. *Evid Based Complement Alternat Med.* 2012;2012:983801.

¹⁵ Lavy A, Naveh Y, Coleman R, Mokady S, Werman MJ. Dietary *Dunaliella bardawil*, a beta-carotene-rich alga, protects against acetic acid-induced small bowel inflammation in rats. *Inflamm Bowel Dis.* 2003 Nov;9(6):372-9.

¹⁶ Slaga TJ, Bowden GT, Boutwell RK. Acetic acid, a potent stimulator of mouse epidermal macromolecular synthesis and hyperplasia but with weak tumor-promoting ability. *J Natl Cancer Inst.* 1975 Oct;55(4):983-7.

¹⁷ Thippeswamy BS, Mahendran S, Biradar MI, Raj P, Srivastava K, Badami S, Veerapur VP. Protective effect of embelin against acetic acid induced ulcerative colitis in rats. *Eur J Pharmacol.* 2011 Mar 1;654(1):100-5.

¹⁸ Somi MH, Mousavi SM, Naghashi S, Faramarzi E, Jafarabadi MA, Ghojazade M, Majidi A, Naseri Alavi SA. Is there any relationship between food habits in the last two decades and gastric cancer in North-Western Iran? *Asian Pac J Cancer Prev.* 2015;16(1):283-90.

¹⁹ Qin M, Ma LQ, Tan J, Chen YR, Zhu LR, Lin R, Hu WL, Li JN, Zhang KH, Wang Y, Li JS, Xiao B, Chen HY, Chen YX, Fang JY. Risk factors for colorectal neoplasms based on colonoscopy and pathological diagnoses of Chinese citizens: a multicenter, case-control study. *Int J Colorectal Dis.* 2015 Mar;30(3):353-61.

²⁰ Cleary K, McFeeters RF. Effects of oxygen and turmeric on the formation of oxidative aldehydes in fresh-pack dill pickles. *J Agric Food Chem.* 2006 May 3;54(9):3421-7.

²¹ Lynch MP, Faustman C. Effect of aldehyde lipid oxidation products on myoglobin. *J Agric Food Chem.* 2000 Mar;48(3):600-4.

²² MacDonald WC, Anderson FH, Hashimoto S. Histological effect of certain pickles on the human gastric mucosa. A preliminary report. *Can Med Assoc J.* 1967 Jun 10;96(23):1521-5.

²³ Kono S, Hirohata T. A review of gastric cancer and life style. *Gan No Rinsho.* 1990 Feb;Spec No:257-67.

²⁴ Hara N, Sakata K, Nagai M, Fujita Y, Hashimoto T, Yanagawa H. Geographical difference of mortality of digestive cancers and food consumption. *Gan No Rinsho.* 1984 Oct;30(13):1665-74.

²⁵ Radosavljević V, Janković S, Marinković J, Dokić M. Non-occupational risk factors for bladder cancer: a case-control study. *Tumori.* 2004 Mar-Apr;90(2):175-80.

²⁶ Fushimi T1, Tayama K, Fukaya M, Kitakoshi K, Nakai N, Tsukamoto Y, Sato Y. Acetic acid feeding enhances glycogen repletion in liver and skeletal muscle of rats. *J Nutr.* 2001 Jul;131(7):1973-7.

²⁷ Wang YY, Chang RB, Allgood SD, Silver WL, Liman ER. A TRPA1-dependent mechanism for the pungent sensation of weak acids. *J Gen Physiol.* 2011 Jun;137(6):493-505.

²⁸ Willershausen I, Weyer V, Schulte D, Lampe F, Buhre S, Willershausen B. In vitro study on dental erosion caused by different vinegar varieties using an electron microprobe. *Clin Lab.* 2014;60(5):783-90.

²⁹ Aihara E, Closson C, Matthis AL, Schumacher MA, Engevik AC1, Zavros Y, Ottemann KM, Montrose MH. Motility and chemotaxis mediate the preferential colonization of gastric injury sites by *Helicobacter pylori*. *PLoS Pathog.* 2014 Jul 17;10(7):e1004275.

³⁰ Lhotta K, Höfle G, Gasser R, Finkenstedt G. Hypokalemia, hyperreninemia and osteoporosis in a patient ingesting large amounts of cider vinegar. *Nephron.* 1998 Oct;80(2):242-3.

³¹ White, E.G., *Testimonies for the Church.* Vol 2. Mountain View, CA: Pacific Press Publishing Association, 1948. pp. 368.

³² Budak NH, Kumbul Doguc D, Savas CM, Seydim AC, Kok Tas T, Ciris MI, Guzel-Seydim ZB. Effects of apple cider vinegars produced with different techniques on blood lipids in high-cholesterol-fed rats. *J Agric Food Chem.* 2011 Jun 22;59(12):6638-44.

³³ Hertoghe, T; *The Hormone Handbook.* International Medical Books, Surrey, UK, 2006, p87.

³⁴ White, E.G., *Counsels on Health.* Mountain View, CA: Pacific Press Publishing Association, 1923. pp. 169.

³⁵ White, E.G., *The Desire of Ages.* Mountain View, CA: Pacific Press Publishing Association, 1898. pp. 746.

³⁶ White, E.G., *The Ministry of Healing.* Mountain View, CA: Pacific Press Publishing Association, 1942. pp. 325.

³⁷ White, E.G., *Counsels on Diet and Foods.* 1938. Washington, D.C.: Review and Herald Publishing Association, 1976. pp. 485.