

## Our Gullible Relationship with Meat & Dairy Foods

*"Eliminating dairy products."*

— Russell Bunai, MD when asked what single change in the American diet would produce the greatest health benefits. <sup>1</sup>

*"I will no longer drink the milk from cows or consume products made from that milk. Cow's milk is a superbly engineered fluid that will turn a 65 calf into a 500 cow in a year. That is what cow's milk is for. Unfortunately, it has the same effect on human beings."*

— Michael Klaper, M.D.<sup>2</sup>

### Udder Nonsense? — Questioning Dairy Food

Dairy marketing has gone from Elsie the feminine and friendly cow, to celebrities wearing milk moustaches and justifying dairy consumption because of calcium content. Along with bumper stickers that remind us "Milk Makes Better Lovers" and "I Brake for Cheese" dairy marketing attempts to recapture primary food status is rapidly becoming pointless as the scientific case against milk and other dairy products grows stronger validating its reduction, if not elimination.

Terry Shintani, MD, author of *Hawaii Diet* <sup>3</sup> writes:

"Why is dairy recommended by many experts as a daily requirement in this country? Scientific studies are showing that dairy isn't the wonder food it was once touted to be. But there is so much money to be made that even the federal government, under the influence of commercial interests, promotes dairy. This is done despite scientific information that dairy fat promotes heart disease, that dairy protein is the leading cause of allergies in this country, and that dairy sugar cannot be digested properly by seventy percent of the adults in the world."

The basic dairy product, whole cow's milk containing a high fat, cholesterol and protein percentage is low in carbohydrate and has no fiber. Popular products made from whole milk include cheese, cottage cheese, yogurt, butter, buttermilk, skim milk, kefir, ice cream, whey, cow-milk based baby formulas and "imitation milk."

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<sup>1</sup> Quoted from: *"Don't Drink Your Milk!"* - by Nathaniel Mead - *Natural Health Magazine*, July/August, 1994.

<sup>2</sup> Quote Source: "Dr Klaper presents important facts about Heart Disease, Fat, Nutritional Needs, Calories, Milk, Osteoporosis and Vitamin B-12" - *Nutrition for Optimum Health* - [www.vegsource.com/klaper/optimum.htm](http://www.vegsource.com/klaper/optimum.htm) - May, 2000

<sup>3</sup> Shintani, Terry, MD- *Hawaii Diet* - Pocket Books, New York - 1997; p. 73

Think about this for a moment: Milk is a food that is ideally designed for the growing nutritional needs of calves. Modern humans, now have a unique distinction of being the only species that drinks milk after they are fully teathed--and from another species! We don't simply drink it for occasional refreshment; we've made it into a national principal beverage. Who pick the cow? Why not dog milk?

Comparing the fiber, cholesterol and macronutrient (protein, carbohydrate and fat) content of milk to dairy reveals similar percentages of each<sup>4</sup> qualifying milk to be redefined as "liquid meat." Dairy products, like meats, are rich foods. Therefore, an excess of these foods can produce similar diseases found in "affluent" societies.

### Concerns Worth Mooing About

*Two cows grazing in a pasture saw a milk truck pass. On the side of the truck were the words, "Pasteurized, homogenized, standardized, Vitamin A added." One cow sighed and said to the other, "Makes you feel sort of inadequate, doesn't it?"*

— "Overheard" conversation between two cows,  
from: *Words for All Occasions*, by Glenn Van Ekeren

The National Dairy Council advertises that "Milk is Natural" and that "You Never Outgrow Your Need for Milk." To do otherwise, we are consistently warned, could result in brittle bones and diminished strength.

In a 1988 interview<sup>5</sup> in the *New York Times*, Steven Locke, instructor in psychiatry and director of the psychoimmunology research project at Harvard Medical School, offered the following psychological perspective:

*"We are moved from mother's milk to cow's milk very early [in life], so that the taste of cow's milk is associated with being held next to mother's breast... Milk has a bigger-than-life image because it's (linked) to mothering in ways that only Madison Avenue could appreciate."*

The biggest concern facing a gullible public is in regard to the calcium content of dairy food. This constant media-focused theme of calcium deficiency has perpetuated the myth that dairy foods are the best choice to support those needs. Factually, the amount of calcium present in the diet has an insignificant effect on the quantity of calcium that is eventually absorbed by the body.<sup>6 7</sup> On low-calcium diets the efficiency of absorption is increased, while on high-calcium diets less absorption has been observed.<sup>8</sup>

Calcium needs for growing children and adults can be obtained from a wide variety of unprocessed vegetable foods. An astonishing fact is that calcium deficiency caused by an insufficient

<sup>4</sup> McDougall, John, M.D - *The McDougall Plan* - New Win Publishing, Clinton, New Jersey (1983), Table 5.1,p. 49-50

<sup>5</sup> Quoted from: "Don't Drink Your Milk!" - Mead, Nathaniel - *Natural Health* - July/August, 1994

<sup>6</sup> Wawlker A. - The human requirement for calcium: should low intakes be supplemented? - *Am J Clin Nutr* - 25 (1972): 518

<sup>7</sup> Symposium on human calcium requirements - *JAMA* - 185(1963): 588

<sup>8</sup> Spencer H. - Influence of dietary calcium intake on Ca (47) absorption in man - *Am J Med* - 46 (1969): 197

amount of calcium in the diet is not known to occur in humans, even though the majority of people throughout the world do not drink milk after weaning due to customs, lactose intolerance or lack of availability.<sup>9 10 11</sup>

While publicity about milk's dangers concentrates on fat content, a number of other issues have emerged as equal concerns<sup>12</sup> in reevaluating dairy food as a common food group.

In the following section, dairy food is attributed to instigating or aggravating numerous conditions. Any health complication can be further diminished by foods that weaken immunity, compromise nutrition or produce excess acidity. Many of these conditions, although unrelated to cancer, can serve to make self-healing more difficult. They are listed for the value of understanding the broad range of disorders that are influenced by our daily eating.

- ***Osteoporosis & Calcium Needs*** — Despite the tired slogans of milk being the solution for preventing osteoporosis, clinical research is proving otherwise. Relentless dairy marketing campaigns have lulled us into a false sense of security about avoiding osteoporosis. In countries where dairy products are generally consumed, there is actually less osteoporosis than in America.

Some studies have shown little effect of dairy products on osteoporosis.<sup>13</sup> The Harvard Nurses' Health Study followed 78,000 women for a 12-year period and found that milk did not protect against bone fractures. More surprising was that those who drank three glasses of milk per day had more fractures than those who rarely drank milk did.<sup>14</sup> There are a number of overlooked sources of calcium that are readily absorbed by the body including kale, broccoli, other leafy green vegetables and beans. A report in the American Journal of Clinical Nutrition found that calcium assimilation was actually higher for kale than for milk. Its conclusion was that "greens such as kale can be considered to be at least as good as milk in terms of their calcium absorbability."<sup>15</sup> Calcium is one of many factors that affect the bone. Other factors include hormones, phosphorus, boron, exercise, smoking, excess alcohol and drugs.<sup>16 17 18 19</sup>

It has also been observed that diets rich in protein, particularly animal proteins, encourage calcium loss.<sup>20 21 22</sup> Cow's milk is high in phosphorus and protein. Elevated phosphorus levels make calcium assimilation difficult. When excessive protein is ingested, the blood can easily become acidic. To buffer this rise in acid, the body draws on calcium stored in the bones, a process known as "calcium

<sup>9</sup> Walker A. - The human requirement for calcium: should low intakes be supplemented - *Am J Clin Nutr* (25 (1972):518

<sup>10</sup> Symposium on human calcium requirements - *JAMA* - 185 (1963): 588

<sup>11</sup> Goodhart and Shils - Modern nutrition in health and disease (dietotherapy) - 5<sup>th</sup> ed., Lea and Febiger - Philadelphia, 1973, p. 273

<sup>12</sup> Outline of disease references: "What's Wrong with Dairy Product" - Physicians Committee for Responsible Medicine, Wash., D.C.

<sup>13</sup> Riggs BL., Wahner HW., Melton J., Richelson LS., Judd HL., O'Fallon M. - Dietary calcium intake and rates on bone loss in women - *J Clin Invest* - 1987;80:979-82

<sup>14</sup> Feskanich D., Willett WC., Stampfer MJ., Colditz GA. - Milk, dietary calcium, bone fractures in women: a 12-year prospective study - *Am J Publ Health* - 1997;87:992-7

<sup>15</sup> Heaney RP., Weaver Cm. - Calcium absorption for kale - *Am J Clin Nutr* - 1990;51:656-7

<sup>16</sup> Dawson-Hughes B. - Calcium supplementation and bone loss: a review of controlled clinical trials - *Am J Clin Nutr* - 1991;54:274S-80S

<sup>17</sup> Mazess RB., Barden HS. - Bone density in premenopausal women: effects of age, dietary intake, physical activity, smoking, and birth control pills - *Am J Clin Nutr* - 1991;53:132-42

<sup>18</sup> Nelson ME., Fisher EC., Dilmanian FA., Dallal GE., Evans WJ. - A 1-y walking program and increased dietary calcium in postmenopausal women: effect on bone - *Am J Clin Nutr* - 1991;53:1304-11

<sup>19</sup> Nielsen FH., Hunt CD., Mullen LM., Hunt JR. - Effect of dietary boron on mineral, estrogen, and testosterone metabolism in postmenopausal women - *FASEB J* - 1987;1:394-7

<sup>20</sup> Zemel MB. - Role of the sulfur-containing amino acids in protein-induced hypercalciuria in men - *J Nutr* - 1981;111:545

<sup>21</sup> Hegsted M. - Urinary calcium and calcium balance in young men as affected by level of protein and phosphorus intake - *J Nutr* - 1981;111:553

<sup>22</sup> Marsh AG., Sanchez TV., Mickelsen O., Keiser J., Mayor G. - Cortical bone density of adult lacto-ovo-vegetarian and omnivorous women - *J Am Dietetic Asso* - 1980;76:148-51 / *N Engl J Med* - 1998;339:110-4

leeching." <sup>23</sup> In parts of the world where protein intake is moderate and largely derived from plant sources, people are maintaining optimum health consuming between 400 and 500 mg calcium daily. This is principally derived from vegetables, grains, roots, nuts and seeds. An example of this is the Bantu women of Africa. These women may give birth to, and breast-feed, as many as ten children in their lifetimes and consume little or no dairy, yet osteoporosis and tooth decomposition are actually quite rare in their population. <sup>24</sup>

"Osteoporosis is not a disease of calcium deficiency," writes Michael Klaper, M.D.,<sup>25</sup> "it is a disease of calcium loss. Calcium will be excreted by the kidneys for a number of reasons: a sedentary lifestyle, too much animal protein in the diet, caffeine, sugar, salt and alcohol. All of these substances cause you to excrete calcium through urination. If you want to avoid osteoporosis, look on your dinner plate and see that you are avoiding chicken, fish, beef, pork and dairy. These animal foods are the prime culprit in causing osteoporosis."

- **Diabetes** — Insulin-dependent diabetes ("childhood-onset" also known as: Type I) has been associated with dairy consumption. <sup>26</sup> The milk protein *bovine serum albumin* (BSA) produces an auto-immune reaction targeted at the pancreas' insulin-producing glands. *The New England Journal of Medicine* <sup>27</sup> reported that in all of 142 diabetic children studied abnormally high levels of BSA antibodies appeared. It was concluded that a specific dairy protein (dairy products may contain up to 25 different proteins) sparked an auto-immune reaction believed to be the cause behind the devastation of vital insulin-producing pancreatic cells.
- **Pesticides / Contaminants** — A study by the Environmental Defense Fund found widespread pesticide contamination of human breast milk among 1,400 women in forty-six states. The levels of contamination were twice as high among the meat and dairy eating women as among vegetarians. <sup>28</sup> Synthetic hormones, namely, *recombinant bovine growth hormone* (rBGH) are frequently used in dairy cows to increase the production of milk. The demand for unusually high volumes of milk typically results in mastitis or inflammation of the mammary glands, requiring antibiotics. rBGH trace amounts and antibiotic residues have been discovered in milk and dairy product samples.
- **Antibiotic-Resistant Bacteria** — In The Kellogg Report <sup>29</sup> authors, Joseph Beasley, M.D., and Jerry Swift wrote: <sup>30</sup>

"...moderate use of antibiotics in animal feed can result in the development of antibiotic resistance in animal bacteria—and the subsequent transfer of that resistance to human bacteria."

In a *Science* report <sup>31</sup> this was elaborated on further:

<sup>23</sup> Recker, et al. - The effect of milk supplements on calcium metabolism, bone metabolism and calcium balance - *Am J Clin Nutr* - 41 (1985): 254-263

<sup>24</sup> Walker, A. - The influence of numerous pregnancies and lactations on bone dimensions in South African Bantu and Caucasian mothers - *Clinical Science* - 42 (1972):189

<sup>25</sup> "Dr Klaper presents important facts about Heart Disease, Fat, Nutritional Needs, Calories, Milk, Osteoporosis and Vitamin B-12" - *Nutrition for Optimum Health* - [www.vegsource.com/klaper/optimum.htm](http://www.vegsource.com/klaper/optimum.htm) - May, 2000

<sup>26</sup> Scott, FW. - Cow's milk and insulin-dependent diabetes mellitus: is there a relationship? - *Am J Clin Nutr* - 1990;51:489-91

<sup>27</sup> Karjalainen J., Martin JM., Knip M., et al. - A bovine albumin peptide as a possible trigger of insulin-dependent diabetes mellitus - *N Engl J Med* - 1992;327:302-7

<sup>28</sup> Reference: "Don't Drink Your Milk!" - Mead, Nathaniel - *Natural Health* - July/August, 1994

<sup>29</sup> The Institute of Health Policy and Practice, 1989

<sup>30</sup> Reference: "Don't Drink Your Milk!" - Mead, Nathaniel - *Natural Health* - July/August, 1994

<sup>31</sup> *Science* - August, 1992

"Doctors around the world are losing the battle against an onslaught of new drug resistant bacterial infections including staph, pneumonia, strep, tuberculosis, dysentery, and other diseases."

Dairy products can also be contaminated with salmonella and viruses that may cause Leukemia.<sup>32 33 34</sup> Leukemia viruses are found in more than 20 percent of dairy cows. Sheep, goats and chimpanzees fed cow's milk can become infected and develop leukemia.<sup>35 36</sup> This warrants concern that such viruses can be passed along to humans. Pasteurization can reduce infectivity from microorganisms.

- **Vitamin D Toxicity** — the daily consumption of milk, especially by children, may result in vitamin D toxicity. Samplings of milk have found significant variation in vitamin D content, with some samplings having had as much as 500 times the indicated level, while others had little or none at all.<sup>37</sup>  
<sup>38</sup> Vitamin D is added to milk as protection from rickets. Rickets is a disorder characterized by deformed and painful bones and typically occurs in areas where sunlight exposure is limited. In fact, vitamin D is not a true vitamin since the body can and does under most circumstances synthesize all that it needs.<sup>39</sup> Vitamin D is actually a hormone synthesized by the action of sunlight on plant sterols found in the skin. Human vitamin D levels are only slightly affected by dietary sources such as fortified vitamin D milk and vitamin supplementation.<sup>40 41 42 43 44</sup> Due to the fat-soluble nature of vitamin D, this hormone can be stored in body fat for extended periods of time, making intermittent exposure to sunlight ample. Sunlight received during yearly summer holidays can be accumulated and reflected throughout the following year in observed vitamin D levels.<sup>45</sup>
- **Growth Hormones** — The practice of adding growth hormones to milk has become a major concern. One hormone, *bovine somatotropin* (BST) has shown evidence<sup>46</sup> of increasing the risk of mastitis, an udder disease that must be treated with antibiotics.
- **Iron Deficiency, Colic, Constipation & Ear Infections in Children** — Milk proteins, milk sugar, fat and saturated fat in dairy products may pose health risks for children and instigate the development of chronic diseases such as obesity, diabetes and atherosclerotic plaque formation that can result in heart disease. The American Academy of Pediatrics recommends that infants not drink cow's milk. The probability of iron deficiency is more likely on a dairy-rich diet considering that cow's milk products are very low in iron.<sup>47</sup> One out of every five American infants suffers severe abdominal cramping from bouts of colic. Mother's consuming dairy products pass milk proteins directly into breast milk,

<sup>32</sup> Fontaine R. - Epidemic Salmonellosis from cheddar cheese: surveillance and prevention - *Am J Epidemiol* - 112 (1980):247

<sup>33</sup> Donham K. - Epidemiologic relationships of the bovine population and human leukemia in Iowa - *Am J Epidemiol* - 112(1980): 80

<sup>34</sup> Ferrer J. - Milk of dairy cows frequently contains a leukemogenic virus - *Science* - 213(1981): 1014

<sup>35</sup> *Ibid.*

<sup>36</sup> Editorial: "Beware of the Cow" - *Lancet* - 2(1974):30

<sup>37</sup> Jacobus CH., Holick MF., Shao Q, et al. - Hypervitaminosis D associated with drinking milk - *N Engl Med* - 1992;326(18):1173-7

<sup>38</sup> Holick MF. - Vitamin D and bone health - *J Nutr* - 1996;126(4 suppl):1159S-64S

<sup>39</sup> McDougall, John, M.D. - *The McDougall Plan* - New Win Publications, Clifton, New Jersey (1983) p. 53

<sup>40</sup> Poskitt E. - Diet, sunlight and 25-hydroxy vitamin D in healthy children and adults - *Br Med J* - (1979): 221

<sup>41</sup> Stamp T. - Comparison of oral 25-hydroxycholecalciferol, vitamin D and ultraviolet light as determinants of circulating 25-hydroxyvitamin D - *Lancet* - 1(1977): 1241

<sup>42</sup> Pietrek J. - Prevention of vitamin D deficiency in Asians - *Lancet* - 1(1976): 1145

<sup>43</sup> Lawson D. - Relative contributions of diet and sunlight to vitamin D state in the elderly - *Br Med J* - 2(1979): 303

<sup>44</sup> Fraser D. - The physiological economy of vitamin D - *Lancet* - 1 (1983): 969

<sup>45</sup> References 68-72; *Ibid*

<sup>46</sup> Report from The General Accounting Office. Reference: "Don't Drink Your Milk!" - Mead, Nathaniel - *Natural Health* - July/August, 1994

<sup>47</sup> Pennington JAT. - Food values of portions commonly used. Harper and Row, New York (1989)

which end up in the baby's blood stream.<sup>48</sup> Additionally, a 1998 study associated cow's milk consumption to chronic constipation in children<sup>49</sup> citing perianal sores and severe defecation pain as a cause for constipation. Infants fed either whole or skim cow's milk as a staple part of their diets are more susceptible to nervous system disease later on in life. Nervous system tissue requires adequate amounts of linoleic acid, an essential vegetable fat, for proper growth.<sup>50 51</sup>

- **Cardiovascular Disease** — The contribution of excessive cholesterol and fat comes from dairy products—including ice cream, milk, butter, yogurt and cheese.<sup>52</sup> It has been established that diets high in fat and cholesterol can increase the risk of several chronic diseases including heart disease. A low-fat vegetarian diet that eliminates dairy products and emphasizes exercise, stress management and smoking cessation has been shown to prevent and reverse heart disease.<sup>53</sup> Well-designed studies by medical researchers independent of food industry associations have clearly demonstrated the detrimental effects of eggs on blood cholesterol levels.<sup>54 55 56 57</sup>
- **Lactose Intolerance & Cataracts** — Common among many ethnicity's, lactose intolerance affects 95% of Asians, 74% of Native Americans, 70% of African Americans, 53% of Mexican Americans and 15% of Caucasians.<sup>58</sup> Due to the absence of essential enzymes that digest the milk sugar lactose, noticeable symptoms have occurred including digestive pain, diarrhea and flatulence. The circulation of galactose, which cannot be broken down, could contribute to cataracts and ovarian cancers as mentioned previously.
- **Arthritis** — Cow's milk antigens may also contribute to rheumatoid arthritis and osteoarthritis. As a result of immune response, antibody-antigen complexes are deposited in the joints. This results in pain swelling, redness and inflexibility. In arthritic people consuming dairy, these complexes elevate. However, rapid pain decrease has been observed that in arthritics who eliminate dairy from their diets. A *Scandinavian Journal of Rheumatology* report observed joint and pain stiffness were greatly reduced by people fasting on water, tea, vegetable and fruit juices for seven to ten days. When they returned to a lacto-ovo-vegetarian diet, painful symptoms returned.<sup>59</sup>

Popular physician and author, Michael Klapper, M.D., writes:<sup>60</sup>

"Even if the fat is extracted and you are eating low-fat cheeses and low-fat yogurts, there are still many substances in cow's milk that clearly cause problems when they enter the human

<sup>48</sup> Clyne PS., Kulezycki A. - Human breast milk contains bovine IgG. Relationship to infant colic? - *Pediatrics* - 1991;87(4):439-44

<sup>49</sup> Iacono G., Cavataio F., Montalto G., et al. - Intolerance of cow's milk and chronic constipation in children - *N Engl J Med* - 1998;339:110-4

<sup>50</sup> Crawford M. - Essential fatty acid requirements in infancy - *Am J Clin Nutr* - 31 (1978): 2181

<sup>51</sup> Agranoff B. - Diet and the geographical distribution of multiple sclerosis - *Lancet* - 2 (1974): 1061

<sup>52</sup> Pennington JAT. *Bowes and Churches Food Values of Portions Commonly Used* - 17<sup>th</sup> ed. New York - Lippincott, 1998

<sup>53</sup> Ornish D., Brown SE., Scherwitz LW., Billings JH., Armstrong WT., Ports TA. - Can lifestyle changes reverse coronary heart disease? - *Lancet* - 1990;336:129-33

<sup>54</sup> Roberts S. - Does egg feeding (i.e. dietary cholesterol) affect plasma cholesterol levels in humans? The results of a double-blind study - *Am J Clin Nutr* - 34 (1981):2092

<sup>55</sup> Mattson F. - Effect of dietary cholesterol on serum cholesterol in man - *Am J Clin Nutr* - 25 (1972): 589

<sup>56</sup> O'Brien B. - Human plasma lipid response to red meat, poultry, fish and eggs - *Am J Clin Nutr* - 33 (1980): 2573

<sup>57</sup> Connor W. - The interrelated effects of dietary cholesterol and fat upon human serum lipid levels - *J Clin Invest* - 43 (1964): 1691

<sup>58</sup> Bertron P., Bernard ND., Mills M. - Racial bias in federal nutrition policy, part 1: the public health implications of variations in lactase persistence - *J Natl Med Assoc* - 1999;91:151-7

<sup>59</sup> Reference: "Don't Drink Your Milk!" - Mead, Nathaniel - *Natural Health* - July/August, 1994

<sup>60</sup> "Dr Klapper presents important facts about Heart Disease, Fat, Nutritional Needs, Calories, Milk, Osteoporosis and Vitamin B-12" - *Nutrition for Optimum Health* - [www.vegsource.com/klapper/optimum.htm](http://www.vegsource.com/klapper/optimum.htm) - May, 2000

system. Cow's milk has bovine proteins in it. IT has casein and a whole number of other cow proteins. When these proteins get out into the bloodstream, they flow through joint membranes. In some people this can cause rheumatoid arthritis to flare up ... Bovine proteins are notorious for setting off inflammatory reactions throughout the body."

- **Adverse Reactions in Children: Colitis, Enlarged Tonsils, Obesity** — A number of adverse reactions have been attributed to dairy products including congestive heart failure in infants, neonatal tetany from low blood calcium levels cause by the high phosphate levels in cow's milk, tonsil enlargement, obesity and the aggravation of ulcerative colitis.<sup>61 62 63 64 65 66 67 68</sup> Dramatic improvement upon removing dairy products occurred in ulcerative colitis, as well as the shrinkage of enlarged tonsils and adenoids.<sup>69 70 71 72 73</sup>
- **Multiple Sclerosis** — Multiple sclerosis is generally found in locales of the world where infants and children are raised on dairy products instead of breast milk and vegetables.<sup>74 75</sup> For over forty-five years, the low-animal fat diet developed Roy Swank, M.D. and used at the University of Oregon, has produced dramatic benefits for hundred of people with multiple sclerosis.<sup>76</sup> Individuals who began a low-animal fat diet early in their disease were found to have a 95% chance of halting further neurological degeneration or improving their conditions over the next twenty years.<sup>77</sup>
- **Food Allergies** — Milk is one of the most common causes of food allergies.<sup>78</sup> The following conditions<sup>79 80 81 82 83 84 85</sup> fall under the broad umbrella of allergy related problems:
  1. Respiratory problems: *nasal stuffiness, runny nose, otitis media (inner ear problems) sinusitis, asthma, and pulmonary infiltrates.*

<sup>61</sup> Addy D. - Infant feeding: a current view - *Br Med J* - 1(1976): 1268 - References for this sentence courtesyL McDougall, John, M.D. - The McDougal Plan - New Win Publishing - Clinton, Jew Jersey (1983)

<sup>62</sup> Department of Health & Social Security - Present Day Infant Feeding Practice Report - no. 9, 1974

<sup>63</sup> Taube L. - *Food Allergy and the Allergic Patient* - 2<sup>nd</sup> ed. Springfield, Ill. - Charles Thomas, 1978, p. 22

<sup>64</sup> Boat T. - "Hyperreactivity to cow's milk in young children with Pulmonary Hemosiderosis and Co Pulmonale Secondary to Nasopharyngeal Obstruction - *J Pediatr* - 87(1975):23

<sup>65</sup> Truelove S. - Ulcerative Colitis Provoked by Milk - *Br Med J* - 1(1961):154

<sup>66</sup> Wright R. - A controlled therapeutic trial of various diets in ulcerative colitis - *Br Med J* - 2(1965):138

<sup>67</sup> Sacca J. - Acute ischemic colitis due to milk allergy - *Ann Allergy* - 29(1971):268

<sup>68</sup> Acheson E. - Early weaning in the aetiology of ulcerative colitis: a study of feeding in infancy in cases and controls - *Br Med J* - 2(1961):929

<sup>69</sup> Taube L. - *Food Allergy and the Allergic Patient* - 2<sup>nd</sup> ed. Springfield, Ill. - Charles Thomas, 1978, p. 22

<sup>70</sup> Boat T. - "Hyperreactivity to cow's milk in young children with Pulmonary Hemosiderosis and Co Pulmonale Secondary to Nasopharyngeal Obstruction - *J Pediatr* - 87(1975):23

<sup>71</sup> Truelove S. - Ulcerative Colitis Provoked by Milk - *Br Med J* - 1(1961):154

<sup>72</sup> Wright R. - A controlled therapeutic trial of various diets in ulcerative colitis - *Br Med J* - 2(1965):138

<sup>73</sup> Sacca J. - Acute ischemic colitis due to milk allergy - *Ann Allergy* - 29(1971):268

<sup>74</sup> Agranoff B. - Diet and the geographical distribution of multiple sclerosis - *Lancet* - 2 (1974): 1061

<sup>75</sup> Alter M. - Multiple sclerosis and nutrition - *Arch Neurol* - 31 (1974):267

<sup>76</sup> Swank R. - Multiple sclerosis: twenty years on low-fat diet - *Arch Neurol* - 23 (1970)460

<sup>77</sup> *Ibid.*

<sup>78</sup> Bahna S. - *Allergies to Milk* - New York: Grune and Stratton, 1980

<sup>79</sup> Original list referenced from: McDougall John, M.D. - *The McDougall Plan* - New Win Publishing, Clinton, New Jersey (1983)

<sup>80</sup> Buisseret - Common manifestations of cow's milk allergy in children - *Lancet* - 1(1978):304

<sup>81</sup> Hull D. - The spectrum of cow's milk allergy in childhood - *Aca Paediatr Scand* - 68 (1979):847

<sup>82</sup> Eastham E. - Adverse effects of milk formula ingestion on the gastrointestinal tract--an update - *Gastroenterology* - 76(1979):365

<sup>83</sup> Gerrard J./ - Milk allergy: clinical picture and familial incidence - *Canad Med Assoc J.* - 97 (1967): 780

<sup>84</sup> Coombs R. - The enigma of cot death: is the modified anaphylaxis hypothesis an explanation for some cases? - *Lancet* - 1(1982): 1388

<sup>85</sup> Parish W. - Hypersensitivity to milk and sudden death in infancy - *Lancet* - 2 (1960): 1106

2. Skin conditions: *rashes, atopic dermatitis, eczema, seborrhea, and hives.*
3. Behavioral: *irritability, restlessness, hyperactivity, headache, lethargy, fatigue, allergic-tension fatigue syndrome, muscle pain, mental depression and bed-wetting.*
4. Blood related: *abnormal blood clotting, iron deficiency anemia, low serum proteins, thrombocytopenia (low platelets) and eosinophilia (allergy-related blood cells).*
5. Other: *anaphylactic shock and death and sudden infant death syndrome (crib or tot death).*

It has been suggested that egg protein is a leading cause of food allergy.<sup>86</sup> Separating the egg white from the yolk might reduce cholesterol, however this elevates protein levels, giving way to increased acidity and undesirable microorganisms. While many commercial egg substitutes are manufactured by unique processes that separate fat and cholesterol content, relative protein, often allergy inducing, increases after such processing.

### Diary Products and Cancer Research

"I can design a study to show that a carcinogen is actually an anti-carcinogen." This is exactly what the dairy industry does by promoting cheese and claiming that dairy foods prevent colon cancer.

—T. Colin Campbell, Ph.D  
Professor of Nutritional Science, Cornell University, NY

The following research is part of the growing evidence that documents dairy excess to numerous cancers, tumor growth and immune function weakening.

- **Ovarian Cancer** — Ovarian cancer rates parallel dairy eating patterns throughout the world. The milk sugar *lactose* is broken down in the body into another type of sugar called *galactose*. Enzymes then take their turn and further break down galactose. In a Harvard study<sup>87</sup> conducted by Boston gynecologist, Daniel Cramer and colleagues, it was observed that when dairy product consumption exceeded the enzymes' capacity to break down galactose, a build-up of galactose in the blood occurs, which is thought to affect a woman's ovaries. Many women have particularly low levels of these enzymes. When dairy products are consumed on a regular basis, their risk of ovarian cancer can be triple that of other women. Yogurt and cottage cheese seem to be the most concern because the bacteria used in the manufacture of these products increases the production of galactose from lactose.<sup>88</sup>

<sup>86</sup> McDougall John, M.D. - *The McDougall Plan* - New Win Publications, Clifton, New Jersey (1983) p. 56-57

<sup>87</sup> Cramer, D.W., et al. - Galactose consumption and metabolism in relation to the risk of ovarian cancer - *Lancet* - 1989;2:66-71

<sup>88</sup> Reference: Physicians Committee for Responsible Medicine (PCRM), Wash., DC - "What's Wrong With Dairy Products?"

In a July 19<sup>th</sup>, 1985 issue<sup>89</sup> of the *Journal of the American Medical Association's* report by Dr. John Snowden, epidemiologist at the University of Minnesota's School of Public Health, summarized a twenty-year study of diet and ovarian cancer: "Women who ate eggs...three or more days each week had a three times greater risk of fatal ovarian cancer than did women who ate eggs less than one day per week." Similar to other female cancers, ovarian cancer incidence rises not only with egg consumption, but also with the consumption of any form of animal fat.

- **Prostrate Cancer** — Prostate cancer has also been linked to dairy consumption. This is thought to be related to an increase in a compound called insulin-like growth factor (IGF).<sup>90</sup> Although a certain amount of IGF-I in the blood is normal, high levels have been linked to increased cancer risk.<sup>91</sup> IGF-I is also found in cow's milk and has been shown to occur in increased levels in the blood by individuals consuming dairy products on a regular basis.<sup>92</sup> Other nutrients that increase IGF-I are also found in cow's milk. Another study showed that men who had the highest levels of IGF-I had more than four times the risk of prostate cancer with those who had the lowest levels.<sup>93</sup> According to a review published by the World Cancer Research Fund and the American Institute for Cancer Research, at least 11 human population studies have linked dairy product consumption and prostate cancer.<sup>94</sup> <sup>95</sup> In the United States as a whole, the incidence of prostate cancer is reportedly related to consumption of dairy products, eggs and meat.<sup>96</sup>

A 13-year look at 20,855 male doctors who took part in the *Physicians' Health Study* shows that men who enjoy lots of milk, cheese and ice cream are 30 percent more likely to get prostrate cancer. The study is a long-term look at US doctors who were aged 40-82 when the study began in 1982.<sup>97</sup>

- **Breast Cancer** — is commonly called a "hormonally driven" tumor. The body's hormones stimulate the growth and development of a breast tumor. In breast cancer, the hormone estrogen chiefly drives a tumor's development and growth. Fat content in foods can encourage the growth of a certain species of bacteria that can split the complex molecule formed by the estrogens and the substance from the liver. As a result, excreted estrogens are freed and readily absorbed back into the body. Inevitably, higher levels of these powerful hormones are found in women who eat foods rich in fats, which comes from the western affluent diet of meats, dairy and oil excess.<sup>98</sup> High milk consumption was found in a case-control study at Roswell Park Memorial Institute to be associated with higher risk of breast cancer, as well as cancer of the mouth, stomach, colon, rectum, lung, bladder and cervix, relative to consumption

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<sup>89</sup> Reference: Robbins John - Diet for a New America - Still point Publishing, Walpole, NH (1987), p. 268-270

<sup>90</sup> Outwater, J.L., Nicolson, A., Bernard, N. - Dairy products and breast cancer: the IFG-I, estrogen, and bGH hypothesis - *Medical Hypothesis* - 1997;48:453-61

<sup>91</sup> Cohen P. - Serum insulin-like growth factor-I levels and prostate cancer risk - interpreting the evidence - *J Natl Cancer Inst* - 1998;90:876-9

<sup>92</sup> Cadogan, J., Eastell, R., Jones N, Barker ME. - Milk intake and bone mineral acquisition in adolescent girls: randomised, controlled intervention trial - *BMJ* - 1997;315:1255-69

<sup>93</sup> Chan JM, Stampfer MJ, Giovannucci E, et al. - Plasma insulin-like growth factor-1 and prostate cancer risk: a prospective study - *Science* - 1998;279:563-5

<sup>94</sup> World Cancer Research Fund/American Institute for Cancer Research - Food, Nutrition and the Prevention of Cancer: A Global Perspective - *American Institute for Cancer Research* - Washington, D.C. 1997, p. 461

<sup>95</sup> Reference: Physicians Committee for Responsible Medicine (PCRM), Wash., DC - "What's Wrong With Dairy Products?"

<sup>96</sup> Pusateri DJ., Roth WT, Ross JK., Shultz TD. - Dietary and hormonal evaluation of men at different risks for prostate cancer: plasma and fecal hormone-nutrient interrelationships - *Am J Clin Nutr* - 1990;51:371-7 - Reference: Block Keith, M.D., Charlotte Gyllenhaal, Ph.D - *Nutrition: An Essential Tool in Cancer Therapy* - Report for OTA, Congress of US, 1990

<sup>97</sup> Report taken from: [www.healthscout.com](http://www.healthscout.com) - April 5<sup>th</sup>, 2000 - by Neil Sherman

<sup>98</sup> MacDonald P. - Effect of obesity on conversion of plasma androstenedione to estrone in postmenopausal women with and without endometrial cancer - *Am J Obstet Gynecol* - 130:448, 1978

of no milk at all.<sup>99</sup> Another study of over 89,000 American nurses reported no relationship between fat intake and breast cancer rates.<sup>100</sup> However, it has been suggested that even those in this study consuming the lowest levels of dietary fat still did not consume levels low enough to make a significant difference in breast cancer rates.<sup>101</sup>

Concluding a report<sup>102</sup> in *Cancer Research*, Dr, Ronald Phillips indicated that the evidence is now overwhelming: vegetarian diets strongly reduce the incidence of breast, uterine, ovarian, colon and many other cancers.

- ***Non-Hodgkin's Lymphoma and Lung Cancer*** — A *Nutrition and Cancer* 1989 study<sup>103</sup> linked the risk of non-Hodgkin's lymphoma with excessive consumption of butter and cow's milk. Some medical research suggests that animal proteins, specifically dairy proteins, play a featured role in the development of this cancer of the immune system. Continuous over stimulation of the immune system by dairy proteins may eventually lead the weakening of immune function.<sup>104</sup> Excessive levels of a milk protein called *beta-lactoglobulin*, were discovered in the blood of lung cancer patients.

## Design and Function

Our physiological design offers several indicators for what should constitute our basic diet. Our evolutionary history reveals that humans developed predominantly as herbivores (plant consumers) and not as carnivores (meat consumers).<sup>105 106 107 108 109</sup> Human salivary glands secrete carbohydrate-digesting enzymes into the mouth where carbohydrates begin their initial breakdown. Our tooth structure is largely for grinding as opposed to the sharp canines most animals predominantly have for tearing meats into smaller pieces. While we are equipped to eat meats (having four canines in the normal mouth, but still no resembling the true canine teeth of true carnivores) our design indicates that animal protein be a minor supplement, if included at all. This is one of the reasons thorough chewing is always emphasized for people who eat whole grains.

Anatomically, the human is vastly different than that of natural carnivores such as cats and dogs. Their shortened intestinal length is what guarantees quicker bowel transit times. The contrasts are not only structurally different, but functionally as well; our bowel walls are deeply puckered and pouched, whereas theirs have smoother surfaces and free of these pouches similar to a stovepipe shape. Human intestinal lengths vary from 27 to 29 feet and resemble a winding mountain road full of angular turns, where carnivore intestines are from 7 to 9 feet short, without angular turns and structured like a chute. In the moist and warm environment of the human intestine, the putrefaction tendency is greater if meats are at a higher percentage. Carnivore intestines have a great capacity to discharge large amounts of cholesterol that

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<sup>99</sup> Reference: Block Keith, M.D., Charlotte Gyllenhaal, Ph.D - *Nutrition: An Essential Tool in Cancer Therapy* - Report for OTA, Congress of US, 1990

<sup>100</sup> Willet WC., Stampfer MJ., Colditz GA., Rosner BA., Hennekens CH., Speizer FE. - Dietary fat and the risk of breast cancer - *N Engl J Med* - 1987; 316:22-28

<sup>101</sup> Block Keith, M.D., Charlotte Gyllenhaal, Ph.D - *Nutrition: An Essential Tool in Cancer Therapy* - Report for OTA, Congress of US, 1990, p. 3

<sup>102</sup> Phillips, R. - Role of lifestyle and dietary habits in risk of cancer..." *Cancer Research* - 35;3513, 1975

<sup>103</sup> Quoted from: "Don't Drink Your Milk!" - Mead, Nathaniel - *Natural Health* - July/August, 1994

<sup>104</sup> Cunningham, A. - Lymphomas and animal protein consumption - *Lancet* 2(1976): 1184

<sup>105</sup> Collens W. - Phylogenetic aspects of the cause of human atherosclerotic disease - *Circulation* - (supp II) 31-32 (1965):II-7

<sup>106</sup> Prosser C. - *Comparative Animal Physiology* - 2<sup>nd</sup> ed., Philadelphia: W.B. Saunders, 1961, p. 116

<sup>107</sup> Nasset E. - Movements of the small intestine - P. Bard - *Medical Physiology* - 11 ed. C. V. Mosby, 1961, p. 116

<sup>108</sup> Dietschy J. - Regulation of cholesterol metabolism, (third of three parts) - *N Engl J Med* - 282 (1970): 1241

<sup>109</sup> "What's Wrong with Eating Meat?" - Ananda Marga Publications, 1977

their diet contains, whereas human livers can only process and excrete a limited amount of dietary cholesterol, leaving our tissues to deal with remaining amounts.

Human saliva has carbohydrate digesting alkaline enzymes which are absent from carnivores. Additionally, their stomach acids (for concentrated protein breakdown) are more powerful than human digestive secretions.

It is clear, that the human physiological design is not suitable for large volumes of animal protein, despite any nutritional study, in-vogue diet book theories, enzyme benefits, mega-conglomerate food recommendations, or Paleolithic theory. We have become too dependent on animal protein as a staple food. Historically, aside from Arctic Inuit populations and some African and Middle-East Nomadic tribes, meat has never been a staple food.

## The Vegetarian Option

The word *vegetarian* has an interesting origin. First coined in 1842 from the Latin *vegetus*, it means: "one who is sound, whole, fresh and lively." If you are choosing to become a vegetarian, or plan to at least experiment with a plant-based diet, the following eight suggestions might make this choice easier, more fortifying and results-rewarding.

**1. The need for dietary sodium is crucial.** Sodium and potassium have a complementary relationship in the blood. As you increase the amount of vegetables, you need to have a source of good quality trace mineral containing sea-salt, or salt contained within fermented products such as natural soy sauce (*tamari*) and soybean paste (*miso*). Among the macrobiotic vegetarians, there has been a tendency to over salt. Symptoms of over-salting are thirst, tendency to overeat, sweet cravings, irritability and in more exaggerated cases, elevated blood pressure. Whether an individual can benefit on a salt-free vegetarian diet is largely dependent on their previous diet. Someone with a dietary past heavy in meats, salt, cook foods, etc., initially does well on a more raw food and low, or no-salt diet. However, this is for the short-term. Over a long period of time, a no-salt diet might result in fatigue, meat or sugar (stimulant) cravings.

**2. Reduce simple sugars.** Vegetarians, tend to use too many simple-carbohydrate products such as fruit juice, honey, maple syrup, barley malt, rice syrup, molasses, agave, etc. These products, in excess, have been show to cause blood sugar instability,<sup>110</sup> fatigue, mood swings, suppressed immunity,<sup>111 112</sup> compromised mineral values for blood buffering, and increased cravings for salt or meats. This can easily graduate into a an addictive cycle: you're fatigued, you crave something sweet as a stimulant, you eat the sweet, cause a blood sugar swing, and then find yourself fatigued, again. For numerous reasons, vegetarians are more sensitive to the negative effects of acid-producing sugar.

**3. Moderate use of oil** - Transition to low-fat and low-sugar diet often results in what is perceived as "meat cravings." Increasing vegetable proteins (beans or bean products) and adding one to two teaspoons of daily oil from olive, sesame or flax sources either in cooking (except for flax) or in dressings, can make the difference between a satisfying meal, or one that leaves you with mysterious cravings. Most often, vegetarians in this position will overeat to compensate for the lack of fat and reduction of protein.

**4. Supplements** - The most common deficiency vegetarians are warned about is for vitamin B12, and for the need to build healthy intestinal bacteria. There is questionable benefit to the value of B12 supplements. Some sources claim that B12 pills contain breakdown sources of B12 and can even have an anti-B12

<sup>110</sup> Yam, D - *Medical Hypothesis* - vol, 38, p.111. 1992

<sup>111</sup> Berstein, J., et al. - *Am J Clin Nutr* - vol. 30, p. 613, 1977

<sup>112</sup> Sanchez, A., et al.. - *Am J Clin Nutr* - vol. 26, p. 180, 1973

effect.<sup>113 114 115</sup> Some fermented foods (miso, tempeh, and tamari) contain trace amounts of B12, however the degree of their bioavailability has also been questioned. Since actual deficiencies such as this are rare,<sup>116 117 118 119</sup> it might be a good idea to have blood work done to determine a deficiency status before attempting to treat symptoms. While there are trace amounts of B12 in miso, tempeh and sea vegetables, the question of bioavailability still remains individualized. Probiotic supplements for constant renewal of healthy intestinal bacteria would be suggestible for those with recent medication and antibiotic history.

5. *Nutritional Variety* - Consuming a wider variety of whole grains, bean and bean products, sea vegetables (for mineral insurance) a wide assortment of vegetables, including daily portions of leafy greens, small amounts of vegetable-based fermented products and fruits, will offer greater variety and healing nutrition.

6. *Thorough Chewing* - Grain digestion begins in the mouth, temporarily stops in the stomach and resumes again in the next digestive stage of the duodenum before being assimilated into the blood via the small intestine. Often, we'll change the quality of our food but hold on to old habits of rushing through meals as if the food were being inhaled. Thorough chewing insures better assimilation of nutrients, less resulting acidity and better regulated bowel function.

7. *Avoiding simple-sugar and complex-sugar combinations* - I've heard this repeatedly from clients over the years who might dine in a natural foods restaurant: "The meal was great, but I had gas for the next 24 hours--frankly, it's not worth it." There's a very simple reason for this: Simple sugars digest quickly, whereas complex sugars are broken apart more gradually. Clients will order a healthy grain-vegetable-bean meal and then enjoy a dessert immediately afterward. Within ten minutes there's a fireworks demonstration in their intestines. Generally, this gas attack could have several causes:

- Overeating
- Eating a dessert too soon after a complex sugar meal.
- Unsalted beans or an excessive amount of beans.

In this case, it would be advisable (unless you want to clear the room) to save dessert for a later time. A small amount of hot caffeine-free tea after a meal can often soothe dessert cravings and make for a satisfying meal closure.

8. *Daily whole grain* - The need for whole grain is important not to overlook. I've met many vegetarians who don't know the difference between whole grains and grain products. An excess of grain products can result in fatigue, sugar cravings and sometimes produce allergic reactions, presumably due to the mixing of yeast, sugar and refined flour.

These eight factors have proved very helpful to people trying to maintain a vegetarian program. They will also apply to individuals who have reduced animal protein.

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<sup>113</sup> Reference: McDougall, John, M.D. - *The McDougall Plan* - New Win Publications (1983)

<sup>114</sup> Herbert V. - Multivitamin/mineral food supplements containing vitamin B12 may also contain dangerous analogues of vitamin B12 - letter, *N Engl J Med* - 307 (1982):255

<sup>115</sup> "Harmful B12 Breakdown Products in multivitamins?" - *Med World News* (Sept. 28<sup>th</sup>, 1981):12.

<sup>116</sup> Murphy, M. - Vitamin B12 deficiency due to a low-cholesterol diet in a vegetarian - *Ann Intern Med* - 94 (1981):57

<sup>117</sup> Winawer, S. - Gastric and hematological abnormalities in a vegan with nutritional B12 deficiency: effects of oral vitamin B12 - *Gastroenterology* - 53(1967):130

<sup>118</sup> Immerman, A. - Vitamin B12 status of a vegetarian diet--a critical review - *Wld Rev Nutr Diet* - 37(1981):38

<sup>119</sup> Stewart, J. - Response of dietary vitamin B12 deficiency to physiological oral doses of cyanocobalamin - *Lancet* - 2(1970):542

### Three Vegetarian Pitfalls

Choosing to eat a predominant amount of plant foods is *not* simply a matter of steering clear of foods that are animal in origin. In addition to selecting good quality food, we need to be mindful of the balance factors; a foods relative acid/alkaline ratio, the foods wholeness and its fat and sugar content.

These are three pitfalls common to relying on vegetable quality foods:

1. **Concentrated Sugar** — Check for ingredients such as white, brown or any of the numerous sugar/molasses combinations of refined sugars. Additional concentrated sugars are honey, corn syrup and fructose. When choosing a sweetener, it is best to do so infrequently and use small amounts of less refined sugars such as barley malt, rice syrup, fruit juice, maple syrup, etc.

2. **Refined Flours & Grains** — Limit you consumption of these categories. Sometimes, you can mix a portion of these in with whole grains. I recommended this for several Hawaiian Japanese clients who were longing for their familiar white rice. I recommended 70% brown rice with 30% white rice and this allowed them to still obtain benefit while enjoying something that was familiar. Refined grains are: white rice, white flour, cous cous, flour (grain product) breakfast cereals, wheat germ, etc.

3. **Plant Foods High in Fat** — This category includes: coconuts, avocados, olives nuts, seeds, soybeans, tofu, vegetable oils, etc. Many of these products can be included in the diet, but in *limited* amounts as you observe overall fat percentages of below 20% total calories from fat.

### "So, What's Left?"

A client once commented, "Everything I like and been eating all my life is suddenly bad for me, so what's left?" This is an understandable sentiment. However, from the current evidence, it seems for the long term neither meat, nor dairy products are health supportive when consumed as principal foods.

For those desiring optimum health and noticeable benefit, it would be prudent to severely limit these foods, or eliminate them altogether, in the interest of "experimenting" in order to determine positive benefits. Sometimes, just eating a little bit or "reducing" can foster cravings for more escalating your daily eating into a battle of will power to avoid the very foods you're trying to avoid. This can be enormously stressful. At best, an 85-90% reduction in these foods will still produce noticeable positive results, so if complete elimination proves too difficult, the alternate choice would be to eat less of these foods in volume, and less in frequency.

*"Diary is a tremendous mucus producer and a burden on the respiratory, digestive and immune systems. If a women eliminate diary foods for an extended period andeat a balanced diet, they suffer less from colds and sinus infections."*

— Christiane Northrup, M.D.

Author: "Women's Bodies, Women's Wisdom" <sup>120</sup>

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<sup>120</sup> A Bantam Doubleday Dell Publication - March , 1998