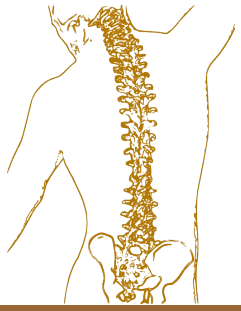

The Spinal Column

Milk: does it do a body good?

By Dr. Alfin Mitha, Hons. B.Sc., D.C.

Udder Confusion

How can milk and dairy products be one of the four major food groups for human beings when 75% of all Native Americans, Africans and 90% of all Asians cannot drink milk because they lack the appropriate enzymes to digest milk? While reading this article, take note of the fact that we are the only species to drink another species' milk. We are also the only species to drink milk after infancy.

One of my earliest memories is my father coaxing me to drink milk so that I would grow big and strong like him. You as a parent may be applying the same type of pressure to your children. At the same time, the average North American consumes approximately 29.2 ounces per day of milk and dairy products. After all, isn't milk "the most perfect food on earth?"

The milk-calcium-bone density myth has been created and perpetuated by the intense lobbying of the dairy industry throughout the lifetimes of most adults living today. The Dairy Industry and milk processors invest hundreds of millions of dollars each year to let us know that milk tastes good and drinking it insures good health. Milk mustaches are stylish. Drink milk and you're beautiful! Gorgeous models, actors, actresses, sports heroes, even Presidents have posed for milk advertisements.

Throughout kindergarten and grade school, most of the nutrition teaching aids were supplied by the Canadian Food Guide and indirectly the Dairy Farmer's of Canada (Environmental Nutrition, Apr2000, Vol. 23). As a result, most parents, teachers, doctors, lawyers, judges, and members of congress grew up with the biased view that milk is a necessary and wholesome food for both children and adults.

Bone Density and Osteoporosis

The true connection between milk and strong bones isn't exactly what the dairy industry has been telling us all these years. Calcium balance, the relationship between the intake and loss of the mineral determines bone density, mostly during childhood and adolescence. Good bone density attained by the age of 18 usually lasts a lifetime for people consuming a balanced plant-based diet and remaining physically active. A 1994 National Institute of Health Consensus Conference concluded that calcium balance and bone density depend at least 3O percent on the ratio of intake to loss, not on calcium intake alone. A report in Science magazine concurred calcium intake (considered alone) is not related to bone density.

The Great White Lie(s)

Dairy products are high in fat and like all animal fats very high in saturated fats. Your glass of milk, even low fat skim milk is very high in saturated fat, hormones, cholesterol, antibiotics, bacteria, and pus. The dairy industry has cleverly expressed fat content as a percentage of weight. Since most of the weight of milk is water, the fat weight is minimal compared to that of water. But since water contains no calories, the derived numbers are meaningless. Using this system, 2% milk is 87% water by weight and sounds like a low fat product. Expressed as a percentage of total calories, 2% milk is comprised of 31-35% fat.

Milk fat % (M.F.) - weight ratio	**Milk fat % by calories**
Butter	Almost 100%
Cheese	60-70%
Whole milk (3 %)	41-49 %
Yogurt	49%
2 %	31-35 %
1 %	23 %
Skim milk	Less then 5 %

Becoming a proactive consumer and learning how to

calculate the true fat percentage of a food product.

In Canada and the U.S, most food producers place a nutritional information section on the side or rear of the product's packaging. Here is where we will find the information to calculate the true fat % of a product. All you need to find on the package is the number of calories per serving, usually identified as;

ENERGY.....149 cal.

Next find the amount of fat per serving, look for;
FAT.....5.8 grams.

This is all you need to do some simple math to calculate true fat %. We know that 1 gram of fat has 9 cal/gm (calories per gram); therefore from the above example we can convert the number of grams of fat into calories. For every 1 gram of fat, we have 9 calories. So if we have 5.8 grams, we then multiply by 9 cal/gm, thus **5.8 gms X 9 cal/gms = 52.2 calories.** Next we divide the number of calories from fat by the total calories per serving. Thus we divide 52.2 calories by 149 calories. **52.2 cal. / 149 = .35.**

We then multiply by 100 to get the percentage.**35 X 100 = 35 %** .Therefore this product is 35 % of the calories from fat.

The Milky Way

Milk consumption has been linked to increasing your risk of heart disease, breast, ovarian, prostate, lung, and colon cancers, and cataracts. According to a study by Daniel Cramer, M.D., and his colleagues at Harvard, when dairy product consumption exceeds the enzymes' capacity to break down galactose, there is a build-up of galactose in the blood which is believed to cause the problems. It is the milk sugar galactose which can triple some of the above mentioned risks, not the fat. Thus non-fat dairy products cannot solve this problem. In fact, yogurt and cottage cheese utilize bacteria in their manufacturing that increases the production of galactose from lactose and thus is considered more serious than most dairy products.

Milk is one of the most common causes of food allergies. The American Academy of Allergy, Asthma and Immunology reports that cow's milk is the most common food allergy amongst children. Respiratory problems, canker sores, skin conditions, post-nasal drip, and other subtle and not-so-subtle allergies can be caused by dairy products. The sad thing is that many people never know that their problems are caused by a dairy sensitivity and go on not understanding why they produce so much mucus. Taking a break from dairy products can often lead to surprising improvements. Asthmatics, in particular,should give themselves a long vacation from dairy products to see whether their condition improves.

Human breast milk is Mother Nature's **perfect formula** for baby humans. Even the dairy industry scientists would not be foolish enough to debate this **universally accepted fact**. In her wisdom, Mother Nature included 33 milligrams of calcium in every 3 1/2-ounce portion of human breast milk.

One out of every five babies suffers from **colic.** Pediatricians learned long ago that cow's milk was often the reason. We now know that breast feeding mothers can have colicky babies if the mothers are consuming cow's milk. The cow's antibodies can pass through the mother's blood stream into her breast milk and to the baby.

I often reassure concerned parents that some bowing of their child's legs is normal up to the age of 3, and is not due to a calcium deficiency or rickets. Dental decay in early childhood causes the same concern, but ironically it may be partially due to the frequent bathing of the teeth with milk, rather than a calcium deficiency. In addition, clinical studies have shown that infants consuming cow's milk lose small amounts of blood from their digestive tracts. There are also theories regarding cow's milk being linked to Diabetes. For this reason, the American Academy of Pediatrics recommends that infants below one year of age not be given whole cow's milk.

Why does animal protein cause bone loss?

Milk and other dairy products, although rich in calcium, are high in animal protein, which has been shown to create calcium loss through the urinary tract**.** Foods high in protein are also high in sulphur-containing amino acids which are broken down to sulfuric acid and acid precursors. High Acidity stimulates the breakdown of bones and stops the production of new bone. This may explain why countries consuming the most milk also have the highest incidence of osteoporosis**.**

Dairy products, despite common myths, do not stop osteoporosis. Evidence shows that the rate of bone loss is largely unaffected by dairy products. For instance, the RDA of calcium in the United States is up to 1,200 mg daily. This is much higher than the World Health Organization's recommendation of 500 mg for children and 800 mg for adults. Areas of the world where dietary protein is very low have low national recommendations. In Thailand, for example, the recommended daily intake of calcium is only 400 mg for all ages. Elderly South African Bantu women, who consume a very low protein diet (5O grams daily, compared with 91 grams for Americans) and only 450 mg. calcium daily, have no osteoporosis despite the calcium drain of nursing an average of 10 children. On the other hand, Eskimos, consuming a very high protein diet (250-400 grams) of fish, and a calcium intake of over 2,000 mg daily, have the highest rate of osteoporosis in the world!

Now it begins to make sense. In cultures where the most protein is consumed, the calcium requirement for good bone density and protection against osteoporosis may be UNATTAINABLY high, without supplements -- it's a Catch-22. It may be a part of the problem, and you can have your calcium without the cow. Dr. Sellmeyer M.D. published a study in the January, 2001 edition of the American Journal of Clinical Nutrition finding that animal protein increases bone loss and the incidence of hip fractures in women after examining the diets of 1,035 women.

Calcium absorption

Up to 80% of calcium consumed in the diet is not properly absorbed by the body. Consider that a cup of broccoli contains about the same amount of calcium as a cup of milk. But wait! Haven't we been told that many green vegetables contain oxalic acid, which reduces the absorption of their calcium. This too, has been exaggerated by the dairy lobby. A 1990 report in the American Journal of Clinical Nutrition concluded that greens such as broccoli and kale have high levels of calcium which is absorbed at least as well as that in milk. Excellent calcium balance on a non-dairy diet is easily attained because ALL vegetables and legumes contain calcium, and collectively it's more than adequate. This calcium stays in the bones, unlike much of that from the high protein-containing dairy products. In addition, the pasteurization process of milk destroys Vitamins A, C, and D.

Tums

The addition of Calcium to TUMS is a marketing ploy and a farce in respect to any health benefits. All antacids are a cause of calcium mal-absorption. In order for absorption to occur, the high acidity of the stomach is essential.

The function of TUMS etc. is to reduce the acidity and thus ultimately stop the absorption of many nutrients including Calcium. No matter how much calcium the company adds to TUMS it would be useless because little, if any, will be absorbed due to decreased amount of acid stomach, and the fact that the type of Calcium used by TUMS is Calcium Carbonate which is the least absorbable type of calcium for our bodies. Note that for 1 out of 5 people over 60 and 2 out of 5 over 80, calcium carbonate taken on an empty stomach will not break down properly for absorption.

Food	**Serving Size**	**Calcium Content**	**Fractional Absorption**	**Estimated absorbable**

		(mg.)	**(%)**	**Calcium/ serving (mg.)**
Cow's milk	1 cup	300	32	**96**
Almonds	1 oz.	80	21	17
Almond Butter	1 Tbsp.	43	21	9
Beans, white	1 cup	161	17	27
Blackstrap molasses	1 Tbsp.	137	n/a	n/a
Broccoli, boiled	1 cup	178	53	94
Brussels sprouts-boiled	1 cup	56	64	36
Chinese Cabbage (bock Choy), boiled	1 cup	158	54	85
Cauliflower, boiled	1 cup	34	69	23
Figs, dried	5 med	135	n/a	n/a
Kale, boiled	1 cup	94	59	55
Oranges, navel	1mediu m	56	n/a	n/a
Rutabaga, boiled	1 cup	72	61	44
Sesame seeds, hulled	1 oz.	37	21	8
Sesame seeds, unhulled	1 oz.	381	21	58
Soymilk, Semblence	1 cup	200	31	62
Soymilk, Edensoy	1 cup	95	31	29
Soymilk, Vitasoy	1 cup	76	31	24
Spinach, boiled	1 cup	244	5.1	12
Tofu, set with calcium, firm	1 cup	258	31	160

Source: Pennington's Food Values of Portions Commonly Used, 1989. Fractional absorption. This tells us how much calcium will be absorbed from a food. The figures were derived from Connie Weaver's work at Purdue Unversity in the U.S.

About the Author:

As a life-long resident of Brampton (34 years), Dr. Alfin Mitha endeavors to provide this city with reliable, informative Chiropractic care. He lives here with his 2 kids, Aura and Zen, and his wife Rupi. Having completed his Bachelor of Science degree in both Biology and Pharmacology at McMaster University, Dr. Mitha had the opportunity to work with Eli Lilly pharmaceuticals in their Research and Development of Non-Small Cell Lung Cancer and Prozac. Deciding that the private sector in medicine was not for him, Dr. Mitha then took one year off to work in Ixtapa, Mexico as a land sports G.O for Club Med. Having considered Chiropractic in the past, it was only confirmed while having the chance to meet many Chiropractors during his time in Ixtapa.

The next part of his journey took him to the Canadian Memorial Chiropractic College in Toronto, Ontario. During his education, he still maintained an active physical lifestyle while working as a personal trainer. His internship year provided him the opportunity to work at 2 very different and unique places. The first part of his internship was at Anishnawbe Health and Native Wellness Center which serviced much of Toronto's aboriginal and homeless community. The second part of his internship allowed him the chance to treat players of the Canadian National Soccer Team, and other elite Canadian athletes. Both of these placements allowed Dr. Mitha to understand many aspects of illness, injury and health. A focus which remains in his clinic; In GoodHands.

Having returned back to Brampton (a resident of 34 years, he has since become an active member of the Rotary Club, Brampton Tennis Club, Brampton Volleyball League, Yoga instructor and more recently the Health Practioner Advisory Committee for the city. Dr. Mitha wishes to become a more integral part of Brampton's community. "It is imperative that we take care of our body and mind, it is our most valuable asset. The first step is education and if anything else, we provide that for our patients".

Main and Franchise Clinics:

In GoodHands Rehabilitation & Wellness Centre
Bramalea City Centre – Inside GoodLife Fitness
Unit 50A - 25 Peel Centre Drive, Brampton, ON L6T 3R5
Phone: (905) 453-5858 **Fax:** (905) 453-8995
Email: info@ingoodhandswellness.com

Services:
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- Chiropractic Care
- Massage Therapy
- Naturopathic Medicine
- Orthotics
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Products:
- Athletic Braces & Splints
- Compression Stockings
- Memory Foam Pillows
- Custom Made Orthotics
- Health Supplements

Clinic Hours:

Mon. and Wed.:	9:30 am - 8:30 pm
Tues. and Thurs.:	10:00 am - 9:00 pm
Fri.:	9:30 am - 7:00 pm
Sat.:	9:30 am - 2:30 pm
Sun.:	Closed

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Services:
- Chiropractic Care
- Dry Blood Analysis
- Hair Analysis
- Irridology
- Massage Therapy
- Nutritional Urinalysis
- Orthotics
- Psychology
- Reflexology
- Rehabilitation
- X-Rays

Products:
- Custom Made Orthotics
- Health Supplements

Clinic Hours:

Mon. - Thurs.:	9:00 am - 7:30 pm
Fri.:	9:00 am - 7:00 pm
Sat.:	9:00 am – 5:00 pm
Sun.:	Closed