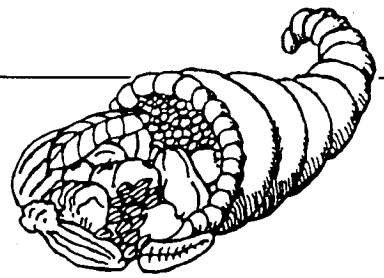
THE MCDOUGALL NEWSLETTER



JUL/AUG 1993 **VOL. 7/NO.4**

INFORMATION

PROBLEMS WITH LOW-FAT MILK

People are seeking better health through better nutrition, and fat has become enemy number one for the health conscious public. Fat in the diet damages arteries leading to heart disease, promotes cancer, contributes to gallbladder disease and is the fundamental cause of obesity. *"Once the fat is removed, the food is now healthy,"* most people believe. Fat, however, is only one potentially troublesome component of the food. Other nutrients and non-nutrients in the food also have a critical impact upon your health. In the case of dairy products, removing the fat may actually increase risks from other parts of the food--the choice becomes one of "being shot or hung."

COMPONENTS OF FOODS:

Water--no calories; the largest component of most foods
Fats--9 calories/gram
Proteins--4 calories/gram
Carbohydrates--4 calories/gram
Dietary Fiber--no calories; non-digestable carbohydrate
Cholesterol--a non-nutrient, made only by animals
Vitamins--13 known vitamins, 11 made by plants
Minerals--all originally from the ground
Chemicals--herbicides, pesticides, and other contaminants
Microbes--bacteria and viruses
Miscellaneous--many other active and inert substances

When the fat is removed from the milk the relative amounts of proteins and carbohydrates are increased.

LOW-FAT MEANS MORE PROTEIN AND LACTOSE

	Whole (3.5%)	Low-fat (2%)	Skim (0%)
Fat	49%	31%	2%
Protein	21%	28%	41%
CHO	30%	41%	57%

CHO = Carbohydrate = Lactose

The low-fat product is still deficient in iron, dietary fiber, essential fat (linoleic acid), and vitamin C and B3 (niacin). Much of the cholesterol and chemical contamination found with the fat is removed in the skimming process. But, the infection potential from bacteria and viruses is still as great with the low-fat product. Consider some ways low-fat dairy products can contribute to your health problems:

Allergy: Of all commonly consumed foods, cow's milk protein, found in dairy products (from acidophilus milk to whey) is the leading cause of food allergy in adults and children. Common manifestations of this allergy include runny nose, fluid collections in the middle ear, post nasal drip, hoarseness, asthma, eczema, and bed wetting (Bahna S. Allergies to Milk, New York: Grune and Stratton, 1980).

Anemia: Milk is the leading cause of iron deficiency anemia in young children (Oski F. Pediatrics 75(suppl):182, 1985). This is the primary reason the American Academy of Pediatrics has recommended cow's milk not be given to children under a year of age (what miraculous change suddenly makes it safe after a child's first birthday?). Milk is deficient in iron. The phosphorous and calcium in milk form complexes with iron found in other foods (beans, meat) and prevent its absorption. Cow's milk causes bleeding in the intestine leading to iron loss. Evidence leads me to believe dairy products cause most of the iron deficiency anemia seen in adults (including anemia commonly seen in women of reproductive age).

Arthritis: By allergic (immune system) reactions dairy proteins cause rheumatoid arthritis in many people (Welsh C. Int. Arch Allergy Appl. Immunol 80:192, 1986; Ratner D. Israel J Med Sci 21:532, 1985; Park A. Br Med J 282:2027, 1981; Panush Arthritis Rheum 29:220, 1986). Other forms of inflammatory arthritis as mild as the daily aches, pains, and stiffness troubling millions of people, and as serious as Lupus are caused and aggravated by dairy proteins.

Atherosclerosis: High levels of antibodies to milk proteins are often found in severe atherosclerosis (commonly known as hardening of the arteries leading to strokes and heart attacks) (Annand J Atherosclerosis 59:347, 1986; Muscari A Ann Ital Med Int 7:7, 1992). Milk protein entering the blood stream is perceived by the body as a foreign substance. The immune system reacts by making antibodies. These antibodies to milk protein may mistakenly attack the arteries themselves initiating the early injury phase of atherosclerosis. They may also attack and destroy enzyme systems that remove cholesterol from the body.

It is not just the cholesterol and fat in dairy products that damage the arteries, dairy proteins are also involved. Therefore, people looking to prevent heart attacks should avoid the low-fat dairy products, too.

Bleeding (Intestinal): Blood is found in the stool of one-quarter to one-half of infants fed cow's milk. The more milk, the more bleeding. Most times the blood loss can be microscopic; other times the blood is easily seen and can be an immediate concern (Editorial Lancet 1:1159, 1984).

Constipation: Dairy products are entirely free of dietary fiber and as a result contribute to constipation and related diseases like varicose veins, hemorrhoids, and hiatus hernia (from straining to pass the stool). In my experience I have seen people with a history of constipation follow my diet strictly except for the skim milk on their cereal and the bowels remained irregular--there must be a sensitivity of the bowel in some people to the milk protein.

Diabetes (Childhood, type I): Cow's milk proteins can trigger diabetes in experimental animals. Worldwide, the incidence of childhood diabetes is tied directly and strongly with the amount

of dairy products consumed by people in various countries (Dahl-Jorgensen K. Diabetes Care 14:1081, 1991). Exclusive breast feeding, which delays exposure to cow's milk infant formula, reduces the risk of diabetes in children.

Exposure to cow's milk protein early in life, when the intestinal tract is immature, allows the milk protein to enter the blood stream where antibodies to this foreign substance, milk, form. Unfortunately, these same antibodies also attack the insulin producing cells of the pancreas. Glassful of milk after spoonful of ice cream over a period of about 5 to 7 years, the child destroys his or her pancreas--left with a lifelong, life threatening, handicap: diabetes. A study of 155 children with diabetes found high levels of antibodies to milk protein in all of the children with this disease. (Karjalainen J. N Engl J Med 327:302, 1992)

Infections: Dairy products are oftentimes infected with E. coli, salmonella, staphylococci, or tuberculosis. Too often pasteurization fails to rid the food of these microbes, and they cause serious disease in humans.

Our dairy herds are infected with bovine immunodeficiency viruses (BIV) and bovine leukemia viruses (BLV). In the United States results show an average 40% of beef herds and 64% of dairy herds are infected with BIV. Herds infected with the BIV are usually infected with the leukemia virus also (AIDS 6:759, 1992). Both viruses cross species lines infecting other animals. Nationwide and worldwide leukemia is more common in the higher dairy consuming populations. The first case of BIV infection in humans was recently reported (Jacobs R. Can J Vet Res 56:353, 1992). (BIV is a virus like human AIDS virus.)

Lactose Intolerance: After the age of 4 most people stop synthesizing the enzyme (lactase) that breaks down milk sugar (lactose) for digestion. Undigested milk sugar in the large intestine results in diarrhea, gas, and stomach cramps. This condition, known as "lactose intolerance," affects 60 to 90% of non-white people, and about 20% of whites.

Osteoporosis: Animal protein in the diet causes the body to lose calcium through the kidneys and in this way the bones are weakened. In an experiment paid for by the dairy industry, post menopausal women fed an extra 3 eight-ounce glasses of skim milk daily consumed nearly 1500 mg of calcium daily; yet they were still in negative calcium balance at the end of a year (They lost more calcium in their urine than they absorbed from their gut). The women supplemented with extra skim milk lost more bone at the end of a year than those who did not drink the extra milk (Recker R. Am J Clin Nutr 41:254, 1985). According to the authors," The protein content of the supplement (the skim milk) may have a negative effect on calcium balance, possibly through an increase in kidney losses of calcium or through a direct effect on bone resorption." Those concerned about osteoporosis are compounding their problems with the low-fat, high-animal-protein varieties of dairy products.

Tonsil and other lymph node enlargement: The body attempts to defend itself from invading bacteria and viruses which are largely made of foreign proteins. The proteins in forkfuls of cheese and glasses of milk are also recognized as foreign and worthy of a strong defense. The tonsils and adenoids enlarge around the throat and try to fight off the invading milk proteins, and as a result enlarge and become inflammed. Stopping the dairy protein shrinks this swollen lymph node tissue (Boat T. J Pediatr 87:23, 1975). There is evidence that constant attack of the body by cow's proteins from foods may eventually wear the immune system down into a cancerous condition known as lymphoma (Hodgkin's and non-Hodgkin's) (Cunningham A Lancet 2:1184, 1976).

A HEALTH HAZARD: Regardless of the fat content, dairy products are a serious health hazard; probably causing more harm than meat because most people believe they are "health foods" and eat them without the slightest precaution.

MEDICAL RESEARCH

MALE INFERTILITY AND MOTHER'S DIET

"The incidence of disorders of development of the male reproductive tract has more than doubled in the past 30-50 years while the sperm counts have declined by half," according to an article by Richard M. Sharpe in the May 1993 issue of the Lancet (341:1392). These changes are similar to those seen in sons born to women who were treated with estrogens (DES) during pregnancy. Both semen volume and sperm count have fallen and disorders such as testicular cancer, urethral abnormalities, and failure of the testes to descend (cryptorchidism) are on the rise.

According to the authors, "The relative composition of fats (especially animal fats), proteins, and refined carbohydrates can also affect substantially estrogen excretion and metabolism, and the overall effect of eating a modern diet is to increase exposure to endogenous estrogens."

In addition to the overall impact of the rich American diet on raising internal estrogen levels there are some other outside sources of estrogens. Consumption of dairy products may increase a woman's estrogen intake. In modern farming, cows continue to lactate at the same time they are pregnant. The pregnancy results in high levels of estrogen (estrone sulphate) excretion into the milk. DES and other synthetic estrogens have been used widely in the livestock industry to promote growth for 20-30 years, and for the first 20 years of their use they were not recognized as a risk to man. Many estrogen-like chemicals are found in the environment where they make their way through the food-chain. The highest levels of chemical contamination are found at the highest levels of the chain (meat and dairy).

COMMENTS: Unborn children, birth defects, motherhood and reproductive prowess are four of the most highly emotional issues in our lives. The possiblity of causing abnormalities in your child's reproductive system may motivate you to look at your diet more seriously than the fear of death from heart disease or breast cancer.

FAT MAKES KIDS FAT

Relationship between diet composition and body fatness, with adjustments for resting energy expenditure and physical activity, in preadolescent children by Jeannie M. Gazzaniga in the July 1993 issue of the American Journal of Clinical Nutrition found the amount of fat in a child's diet was the single determining factor for the development of obesity (58:21). In a study of 53 children (aged 9-11 years) investigators found obese children consumed a greater portion of their energy from fat, both saturated (animal) and unsaturated (vegetable) fat and significantly less from carbohydrate. Fatty snacks, such as chips and packaged cookies, were reported favorites for the obese kids, whereas the non-obese liked high carbohydrate

snacks, like popcicles and soft drinks.

There was no relation to the total amount of energy consumed or the level of physical activity to the child being obese. In fact, the obese children actually had a lower energy intake after body weight was considered.

COMMENT: Five studies have found a relationship between body fatness and the amount of fat in the diet of adults (Gazzaniga J. Am J Clin Nutr 58:21, 1993). Most studies show either no correlation or a negative correlation between food (energy) intake and body weight (Swinburn B. Am J Clin Nutr 57 suppl:776S, 1993). Clearly "overeating" is not the cause of obesity. Obesity is caused by consuming rich foods, high in fat and low in carbohydrate, for three reasons:

1) STORAGE: Excess fat is almost effortlessly stored in the body fat by simply moving it from the fork and spoon to the fatty tissues. Excess carbohydrate, after a small amount is stored as glycogen in the muscles and liver, is burned off as heat rather than converted to fat for storage. Excess intake of protein and alcohol are also not converted to fat (Swinburn B. Am J Clin Nutr 57 suppl:776S, 1993). The capacity to store fat is enormous.

2) HUNGER SATISFACTION: The hunger drive is insensitive to fat intake, yet carbohydrate satisfies the hunger drive, and quiets that maddening appetite (See May/June 1993 Newsletter).

3) CALORIE CONCENTRATION: Foods high in fat are calorie dense, and therefore fill the stomach with more calories and less volume of food. Low-fat, high carbohydrate foods are *calorie dilute* providing volume to fill the stomach with fewer calories.

Your only permanent solution to obesity is to change the composition of your diet (and your children's diets) to low-fat, high-carbohydrate choices; in simpler terms; eat a starch-based diet. Exercise is an important addition for attaining a fit appearance.

A LIGHTER SIDE

THE MCDOUGALL PROGRAM JIVE

May 16th, 1993 Program The McDougall Program, St Helena Hospital, Napa Valley, CA. (Lyrics by Joe Sagen)
Sung to the tune of "Willie and the Hand Jive."

Got to get McDougall food.
If I don't I won't feel good
Doctor John and Mary too
Really love that veggie stew.

No fat or grease or margarine.
Soon I'll be so nice and thin.
Fruits and grains and cereal.
Now I eat 'til I'm real full.

I'm so glad because you see
My old doctor is history.
Linda S. and exercise.
Can't believe I lost those thighs.

Chorus: McDoug. McDoug. McDoug.
Eatin' that crazy McDoug.

Vicki knows what we should eat.
Peas and beans and no more meat.
Linda G. she drove the bus.
And really showed the place to us.

Sylvia and Carol too
Help us manage what we do.
Hap and Lynn they fixed my head.
No stress and pain just joy instead.

Judy C. she helped us pray.
And read a story every day.
Arlene Taylor P-H-D
Helped my thymus don't you see. **(Chorus)**

Dor Anne listened to my chest.
And told me what she thought the best.
For concern with breath and lung
Doctor Hodgkin is the one.

If your fret is with your heart
VandenHoven is the start.
Carol feeds the whole darn group
Garbanzo beans and lentil soup.

Gee we're glad that we were here.
Oats and rice and no more beer.
Instead of fish I'll have some kelp.
Thank you all for all your help. **(Chorus)**

**The McDougall Program Staff:
Carol Trivett is our program director
Sylvia Lotz is our program secretary
Vicki Saunders is our Registered Dietitian
Linda Greenhow is our program facilitator
Linda Schulz is our exercise physiologist
Hap Stump PhD is our psychologist
Lynn Pizzitola is our relaxation consuelor
Carol Wallace prepares all the McDougall Program food
Judy Crabb is our chaplain
Arlene Taylor PhD is director of risk management
Dor Anne Neergaard is our physician's assistant
Peter VandenHoven M.D. is our cardiology consultant
John Hodgkin M.D. is our pulmonary consultant

RECIPES

CHUNKY GAZPACHO

SERVINGS: 10
PREPARATION TIME: 20-40 MINUTES
COOKING TIME: NONE
CHILL TIME: 3-4 HOURS

4 cups tomato juice
2 cups peeled, seeded and chopped tomatoes
1 cup chopped cucumber
1/2 cup chopped red onion
1/2 cup chopped celery
1/2 cup corn kernels
1/2 cup chopped green pepper
1/4 cup chopped green onions
1/4 cup chopped zucchini
1/4 cup chopped green chilies
1/4 cup chopped fresh parsley
1/4 cup chopped cilantro (optional)
1-2 cloves garlic, minced
2 tblsp. red wine vinegar
2 tblsp. lime juice

Combine all the ingredients in a large bowl. Cover and chill for several hours before serving.

Hint: The ingredients may be prepared by using a food processor. This is a great time saver. This may also be prepared by pureeing half of the ingredients and leaving the remaining ingredients finely chopped.

GARBANZO GUACAMOLE

SERVINGS: 2 CUPS
PREPARATION TIME: 15 MINUTES
CHILL TIME: 2-4 HOURS

1 can (15 oz.) garbanzo beans, rinsed and drained
1 tablespoon lemon juice
1 clove garlic, crushed
1 medium onion, chopped
1/2 small avocado, peeled and chopped (optional)
1 medium tomato, chopped
4 scallions, thinly sliced
1 tablespoon canned chopped green chilies

Place garbanzos in a food processor. Add lemon juice and garlic. Process briefly until garbanzos are slightly chopped. Add onion and optional avocado, if desired. Process again until mixture is chunky. Place mixture in bowl. Add remaining ingredients. Mix well. Cover and chill before serving.

Serve with oil-free tortilla chips or fresh vegetables.

This is a lower-fat version of the traditional guacamole. However, because of the small amount of avocado used, it still contains some concentrated fat. To reduce the amount of fat, eliminate the avocado. The recipe is still delicious.

BREAKFAST TORTILLAS

SERVINGS: 6-8
PREPARATION TIME: 10 MINUTES(COOKED RICE NEEDED)
COOKING TIME:10 MINUTES

2 cups packed,washed, chopped spinach
2 cups cooked brown rice
1 cup frozen corn kernels
1/2 cup Mexican salsa
6-8 whole wheat or corn tortillas

Place the spinach in a saucepan with only the water still clinging to the leaves. (If you washed the spinach the night before, place the spinach in the saucepan and sprinkle a little water over the leaves with your fingers.) Cook and stir until just wilted, about 2 minutes. Remove from saucepan and drain well. Place the brown rice, corn and salsa in the saucepan, cook and stir until heated through. Stir in the spinach. Place a line of the rice mixture down the center of each tortilla, roll up and eat.

GARDEN PITAS

SERVINGS: 4 LARGE
PREPARATION TIME: 30 MINUTES
COOKING TIME: 30 MINUTES

1/2 cup water
1 tablespoon soy sauce
1 small round onion, chopped
1 teaspoon finely chopped fresh basil
2 cups chopped broccoli
2 cups packed spinach leaves
1/2 pound mushrooms, sliced
2 medium tomatoes, sliced
4 whole wheat pita breads

Place the water, soy sauce, onion and basil in a frying pan. Cook and stir over medium heat for 2-3 minutes, until onion softens slightly. Add broccoli and continue to cook and stir for another 6-8 minutes, until broccoli is crisp-tender. Remove from heat.

Pre-heat oven to 350 degrees. Place the pita breads on a baking sheet, top side down, so a small bowl is formed. Divide the broccoli-onion mixture between the 4 pitas. Lay the spinach leaves over the broccoli mixture, then the sliced mushrooms over the spinach, finishing with the sliced tomatoes.

Bake for 30 minutes. Serve hot, topped with a warm sauce, such as Szechwan or mushroom, or an oil free dressing.

HELP

DONATIONS

TO THE MCDOUGALL PROGRAM

The McDougall Lifestyle Change Research Fund--2574.1040 will be money I personally manage for research and education. The McDougall Program Fund--2574.1039 will be money managed by The McDougall Program administrative staff, and used for research and education. Send to The McDougall Program, c/o St. Helena Hospital, Deer Park, CA 94576. ALL TAX DEDUCTIBLE.

MORE HELP

Books and Audio Cassettes: The New McDougall Cookbook--$24. The McDougall Program--$10.95; The McDougall Plan--$10.95; McDougall's Medicine--A Challenging Second Opinion--$11.95; Volume I & II of the Cookbooks--$9.95 each. The McDougall Video--$25. McDougall Program Audio Cassette Album (8 tapes)--$69.95. Add postage ($4 first book, audio album, or video and $2 each additional item)

The McDougall Program at St. Helena Hospital, Deer Park, CA. Two weeks of physician supervised live-in care designed to get people off medication, out of surgery and living again--call 1-800-358-9195 (outside California) or 1-800-862-7575 (California).

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