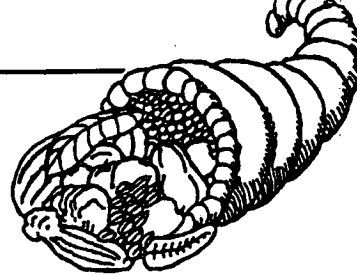


THE NEWSLETTER MCDougALL



MAR/APR 1987

VOL. 1 NO. 4

INFORMATION FOR YOUR HEALTH

ALUMINUM AND ALZHEIMER'S DISEASE

DO YOU WANT TO BE PART OF THIS EXPERIMENT?

On December 4th, 1986 I received a letter from Frank Rathbun, Manager of Consumer Information, The Aluminum Association (900 19th Street N.W., Washington, D.C. 20006) concerning mention I had made once in a national magazine and again on national radio of the association between aluminum and Alzheimer's Disease. In his letter, Mr. Rathbun defended the safety of eating aluminum with quotes from several nationally known experts convinced of the safety of eating aluminum. I feel, as part of "the experiment," you should be aware of this important controversy.

I realize this sensitive subject is not good for the business of the Aluminum Industry, but the American public has the right to be informed of the scientific facts on this important health issue. The information linking aluminum to Alzheimer's disease is substantial. The following should be brought to the attention of the consuming public:

- Aluminum is not a nutrient; therefore it plays no necessary role in human nutrition. Avoidance of this metal is entirely without negative health consequences.

- The most characteristic autopsy finding used to diagnose Alzheimer's disease is bundles of nerve fibers twisted and tangled into masses called *senile plaques*. These plaques are referred to as a major neuropathological feature of Alzheimer's disease. Aluminum is found in the diseased brain of Alzheimer's patients in the central region of these senile plaques. As stated in a recent research article (Candy J. Lancet 1:354, 1986): "The presence of aluminosilicates at the centre of senile plaque cores contrasts with the distribution of other inorganic constituents and suggests that they may be involved in the initiation or early stages of senile plaque formation." The authors more clearly stated their concern, "The association of high concentrations of these elements with both major neuropathological features of this disorder suggests that they may be involved in the aetiology of the disease." (The elements referred to are aluminum and silicon.)

- Increased levels of aluminum are found in the brains, senile plaques and neurons of Alzheimer's diseased patients compared to those persons without the disease (Perl D. Science 208:297, 1980; Crapper D. Science 180:511, 1973; Crapper D. Brain 99:67, 1976; Duckett S. Journal of Neuropathology Experimental Neurology 39:350, 1980.)

- Aluminum has been demonstrated to cause senile plaque formation and cognitive (mental function) defects in experimental animals (Klatzo I. J Neuropathology Experimental

Neurology 24:187, 1965; Terry R. Journal Neuropathology Experimental Neurology 24:200, 1965.)

- The viewpoints of many other experts in the field of Alzheimer's disease were conspicuously absent from Mr. Rathbun's letter to me. Consider these comments on this tragic disease from the 1986 conference held by the American Association of Retired Persons and the National Institute on Aging: "There is no doubt that aluminum is a neurotoxin," according to Dr. John Blass, a neurologist who heads the dementia research center at Burke Rehabilitation Center, White Plains, NY. "The working hypothesis in our laboratory is that aluminum is a potential etiological agent in Alzheimer's" according to Dr. Perl, director of the division of neuropathology at Mount Sinai. Dr. Perl wonders, "...is the barrier system we relied on to keep aluminum out of the body still effective?" Dr. McLachlan is concerned about the amount of aluminum we eat and thinks, "We ought to examine that load more closely and try to do something about decreasing it." (Internal Medicine News 19:1, 1986)

- The burden of proof for the safety rests upon the Aluminum Industry. So far the scientific evidence has not provided the proof that aluminum is safe to eat. On the contrary, the evidence is pointing a guilty finger in the direction of the Aluminum Industry--and the scientific link between aluminum and Alzheimer's disease is growing. Unfortunately, in the real world, those people concerned about health hazards created by a variety of powerful industries, are required to prove the dangers beyond a doubt--and the public acts as "human guinea pigs" while the issues are being argued.

- The "consumer information people" representing the tobacco industry still contend that smoking is not a health hazard. I must assume that the Manager of Consumer Information of the Aluminum Industry has a similar loyalty to his employer. I hope anyone listening to spokespersons defending aluminum will take this important fact into consideration and make the effort to look over all the scientific evidence before forming his or her own opinion on this subject. Do you want to be a part of the experiment that eventually determines the hazards of eating aluminum?

- People contact and consume aluminum from pots, pans, other utensils and cans. The amount of aluminum that eventually ends up in the food depends upon the type of food and the length of contact. For example, tomatoes heated in aluminum pans for a few minutes accumulated .02-.03 mg per 3 1/2 ounces, while tomato sauce cooked for 3 hours in aluminum pans accumulated 5.7 mg per 3 1/2 ounces.

- Aluminum is used extensively in the food and drug industry. Four million pounds of aluminum were used as food additives in the United States in 1982 (Food Technology 39:73, 1985.) A few examples of use as an additive are: as a chewing gum base, in some baking powders, in producing sweet and dill pickles, as a modifier of food starch, as a buffer and neutralizing agent in milling, as a leavening agent, for clarifying

sugar, as a carrier for bleaching agents, a firming agent, a pH agent, for color and appearance control, for processing cheeses and other dairy products, and aluminum calcium silicate is present as 2% of table salt. Aluminum is also used in packaging, in deodorants as a perspiration drying agent, in antacids (Amphogel), and in other medications (aluminum nicotinate). Your label reading skills will be used extensively as you search out common products that are tainted with aluminum. There is also a small amount of aluminum in vegetables and our water supply.

• The amount of aluminum consumed varies considerably among individuals. Just as important is the way the ingested aluminum is handled--some people absorb more of the aluminum they eat than others, also the ability to excrete aluminum varies. As with all other diseases, strengths and weaknesses of the individual determined by heredity, general nutrition, previous health and other unknown factors play a role in whether or not an individual will develop Alzheimer's disease. The amount of aluminum we eat is largely under our control. Present knowledge clearly shows avoiding aluminum is without hazard and may be the most important opportunity we have to prevent Alzheimer's disease.

MEDICAL RESEARCH

CARBOHYDRATE METABOLISM AND DE NOVO LIPOGENESIS IN HUMAN OBESITY by K. Acheson (American Journal of Clinical Nutrition 45:78, 1987. Six healthy young obese individuals were compared with six lean people to find out if overweight people have a greater capacity to make body fat from carbohydrates (starches and sugars) than thin people. All subjects were fed a large amount of a carbohydrate solution (500 grams of dextrin maltose in juice.) Changes in the body's fat content were measured by metabolic and blood tests. The results showed that overweight people were no more efficient at making fat from carbohydrate than thin persons. Furthermore, very little carbohydrate was actually converted to fat.

COMMENT: Obesity is caused by the intake of food energy in excess of expenditure. Some people blame their overweight condition on their metabolism--"everything I eat turns to fat" and "I gain weight on 500 calories a day." This is one more study that shows that overweight people are not more efficient at the conversion of calories to fat than other people.

More importantly, this study and others (Acheson K, Metabolism 31:1234, 1982) show that very little carbohydrate is actually turned into fat. When carbohydrate calories (found mostly in starches, vegetables, fruits and sugars) are eaten in excess of need, they are stored in the liver and muscles in the form of glycogen, where they are immediately available for physical activity and other "on the spot" energy demands. However, when calories in the form of fat (found in high concentrations in oils, butter, cheese, milk and meats) are consumed they are efficiently turned into blood fats (triglycerides) which accumulate in the body fat tissues and the most common consequence is people become obese. (Flatt J. Journal of Clinical Investigation 76:1019, 1985.) When you understand that "food fat" makes "body fat" and carbohydrates contribute very little to body fat accumulation, then you will have one more good reason to no longer fear carbohydrates. Starches make you thin--look at one billion Chinese living on mounds of rice for convincing evidence. For confirming evidence, look at the overweight Chinese living

• in this country on the high-fat American diet.

COMPARISON OF MONOUNSATURATED FATTY ACIDS AND CARBOHYDRATES FOR LOWERING PLASMA CHOLESTEROL by S. Grundy (New England Journal of Medicine 314:745, 1986. A diet high in monounsaturated fats (43% fat) in the form of olive oil and a low-fat diet (20% fat) diet were compared for their effects on lowering cholesterol. The olive oil was found to be at least as effective as the low-fat diet in lowering cholesterol. These authors felt the ingestion of more olive oil rather than the severe restriction of a low-fat diet may be more acceptable to people.

COMMENT: Olive oil has no special effect of lowering cholesterol over any other method that reduces animal-type fats in the diet (Keys A. New England Journal of Medicine 315:585, 1986). This vegetable fat--olive oil--simply replaced the animal fat. However, because of all the popular media, olive oil has joined the list of "health foods" for many Americans. The hazards of using olive oil are omitted from most discussions. No one seems to mention the fact that olive oil is high calorie (9 calories per gram, compared to sugar at 4 calories per gram, and starches at approximately 1 calorie per gram). In animal experiments olive oil, like other vegetable oils, is among the strongest promoters of cancer in the diet (Carroll K. Cancer Research 35:3374, 1975.) Furthermore, vegetable oils are involved in the development of gallbladder disease, oily skin and acne. By nature we have a tendency to resist change; we are looking for the easy "magic pill" way out of our troubles. To replace one oil for another, especially when health benefits are claimed, is much easier than reducing or eliminating completely this rich component from our diet.

RECIPES

EASY TOFU BURGERS

Makes 20 burgers

2 lbs. firm tofu
3 cups rolled oats
2 tbsp. ketchup
2 tbsp. Dijon mustard
2 tbsp. natural Worcestershire sauce
2 tbsp. low sodium soy sauce

Combine all ingredients in a large bowl and mix together well. Take a small amount into your hands and shape into a patty. Place on a non-stick baking sheet. Repeat until baking sheet is full. Place in a preheated 350 degree oven. Bake for 20 minutes, then turn over and bake for another 10 minutes. Remove from baking sheet and let cool on racks. Repeat until all ingredients have been shaped into patties and baked.

HELPFUL HINTS: To heat before serving, place on a serving dish and heat in a microwave for a few minutes, or place under the broiler until brown. They are also delicious cold. Serve in a whole wheat bun with all of your regular, favorite burger trimmings!

Contributed by Vicki Saunders R.D. (St. Helena Health Center)

ITALIAN SPAGHETTI STEW

Serves 4 to 6

1 large clove garlic, chopped
2 quarts canned, undrained, salt-free tomatoes
1 teaspoon dried basil
1 teaspoon crushed oregano

1/2 pound spaghetti noodles
2 cups cooked chick-peas (garbanzo beans)
4 ears corn on the cob, cut in 2-inch segments
2 cups shredded romaine or other leafy greens

Saute garlic briefly in a small amount of water. Before it begins to color, add tomatoes and seasonings; bring to a boil and simmer for 10 minutes. Add spaghetti, chick-peas, corn, and simmer for 15 to 20 minutes, or until spaghetti is tender. Add greens and cook 2 minutes longer, just to wilt.

HELPFUL HINTS: This is a rich stew that includes chunks of corn on the cob for a taste and texture that is different than other recipes you have made. Eating with fingers is definitely permitted.

Contributed by Vicki Saunders R.D. (St. Helena Health Center)

FROZEN FRUIT "SORBET"

Serves 6 to 8

1 cup pineapple juice
1 frozen banana
1/2 to 1 cup frozen blueberries or strawberries
2 cups frozen pineapple

Put the 1 cup of juice into blender. While blender is running, add pieces of frozen fruit through the feed opening in the blender lid. Blend mixture until it is of a "soft serve" consistency. Pour into serving dishes, 3 to 4 oz. servings. Serve immediately, or hold in freezer for a short time before serving.

A STORY WORTH REPEATING

THE MURDER OF GRABWELL GROMMET

by Arthur Hoppe**

On the morning of his 42nd birthday, Grabwell Grommet awoke to a peal of particularly ominous thunder. Glancing out the window with his bleary eyes, he saw written in fiery letters across the sky: "SOMEONE IS TRYING TO KILL YOU, GRABWELL GROMMET!"

With shaking hands, Grommet lit his first cigarette of the day. He didn't question the message. You don't question messages like that. His only question was, "Who?"

At breakfast as he salted his fried eggs and buttered his toast, he told his wife, Gratia, "Someone's trying to kill me."

"Who?" she asked with horror.

Grommet slowly stirred the cream and sugar into his coffee and shook his head, "I don't know," he said.

Convinced though he was, Grommet wasn't going to the police with his story. He decided his only course was to go about his daily routine and hope somehow to outwit his would-be murderer. He tried to think on the drive to the office. But the frustration of making time by beating lights and switching lanes occupied him wholly. Nor, once behind his desk, could he think a moment what with jangling phones, urgent memos and the problems and decisions piling in as they did each day.

It wasn't until his second martini at lunch that the full terror of his position struck him. It was all he could do to finish his Lasagna Milanese. "I can't panic," he said to himself, lighting his cigar. "I simply must live my life as usual."

So he worked until seven as usual. Drove home fast as usual. Studied business reports as usual. And he took his usual two Seconal capsules in order to get his usual six hours sleep.

As days passed, the man fully stuck to his routine. And as the months went by, he began to take a perverse pleasure in his ability to survive. "Whoever's trying to get me," he'd say proudly to his wife, "hasn't got me yet. I'm too smart for him."

"Oh, please be careful," she'd reply, ladling him a second helping of beef stroganoff. The pride grew as he managed to go on living for years. But as it must to all men, death came at last to Grabwell. It came at his desk on a particularly busy day. He was 53.

His grief-stricken widow demanded a full autopsy. But it showed only emphysema, arteriosclerosis, duodenal ulcers, cirrhosis of the liver, cardiac necrosis, cerebrovascular aneurysm, pulmonary edema, obesity, circulatory insufficiency and a touch of lung cancer.

"How glad Grabwell would have been to know," said the widow smiling proudly through her tears, "that he died of natural causes."

**copyright Chronicle Publishing Company, reprinted with permission of the author.

REHASH

What to tell your concerned friends when they ask: Aren't you afraid of getting osteoporosis? You don't drink milk.

•Osteoporosis has become a household word over the past five years. A woman's bones seem to mysteriously dissolve away at age 55 leaving her with a shortened stature and a shorter life. How unfair, when the natural life-span is around 85 years. Common sense tells us this must be a disease, not the natural course of life, or even more unbelievable, a curse on women. (Men develop osteoporosis about one decade later in life.)

•This tragic disease, osteoporosis, is claimed by the Dairy Industry to be due to cow's "milk deficiency." Those people believing in this message should be as willing to accept an explanation that the cause of fragile bones is due to kangaroo, dog, goat and/or human breast "milk deficiency." In these terms it sounds rather silly that osteoporosis would be due to a deficiency of any animal's milk in adulthood.

•Manufacturers of calcium pills try to convince us that osteoporosis is due to a "pill deficiency"--somehow our creation was flawed and we need a pill to survive in good health. Hard to believe?

•Physicians and drug manufacturers claim the problem of thin bones is due to estrogen "pill deficiency"--we are asked to believe that somehow menopause was a mistake in a woman's design.

•We don't have to be medical doctors to conclude that this threatening disease is not due to a deficiency of any species of animal's milk nor a pill deficiency. All the necessary nutrients to preserve the strength of bones for a lifetime must be in the food.

•Worldwide osteoporosis is most common in countries where dairy product consumption is highest--United States, England, Israel, Finland and Sweden. Just as surprising, this disease is rare in countries where people eat few dairy products--Asian and rural African countries.

•There is one consistent and direct dietary relationship that does provide the clue to the cause of osteoporosis--the more protein, and especially animal protein, consumed, the more osteoporosis. The United States has the highest animal protein intake of any country and the highest hip fracture rate in the world. In rural Africa, hip fractures are almost unknown and the animal protein eaten is no more than a flavoring.

•Protein changes the physiology of the kidneys, causing them to excrete large amounts of calcium and other minerals. Animal protein has a much more profound effect of causing calcium loss than vegetable protein.

•Eskimos are physically active people, who consume approximately 2500 mg of calcium a day from fish bones, but they also have the highest intake of animal protein (fish, whale, walrus, etc.) of any people in the world (250-400 grams/day.) Predictably, they have the highest incidence of osteoporosis of any population. By comparison, in the United States people consume 800 mg of calcium a day and 160 grams of protein. Osteoporosis is 10% more common in Eskimos than people in the United States.

•Amounts of protein consumed by typical Americans--160 grams a day--produces a calcium loss in the urine that cannot be compensated for by even large intakes of calcium--1500 mg or more per day. The deficit is made up from the calcium stores--the bones.

•Lowering the protein content of the diet by limiting protein-rich foods, such as chicken, fish, beef, eggs, cottage cheese and skim milk will restore calcium balance, so more calcium stays in the body than leaves it. Even though vegetable proteins cause much less loss of calcium than animal-derived protein, people with osteoporosis or at high risk for osteoporosis should limit high protein vegetable foods--beans, peas and lentils.

•Add regular physical activity to a healthy diet for the greatest opportunity to prevent osteoporosis and restore lost bone.

SUMMERTIME SPEAKING ENGAGEMENTS

Dr. McDougall will be speaking at the following places this summer:

June 22nd--Weimar Institute, Weimar, CA 95736 for the Alumni Homecoming Week. 916 637-4111

July 15th-19th--Vegetarian Summerfest in Allentown, Pennsylvania. Exact date and time not yet set. 518 568-7970

August 7th--Toronto Vegetarian Association Conference "Vegetarianism--A Taste of Tomorrow" Ontario, Canada. 416 923-1933

August 10th-16th--International Macrobiotic Summer Conference 1987, Great Barrington, Massachusetts. Exact date and time to be set. 617 738-0045.

MORE HELP

The McDougall Plan--\$8.95. McDougall's Medicine--A Challenging Second Opinion by New Century--\$8.95. Volume I & II of the Cookbooks \$7.95 each. Add postage (\$2 first book--\$1 each additional)--send to POB 1761, Kailua, HI 96734. THE MCDUGALL PROGRAM at St. Helena Hospital, Napa Valley, 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).

SUBSCRIBING INFORMATION

The McDougall Newsletter is published bimonthly. Send \$8 to POB 1761, Kailua, HI 96734. Previous issues available at \$1.50 per copy.

LETTERS TO THE MCDUGALLS

My husband and I have been on your health-supporting program since the first of March. My husband has lost 49 pounds and feels much better than he has in years. I have lost 24 pounds and also feel better. I am taking less estrogen than I have in years and that's the only medication I take. My husband is still taking some blood pressure medication, but is looking forward to the day when his doctor will take him off it. We believe in your program and have been sharing it with others. My sister-in-law, who has lupus, has been on the program for several months now and has noticed much improvement. Our children and their daughters are all doing very well. They are as convinced as we are that this is the only way to live healthily. Those are only a few of the several families that have started on the program because of the difference it has made in my husband and myself. J.H. Lawton, OK

I'm a 79 year old dyed-in-the-wool former skeptic turned vegetarian due to your broadcast on the Larry King Show. Since embarking on your plan 2 months ago I have: shed 16 pounds, swim a quarter-mile every day (and taken 4 inches off my hips, 3 inches off my stomach, 3 inches off my waist, and 2 inches off my bust), completely licked my chronic constipation, lessened my insomnia, and had more energy than I've had in some years. I realize this is a life-style that must continue through all the years remaining to me. E.H. Sun City, AZ

I want to thank you for writing McDougall's Medicine and The McDougall Plan. I have suffered the pain of arthritis for nine months. I am a violin teacher and that was devastating. I am amazed with my regained flexibility and lack of morning pain. I am extremely grateful to you. L.P. Grandview, WA

I have read through your book The McDougall Plan and have easily followed your advice and proper diet. I cannot believe what a difference it makes to be fueling my body with premium fuel. Your easy to follow recipes are both fun and satisfying. I never knew I could eat so much and still stay in good condition. I have always been one to watch my weight and exercise properly, but it was not enough. To truly feel and look my best, this plan has been the answer. I found your book very informative as well as easy to understand. Your diet has given me much more energy, a better attitude, and much more patience with my family as well as with my work. Thank you. S.G. Milwaukee, WI