

CHOLESTEROL AND ALL THAT

From the Patient's Point of View

Dear friends in Cardiac-Rehab:

These birthday letters occur annually for some reason; and this one is for my 97th, which makes me, Bill Duren, the oldest Cardiac-Rehabber, I think. I am looking forward to the pizza party celebrating it. But I can't get too swell headed about that because I know that we look for every excuse to have one of those parties when the dietary rules are relaxed in favor of pizza and beer. I had suggested that such a celebration should wait for my 100th but you couldn't wait.

Today I want to take a patient's look at those intricate rules of nutrition for all those other days of the year, but first let me answer a question that is frequently asked.

What is my secret for living so long? Is it heredity? Could be. I have some, but my parents did not make it to this age, and my brother and sister, both younger, are long gone. They quit cigarettes too late.

Could it be exercise? Maybe. I was in training for athletics in college, took up tennis after that, and then converted to gardening and hiking when our kids came along. Now in my "senior years" Cardiac-Rehab replaces most of these. -- It is preventive with me; I have not had heart trouble.--And the greatest benefit that I perceive from it is in mental sharpness. I am still able to read stimulating writing, as well as research mathematics in my field.

I feel that it is very important to push myself to maintain a full exercise schedule, even though it is increasingly tiring, and not give in to my cravings to slack off. It is especially important to me because my old-age peripheral neuropathy so impairs my walking that I cannot walk around the block. Without regular exercise at Cardiac-Rehab I would soon be bedridden in a nursing home.

Isolation is also a problem of old age when, not only your wife, but also virtually all of the friends of younger years are gone. Here in Cardiac-Rehab I find new friends to supplement those among younger mathematicians that I meet in research seminars at the university. And I am very fortunate that our sons and daughter, as well as other members of our close-knit extended family, take turns coming to see me. Almost every month I see at least one of them.

Avoiding substance abuse? Yes. I have never smoked cigarettes, and drank no alcohol until the repeal of Prohibition in 1933, when my wife, Mary, and I took up wine, limited to amounts that are still to this day considered beneficial. We drank lots of coffee, but the only heart damage that has ever been pinned on coffee was on decaf, which we did not use. The only other drug we used was aspirin, which has turned out to be helpful, not only in preventing blood clots, but in many other ways as well. That was sheer luck.

Diet? Quite possibly. I happened to like leafy vegetables, and for as long as I can remember I have eaten three times the normal amount of them. So I got my folates all those years. That too was pure luck.

Also, in graduate school in biology, Mary thought she was going to teach biology in a women's college; so she learned nutrition to teach it. But she married me instead; so our kids and I got the benefit of it. In Mary's grad school days they did not know the

difference between LDL and HDL, but they knew that the body needs cholesterol and produces it from fats. So the right tactic is to hold down fats in the diet. She cut the fat and salt in all recipes to half, starting in about 1934. Modern nutrition now makes finer distinctions, but restricting fats and sodium is still the main idea. In later years Mary's graduate training enabled her to discriminate reliable reports from the pseudoscientific junk on food that floods the newspaper and television.

When Mary could not do the cooking any more, I took over getting food on the table, and so was able to learn from her. Since then, the microwave has become my main cooking utensil, and the University of California *Wellness Nutrition Counter* my food bible. The *Healthy Choice* and *Lean Cuisine* brands of frozen entrees offer many heart-healthy choices for lazy cooks. Except for special beefsteak occasions, beef in my diet has been replaced by soy *Veggie Burgers*, but fish and poultry remain. As a result of all this, the blood chemistries in my annual physicals look good.

Weight control and sleep? These are my failures. I am at a stand-still in my program to lose 40 pounds, and I lie awake nights, unable to sleep.

From Something-To-Eat To Nutrition. Did you ever think how many words there are for *something to eat*? *Food* is the main word now up to the point of food on the table- *feed* or *fodder* for animals -. Then it becomes *breakfast*, *dinner*, and *supper*. *Lunch* was a later introduction, with dinner shoved back to last. *Meal* is the general word now for these *repasts*. The list of items in a meal is the *menu*. Besides the word, *food*, we have the general words: *nourishment*, *fare*, *provisions*, *rations*, and *victuals*. There used to be separate *markets* for each kind of food until they were combined into a *grocery store*, which was the ancestor of the *supermarket*. The *meat market* and the *fish market* were the last separate markets to join in the grocery store.

All of these general words avoid having to say in detail what they include. But when we come to *recipe*; that calls for spelling out in detail each recipe. This uses up a lot of newsprint, and cookbooks. At the end of this letter I shall present a make-believe recipe of my own. But the champion generator of food literature is the word, *nutrition*. Introduce the word, *nutrition*, and suddenly you have brought in: calories, fatty acids (saturated, poly unsaturated, and monounsaturated), triglycerides, cholesterol, carbohydrates, protein, HDL, LDL, dietary fiber, minerals (not too much sodium, but enough calcium, potassium, and iron), and vitamins (A, carotenoids, B6, B12, C, D, E, K, folic acid, niacin, thiamin, and lesser ones). And, according to the latest research, which may be reversed next week, each of these impacts the aging human body in several special ways of its own, good or bad.

Of course all this has to be explained to us for our benefit, or so they think. The result is the overwhelming spread of newspaper, radio, and television stories about the latest that "science says", and many authentic health and nutrition letters, including the well-written ones by our own Lisa Womack. -- Sadly, the current issue will be her last. -- Then there is the plethora of books on the subject, including the authentic, but worthless, Johns Hopkins *Family Health Book*. One way that these authors try to make it simple for us is to pick one small subject out of the list, and write about this alone. This ignores the fact that what hits us is the stupendous totality of articles like theirs. Another way they have is to avoid technical language, and explain it to us in what they conceive as layman's language that nobody can understand. And they emphasize reducing calories in

the diet so much that you have to remember that the purpose of eating is to acquire calories. Without calories you would starve.

I don't know about you, but I find this complicated beyond reason. I manage my lifestyle as I described it above, without using any of it except make sure that I have a balanced diet. This leads me to study the nutritional components of foods. We get a lot of news stories that extol the recently discovered virtues of some ingredient, such as red bell peppers, and presents a recipe that includes it.. But why stop there? Why not a recipe that includes the best source of each and every essential vitamin and mineral? So here I present a make-believe recipe that includes the best of everything. Eat it at your own risk!

Beet Greens Durenaise. First we must list the best source, on a per-calorie basis, in each essential vitamin and mineral. Here "the best" also takes into account the necessity to limit fat and sodium. So here are our ingredients.

Vitamin A.	Carrots, raw, chopped, ½ cup.	52 cal.
Beta Carotene	Carrots, Above.	
Vitamin B6	Sweet red bell peppers, raw, chopped	40 cal.
Vitamin B12	Clams, boiled, 3.5 oz.	148 cal.
Vitamin E	Wheat germ oil 1 Tbs.	120 cal.
Vitamin K	Beet greens, ½ cup.	19 cal.
Folic Acid	Spinach, Fresh boiled, ½ cup	21 cal.
Niacin	Mushrooms, boiled, ½ cup	21 cal.
Thiamin.	Meatless soy sausage, 3 links.	192 cal.
Vitamin D.	Sunshine.	
Calcium.	Chinese cabbage, pok choi, ½ cup.	10 cal.
Potassium.	.Beet greens, ½ cup. Above.	
Iron.	Clams, Above	
	Lettuce, Romaine, 1 cup, shredded	9 cal.

Make a salad with the raw carrots, bell peppers, lettuce, and wheat germ oil. Boil the rest of the stuff in a large pot, and season with Mrs. Dash. Serves three at only 211 calories per meal. I call it Beet Greens, Durenaise. It provides more than the minimum daily requirement of all essential vitamins and minerals, I think. And uses the best existing low calorie, low fat, low sodium source of every one. How about that? If you make up this dish, please let me know how it tastes. I haven't had the nerve.

W.L.Duren, Jr.
Nov. 10, 2002.