



INTEROFFICE

TO: Pepsi East Division Team

FROM: Michael K. Lorelli

SUBJECT: YOUR HEALTH

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This weekend I finally collected my notes on the subject for which I've become your favorite nuisance...your health. Herewith, a 3 page nonmedical-jargonned Cliff Notes White paper on the subject of longevity, based partly on my work as a trustee at the Institute For Cancer Prevention. Their chairman, Dr. Ernst Wynder believes that "we should all die young...as late in life as possible."

First. Age is not merely the passage of birthdays. We all know people in their 70's that are as vibrant as a lot of 50's. We see some 50's that make a major effort to just close the car door. Decline in functional capacity does not have to be linear with age. The 5 swing factors are these:

- Cardiovascular condition - There's just no substitute for 3 days per week of intense (minimum 20 minutes) activity that gets the heart rate up to 85% of it's peak rate. Beyond 20 minutes you're still burning off calories which is great; the cardiovascular benefit hits diminishing returns.
- Body (primarily trunk) flexion – Kids can put their feet behind their necks. Every day that you don't flex the limbs, reduces their range. Stretch, stretch, stretch, twist, touch toes, pole twists, and other limbering exercises will keep the cement from forming around your ankles. Force yourself to go beyond yesterday's reach, everyday. Continuous improvement, as we say.
- Your intake – More on this later in this paper. I cannot offer advice on nutrition, but I will bore you with facts on eating habits that statistically will prolong your life and wellness.
- Sleep – Your body goes through 4 REM cycles every night. The first two are when the body does "Preventative Maintenance" on the organs. The latter two cycles perform the same function for the brain. You need the first three cycles, or 6 ½ hours of sleep. Cutting deeper not only limits your alertness and creativity (which has been popularly written about), but also cuts down your life expectancy. Dr. James Maas, the leading authority on this subject, believes that regular omission of the last two REM cycles will shorten your life expectancy by 7 years. Before you say it, I recognize that my own credibility in this regard is questionable.
- Genes – Yes, heredity factors play a major role. There's nothing you can do about it, except to take the subject more seriously if your natural family has a history of heart or cancer disease incidence.

Second Cardiovascular condition is a function of not just regular aerobic activity, as discussed above, but food intake as well. Cholesterol (more specifically LDL) is the enemy, and relatively easy shifts in consumption practices can make a large difference in your cholesterol statistics. As an aside, you should know your cholesterol count. Total cholesterol

must be below 200. Below 180 is an appropriate PepsiCo-like target. Your total/HDL ratio should be 4:1 with 3:1 being a dream come true.

The attached food intake guide highlights the substitutions you should be making now and every day. Force yourself to get serious and go cold turkey on butter, red meat, bacon, eggs, sausage, regular milk, shellfish, sauces, cheese, and all the other vice-grips on the arteries. Aerobic activity is believed to increase your HDL (the good kind) level.

Third is the life-limiting subject of cancer. Here, too many of us know “smokestacks” who puff away merrily in their 70’s without a hitch. Then there are the victims in there 20’s for which life just didn’t seem fair.

The bridge explanation is that all of us have cancer cells in our bodies *right now*. Cancers develop over a long time frame...probably between 10 and 30 years. The body normally rids itself of these cells as a regular process. But cancer is a continuum. The body is in a constant Presidential debate between the cancer “promoters” and the body’s heroic “detoxifiers.” When the cells reach a critical mass (defined unscientifically as visible to the eye, or to feel) we have a tumor.

The three “stimulants” to cancer growth are **environmental factors**, **self-imposed risks**, and our **genetic makeup**. Again, the latter is something for which there is no “to do” other than overcompensate by minimizing additional risk exposures. For example, if two of your blood relatives developed cancer of the stomach, some scientists believe this may be related to a genetic flaw. Scientists disagree on this point. Some believe it may be attributed to common environmental risk exposures (i.e., your family regularly held charcoal grill hamburger cookouts, exposing the family to unusual levels of nitrosamines). Then again, some scientists attribute this to pure chance.

Environmental factors that increase one’s cancer risk include the documented occupational hazards (don’t be the person blowing insulation into attics or resurfacing floors), living in certain geographies which for some debatable reasons aren’t the place to be, subjecting yourself to passive tobacco smoke, etc. Obviously, excessive alcohol consumption and active smoking, while not “environmental”, are high on the avoidance list.

The primary actionable area, presuming we’ve avoided the previously mentioned risks, is in our **intake**. In this regard, there are two noteworthy points. The first deals with foods that better or lessen your odds of promoting cancer (remember this is a subject of probabilities, not guarantees). The second point relates to putting a “ball & chain” on the cancer cells’ ankles.

The facts: a high fiber/low fat diet will reduce the tumor promoting activity of cancer cells. Animals treated with a carcinogen, and then fed a diet containing a fat level similar to the present-day U.S. diet (40% of calories from fat) exhibited twice the number of tumors as those fed fat levels of a Japanese diet (10% of calories from fat). Stay with olive oil.

More facts: fiber seems to act as both a deterrent and a retardant. Wheat bran (rich in fiber) has been shown to significantly reduce mammary cancer incidence in animals. It also has been shown to prevent recurrence of these types of cancers. The way in which this occurs is unclear, but wheat bran intake, for instance, *“creates an alteration in the metabolism of estrogens, which are associated with breast cancer, and a decrease in the amount of fat available for absorption into the body. Wheat bran may also act to bind estrogens and lipids like a sponge and remove them from the body.”**

To get specific, for example, to one particular cancer, the facts are well accepted that populations consuming diets high in fiber-containing foods such as whole grains, fruits and vegetables, have a reduced risk for (colon) cancer development. Research conducted in the

laboratory would support the hypothesis that these same diets preventative re-current values as well.

The moral of the story is that you can better your "odds" by practicing the intake substitutions, again as shown on the attached chart. Keeping the fat intake down is the easier chore. The bad news is that it takes a super-human effort to stay "On Budget" with regard to daily fiber intake. Recommended consumption is 20-35 grams a day. See for yourself:

-high fiber cereal (Fiber one, or other "rabbit food")	12 grams
-1/2 cup beans	7 grams
-a bran muffin	3 grams
-an apple (with skin)	3 grams
-a banana, strawberries, peach, or blackberries	3 grams
-1 shot of Metamucil or Citracel	4 grams

It's easy to see that swallowing the desired fiber diet is not an accident. It takes a conscious effort.

I hope that this paper is helpful and that you'll share it with your spouse.



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Attachments

cc: Dr. Ernst Wynder (The Institute For Cancer Prevention)

*Paraphrased from a paper by Leonard A. Cohen, Ph.D with permission from The Institute For Cancer Prevention