Nutrition—A Cancer Battle Plan

Updated and revised

This is the most difficult article we've had to write for this edition. Why? You ask. The experts hardly agree on anything. Here are a just a few of their disagreements:

Reports from the Orient show the cancer fighting properties of fermented soy products, but Dr Balch in *Prescriptions for Nutritional Healing* advises against soy products because they interfere with enzymatic action (wrong: do not eat raw soy; the interfering enzymes are destroyed in the fermentation process), while breast cancer experts sit on both sides of the soy garden, some saying they are safe while the others say avoid soy products completely (we recommend ONLY fermented soy products). Some diets recommend salt, some, like the Gerson Therapy, recommend a salt free high potassium diet. If you are juice fasting, Dr Schultz calls for lots of water: "Fasting is flushing." However, Gerson advises against any water because he feels that the stomach must be as empty as possible to digest the juices and soups. Chicken (skinless) can be found on some cancer diets, except at the Livingston Foundation Medical Center, for her book, The Conquest of Cancer, dedicates an entire chapter to the carcinogenic aspects of chicken: "Chicken: Cancer in Every Pot." She admits that free range or organic chickens are better, but still should be avoided. Though most diets call for a strictly vegetarian approach, Gerson cooks the bulk of his vegetables, while most others call for live foods, and then there is Dr Nicholas J Gonzalez out of New York whose diets are prepared on an individual basis with some calling for fatty red meats depending on the patients metabolism and biochemistry.

We could go on for hours, but we'll end these arguments and try to glean for you the best advice from all the experts. However, because of the differing opinions concerning cancer and nutrition, this advice is information only. We cannot create a menu specifically for you, but your doctor and nutritionist can. Please note that if someone designs a diet specifically for you without a thorough assessment of your own particular blood chemistry, you are engaging in quackery. Only general guidelines can be advised without a thorough assessment. A thorough assessment of one's body chemistry is the only way to design a specific meal plan.

The best nutritional advice so far has come to us from the Center for Advancement in Cancer Education in Pennsylvania. They have put together a cancer battle plan from the best of all nutritional advice and we will give it to you here. The Center for Advancement in Cancer Education can send you a slough of information, papers, books, audio and video tapes, to aid you in your struggle. They need your support through donations and fees charged for their information, and can be contacted at (610) 642-4810.

First we will give you general guidelines, followed by in depth information of a diet to fight cancer.

To begin, we must warn you that a dramatic change in your diet can dump dangerously large amounts of cellular waste into your blood stream, therefore you must detoxify your system before and during the initial stages of your diet. However, most people's idea of detoxification is to buy a detox tea. This is wrong and dangerous. There is a proper way to detox, and you

must read the article "Cleaning House" before you attempt it. "Cleaning House" is the most important article you will read at this web site. Dr Richard Schultz told us that in his clinical experience, 80% of all maladies, whether chronic acne, psoriasis, arthritis, or cancer, cleared up within two weeks of detoxifying the colon only. Read that article. Top

The Principles of a Cancer Diet

The Center for Advancement in Cancer Education puts it simply: low fat (a low fat diet lowers "bad" estrogen levels in women), low animal protein, high fiber, high enzyme diet whose acid/alkaline balance approaches a ratio of 1:4, eliminating heavily refined, highly heated, over-processed, artificial, and chemically adulterated foods. In other words, organic, unprocessed or minimally processed foods. However, there is a problem here in that the Mediterranean diet is high in fat and breast cancer rates are lower there. So it is not just fat, but the types of fats we are interested in here. Olive oil is contains essential acids as does flax oil. Diets low in fat can kill a cancer patient. PMGs that promote cells to stop this crazy out-of-control growth needs to work with fats. For more information on PMGs see here: http://www.mnwelldir.org/docs/cancer1/altthrpy3.htm#Protomorphogens

Also keep in mind the condition of the animal who's fat you are about to consume. Butter from an organically raised cow is so much better for you than butter from conventionally raised cows.

What Else to Eliminate

Coffee, tea (with too much caffeine), sugar, white flour, white rice, milk, oils (except olive oil), liquor, fried food, meat from animals that have been raised with hormones or antibiotics, citrus (one or two oranges is maximum), vitamins that are not indicated for you specifically, refined salt (Celtic Sea salt - http://www.mnwelldir.org/docs/immune/immune2.htm - has been given the ok by many naturopaths and nutritionists), cocoa, over-processed foods, foods with additives and drugs (these include all over-the-counter remedies, i.e., pain relievers, antacids, cough and cold medicines). Keep in mind that these are just general guidelines. Some people actually need coffee to counteract the alcohol created by their pancreas. Some people need animal proteins. Some need citrus. Only a thorough chemical analysis can tell you specifically what to eat and what to avoid. However, everyone with cancer should avoid all sugars and any foods containing partially hydrogenated oils (which means you must learn to read labels as the food industry is slowly slipping these fats into nearly everything: frozen foods, cream soups, cocoas, cheese products, you name it).

A special note on sugar: **CANCER LOVES SUGAR**. Your oncologist knows this, yet most feed their patients cookies and Ensure®. Click here to learn what your doctor knows, but refuses/forgets to tell you: **SUGAR** (http://www.mnwelldir.org/docs/nutrition/sugar.htm).

Foods to Use

Raw vegetables and vegetable juices, fruit (fresh and dried but rehydrated—avoid sulphurated), whole grains, lightly cooked vegetables, sweet potatoes, white potatoes, beans, yogurt and kefir, small amounts of organically raised meat, small amounts of poached fish, nuts and/or nut milks, herb teas, vegetable soup, and cruciferous vegetables. Cancer experts recommend a 70% raw food diet (uncooked), however, others seem to feel that 50% is recommended. Check with your own nutritionist.

Another reason for eating organic foods is of special interest to women wanting to prevent or fight breast cancer. Pesticides mimic the action of estrogen in your body in that they can lock onto receptors in the your breasts and stimulate cell division. Even small amounts of pesticides can be dangerous to women, because they tend to concentrate to high levels in fat cells, and breasts are comprised mostly of fat cells.

Enzymes

Any biochemist will tell you, that when the body is creating digestive enzymes, it is too busy to create other enzymes that support your immune system. Adding enzymes to your diet keeps your organs from becoming overstressed and helps them to protect your immune system.

- Before meals:3 pancreatic enzymes (General Research Laboratories).
- With meals:3 or 4 Green Life (Sonebrand).
- After meals: Pancreatrophin, Hepatrophin, and Thymus (Std Process Labs).

All of the above recommendations and name brand products came to us from the Center for Advancement in Cancer Education. Again, you will want to check with your nutritionist.

Food Purchasing and Preparation

Use only fresh, organic, crisp vegetables; avoid anything wilted. Most nutritionists recommend buying only organic foods that are in season and grown locally. This is a pretty difficult order for some of us Northerners since the only thing that grows in winter here are icicles, and a diet of bean sprouts we've sprouted near a window can get rather tedious.

Prepare your veggies and eat them immediately. Do not put leftovers in the refrigerator. Once a vegetable has been sliced, its vitamins and enzymes begin to degenerate. So prepare what you need and toss out your leftovers. Second best to fresh, is frozen. Freeze your own organic veggies.

Do not microwave or use a pressure cooker. Use steel, glass, or ceramic (not imported) cooking pots. Veggies can be lightly steamed, gently sautéed, or baked. Gerson recommends cooking veggies very slowly in their own juices with no added water.

How to Eat

- Eat only when hungry and never overeat.
- Turn off the television and radio.
- Sit down to eat.
- Eat slowly and deliberately chewing each mouthful thoroughly.
- Don't talk and don't be bothered by any distractions.
- Thank your higher power for every bite, and give thanks before and after each meal.
 You'd be surprised who's listening and the powers they/he/she/it can infuse into your
 food. We are spiritual beings experiencing a physical reality. Bring the spirit to your
 table.

Food Combining

There is a lot of controversy surrounding food combining, however, we will give you here the information supplied to us by those on the side of food combining.

Combining foods improperly causes complete digestion to take longer, tires you out, and can allow foods to ferment leading to purtrification of the colon, which leads to toxins entering the blood stream. Because fruit should not rest long in your stomach, fruit should always be eaten alone or before meals. Here are a few more simple rules about fruits:

- Eat sub-acid fruits with either acid fruits or sweet fruits, but never eat acid fruits with sweet fruits.
- Sub-acid fruits: Apricots, berries, cherimoya, cherries, fresh figs, grapes, mangos, nectarines, papaya, peaches, pears, plums.
- Sweet fruits: Bananas, dates, dried fruit, persimmons, prunes, raisins, sapote. (Some apples are sweet and some can be sub-acid)
- Acid Fruits: All citrus, kumquats, pineapple, pomegranates, strawberries.
- Always eat melons alone.

Rules for veggies, proteins, carbohydrates, and fats: Eat veggies with carbohydrates or with proteins, but never mix proteins with carbohydrates (no meat and potatoes). Meats should never be cooked in fats. Remember, your carbohydrates are: breads, corn, dried beans & peas, grains and cereals, pasta, potatoes, pumpkin, squash, and yams.

Detox Your Life

Although this might not seem related to diet, what we take in our bodies comes from the air we breath, the lotions we put in our hair and on our skin, and the foods and liquids we consume. We are immersed in a sea of antigens, chemicals and toxins that put a relentless strain on our immune systems. If the food you eat is going to help your body to heal, give it a head start by cleaning up your immediate environment.

- Air filtration systems: for your home and office, and keep the filters clean.
- Water filtration systems: the best seem to be the reverse osmosis type. Avoid all
 chlorinated or fluoridated water. Some recommend adding two drops of bleach to the
 intake of your water filter every month or so, though, half an ounce of hydrogen
 peroxide (30%) might be better.
- Avoid long hot showers. In 1990 the EPA placed hot showers on their list of cancer sources. Not only do the carcinogens in your water supply get into your skin during a hot shower, you breath in the carcinogenic steam. Thus, a filtration system added to your shower is also recommended.
- Throw out all your skin lotions, soaps, and hair sprays. Find a health care professional to advise on what you can use that is not toxic.
- Throw out all your cleaning supplies. Shop for non-toxic cleaning supplies.
- Food grade Hydrogen Peroxide (30%): have some on hand in your refrigerator. It is strong and should be treated as a dangerous substance (a splash in your eyes can cause blindness). Mix up a three percent solution, the instructions are on the bottle. Put some in a spray bottle. Use it to clean up any meat drippings. Wash your veggies in it, or spray and rinse.
- Enforce a "No Shoes In This House" policy. Shoes drag in toxins from outdoors. The Japanese know this.

- If you have an attached garage, when you come home, keep the garage door open, exit through the garage door and enter the house through the front door. You would not believe the levels of carbon dioxide found in homes with attached garages.
- Call Greenpeace and ask for their pamphlet Stepping Lightly on the Earth—
 Everyone's Guide to Toxics in the Home. And send them a donation. Or get a copy of
 The Cure for All Cancers, by Hulda Clark, PhD, ND. It is filled with suggestions for
 detoxifying your life.
- Read the article "Cleaning House" on the proper way to detoxicate your body. It is probably the most important article at this web site.

General Guidelines

Most of the following guidelines have been created by the Center for Advancement in Cancer Education, though we've thrown in a few others we've found in our research.

Vegetables

A minimum of fifty percent of your diet should be veggies. The ratio of raw to cooked should range from 50:50 to 70:30 (70% raw, 30% lightly cooked). Raw vegetables give you the enzymes you need, but an entirely raw diet is inadvisable since there are some tough fibrous walls that need to be broken down to get to the nutrition, and this can put a strain on your digestive system. Another way to break down raw foods and make them more assimilable is to grate them, or run them through a food processor. However, you will have to eat them as soon as they are processed, because they begin to degenerate very quickly.

Fresh vegetable juices are a must. The best cancer fighting juice is carrot juice. It is high in beta-carotene and high in alpha-carotene, an often ignored nutrient, though thought by many experts to be ten times more powerful than beta-carotene.

Some nutritionists recommend sprouts either juiced or whole, however, the Gerson Institute strongly recommends against them because, in their experience, sprouts interfere with the action of your enzymes.

Include large amounts of green, leafy veggies and choices from the cabbage family (cruciferous) daily, and don't forget the sea vegetables such as wakame, nori, kelp, kombu, hizike, and dulce. The sea veggies are great in salads (after being rehydrated and drained) or in soups. Top

Vinegar

We should make a special note about vinegar here, for many of you will make salad dressings for your veggies. Most vinegars you purchase are destructive to your liver and digestive tract. According to Dr Norman Walker who wrote *Fresh Vegetable and Fruit Juices* (a must for anyone thinking of juice fasting or just making their own fresh juices), most vinegars contain *only* acetic acid, not a plus for a cancer diet. Apple cider vinegar contains, in addition to acetic acid, malic acid, an element of the digestive process. If you are going to use vinegar, use unpasteurized, unfiltered, organic apple cider vinegar. Top

Fruits

Ten percent of your diet should be fruit. Eat fruit alone as a small meal or between meals, or at least one half hour before a meal, *never* after. They should be raw or rehydrated and preferably in season. A breakfast of fruit only is light and highly recommended by movers and shakers. Additionally, since fruit, if properly mixed, does not sit in your stomach long, it can be eaten before bedtime without causing excessive stomach acid.

Keep citrus fruit to a minimum. Yes, we know how the television ads state that orange juice fights cancer, but that is prevention only. Citrus puts your body into an acidic state. Nearly all of the cancer institutes we've talked to during our research said the same thing: if you are battling cancer, keep your citrus to a minimum. Get your vitamin C from supplements.

Animal Products

Limit your animal products to two or three small (2 oz.) servings per week. White fleshed fish (preferably cod, haddock, salmon, or trout), or white meat poultry are preferred. Poultry and meat should be raised free range without additional hormones, antibiotics, and pesticides. The Center for Advancement in Cancer Education recommends no red meat, however, Dr Gonzalez of New York says this depends on the person's own biochemistry. Certainly no processed meats should be consumed. Poached or soft-boiled eggs from flax fed, free range chickens are best.

Depending on who you talk to, some red meat can be permitted on a cancer diet, however, red meat is high in iron, which reacts with oxygen to create free radicals. Thus some small amounts (in stir fries and soups) are recommended, along with antioxidants such as vitamin C and vitamin E.

Liquids

Avoid drinking any liquids 15 minutes before a meal, and for three hours following a meal. If you must drink with your meals, our research tells us that what is best is hot green tea made with Willard Water® (can be purchased in many health food stores).

A Chinese study of over 900 middle-aged individuals showed that drinking green tea cut the risk of esophageal cancer by as much as 60%. [Journal of the National Cancer Institute, June 1, 1994]

The phytochemicals (chemicals from plants) in green tea most responsible for its anti-cancer effect are polypherols, and in addition to preventing cancer of the esophagus, are also thought to prevent cancer of the stomach, liver, skin, and lung. (Japanese men smoke more than American's but have a lower incidence of lung cancer.) Researchers in China believe that green tea also helps to lower blood pressure and blood cholesterol, stabilize blood sugar, kill decay-causing bacteria, and block the action of many carcinogens. (Green tea extracts are now found in many health food stores.)

Black tea too seems to have the same effect, however, analysis shows that there are 4 times the active compounds in green tea than black tea. Researchers at Rutgers State University showed that over a 31 week period with mice exposed to two carcinogens known trigger skin cancer, the experimental group, drinking tea, experienced 70% to 90% fewer skin cancers. Black tea worked as well as green tea, and decaffeinated teas, though showing a slightly

smaller anti-cancer effect, were still significantly high. [Environmental Nutrition, November 1994]

An estimated 80% of Americans walk around in a state of virtual dehydration. If you want proof, next time you are in a high-school or grade school, take a tour of one of the boys' lavatories. Young boys have a tendency not to flush. You will find in the urinals a thick brown substance normally called urine. Because our kids drink so many caffeinated soft-drinks, they are dehydrated.

The color of your urine should range from clear to a light yellow. A dark yellow shows signs of dehydration, even though your throat and mouth feel just fine. For every caffeinated drink, you need to drink one more cup of water. Deepak Chopra recommends water at room temperature, eight to ten glasses per day. Others recommend ten to twelve glasses. Then again, Gerson forbids water. Check with your nutritionist. (For more on teas repudiated to fight cancer, see the article "Alternative Cancer Therapies." Here: http://www.mnwelldir.org/docs/cancer1/altthrpy.htm)

Avoid caffeinated and artificial drinks (they contain fluoridated and chlorinated water), and fruit juices that have been processed or that have extra sugars added. Whole fruit juices are good in moderation (with added filtered water). Roasted cereal grain beverages (e.g., brown rice, barley) or herbal teas are recommended. Raw vegetable juices are excellent, especially carrot juice.

Again, avoid fluoridated and chlorinated water, but keep your fluid intake up. Ice cold beverages are out. Chinese medicine reminds us that the temperature of digestion is 100° Fahrenheit. Drink your water (and other beverages) at room temperature. Hot herbal teas are also excellent, and for a primo coffee substitute, from Maharishi Ayurveda products, you may drink "Raja's Cup" which is not only a great drink and coffee substitute, but is charged with antioxidants.

Be sure to empty your bladder as soon as you feel the need to do so. Dr Frank Charles (from Natural Wellness Group in Minneapolis) reminds us that the longer urine is confined to the bladder, the more concentrated it gets. Studies show that persons who hold in their urine get bladder cancer at greater rates than those who go when the urge hits.

Grains

Twenty percent of your diet should be whole grains. Avoid all refined, polished grains and flours and products made from them. Brown rice, kashi, millet, rye, buckwheat, barley, oats and oat brans, corn (on the cob or corn grits), and quinoa are recommended. Whole grain pasta can be used with limitations. For grain recipes, pick up of copy of Candia Cole's *Gourmet Grains*.

One important note on grains: unprocessed, whole grains, as well as seeds and nuts, contain volatile oils that can go bad quickly. It is best to keep them refrigerated or in your freezer once you've opened them.

Fats and Oils

Most fats/oils should be kept to a minimum especially if they are human made or over processed (corn oil is deadly, margarine even more so), though you will want to get your allotment of Omega-3s. Dr Johanna Budwig has demonstrated that for proper utilization of oxygen by our cells, adequate amounts of unsaturated fatty acids must be present in our diets. (See the section on her in "Alternative Cancer Therapies.") Monounsaturates (olive and sesame seed) are highly recommended, but they must be unrefined (cold or expeller pressed) and they must be kept capped and refrigerated. Avoid heating oils; heat causes oxidation and the release of free radicals. Mayonnaise and margarine are out. Avoid trans fatty (partially hydrogenated) oils as if they were the cause of your cancer (for we are slowly discovering, they just might be the cause).

In 1989, the USDA found that fish oils reduce the production of the prostaglandin E2 which has a tendency to cause appetite loss. It is this appetite loss that brings on cachexia, the wasting syndrome that causes eventual death in cancer patients.

Seeds and Nuts

Five percent of your diet should be seeds and nuts. They must be consumed raw, though some say the best way to eat them is sprouted (alfalfa, radish, sunflower) though keep in mind what we've said earlier about sprouts. Because seeds and nuts can put a strain on your digestive system, when your immune system is down, you will probably want to pulverize them in a grinder and sprinkle them over soups and salads. If you do not want to strain your digestive system, avoid nuts until your immune system is responding better.

Seeds and nuts can be made into milk substitutes. Get a copy of Candia Cole's *Not Milk—Nut Milks*. Nuts should (unless blended into drinks) be used in small amounts, with almonds, hazel nuts, and pecans being the best. *No peanuts!* Peanuts are not nuts, but legumes; they are considered indigestible by some, and can contain carcinogens from a very common mold often found on them.

Legumes

Ten percent of your diet should be legumes and should be cooked well. Aduki, mung, kidney, navy, black, turtle, red, garbanzo, and pinto beans, as well as peas, black-eyed peas, and lentils are excellent. Fermented soy products (miso is one) are a must on a cancer diet (unless your breast cancer is estrogen receptive). Remember to combine your legumes with grains for more complete proteins.

Soups

Soups are an excellent means of breaking down the fibers in veggies and getting more of their nutrients and should include a variety of veggies, seaweeds, and legumes. Miso, tamari, or bean broth can serve as a base (check with your doctor/nutritionist if your breast cancer is estrogen receptive). Get a book on making home-made vegetable soups.

Condiments

Salt should be kept to a minimum; seaweeds are sold as salt substitutes. If you must use a salt, make sure it is naturally processed sea salt, tamari, or something high in potassium.

Garlic is a must; Dr Schultz recommends 5-7 cloves a day, though this could upset your stomach if taken all at once. Use your judgement.

Try some of the herbal seasonings at your local health food store; it won't take long to develop a liking to them. And keep in mind that herbs from the mint family, like oregano, are great on salads and contain a goodly amount of antioxidants, as well as many other nutrients.

Where Do We Go From Here?

Now that we've mentioned the highlights and some of the rules, we can go into more depth and discuss the whys and wherefores of the cancer diet, and point out those foods that prevent and fight cancers.

Juice Fasting

If your immune system is compromised and your body is running down hill fast, there is no better quick nutritional lift than a juice fast. But you must make your juices fresh every day and drink them right away. If something is left overnight in the refrigerator, throw it out. Max Gerson recommends a juicer that comes in two parts, a grinder and a press and advises against a singular processing unit, though he doesn't give his reasons. Others recommend some of the many juicers available on the market. You will want to juice those foods that fight cancer, and if they are unpalatable, add some fruit juice to sweeten them(e.g., broccoli and pineapple).

Juicing will break down the fibers and supply you with the nutrients and enzymes your body needs. Some naturopaths feel juicing is analogous to getting an IV, for your blood stream feels the benefits of drinking fresh vegetable juices within fifteen minutes. Enzymes are destroyed by cooking, and enzymatic therapy is a must on a cancer diet. (See below for more on enzymes.)

Macrobiotics

The rules for a macrobiotic diet go far beyond the scope of this article, so get a book (see below under References and Further Reading). Many have found that a macrobiotic diet battles any immune system dysfunction, and there are numerous case histories of complete reversals of degenerative diseases on this diet. One of the best books on this subject is: <u>The Cancer Prevention Diet</u> by <u>Michio Kushi</u> who is considered one of the top nutritional specialists in Macrobiotics.

Superfoods

Any of the superfoods used on a daily basis is also highly recommended, and they can combined with your beverages and juices. They are filled with minerals, nutrients, vitamins, and chlorophyll and can help your body detoxify. Superfoods are: alfalfa, barley, and wheat grasses, spirulina, chlorella, blue green algae, and certain sea weeds.

Sugars

All sugars are out (although some centers allow the more complex sugars in moderation while others forbid them entirely). Cancer loves sugar and your liver hates it. Sugars put a terrible strain on your liver. The only recommended sweetener is Stevia. Stevia, interestingly enough, was outlawed for internal use by the FDA right about the same time they okayed Aspartame (NutriSweet®, Equal®). However, grass roots campaigns have forced the FDA to allow Stevia to be sold in the US again. Stevia has been used for decades with no side effects, and can be purchased at most health food stores. If you must use a sugar, use it sparingly, and make sure it is an unrefined form, such as Sucanat or Florida Crystals (both are registered trademarks). Avoid all other sugar substitutes: your liver hates them.

Enzymes

There is hardly a center we've contacted that doesn't use enzymatic therapy. Enzymes are needed for every chemical process in our bodies and are highly specialized. Dr Balch points out in *Prescriptions for Nutritional Healing* that overloading the system by making it produce digestive enzymes detracts from our ability to make other enzymes for metabolic and/or immune system processes.

An article from *Bestways*, May 1979, entitled "Dr Edward Howell: A Man With an Urgent Message," by Ron Rendleman points out that we are a nation with an enzyme starved diet. Dr Howell is quoted: "Cancer specialists are discovering certain enzymes are completely lacking in the blood and urine of [their patients]." He goes on to say that because of our overcooked diets, our digestion must "steal" enzymes from other organs setting up a competition for enzymes among various organ systems, "The resulting metabolic dislocations may be the direct cause of cancer, coronary heart disease, diabetes and many other chronic incurable diseases." Lack of digestive enzymes, according to Dr Howell, is responsible for enlarged pituitary glands (the one that regulates all the others) and enlarged pancreases.

Dr Howell also points to toxemia as the final result of our lack of digestive enzymes combined with our high meat diets, for our foods take longer to pass through our system, ferment, cause gas, heartburn, headaches and colon problems. Colon therapists estimate that the average middle-aged American might carry around five to fifty pounds of hard, toxic, fecal matter lodged in their colons.

Adding digestive enzymes to your system keeps it from getting overloaded. Cancers of the liver and pancreas demand the supplementation of digestive enzymes because these are the organs that are supposed to produce them in the first place.

To protect your pancreas, pancreatic enzymes are a must. Dr William Kelly in *One Answer to Cancer* recommends taking them with your meals and in between meals, and especially in the afternoon between 2 and 3 when your system is most alkaline, and at 3:30 in the morning when your system again is most alkaline. A few references we found disagree on this point (exactly when your system is most alkaline) and some recommend taking them upon waking. Again, you will have to check with your nutritionist for recommendations based on your particular body chemistry.

Each vegetable contains the enzymes needed for its own digestion. Eating raw foods unburdens your system by supplying you with digestive enzymes. Bananas, mangos, and avocados are rich in enzymes, but for the richest source, you'll have to eat your sprouts.

Some Enzymes and their action:

- Chymotrypsin reduces inflammation.
- Trypsin digests necrotic tissue.
- Papainde shields tumor tissue.

Hydrochloric acid is also recommended at times, especially if you are a vegetarian, and many of the digestive enzymes you can purchase come with a little HCL. It is time for us to quit thinking HCL is our enemy. It is needed for digestion and as we age, we produce less and less. A simple test to see if you are producing enough HCL comes from Dr David G Williams of *Alternatives* (a newsletter) in a pamphlet he produced called *SECRETS OF LIFE EXTENSION: 10 Simple All-Natural Steps to Achieving Your Maximum Lifespan*, when you arise in the morning, before you brush your teeth, test the pH of your saliva (testing kits are available at most drug stores), and after you eat breakfast, test it again. If the pH of your saliva has dropped, you will need extra HCL. Please, see a physician to determine your own specific needs. Note that niacin aids in the production of HCL.

Supplements

It is better to get your vitamins from the food you eat than from a bottle. We've been told this for years. However, this is true only if you eat organic whole foods. While in Mastel's Health Food Store, John Mastel handed me an article (I had been asking him a lot of guestions) from Organic Gardening (July/August 1995) written by Dr Jim Duke out of the Chicago area. In the article called "Synergy in the Garden," he gave numerous examples of how the whole plant proves to be better than the sum of its parts. Scientists love to extract the phytochemicals from plants looking for the active ingredient, however, over and over again, they are disappointed at the results. The mayapple, Duke pointed out, has been used by the Penobscot Indians of Maine to cure cancer, and to commit suicide. Apparently, it is very powerful. Scientists extracted the active compounds and used them to fight potato bugs. However, over a period of time, the anti-pest activity stopped and the bugs were back at the potato plants. Duke assures us that if we use the entire mayapple, grind it up and spread it around our potato plants, the anti-pest activity will not stop, because in its natural state, all of the ingredients (the phytochemicals) act in synergy (synergy: one plus one is greater than two). In our food, Duke claims that you might get more beta carotene from a pill than from a carrot, but you will probably get more benefit from the carrot because all of the ingredients act in synergy.

Having said this, yes, you will probably want to use supplements because the amount of food you would have to eat to get all your supplements will probably not fit in your stomach. Though we must caution you against taking any supplements that have not been specifically prescribed for you by your health care professional.

The following is the Falk Supplementation Schedule (from the Falk Oncology Center in Toranto, Canada):

Vitamin C fine crystals, minimum 4 grams (4,000 mg) three times per day. Aim for a dose just below diarrhea level, up to 40 grams per day. 1 level teaspoon = 4 grams (for most Vitamin C, however check the label). When using megadoses of Vitamin C, always use Esterfied C.

Niacinamide 500 mg three times per day. (If cholesterol is high, use niacin.)

Vitamin B Complex (50's) once a day (sublingual B12 is the best form of B12, especially if you are over 35).

Vitamin E 400 IU once a day

Beta Carotene 25,000 IU once a day

Cod Liver Oil 2 capsules once a day

Zinc Citrate 50 mg twice a day

Selenium 200 mcg three times per day

Folic Acid 5 mg twice a day

Potassium increase to 1 gram once a day

Magnesium Oxide 420 mg once a day

We should point out here that the one additional supplement you will want to take is Lactobacillus acidolphilus. It is very important to a finely tuned digestive track and (according to Susan Silberstein from the Center for Advancement in Cancer Education) studies show it fights colon cancer by decreasing certain fecal enzymes that can turn pre-carcinogens into carcinogens. [Golding and Gorbach. "The Effect of Milk and Lactobacillus Feeding on Human Bacterial Enzyme Activity." *American Journal of Clinical Nutrition*, 1984; 39] Lactobacillus acidophilus has also been shown to stimulate natural killer (NK) cell activity, and it was discovered in Australia that injecting Lactobacillus acidolphilus directly into tumors causes immediate shrinkage. Garlic enhances the actions of Lactobacillus acidolphilus.

Lactobacillus acidolphilus is found in live culture yogurt. The international *Journal of Immunotherapy* [1991; 7:4] reports that a diet of 2 cups of live culture yogurt daily increased the production of interferon by both the lymphocytes and thymus gland with no adverse side effects. However, **if you are a woman**, check to see if you have glucose intolerance; if so, one serving per month of yogurt increases your chances of ovarian cancer. Studies also show that kefir grain, used to start the cultured milk product kefir, also has anti-tumor activity. [*Japanese Journal of Medical Science and Biology*, 1982; 35] and kefir has been shown to stimulate the immune system. [*Immunopharmacology*, 1986; 12]

Lactobacillus acidolphilus is found in health food stores in the refrigerator section. Keep it refrigerated and use it up as soon as possible, for it is alive and if you keep it past its time, it won't do you a bit of good.

Acid or Alkaline

Gerson talks of the acid/alkaline imbalance that he feels leads to cancer. At the last minute, we received information of a new product from the Orient to re-balance your body's pH called Coral Calcium. It seems that an entire industry mining the Coral sands from the Okinawa Islands (without disturbing the coral reefs) began after it was discovered that few of the inhabitants of these islands die before the age of 95, and according to the Guinness Book of

Records, one inhabitant, Shigechiyo Izumi, is the oldest living person at 115, who worked up until the age of 105.

The water we drink can become acidified by bacteria, algae, chloroform (from chlorination), nitrates, and heavy metals. Maintaining alkalinity is essential for health and vitality. Acidity is catabolic (tears down) and alkalinity is anabolic (builds up). Adding one tea bag of Coral Calcium to anything you drink will change the pH of whatever you are drinking and help to reestablish the body's natural alkalinity. Already reports are coming in claiming increases in energy, less arthritic pain, ulcers healed, osteoporosis reversed, and positive effects on people suffering from diabetes, allergies, angina, and fibromyalgia. The most interesting of all the materials we've perused was a short piece describing some of the ancient medicinals found in a rare collection of pharmacy bottles dating back to the 17th and 18th centuries. One of the jars has the inscription: "The Coral Stone to purify the Blood."

Just one more suggestion concerning the acid/alkaline imbalance: pick up a copy of *Alkalize or Die*, by Theodore Baroody, Jr., DC, Phd, ND, MA. Within its pages are hundreds of foods and those that are alkaline (greens, certain fruits, etc.) and those that are acid (sugar, processed flours, etc.). You may also contact the Center for Advancement in Cancer Education to get a chart of acid and alkaline foods, but make sure you send them a donation.

Foods to Avoid

Avoid salt-cured, pickled, or smoked foods. Avoid all processed foods and trans-fatty oils as if they were the cause of your cancer itself. Avoid inorganically raised foods. Alcohol is completely out—your liver must be in tip top shape for the metabolism of vitamin A.

Nuts: when your immune system has been compromised, nuts are out, at least when beginning to rebuild your immune system. They put a strain on your digestion. However, when you begin getting back on your feet, almonds (containing amygdalin, the main ingredient in Laetrile®) are a must. For more digestible nuts, we highly recommend Candi Cole's, *Not Milk—Nut Milks*. Find the almond recipes and follow the instructions. Her recipes taste wonderful and are extremely healthful.

Avoid parsnips; animal studies show they cause cancer after a period of time. Avoid sugar and sugar substitutes. Avoid fried foods. Avoid foods that have chemical additives. Avoid foods cooked in a microwave.

Foods that Fight Cancer

Though most of the foods we will talk about are known to prevent cancer, you can assume that once your diet has begun to boost your immune system, these foods will help to fight the spread of cancer and contribute to your overall defense against any existing tumors.

There are many books and articles written about foods that fight cancer. Here is what we've found:

Fiber

A high fiber/low fat diet is a cancer preventer and fighter. Fiber cleans your colon and combines with "stuck" fats to pass them on. It helps to lower cholesterol and tones your

entire digestive track. The connection between low fiber intake and colon cancer has long been established, however, a recent study (1999) showed no connection between a high fiber diet and lowered colon cancer risks. We (here at this web site) are going to check into this latest study before we buy into it, for any study can prove anything depending on the methodology.

In breast cancer, there are two types of estrogen, good and bad estrogen. A high fiber diet lowers blood levels of estradiol, the bad estrogen.

Starch

From the *British Journal of Cancer*, June 1994, we've learned of the largest international study on links between colon cancer and consumption of starch. "After analyzing diet and cancer rates from 12 countries, they found a strong association between starch consumption and cancer of the large bowel, colon and rectum. On the average, the more starch consumed in a population, the lower the incidence of the diseases." Green bananas and cold boiled potatoes were cited as sources of virtually indigestible starches that might provide particularly strong protection against these cancers.

Cruciferous Vegetables

Cauliflower, broccoli, Brussels sprouts, cabbage, kale, and Chinese vegetables. They contain indole-3-carbinol that stimulates liver enzymes to reduce levels of hormones and immuno-suppressive agents. They also contain sulfur, which is an overlooked nutritional supplement. However if the gas from cruciferous veggies is too much, try Bok Choy with only two percent sulfur.

At Cornell University, rats that were given a substance that causes breast cancer were separated into two groups and both were fed the same, except that one group got 20% ground up Brussels sprouts. 70% of the group not getting the Brussels sprouts developed cancers, compared to 13% in the Brussels sprout group. Additionally, when those who had come down with cancer were given Brussels sprouts, their cancers stopped spreading. [Cancer Letters, 88]

It is also assumed that the indoles from cruciferous veggies fight breast cancer by either converting the cancer promoting type of estrogen to a harmless form or by preventing am overproduction of estrogen. [Environmental Nutrition, August, 1995]

Sulforaphane, another phytochemical in cruciferous vegetables, has been shown to neutralize carcinogens before they could trigger tumors, and isothiocyanates, the chemicals that give these veggies their sharp flavor, "have been shown to slow the progression of cancerous cells in rats." [Health and Healing, August 1993, 3:8]

Carotenoids

Beta carotene (found in the yellow veggies such as yams, pumpkins, and carrots) is a powerful antioxidant that has been shown to inhibit the growth of tumors (and is used in Russia to fight infant leukemia), but few know about alpha carotene that has been demonstrated to be ten times more powerful in its inhibitory effect on tumors. (Murakoshi, Et

Al: "Inhibitory Effects of Alpha Carotene on Proliferation of the Human Neuroblastoma Cell Line." *Journal of the National Cancer Institute*, 1989; 81.)

Spinach and collard greens contain the carotenoids lutein and zeaxanthin which are powerful antioxidants that cannot be bought in a health food store. Spinach and collard greens are highest in these two carotenoids, followed by kale, mustard greens and turnip greens.

A study in Northern Italy consisting of nearly 3,000 people showed that eating seven or more servings of tomatoes per week had a 50% to 60% lower risk of developing cancers of the mouth, esophagus, stomach, colon and rectum. It is believed that the cancer fighting substance in tomatoes is lycopene, an antioxidant and member of the carotenoid family. Lycopene remains stable when tomatoes are cooked or canned. [International Journal of Cancer, October 15, 1994]

In 1998, the Israelis developed a tomato with ten times the amount of lycopene found in our present tomatoes. Look for them soon in supermarkets.

Flax

There is already at this web site lots of information on flax oil, and <u>Johanna Budwig's recipe</u>. The simple fact is that your omega oils protect you from cancer (especially breast cancers because breasts are made of fat) and have reversed cancers. Flax oil daily is a must for a cancer patient. Also good are fish oils and hemp oil, which is reputed to be the best oil for the human body, you have to take into consideration that the seeds from which we get hemp oil have been "denatured" and ... how is this process completed? We don't know. So, personally, I avoid it.

Soybeans

As mentioned earlier, Dr Balch recommends avoiding soy products because he claims they inhibit enzymatic action, however, the benefits of **fermented** soy products in fighting cancer and many other benefits must be mentioned.

First off, foods made from soy lower blood cholesterol and reduce the risk of heart disease. All the plant chemicals found in the soy plant — phytate, phytosterols, phenolic acids, lecithin, omega-3 fatty acids, isoflavones, and protease inhibitors — protect against cancer. Proteases are chemicals (enzymes) that tumors give off to break down surrounding tissues to facilitate the growth of the tumor. Protease inhibitors (found in soybeans, lima beans, seeds and sprouts) can block the spread of cancer. ["Protease Inhibitors May Block Tumor Spread." *Cancer Reporter*, 1987;2]

According to Morton Walker, a professional medical journalist ["Phytochemicals in Soybeans," *Health Foods Business*, March 1995]:

The Japanese, Taiwanese, Koreans, and Indonesians eat a daily average of 40 grams of [fermented] soy foods per person, and experience 90 percent less [*Sic*] . . . cancers (and half the amount of colon cancer) than do Americans.

He goes on to point out that the isoflavone components of soy are similar to the drug tamoxifen in their anti-estrogenic effect (lowering estrogen), and should be used daily for any estrogen related malignancies such as breast cancer.

Here is where a controversy exists: the Gerson institute says soy brings back breast cancers while others state that soy fights breast cancers. We know that soy products, between 35 and 60 grams per day, will help to reduce a woman's chances of breast cancer. The phytoestrogen in soy is a "good" estrogen. It also helps to extend the menstrual cycle, as we've seen in Oriental women who have, on the average, a 33 day menstrual cycle (exercising daily can help extend the menstrual cycle too). With fewer menstrual periods in your life, you have less contact with estrogen.

Another isoflavone component, genistein, inhibits prostate cancer by normalizing cancerous cells—death by prostate cancer is nearly nonexistent in the Orient—and in breast cancer, genistein stops the proliferative growth of cells that can differentiate into cancer. Furthermore, Walker states that the anti-angiogenetic (stopping the growth of new blood vessels) properties of genistein is on a par with shark cartilage. It works by neutralizing the vascular endothelial growth factor (IGF) put out by tumors to encourage new blood vessel growth. This being the case, pregnant women and persons with injuries could use soy products instead of shark cartilage to fight cancer. (See the section on shark cartilage in the article entitled "Alternative Cancer Therapies.")

In his book, *Concentrated Soybean Phytochemicals*, Dr Walker also talks about the phytate in soy that "binds iron in the intestines to prevent it from generating free radicals," the saponins "which stop cellular mutations," and the phytosterols "which neutralize the breakdown products of cholesterol and reduce the development of colon tumors and skin cancer."

From the Tufts University *Diet & Nutrition Letter* (12:12, February 1995), we find that the phytoestrogens (plant estrogens) will prove to be an alternative to estrogen replacement therapy. Premenopausal women consuming soy protein are protected by this natural antiestrogen, and after menopause they provide the lift estrogen therapy normally provides, but without the cancer risk.

From Earl Mindell's *Soy Miracle*, we find that soy foods contain antioxidants, boost the immune system, are easier on the kidneys than animal protein, might slow down or prevent kidney damage, and can protect against osteoporosis.

A report from the *Boston Globe* (February 10,1995) spoke of an experiment in which human leukemia cells were injected into mice, and the soy derivative B43-genistein was administered killing all detectable leukemia cells.

Other Beans

Red, navy, pinto, etc. Studies have shown beans to be anti-carcinogenic. Also they are fiber filled which helps to keep the colon clear of fats and in a fit condition. Again, we must mention preparation and caution you against indigestion which leads to colon problems and to degenerative diseases: soak the beans overnight as needed (see below), and pour off the water. Add digestive enzymes to your meal to help with the flatulence. Beano® works for some.

Beans should be complimented with whole grains for making high-quality protein. Here are some guick notes on a few types of beans:

Aduki: used in oriental medicine for kidney ailments, good source of calcium, phosphorous, potassium, iron and Vitamin A.

Garbanzo: (also known as chick peas) a staple in the Middle East (hummus), high in potassium, calcium, iron, and vitamin A.

Lentils: available in different flavors, high in calcium, magnesium, potassium, phosphorous, sulfur and vitamin A. Considered a nutritional super food. Do not need to be soaked.

Lima Beans: high in potassium, phosphorous, and vitamin A.

Pinto Beans: rich in calcium, potassium and phosphorous.

Soybeans: the only bean that is a complete protein by itself, and are 20% lecithin which is essential to every cell in the body (we recommend fermented soy products only).

Bean Sprouts: like seed sprouts, contain more vitamins and minerals than the original beans they come from. Check out a book on sprouting your own, or pick up a copy of *The Bread & Circus Whole Foods Bible*. Top

Sea Vegetables

Sea veggies are high in iodine. According to Gerson, cancer is caused by a sodium/potassium imbalance, an acid/alkaline imbalance, and a lack of iodine. Sea veggies are an excellent source of Omega-3 fatty acids, contain a fiber that binds with steroids and carcinogens, and are great detoxicators and liver cleansers.

Additionally, studies of the Japanese diets, which are high in seaweeds, seem to indicate that sea veggies might be involved in battling certain cancers and leukemia. (Yamamoto, Et Al: "Antitumor Activity of Edible Marine Algae: Effect of Crude Fucoidan Fractions Prepared from Edible Brown Seaweeds Against L-12100 Leukemia." *Hydrobiologia*, 1984;116/117.)

The brown seaweed Laminaria has been linked to a lower incidence of breast cancer. (Cohen, Thompson, "Seaweed Blocks the Mammary Tumor Promoting Effects of High Fat Diets." *International Breast Cancer Research Conference*, Denver, CO., March 1983, Abstract 52, Willmintton, Del.: Stuart Pharmaceuticals, 1983.) Top

Mushrooms

According to J. Chilton in his article "Medicinal Mushroom Use on the Rise" in *Vitamin Retailer*, April 1994:

Mushrooms . . . may have been one of the first "neutraceuticals," or foods that also function as medicines. . . . Mushroom polysaccharides act by enhancing host defenses, rather than directly killing tumor cells. For this reason they are called host defense potentiators (HPD). The specific effect of these polysaccharides is the activation of macrophages and T-

lymphocytes, stimulation of interferon, and the overall enhancement of cell-mediated immune response."

In addition to the Reishi mushroom having anti-aging and immunorestorative powers, studies from Japan, Korea, and Russia all showed reduction in tumors (98% in the Japan study with 80% complete remission). The phytochemical in the Shitake mushroom that scientists are now studying is called Lentinan, which has shown to stimulate macrophages, increase T-cell production, enhance helper T-cell activity, and increase interferon production. But the real cancer killer seems to be the Maitake mushroom which has been available wild but is now being cultivated. The National Cancer Institute began testing the Maitake in 1991 on both anti-HIV and anti-tumor activities and their results supported the findings of studies in Japan. Laboratory studies have shown that 97% of 300,000 HIV infected T-cells remained alive with a minimal amount (1/1000,000 gram) of maitake compound. The anti-cancer activity of the Maitake was even greater than that of the Shitake and Reishi, showing that both oral administration or injection inhibited cancer growth up to 86.3%. (Duke, James. "Mushrooms Mushrooming." *Immune Perspectives*, Winter, 1995]

Most naturopaths claim that you cannot get as much medicinal "punch" from the actual mushroom as you can get from extracts sold in health food stores, but this depends on how much you eat. Including them with every meal, in salads, soups, and teas should allow you to get much of their benefit.

While we're on the subject of mushrooms, we should mention the latest fungus to make it into vogue in alternative medicine, the Kombucha. The Kombucha, to some, doesn't really qualify as a mushroom—it is a fungal scum that you can grow in your kitchen. It has been touted as the new fountain of youth and as a cure for AIDS. However, there have been no third party studies done on the Kombucha, and all the material available comes from those marketing it.

Because we have not been able to find any objective evidence on its properties, we can tell you only what people in the wellness community are saying about it.

If you make it up at home, it can get contaminated. Additionally, it seems to be a powerful antibiotic, and therefore you should treat is as such, using it only when needed and not capriciously. Until studies by outside parties are available, we can't tell you much more. Top

Just a few more . . .

Lutein is another cancer battler and is found in watercress, spinach, dark green veggies and eggs.

Asparagus seems to be linked to the remission of more than a few disorders, including cancer. According to Karl Lutz, this is because of the high folic acid, nucleic acid, and histone (basic protein) levels found in asparagus. In *Beating the Odds*, Dr Machetti points to a study that discovered that methyl mercaptan, which is secreted into the urine following a meal with asparagus, has distinct anticancer qualities.

Garlic and onions should be consumed daily, with a minimum of 4 cloves of garlic, if sensitive to it, 7 if not. The phytochemicals (plant chemicals) in garlic and onions have been shown to

increase T-cell activity, and garlic contains a safe form of germanium, which helps the blood and tissues hold more oxygen. Remember, cancer hates oxygen.

Studies also show that garlic can increase T-cell activity, and, interestingly enough, aged garlic seems to work even better. However, many preparations of garlic are devoid of the volatile oils, and there has been much controversy on why you would want to avoid these volatile oils versus why you would want them. Dr Block, in his article "Chemistry of Garlic and Onions" published in the March 1985 edition of *Scientific American*, states that the volatile oils are the physiologically active factors of garlic and recommends that fresh garlic be used.

Additionally it was discovered that lab animals implanted with tumors and fed garlic and a low protein diet showed no tumor growth, while the control animals came down with full blown cancer. And apparently the substance Allium, found in onions and garlic, inhibits stomach cancer in groups at high risk.

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(Click on the links to learn more about the books and the authors)

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