

## ***DISCLAIMER***

It should be noted that the author is not a physician, naturalopath, nurse or dietician. He is someone who simply likes to eat. He is not overweight—at least according to the height and weight standards published by the U.S. Air Force.

It is suggested that reading this text be for informational and entertainment purposes only. The information contained herein is the result of countless hours of research into food—the things we eat; the things we shouldn't eat and the things we better not eat.

The research began as a quest to find some happy medium between what he did eat and what his wife was told she could not eat. You see, she was diagnosed as being borderline diabetic. The idea was to learn what caused diabetes and what could be done to short circuit it before it became a debilitating problem.

The author sincerely believes his research is factual and any flaws found in the text (besides typos) is probably the result of bungled research on the part of medical science (they have been known to make mistakes), medical research (them too) and our ever- popular *Government Studies* and old wives tales.

The author and publishers of this text are not making any definitive statements regarding curing what ails you. The text is, in part, a chronicle of one couple's attempt to avoid the inconvenience, hassle and cost of insulin therapy. What this text offers are guidelines, not suggested treatments or prescriptions. To the best of their knowledge, nothing contained in this text is harmful to human health—nor is the stuff we suggest you eat.

This text is a How-To-Guide, a history of continuing value to the couple who are still living it. We sincerely hope it is some value to you. You are welcome to pick up on the guidelines—it's your choice. We are attempting in this book to educate you about the foods you may be eating now or are contemplating eating in the future. If what we have to say enlightens you or scares the bejesus out of you, then we have accomplished our purpose.

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Any perceived slights of specific people or organizations are unintentional. Results will vary depending on the individual's effort and research.

Now that we have gotten all of the legal stuff out of the way, let's get on with the meat (or lack thereof) of the subject.



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## CHAPTER 1.

### *Introduction*

#### **Where I'm Coming From**

From birth until I was 18 years old, I lived in a small town in Southern New Jersey (as opposed to Northern New Jersey, which was, and still is, substantially different. You'd know that if you watched the Sopranos).

My Mom and Dad met as factory workers at the tail end of the Great Depression. After I was born, Mom became a homemaker (stay-at-home Mom). Looking back, I would put us in the socio-economic status as lower middle class or upper lower class, depending on your view point. I was first born and was joined later by a brother and sister.

We were mostly a meat-and-potatoes family. That's what Dad liked so we all went along with that. He was the bread winner, although we seldom ate bread with meals. I guess that was because butter was simply not available during the war. We had some messy, greasy crap called oleomargarine. It came in a plastic bag and had an orange capsule in it. Mom would crush the capsule and knead (squeeze) the bag until the white goop all turned a bilious yellow color.

We never much went in for exotic meat dishes. It was mostly boiled chicken, fried hamburger and an occasional pork chop. We never owned a grill. Potatoes were either boiled or mashed. Either way they often made me gag, something I couldn't help. Smothering them in oleomargarine helped to kill the urge to barf.

Meat and potatoes. I have no lasting memory of eating many vegetables as a child. When we did have them it was usually something from a green giant that came in tin cans. None of us kids cared much for them anyway.

I married at age 19 and thus began 39 years and nine months of marital bliss—more or less. My wife of that era introduced me to such niceties as broccoli, cauliflower, and creamed spinach. I even adapted to scrambled eggs. At age 30 I weighed about five pounds more than I did when I was in high school—about 150 pounds.

During those early years, eating was something I did because it was expected of me. Maybe that was because most of what I ate was a holdover from the good old days—meat and potatoes—and I still had a tough time with boiled or mashed.

After marriage I was introduced to fried potatoes: home fries, french fries and hash browns. We ended up with four kids, some of whom were even greater picky eaters than I. And of course I gained some weight.

Years passed and a divorce ensued. I'm still not sure what was behind that, but I feel confident in saying that it wasn't because I gagged on her boiled potatoes.

I never understood vegetarians. What would life be like without crispy bacon, sausage links and pancakes lathered with butter, and topped with Vermont maple syrup.

Most members of the medical profession would have a fit seeing me eat a meal like that, or recommending you do the same—so I won't. The last thing I want to do is piss off our healthcare providers.

I eat a breakfast like that on average of nine or 10 times a year. So is that harmful—probably—but doing so infrequently may also be compared to spending a few hours outdoors on a hot, humid day when the ozone level is bordering in the red and purple zones.



In fact, the EPA says that when conditions reach that level we had better stay indoors where all you will have to deal with is the formaldehyde seeping out of the new furniture, carpet or building materials. Add to this, airborne fumes from cleaning products like bleach, pine oil, and furniture polish and an attack from the dust bunnies.

Hazards surround us so we have a choice, say the hell with it and eat what you want, go where you want and live where you want. Just don't go berserk.

Do you see where we're going with this. My philosophy is simple:

1. Life is too short to quibble over the small stuff.
2. Things done in moderation can't be all that bad.

First impressions are important because you only get one shot at making a first impression. I don't want to give you the impression that I'm down on doctors. I have the greatest respect for any person who would endure so much persecution—otherwise known as med school—just so he or she could make bazillions of bucks over a lifetime. Seriously, I have known doctors who are devoted to the care of their patients. I see doctors picking through the muck and mire of New Orleans after Hurricane Katrina to give care and comfort, and more recently the airplane loads of doctors who flew to Haiti and faced untold devastation and human suffering following the earthquake.

At my age, I have run the gamut of good and not so good doctors. Some were friends, some were doctors, and wouldn't let me forget that fact. One doctor I had was obsessed over the fact that I had one kidney larger than the other. Every visit he would bring that up. That was over 30 years ago. I am a bit older now and if anyone were to check, I probably still have two miss-sized kidneys.

One doctor I will never forget was Dr. Rod. We often met socially and he once made me a bet. I had a fancy for a blue velvet bag with a gold drawstring that protected a bottle of Seagram's Crown Royal that he had. "I'll give you the bag," he said, "If you can finish the bottle." 40 years later I still have that bag, I keep my Walther PPK .380 automatic in it. No wonder I still remember him above all the rest.

Dentists are concerned with what you eat too. Other than my current one, whom I call "Painless" after the Red Skelton character, there was Dr. Ralph. He was obsessed over an impacted wisdom tooth I had. Nearly every six months he'd remind me that it had to come out. Well, I believe in the afterlife, and when I see him, I'll show him the molar is still in place.

You will discover as you pass through the following pages that I have included some very serious material. Keep in mind that my goal is not to cure you of some hideous disease or help you to lose 50 pounds—even if you need to. What I am presenting to you is definitely **politically incorrect**. Whether it is medically



## CHAPTER 2.

### *Nutrition*

#### *Nutrients Defined:*

- Vitamins
- Dietary minerals
- Proteins
- Essential fatty acids
- Essential amino acids

Here we will introduce a most often misunderstood term...Nutrition. Think about nutrition as getting the right balance of nutrients (the good stuff) needed for good health. Food and food stuffs are our source for these nutrients. Food stuffs are a raw material that is converted into edible food. Eating just particular foods or food stuffs has little to do with fostering good health. Man doesn't live by rutabagas or cauliflower alone.

According to Wikipedia, there really is no difference between food and foodstuffs. *Food is any substance, usually composed of carbohydrates, fats, proteins and water, that can be eaten or drunk by an animal, including humans, for nutrition or pleasure. Items considered food may come from plants, animals or other categories such as fungus or fermented products like alcohol. Also according to Wikipedia, "Food Stuffs" is a food distributor in New Zealand.*

You can think about anything that provides nutrients to the body as a carrier, like the truck that brings the food to the super market. For example, a loaf of bread is mostly starch along with some protein, sugar and non-fat dry milk tossed in. It also contains a bunch of minerals. Minerals...that's another term we will look into in a bit. For now just accept the fact that without minerals in our diet we'd all have a lifespan of about 28-30 years—much like the Cro-Magnons (Paleolithic man) that roamed parts of Europe before they invented champagne.

When you eat food, your body, in particular—the small intestines—break down the food to get nutrients the body needs to keep working past age 28. So at some point we need to start to eat with our health in mind. But at what point does that happen. Unfortunately, not soon enough for many of us. Our government, in an effort to convince us that children are at risk, and that they (the bureaucrats) may actually be earning the salaries they get, point out that all too many children are overweight, not chubby, the little buggers are just plain fat!



If people would only recognize that diet and exercise are the key to long life, 30% of our population, according to the experts, wouldn't be considered "obese." This has to begin at an early age, but how do you convince the kids that fries and Cokes will make them fat? And do they really give a damn!

Look, folks, I have four children and I went through all of that crap. Kids are gonna do what kids do. It shouldn't be left up to the kids. It is the responsibility of the parents. There is no excuse for kids to be obese. Maybe we need to start "water-boarding" parents to get their attention. My four kids grew into healthy men and women. What are you doing about your offspring?

Oh, I know what you are thinking. My kids' father was, or still is, a kook. Well, let me confess something. About six months or so, before I was informed that we were separating, my former wife and I were out back beside the pool. As I was about to dive in she remarked, "You're carrying that baby kinda high!"

Yes, my weight was where it should have been, but I had a "gut."

About five, or was it six years ago I woke up at around 2:00 a.m. with a severe burning in my chest. I got up and took an aspirin, for want of something else to do. I thought it was acid reflux or heart burn. OK, so I drank a shot or two of vodka before going to bed. Well the burning wouldn't go away, so I woke my current wife and asked her to drive me to the hospital.

After the usual triage stuff, a female doctor looked over my chart and asked several questions. She seemed more concerned at what I had to drink. The next day while I was still in ICU I got a glance at my chart. It said, "The PT (patient) presented with severe chest burning. He is an obese, alcoholic, white male, age 68...Man, did that piss me off. I weighed 195 lbs. This woman had to be 5 ft. 9 and 220 lbs. Obese indeed!

Ok. So I really screwed up. I had an angioplasty and a stent installed in one artery and so far, it is doing its job. You see, I didn't tell you that I smoked a pack a day at the time.

Sorry...I drifted off the subject. Back to nutrition!

We all know that we often eat the wrong things and I'll cover that in a bit. But first I'll give you one of my famous "Tips To Tip The Balance (TTTTB)."

TTTTB No. 1: Getting good, useful nutrition requires that we tip the balance from bad to good. So before we get into the specifics of what is good, we need to wean ourselves off of the bad.

Changing bad eating habits will not be easy—it requires a commitment. So any change we make will have to be done gradually. The slow approach to tipping the balance works best. If you do try to go “cold turkey” with some of the junk you consume, in short order you will fail. Changing all bad habits all at once is just too much for a human being to maintain. CHANGE ONE THING AT A TIME. I am a coffee drinker—but not to excess I have ONE cup first thing in the morning. I use ¼ teaspoon of Splenda and a touch of milk (just to kill the taste). At most I was having one or two more cups at work during the day. I cut that out. I will not give up the first cup, since I read somewhere that a cup a day may actually be beneficial to my health (medical science still can’t agree on that one yet).

Lot’s of folks I know start the day with a Coke, Pepsi or Dr. Pepper. Now that is a problem. All three are loaded with sugar, in fact it isn’t even sugar, it’s high fructose corn syrup, not to mention the caffeine. I have no problem with the caffeine. I believe a shot of caffeine per day is good for you—but then that’s just my opinion.

And there are those who think they are doing their body a great service by drinking DIET drinks. I did a short study on that and was shocked to learn that the artificial sweetener, Aspartame, contains 10% methanol (methyl alcohol), better known as “wood alcohol.” This book has a chapter on dangerous “food stuffs” and I’ll cover this later. Suffice it to say, methanol can cause blindness and death.

So think about what you need to begin to withdraw from. No rush—but do give it serious thought. If your choice involves drinking something, try substituting water with a touch of lemon juice in it. No...I’m not talking about bottled water. That stuff is an absolute rip-off. Yes, it is convenient, but most of what you are paying for is the damn plastic bottles, which are clogging our landfills. OK, buy one bottle of whatever brand and keep reusing the bottle.

Once you have reduced the compulsion to have your Coke or Diet Coke, move on to something else—like snack foods. My chapter on Junk Food may give you nightmares—at least I hope it does. Just remember—make the change, but do it gradually.

Earlier I mentioned diet and EXERCISE. I’ll remind you about the latter often and will get into more specifics later on.

## CHAPTER 3. Nutritional Sources For Vitamins

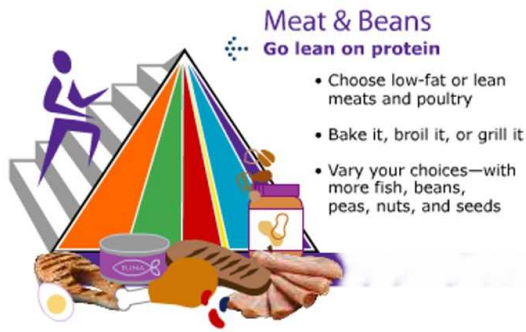
Remember the FOOD PYRAMID? Here's some background information from Wikipedia:

*Before the dietary pyramid that most people have become familiar with was invented, the USDA (United States Department of Agriculture) published the first list of dietary recommendations. In 1916, the first food guide was published and named "food for young children". In 1943 the "basic seven" guidelines that President Franklin D. Roosevelt introduced was deemed obsolete because of its complexity and was replaced by the much more simple "basic four". This consists of milk, meats, fruits, and vegetables. In the 1970s, there was a fifth group added, fats, sugars, and alcohol. People were advised to only have this on a restricted basis though. Then in 1994, after careful consideration of all of the different dietary factors, the USDA released the commonly known food pyramid that consists of four levels with different types of food on each level.*

*However, a recent change has been made to dietary suggestions yet again by editing the food pyramid released in 1994. Many nutritional experts, like Harvard nutritionist Dr. Walter Willett, believe the 1992 pyramid does not reflect the latest research on dietetics. Certain dietary choices that have been linked to heart disease, such as three cups of whole milk and an 8 oz. serving of hamburger daily, were technically permitted under the pyramid. The pyramid also lacked differentiation within the protein-rich group ("Meat, Poultry, Fish, Dry Beans, Eggs, and Nuts").*

In other words, they still can't seem to get it right! Here in North Carolina many of the natives believe in only four basic food groups: Pork Barbecue, Collards, Moon Pie and Jack Daniels.





Photos Courtesy of the USDA, website may be found at [www.mypyramid.gov](http://www.mypyramid.gov).

We can infer from the pyramid photos that the USDA no longer offers a “tiered” pyramid. It is now segmented so the inference is that no one food group is more important than the other. All food groups have equal importance in our daily lives. It certainly took them long enough to come to that conclusion. But are they right?

Let’s take a closer look at each group, remembering that there really is no special order. This chapter deals with VITAMINS. In the next chapter we will take on MINERALS:

**Definition:** Vitamins: Most nutrition references define vitamins as organic compounds that the body needs in small quantities for normal functioning.

With few exceptions the body cannot manufacture or synthesize them. They must be supplied in the diet or in dietary supplements. Vitamins are essential to the normal functioning of our bodies. They are necessary for our growth, vitality, and general well being. So in layman’s terms; Vitamins are nutrients you must get from food because your body can’t make them from scratch. Another very important definition is; a vitamin is a nutritional supplement that can be taken to

enhance the diet. Often times the terms vitamins, supplements and minerals are used interchangeably to describe this dietary supplementation. Are Vitamins the only essential nutrient the body needs? No! The essential nutrients are:

- Water
- Carbohydrates
- Proteins
- Fats
- Vitamins
- Minerals

**Vegetables, Nuts and Fruits:** Variety is the key here. Certain fruits and veggies are favored above others—regardless of whether you like them or not. The following will give the vitamin and its sources rather than bog you down with a lot of duplication.

**Vitamin A:** Vitamin A assists cell reproduction and it also strengthens immunity. It is needed for creating of some of the necessary hormones. Vitamin A promotes better vision and encourages bone growth, tooth development, and helps maintain healthy skin, hair, and mucous membranes. Low levels of Vitamin A can cause night blindness, dry skin, poor bone growth, and weak tooth enamel. Alpha-carotene, beta-carotene and retinol are all versions of vitamin A. Sources of Vitamin A include:

- Veggies: Asparagus, avocado, broccoli, carrots, green pepper, kale, spinach, squash, sweet taters.
- Fruits: Blackberries, cantaloupe, kiwi, peaches, tomatoes
- Nuts: Almonds, chestnuts, filberts, pecans, pine nuts, pistachios, pumpkin seeds,

**Vitamin B1 & B2:** Vitamin B1 also known as thiamine is important for the production of energy. It helps the body cells convert carbohydrates into energy (instead of fat). It is also essential for the functioning of the heart, muscles, and nervous system. Not getting enough thiamine can leave one fatigued and weak. Vitamin B2 (Riboflavin) helps in red blood cell production especially if you cut yourself shaving regularly.

- Veggies: Avocado
- Fruits: Kiwi
- Sorry—no nuts can help here

**Vitamin B3:** Niacin assists in the functioning of the digestive system, skin, and nerves. It is also assists in converting food into energy.

- Veggies: Artichoke, avocado, asparagus, broccoli, carrots, corn, green pepper, kale, lima beans, mushrooms, peas, potatoes, sweet potatoes

- Fruits: Bananas, cantaloupe, Kiwi, peaches, tomatoes, watermelon

*Authors Note: I once bought a bottle of Niacin because a doctor recommended it. It made my face burn because I was blushing with intensity. That crap ended up in the trash.*

**Vitamin B5:** Pantothenic acid speeds up the metabolism of food as well as in the manufacture of hormones and *good* cholesterol.

- Veggies: Avocado, artichoke, broccoli, carrots, cauliflower, corn, lima beans, mushrooms, potatoes, squash, sweet potato
- Fruits: Bananas, oranges
- Nuts: Nothing here either

**Vitamin B6:** B6 assists in the creation of antibodies in the immune system. It helps maintain normal nerve function and it assists in the formation of red blood cells. It is also required for the chemical reactions of proteins. If you eat a lot of proteins then you'll need a regular dose of B6. A lack of B6 in the diet can cause dizziness, nausea, confusion, irritability and convulsions.

- Veggies: Avocado, carrots, peas, potatoes
- Fruits: Bananas, watermelon
- Nuts: Nope

**Vitamin B9:** Folate and folic acid are both forms of B9. Folate is found in fresh foods, but folic acid is the synthetic form found in supplements. Folate helps in red blood cell production, as well as components of the nervous system. It also is a DNA builder and assists in maintaining normal brain function, It is a critical part of spinal fluid. If you are pregnant be sure you get adequate amounts of vitamin B9.

- Veggies: Artichoke, asparagus, avocado, broccoli, carrots, corn, green pepper, kale, lima beans, onions, peas, potatoes, spinach, squash, sweet potato,
- Fruits: Bananas, blackberries, cantaloupe, kiwi, strawberry, tomatoes\*
- Nuts: Almonds, brazil nuts, cashews, chestnuts, filberts, macadamias, peanuts, pecans, pine nuts, pistachios, pumpkin seeds, sunflower seeds,
- Walnuts

\*Some controversy exists as to whether a tomato is a fruit or vegetable. The Oxford Dictionary says, *“Scientifically speaking, a tomato is definitely a fruit. True fruits are developed from the ovary in the base of the flower, and contain the seeds of the plant.”*

The U.S. Supreme Court weighed in on the controversy on May 10, 1893 by declaring that the tomato is a vegetable, based on the popular definition

that classifies vegetables by use, that they are generally served with dinner and not dessert. So take your pick.

**Vitamin B12:** Vitamin B12 is important for metabolism. It helps in the formation of red blood cells and in the maintenance of the central nervous system.

Vitamin B12 is the one vitamin that is available only from fish, poultry, meat or dairy sources in food.

**Vitamin C:** Vitamin C is considered one of the most important of all vitamins. It plays a major role as an antioxidant, thereby protecting body tissue from the damage of oxidation. Antioxidants act to protect your cells against the effects of free radicals, which are potentially damaging by-products of the body's metabolism. Free radicals can cause cell damage that may contribute to the development of cardiovascular disease and cancer. Vitamin C has also been found to be an effective antiviral agent.

- Veggies: Artichoke, asparagus, avocado, broccoli, carrots, cauliflower, corn, cucumber, green pepper, kale, lima beans, mushrooms, onions, peas, potatoes, spinach, squash, sweet potato
- Fruits: Apples, bananas, blackberries, cantaloupe, grapes, kiwi, lemon, lime, orange, peach, strawberries, tomato, watermelon
- Nuts: Nothing here either

**Vitamin D:** The “sunshine vitamin!” Vitamin D is manufactured by the body after being exposed to sunshine. Ten to fifteen minutes of good sunshine three times a week is enough to satisfy the body's needs of vitamin D. This means that we don't need to get vitamin D from our diet unless we get very little sunlight – which usually not a problem for children. But be certain not to exceed the recommended exposure time. Melanoma is a side effect of too much sun—so they say. Some are now having doubts.

Vitamin D is vital to the human body as it facilitates absorption of calcium and magnesium, which are essential for the normal development of healthy teeth and bones. It also helps maintain adequate levels of calcium and phosphorus in the blood. The lowly mushroom is the only dietary source of vitamin D

**Vitamin E:** Vitamin E plays a significant role as an antioxidant, thereby protecting body tissue from the damage of oxidation. It is important in the formation of red blood cells and the use of vitamin K. Many women also use it to help minimize the appearance of wrinkles, and mothers use it to help heal minor wounds without scarring, as it is valued for its ability to soothe and heal broken or stressed skin tissue.

- Veggies: None
- Fruits: Apples, bananas, blackberries, kiwi
- Nuts: Almonds, brazil nuts, peanuts, pine nuts, sunflower seeds

**Vitamin K:** Vitamin K is fat soluble and plays a critical role in blood clotting. It regulates blood calcium levels and activates at least three proteins involved in bone health.

- Veggies: Broccoli, kale, spinach
- Fruits: None
- Nuts:
- Cashews, chestnuts, filberts, pine nuts

And the winner is . . . the avocado!

These are the basic, essential vitamins needed for everyday health. There are a few more that we seldom hear about—like Vitamin U—so we'll disregard them.

### **The French Connection**

While you will only find grapes under two categories: Iodine and Vitamin C, a recently discovered fact may give the grape new status. Some Harvard-educated researchers believe they've discovered a proverbial "fountain of youth."

What has them so excited is **Resveratrol**. They are calling it a miracle ingredient, and the greatest discovery since antibiotics. That's a stretch, but hear me out.

Resveratrol is a compound found in the skin and seeds of grapes.

Researchers have been mystified for years about how the French can smoke cigarettes and eat high-fat foods, yet still have extremely low rates of cancer and heart disease. They refer this phenomenon the *French paradox*.

Harvard researchers, Dr.Christoph Westphal and David Sinclair conducted genetic research to investigate **What** French people are doing that we in the U.S. are somehow missing.

For many years scientists believed that drinking red wine offered some health benefits, but they couldn't figure out exactly why. Now they believe that the resveratrol in wine motivates our body cells into adopting a youthful behavior in several ways.

The biggest impediment with resveratrol was finding a way to consume the large concentrations required to provide you with a benefit. You'd need several bottles of wine per day to get the anticipated benefit from resveratrol. Drinking large amounts of wine or other alcoholic beverages will increase your insulin levels, which will eventually have a negative impact on your health in a number of ways.

**A Resveratrol source...Let's hear what Wikipedia says about Muscadines:**



*Muscadine (also known as scuppernong) grapes are a grapevine species native to the present-day southeastern United States that has been extensively cultivated since the 16th Century. Its recognized range in the United States now extends from New York south to Florida, and west to Missouri, Kansas, Arkansas, Oklahoma and Texas. They are well adapted to their native warm and humid climate; they need fewer cooling temperatures than better known varieties and they thrive on summer heat.*

*Muscadine grapes vary in color from bronze to dark purple to black in color when ripe. However, many wild varieties stay green up to and including maturity. They have thick skins tough enough that eating the raw fruit often involves biting a small hole in the skin to permit sucking out the pulp inside. Muscadines are not only eaten fresh, but also are used in making wine, juice, and jelly.*

*Muscadine grapes are rich sources of polyphenols and other nutrients studied for their potential health benefits Reports have indicated that muscadine grapes may contain high concentrations of **resveratrol** – a polyphenol with reported beneficial health effects — and that wines produced from these grapes, both red and white, may contain more than 40 mg/L of resveratrol.*

**Author's Note:** The jury is still out on muscadines (scuppernongs). Some research indicates that they are abundantly rich in resveratrol, while other researchers claim the opposite. Keep an open mind. My money is on the scuppernong...and I'll drink to that!



## Chapter 4.

### *Nutritional Sources For Minerals*

**Definition:** Dietary Minerals - Any of a group of inorganic elements that are essential to humans and animals for normal body function. In nutrition, *minerals* are those elements for which the body's requirement is at least 100 mg per day, and *trace minerals* are those elements that are needed in smaller amounts. Dietary minerals are derived from the earth's crust. Plants extract the minerals from the soil, and humans and animals, in their turn, consume the plants. Vitamins cannot benefit us without the aid of minerals. Although the body can manufacture a few vitamins, it cannot manufacture a single mineral. All tissue and internal fluids contain varying quantities of minerals.

There are seven major minerals and this chapter will list their food sources—if any.

Major minerals include calcium, magnesium, phosphorus, chlorine, potassium, sodium and sulfur.

Trace minerals include iron, cobalt, copper, fluoride, iodine, manganese, molybdenum, nickel, selenium, vanadium and zinc.

Dietary minerals have many sources. The following is a listing of food sources. As is the case with vitamins, minerals may also be gained through the intake of dietary supplements.

#### **Calcium**

Almonds, figs, beans, carrots, pecans, raisins, brown rice, apricots, garlic, dates, spinach, sesame seeds, brazil nuts, cashews, papaya, avocados, celery.

#### **Chromium**

Brewers yeast, clams, cheese, corn oil, whole grains.

#### **Copper**

Soy beans, Brazil nuts, bone meal, raisins, legumes, seafoods, black strap molasses.

#### **Iodine**

Kelp,  
beets, celery, lettuce, Irish moss, grapes, mushrooms, oranges.

#### **Iron \***

Kelp, raisins, figs, beets, soy beans, bananas, asparagus, carrots, cucumbers, sunflower seeds, parsley, grapes, watercress.

#### **Magnesium**

Honey, almonds, tuna, kelp, pineapple, pecans, green vegetables.

#### **Manganese**

Celery, bananas, beets, egg yolks, bran, walnuts, pineapples, asparagus, whole grains, leafy green vegetables.

**Phosphorus**

Mushrooms, cashews, oats, beans, squash, pecans, carrots, almonds.

**Potassium**

Spinach, apples, tomatoes, strawberries, bananas, lemons, figs, celery, mushrooms, oranges, papaya, pecans, raisins, pineapple, rice, cucumbers, Brussels sprouts.

**Sodium**

Turnips, raw milk, cheese, wheat germ, cucumbers, beets, string beans, seafoods, lima beans, okra, pumpkins.

**Sulphur**

Bran, cheese, eggs, cauliflower, nuts, onions, broccoli, fish, wheat germ, cucumbers, turnips, corn.

**Zinc**

Mushrooms, liver, seafood, soy beans, sunflower seeds, brewers yeast.

**Special Note:** Iron has been found to be problematic for people who have high levels from their diet and environment. Many mineral supplements are now formulated without iron because of its inflammatory and toxic effects on some people.



## Chapter 5. *Caloric Intake*

For simplicity sake, let's say a calorie is the amount of heat that is required to raise one cubic centimeter of water one degree. A kilocalorie is the amount of heat that is required to raise one kilogram of water one degree.

That said, let's see why there is such a fixation with regard to the *number of calories* we consume in a day's time. Weight loss and gain is most often in direct proportion to what we eat. Calories are the yardstick some use to keep track of where they are on the dietary scale.

In order to eat fewer calories than you need, you first have to find out how many calories you actually need. For this purpose, we begin by assuming that you do no exercise (like too many of us).

Adult males can calculate their approximate energy needs using the following formula:

- A. Basal Metabolic Rate (body weight multiplied by 12)
- B. Activity: One third body weight multiplied by the number of hours you don't sleep, typically 16 hours)
- C. Digestion = A + B multiplied by 10%
- D. Required Calories: A + B + C

Confused? So am I. Math was not, nor will it ever be my favorite subject. That's why my wife won't let me have a checkbook.

The "Basal Metabolic Rate" is the number of calories a man of that weight would burn just to keep the heart beating, the lungs pumping, and so forth. You would just burn your basal metabolic rate worth of calories if you slept 24 hours per day. "Activity" is approximately the amount of calories a person would burn up by spending his or her whole day sitting around. Any deviation from sitting around can be considered exercise and added to the amount expended. (See that, dearest!)

Adult females can calculate their approximate energy needs using the same formula, except that A (the "Basal Metabolic Rate") is determined by multiplying body weight times 11 (e.g., 130 lbs. x 11 = 1430). Once you've determined how much you need to eat, stop eating that much. In order to reduce your calorie intake to an amount less than you require, you'll have to keep track of how much you eat. The best way to do this is to buy a book that includes an extensive list of foods and the number of calories each item contains. A good, thorough listing

takes many, many pages; don't buy something that just contains a one-page list of "sample caloric values," because you eat lots of different things. If you don't want to buy a book, you can just eat nothing but packaged, pre-prepared foods that indicate the number of calories they contain. My wife has an iPod and can download that stuff on it. Pretty cool, huh?

Now that you have the means to keep track of your caloric intake, you need to set a daily allowance and stick to it. It is very difficult to function on a diet that is more than 500 calories under your requirement, and we don't recommend trying to follow such a diet.

Now that you've calculated your daily allowance, you just need to keep track of what you eat and stick to your diet. When you knock down your intake, your body notices and it lets you know by making you feel hungry. Ignore this. Eat lots of celery, eat low-fat, high-fiber meals, and drink lots of water.

Ok, that calorie stuff is behind us. I put it in here because a lot of people expect a book about eating to say something about calories. Well I did so now let's move on.



## Chapter 6.

### *Carbohydrates*

It's time to get down to some specifics about the foods we eat. Carbohydrates (carbs) will be covered first. As you are certainly aware by now, some doctors (especially Dr. Atkins) consider carbs as the basis for all of our problems. Let me add that the plan my wife is on is very similar to the Atkins diet. Right now it is working marvelously for her. (She lost 50 pounds in about three months.) But she has had her struggles.

Carbohydrates (*saccharides*) are sugars and starches, which provide energy for humans and animals and cellulose that makes up many plant structures. Carbs have become both a blessing and a curse, as the process of modern food production has changed the way we eat them. There are two types of carbohydrates, **simple**, or *monosaccharides* and **complex**, or *polysaccharides*. But please don't be concerned about the spelling, the final exam does not include a spelling bee :^)

Simple carbohydrates, which are found in fruits and dairy products are more easily digested by the body. They are also often found in processed, refined foods such as white sugar, pastas, and white bread.

The body needs a certain amount of carbohydrates to function properly, and insufficient intake may cause fatigue, muscle cramps, and poor mental function. Although carbohydrates are an important part of our diet, the body can produce energy from fat and proteins alone. While this may do for short periods of time, avoiding all carbs will adversely affect your body. Many low-carb diets have been touted as healthy, but if taken to the extreme, they can be very dangerous to a one's overall well-being. It's important to remember that "low-carb" doesn't mean "no-carb." Be sure to eat moderate amounts of the *right* type of carbs to keep your body fueled properly.

Carbohydrates are made up of carbon and water. Atoms of carbon, hydrogen and oxygen form carbohydrate compounds such as sugar and starch. There are five types of carbohydrates: sugars, glucose, fructose, sucrose, maltose and lactose. Carbohydrates are the body's preferred source of energy and in fact your brain needs a constant supply of carbohydrates. (HMMMMM!)

Here's what the Harvard School of public Health has to say:

*Choose good carbs, not no carbs. Whole grains are your best bet.*

*Don't be misled by fad diets that make blanket pronouncements on the dangers of carbohydrates. They provide the body with fuel it needs for physical activity and for proper organ function, and they are an important part of a healthy diet. But some kinds of carbohydrates are far better than others.*

The good folks at Harvard say that the best sources of carbohydrates are whole grains, vegetables, fruits and beans because they promote good health by supplying our daily needs for vitamins, minerals, fiber, and a bunch of important phytonutrients. Easily digested carbohydrates from white bread, white rice, pastries, sugared sodas, and other highly processed foods most certainly contribute to weight gain and promote the onset of diabetes and heart disease.

**Complex carbohydrates**, which take longer for the body to digest, are most commonly found in vegetables (cellulose), whole grain breads and pasta, brown rice, and legumes. Foods with unrefined grains, such as brown rice, retain complex carbs, unlike refined grains, such as white rice. This is because the refining process removes some of the grain's fiber and nutrients. Eating a serving of whole grain cereal such as oatmeal will fill you up and give you longer lasting energy than a bowl of sugary cereal due to the way the body processes and uses the carbohydrates.

The liver digests carbohydrates by breaking them down into simple sugars, or glucose, which stimulates the production of insulin in the pancreas. Insulin's job is to get the sugar into the body's cells to be used as energy. The two different types of carbohydrates affect the production of insulin in different ways—when digesting simple carbohydrates, insulin levels top out faster, and the carbs are used up more quickly for energy. Granted, a candy bar is a quick energy source, but energy levels crash when the “sugar high” ends. Complex carbohydrates take longer to digest, which gives us longer lasting energy, and less of an insulin blast to the body.

If the body produces too much glucose, it ends up being stored in the liver and muscle cells as glycogen, to be used for when the body needs an extra shot of energy. Any leftover glycogen that isn't stored in liver and muscle cells is stored as fat. *(OOPS! Here it comes. The first clue as to where a big belly comes from.)* The body uses the immediate store of glycogen for short bursts of exercise. For extended periods of exercise such as long distance running and more strenuous workouts, the body will turn to its fat reserve to draw extra energy. In other words the body becomes a “fat-burner.”

*(Note: What I get from this is that if I work out at the gym for 30-45 minutes a couple of times a week I should not expect to get rid of very much fat!)*

The recommendation of the Institute of Medicine suggests that 40-65% of an adult's “dietary energy” should come from carbohydrates, while the World Health

Organization (WHO) recommends 55-75%. The WHO also recommends that no more than 10% of carbohydrate consumption come from simple carbs.

We all need a certain amount of carbohydrates, of course, but, through our addiction to grains, potatoes, sweets and other starchy and sugary foods, we are consuming far too many. The body's storage capacity for carbohydrates is quite limited, though, so here's what happens to all the excess: they are converted, via insulin, into fat and stored in the adipose, or fatty, tissue. In my case—a big gut!





## Chapter 7.

### *Proteins*

Fats are a waxy, oily substance and, believe it or not, they are essential for good health. Fat has double the amount of calories and so it poses a problem to individuals who find it difficult to exercise. If you break down a fat you end up with a fatty acid and glycerol.

Proteins are made up of chains of amino acids and are necessary for your body to build enzymes, antibodies and hemoglobin. When you consume protein, your body breaks the protein down into amino acids and then it tries to re-assemble them into other configurations to make other needed proteins for use around the body.

Scientists can measure the quality of nutrients that people are getting. I hope they do a better job than those chaps that have been feeding us those “Global Warming” numbers. People will volunteer to be involved in a clinical feeding trial and they will hook these people up to all kinds of measuring devices to measure everything from body temperature to how much moisture they exhale.

They weigh and eliminate salt in their feces and record everything they can about these patients. These people are fed a controlled diet—regulating the amount of protein consumed. They can measure how much is excreted, how much weight a person gains and basically they can determine how much of that protein is utilized by the body. (Phew—watta crappy job.)

When they do that they can determine the quality of the protein and the amino acids that makes up the protein. They can determine how well the body absorbs protein and assign a number value to the protein as to how well it is absorbed. Some proteins are absorbed extremely well, an example would be egg albumin, which is a protein found in the white of an egg rather than the yolk. The egg white protein has an extremely high biological advantage and all of the essential amino acids in perfect balance.

Gelatin though has many of the essential amino acids, however, it does not have an amino acid called tryptophan and because this is lacking—it isn’t considered a complete form of protein. If it is combined with other sources of protein it is okay.

Protein can help you shed those unwanted pounds and keep your belly full. But it’s important to eat the right amount and the right kind of protein to get the health benefits.

## **Sources of Protein**

### **Seafood**

Seafood is one of the best sources of protein because it's usually low in fat. Fish such as salmon is a little higher in fat but it is the heart-healthy kind: omega-3 fatty acids. Many saltwater fish are also high in omega-3 fatty acids.

### **White-Meat Poultry**

Stick to the white meat of poultry for excellent, lean protein. Dark meat is higher in fat. The skin is loaded with saturated fat, so remove skin before cooking. (But that's the best part—crunchy skin.)

### **Milk, Cheese, Yogurt**

Not only are dairy foods—like milk, cheese, and yogurt—excellent sources of protein and they also contain important levels of calcium. Choose skim or low fat dairy to keep bones and teeth strong, prevent osteoporosis, and enhance weight loss.

### **Eggs**

Eggs are one of the least expensive forms of protein. The American Heart Association says normal healthy adults can safely enjoy an egg a day. (Over easy, please!)

### **Beans**

One-half cup of beans contains as much protein as three ounces of broiled steak. Plus, these nutritious nuggets are loaded with fiber to keep you feeling full and un-constipated for hours.

### **Pork Tenderloin**

This great and versatile white meat is 31% leaner than it was 20 years ago.

### **Soy**

Twenty five grams of soy protein daily can help lower cholesterol and reduce the risk of heart disease. Combine soy protein foods like tofu with a healthy low fat diet.

### **Lean Beef**

Lean beef has only one more gram of saturated fat than a skinless chicken breast. Lean beef is also an excellent source of zinc, iron, and vitamin B12. We buy top sirloin roasts and have the butcher grind them into hamburger. Now that's good eating!

### **Protein on the Go**

Grab a meal replacement, drink, cereal bar, or energy bar. Check the label to be sure the product contains at least six grams of protein, and is low in sugar and fat.

Animal protein and vegetable protein probably have the same effects on health. It's the protein package that's likely to make a difference. A 6-ounce broiled porterhouse steak is a great source of protein—38 grams worth. But it also delivers 44 grams of fat, 16 of them saturated. That's almost three-fourths of the recommended daily intake for saturated fat per day. The same amount of salmon gives you 34 grams of protein and 18 grams of fat, 4 of them saturated. A cup of cooked lentils has 18 grams of protein, but under 1 gram of fat.



## Chapter 8. *Dietary Fats & Cholesterol*

Once again we hear from the Harvard School of Public Health

*"Eat a low-fat, low-cholesterol diet" has been the mantra for healthful eating for decades. Touted as a way to lose weight and prevent or control heart disease and other chronic conditions, millions of people have followed (or, more likely, have tried to follow) this advice. Seeing a tremendous marketing opportunity, food companies re-engineered thousands of foods to be lower in fat or fat free. The low-fat approach to eating may have made a difference for the occasional individual, but as a nation it hasn't helped us control weight or become healthier. In the 1960s, fats and oils supplied Americans with about 45 percent of their calories; about 13 percent of us were obese and under 1 percent had type 2 diabetes, a serious weight-related condition. Today, Americans take in less fat, getting about 33 percent of calories from fats and oils; yet 34 percent of us are obese and 8 percent have diabetes, most with type 2 diabetes.*

Why hasn't cutting fat from the diet paid off as expected? Detailed research—much of it done at Harvard—shows that the *total* amount of fat in the diet isn't really linked with weight or disease. What really matters is the *type of fat* in the diet. Bad fats, meaning trans fats and saturated fats, increase the risk for certain diseases, in particular, heart disease and cancer. Good fats, you know, monounsaturated and polyunsaturated fats, do just the opposite. They are good for the heart and most other parts of the body.

What about cholesterol in food? For most people, the mix of fats in the diet influences cholesterol in the bloodstream far more than cholesterol in food does. Remember...the liver manufactures cholesterol. So your cholesterol level may not necessarily be inherited from Aunt Susie or Uncle Max.

Almost all foods contain some fat. Even the often accepted fat-free foods like carrots and lettuce contain small amounts of this nutrient. That should tell us something—how important fats are for life. Fat is a terrific source of energy as well as a great repository for storing energy. It is an important part of our cell membranes, helping govern what gets into cells and what comes out. The body uses cholesterol as the starting point in the manufacture of estrogen, testosterone, and other vital compounds. Fats are also biologically active molecules that can influence how muscles respond to insulin's "gotta dump that sugar" signal.

Fat and cholesterol can't dissolve in water or blood. The body overcomes this "oil and water don't mix" problem by packaging fat and cholesterol into tiny, protein-covered particles called lipoproteins. Although lipoproteins can carry quite a bit of fat, they mix easily with blood and flow with it. Some of these particles are big

and fluffy, others small and dense. The most important particles are low-density lipoproteins, high-density lipoproteins, and triglycerides.

Fat is another term for lipid. Too much fat in your diet can lead to a big gut (obesity), heart disease, heart attacks, and strokes. But some fats are important, the body needs some fat to process vitamins and minerals and to insulate its inner systems. Fat is also used by the body to provide energy during exercise. Cheese, nuts, cooking oil, etc. are high in fat content. There is more than one kind of fat, let's have a look at the three:

### **Saturated Fat**

Saturated fat is the worst fat for the body. Saturated fat causes the arteries to clog which in turn can cause strokes, heart attacks and coronary heart disease.

### **Polyunsaturated Fat**

Polyunsaturated fat has fewer fatty acid molecules than saturated fat, so is a lot better for you than saturated fat. The best benefit for you is in Omega 3, which is found in fish oils, this fat helps with the development of the nervous system and a host of other bodily functions.

### **Mono Unsaturated Fat**

Mono unsaturated fat has even fewer fatty acid molecules than polyunsaturated fat, and for this reason is the best of all three fats. You should have a higher intake of mono unsaturated fat than the other two fats.

- **Low-density lipoproteins (LDL)** carry cholesterol from the liver to the rest of the body. These particles cling to our cells and where the cells extract fat and cholesterol from them. When there is too much LDL cholesterol in the blood, these particles can form deposits in the walls of the coronary and other arteries throughout the body. Such deposits, called plaque, can narrow arteries and limit blood flow. When plaque breaks loose inside the arteries, it may lead to a heart attack or stroke. Because of this, LDL is bad, or harmful, cholesterol.
- **High-density lipoproteins (HDL)** scavenge cholesterol from the bloodstream, from LDL, and from artery walls and transfer it back to the liver for disposal. HDL cholesterol is often referred to as good cholesterol.
- **Triglycerides** make up most of the fat that you eat and that finds its way through the bloodstream. As the body's main method for moving fats to the cells, triglycerides are important for good health. But as you might imagine of so many things, an excess of triglycerides can be unhealthy.

*In general, the lower your LDL and the higher your HDL, the better your chances of preventing heart disease, stroke and other chronic conditions. Guidelines from the National Cholesterol Education Program suggest specific targets:*

### **Good Fats**

*Unsaturated fats are called good fats because they can improve blood cholesterol levels, ease inflammation, stabilize heart rhythms, and play a number of other beneficial roles. Unsaturated fats are predominantly found in foods from plants, such as vegetable oils, nuts, and seeds. They are liquids at room temperature.*

*Dutch researchers conducted an analysis of 60 trials that examined the effects of carbohydrates and various fats on blood lipid levels. In trials in which polyunsaturated and monounsaturated fats were eaten in place of carbohydrates, these good fats decreased levels of harmful LDL and increased protective HDL. More recently, a randomized trial known as the Optimal Macronutrient Intake Trial for Heart Health (OmniHeart) showed that replacing a carbohydrate-rich diet with one rich in unsaturated fat, predominantly monounsaturated fats, lowers blood pressure, improves lipid levels, and reduces the estimated cardiovascular risk.*



Most people don't get enough of these healthful unsaturated fats every day. We find no strict guidelines that have been published regarding their consumption. Suggested targets are 10 to 25 percent of calories from monounsaturated fats and 8 to 10 percent of calories from polyunsaturated fats. Since no one eats by percentage of daily calories, a good rule of thumb is to choose unsaturated fats over saturated whenever possible.

The USDA recommends that Americans get between 20-35 percent of their daily calories from fats and here's why.

We need fat for many reasons. First, it provides calories. Second, it provides vital nutrients, including essential fats, which are fats that we need to get from food that we naturally can't create in our bodies. And fat does, add a lot of flavor, texture and taste to food. It's something we don't want to avoid completely.

### **OILS AND SPREADS**

#### **Best picks:**

Olive oil

Canola oil

Safflower oil

Sunflower oil

Margarine, trans-free, soft, in a tub

Mayonnaise

These oils contain monounsaturated and polyunsaturated fats, both of which can have heart health benefits if you use them to replace saturated fats, like butter. Keep intake to a minimum, sticking to about one teaspoon per serving, and most Americans should aim for about six teaspoons of healthy oils each day.

### **OTHER SPREADS AND DRESSING**

1 tablespoon of these counts as 1 teaspoon of oil.

Light or low-fat tub margarine

Light mayonnaise

Salad dressing (low-fat dressing: 2 tablespoons = 1 teaspoon oil)

### **MEAT / BEANS**

Although these foods count in the meat/beans food category, they naturally contain oils and some healthful fats. They are loaded with calories, so stick to small portions.

Nuts: almonds, cashews, peanuts, 2 tablespoons of each

Almond butter: 1 tablespoon

Peanut butter: 1 tablespoon

Fish, especially cold water fish (salmon, tuna, sardines, mackerel) contains healthful omega-3 fats

### **UNHEALTHY FATS**

Butter, shortening, stick margarine, sour cream, cream cheese — these are solid fats that need to be counted as discretionary or extra calories, not as part of any food group recommended by the dietary guidelines. For a 2,000 calorie plan, you can use about 250 of those calories on any foods you like.



## Chapter 9. *Amino Acids*

Every cell in the human body contains protein. It is a major part of the skin, muscles, organs, and glands. Protein is also found in all body fluids, except bile and urine.

You need protein in your diet to help your body repair cells and make new ones. Protein is also important for growth and development during childhood, adolescence, and pregnancy.

Why do so many people know so little about amino acids and protein, the differences in their form and the best times to ingest them? With nothing less than optimal body growth at stake, time invested in a little research can pay big dividends - both in terms of physical size and dollars saved.

Amino acids are the building blocks of proteins and muscle tissue. All types of physiological processes relating to our lives - energy, recovery, muscle / strength gains and fat loss, as well as mood and brain function - are intimately and critically linked to amino acids. It's no wonder amino acids have become major players in athletes' supplementation.

The 23 or so amino acids are the molecular building blocks of proteins. According to one accepted classification, 9 are termed indispensable amino acids (IAA, sometimes called essential), meaning that they must be supplied from some food or supplement source; the others, which used to be classified simply as nonessential, are now more correctly termed dispensable amino acids (DAA) or conditionally indispensable, based on the body's ability to synthesize them from other amino acids.

You may not give it much thought when you sink your teeth into a chicken breast (or a bowl of lentil stew), but the content and balance of amino acids, particularly the ratio of IAA to DAA, is what determines the body and health building value of a protein food or supplement. But that isn't all that matters.

Eating quality food is the most common way to get amino acids into the diet, especially high protein foods like lean meats and nonfat dairy products. Even some vegetables and legumes can offer high levels of most amino acids. For athletes and those on the run, protein powders and pure free form amino acids provide a convenient and effective means to supplement dietary needs.

Bioavailability is a measure of the extent to which a substance reaches its intended destination or utilization in the body. Bioavailability is thus a measure of the efficiency of delivery--how much of what is ingested is actually gets to the intended destination and is used for its intended purpose.



It is possible that two diets could contain exactly the same amount of particular amino acids (the same amino acid profile) but have considerable differences in their absorption. A number of factors affect amino acid bioavailability.

Protein-containing foods are grouped as either complete or incomplete proteins.

Complete proteins contain all nine essential amino acids. They are found in animal foods such as meat, fish, poultry, eggs, milk, and milk products such as yogurt and cheese. Soybeans are the only plant protein considered to be a complete protein.

Incomplete proteins lack one or more of the essential amino acids. Incomplete protein include beans, peas, nuts, seeds, and grain. A small amount of incomplete protein is also found in vegetables.

Plant proteins can be combined to provide all of the essential amino acids and form a complete protein. Examples of combined, complete plant proteins are rice and beans, wheat cereal, and corn and beans.

A diet high in meat can contribute to high cholesterol levels or other problems such as gout. A high-protein diet may also put a strain on the kidneys.

A nutritionally balanced diet provides adequate protein. Protein supplements are rarely needed by healthy people.

Vegetarians are able to get adequate amounts of essential amino by eating a variety of plant proteins.

The amount of recommended daily protein depends upon your age and health. Two to three servings of protein-rich food will meet the daily needs of most adults.

The following are the recommended serving sizes for protein:

- 2 to 3 ounces of cooked lean meat, poultry, or fish
- 1/2 cup of cooked dried beans
- 1 egg, 2 tablespoons of peanut butter, or 1 ounce of cheese

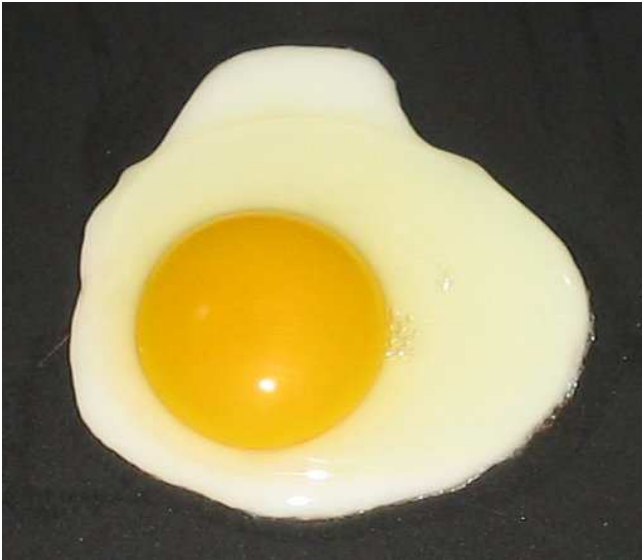
You should select lean meat, poultry without skin, fish, and dried beans, and low-fat or fat-free dairy products often. These are the protein choices that are the lowest in fat.

. A total of 20 different kinds of amino acids form proteins. The kinds of amino acids determine the shape of the proteins formed. Commonly recognized amino acids include glutamine, glycine, phenylalanine, tryptophan, and valine. Three of

those — phenylalanine, tryptophan, and valine — are essential amino acids for humans; the others are isoleucine, leucine, lysine, methionine, and threonine. The essential amino acids cannot be synthesized by the body; instead, they must be ingested through food.

One of the best-known essential amino acids is tryptophan, which performs several important functions. Tryptophan helps induce normal sleep; helps reduce anxiety, depression, and artery spasm risk; and helps produce a stronger immune system. Tryptophan is perhaps most well-known for its role in producing serotonin.

Amino acids make up 75% of the human body. They are essential to nearly every bodily function. Every chemical reaction that takes place in your body depends on amino acids and the proteins that they build.



## **Chapter 10.**

### *Free Radicals & Antioxidants*

The radicals we're talking about don't favor one political party or the other. They don't carry signs nor do they hold "Tea Parties." The free radicals I'm taking about are molecules (mostly oxygen) that float around your body looking to balance themselves with electrons from another source. A more scientific explanation follows.

### **We now hear from the experts at Rice University**

*Antioxidants are intimately involved in the prevention of cellular damage -- the common pathway for cancer, aging, and a variety of diseases. The scientific community has begun to unveil some of the mysteries surrounding this topic, and the media has begun whetting our thirst for knowledge. Athletes have a keen interest because of health concerns and the prospect of enhanced performance and/or recovery from exercise. The purpose here is to serve as a beginners guide to what antioxidants are and to briefly review their role in exercise and general health. What follows is only the tip of the iceberg in this dynamic and interesting subject.*

*Free radicals are atoms or groups of atoms with an odd (unpaired) number of electrons and can be formed when oxygen interacts with certain molecules. Once formed these highly reactive radicals can start a chain reaction. Their chief danger comes from the damage they can do when they react with important cellular components such as DNA, or the cell membrane. Cells may function poorly or die if this occurs. To prevent free radical damage the body has a defense system of antioxidants (anti-oxygen).*

*Antioxidants are molecules which can safely interact with free radicals and terminate the chain reaction before vital molecules are damaged. Although there are several enzyme systems within the body that scavenge free radicals, the principle micronutrient (vitamin) antioxidants are vitamin E, beta-carotene, and vitamin C. Additionally, selenium, a trace metal that is required for proper function of one of the body's antioxidant enzyme systems, is sometimes included in this category. The body cannot manufacture these micronutrients so they must be supplied in the diet.*

### **Prevention of cancer and heart disease with antioxidants**

Scientific observations show lower cancer rates in people whose diets are rich in fruits and vegetables. This has led to the theory that these diets contain sufficient quantities of substances, antioxidants, which protect against the development of cancer. There is currently a great deal scientific investigation into this topic.

Antioxidants are also thought to have a role in slowing the aging process and preventing heart disease and strokes, but much more research is needed. From a public health perspective it is premature to make recommendations regarding antioxidant supplements and disease prevention. New data from ongoing studies will be available in the next few years and will shed more light on this constantly evolving area. Perhaps the best advice, which comes from several authorities in cancer prevention, is to eat 5 servings of fruit or vegetables per day.

### **Exercise and oxidative damage**

Endurance exercise can increase oxygen utilization from 10 to 20 times over the resting state. This greatly increases the generation of free radicals, prompting concern about damage to muscles and other tissues. The question that arises is, how effectively can athletes defend against the increased free radicals resulting from exercise? Should athletes take extra antioxidants?

Because it is not possible to directly measure free radicals in the body, scientists have approached this question by measuring the by-products that result from free radical reactions. If the generation of free radicals exceeds the antioxidant defenses then one would expect to see more of these by-products. These measurements have been performed in athletes under a variety of conditions.

Several interesting concepts have emerged from these types of experimental studies. Regular physical exercise enhances the antioxidant defense system and protects against exercise induced free radical damage. This is an important finding because it shows how smart the body is about adapting to the demands of exercise. These changes occur slowly over time and appear to parallel other adaptations to exercise.

### **Can antioxidant supplements prevent exercise induced damage or enhance recovery from exercise?**

Although it is well known that vitamin deficiencies can create difficulties in athlete training and recovery, the role of antioxidant supplementation in a well nourished athlete is controversial. The experimental studies are often conflicting and conclusions are difficult to reach. Nevertheless, most of the data suggest that increased intake of vitamin E is protective against exercise induced oxidative damage. It might be that vitamin E is also involved in the recovery process following exercise. Currently, the amount of vitamin E needed to produce these effects is unknown. The diet may supply enough vitamin E in most athletes, but some may require supplementation. There is no firm data to support the use of increased amounts of the other antioxidants.

## Performance

How much is enough?

Although there is little doubt that antioxidants are a necessary component for good health, no one knows if supplements should be taken and, if so, how much. Antioxidants supplements were once thought to be harmless but increasingly we are becoming aware of interactions and potential toxicity. It is interesting to note that, in the normal concentrations found in the body, vitamin C and beta-carotene are antioxidants; but at higher concentrations they are pro-oxidants and, thus, harmful. Also, very little is known about the long term consequences of megadoses of antioxidants. The body's finely tuned mechanisms are carefully balanced to withstand a variety of insults. Taking chemicals without a complete understanding of all of their effects may disrupt this balance.

Was that scientific enough for ya?

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## Chapter 11. *Junk Food*

We seem to have a penchant for junk food. Between 1977 and 2002, the percent of the American population eating three or more snacks a day -- and most of it junk food -- increased to 42 percent from 11 percent. Further, researchers found, the percent of children surveyed who said they had eaten three meals on the previous day went down, while those who had had a snack went up more than 40 percent.

The U.S. consumed over \$68 billion in packaged snack foods in 2008, up from \$60 billion in 2004. Among the newest and best-selling concepts are small packs of cookies and other junk foods. The spread of snacking has been abetted by over-scheduled children and the demise of the family dinner. *(Maybe instead of taking over banks and automobile manufacturers, the administration in Washington should consider taking over McDonalds. That's a lot of billions that could be applied to the national debt.) No...the NY Times didn't add that in!*

This is just one aspect of a much larger problem that encompasses a reliance on nutritionally depleted foods, chemical additives and pharmaceutical drugs to treat the resulting malnourished bodies.

Source:

New York Time Article January 19, 2010

American children get 40 percent of their calories from food of poor nutritional quality. This fact from the Agriculture Department, reported in the *New York Times* article above, is shocking, and exactly the reason why the film *FoodMatters* is so important.

The number one source of calories in the United States is high fructose corn syrup that will accelerate your progress towards degenerative diseases like diabetes, and it will make you fat.

In countries around the world, waistlines are expanding so rapidly that health experts recently coined a term for the epidemic: globesity. One in three of the world's adults is overweight and one in 10 is obese. *With that many fat people on earth, maybe global warming is occurring from all the excess carbon monoxide exhaled and methane gas from,,,well, you know where it comes from.*

The stereotypical picture of malnourishment -- a very thin, starving person -- is no longer accurate. It is possible, and quite common, for people to be both overweight and malnourished.

In fact, you may not notice symptoms until you are very severely deficient in nutrients. A lot of people may be on the borderline of malnourishment right now and not even realize it.

Then down the line an illness, such as cancer, heart disease or diabetes, occurs, and is never tied back to the lack of nutritious foods consumed over your lifetime.

The problem here is not kids eating more snacks, not by a long shot.

The problem is what's in those snacks: ingredients that are dead and devoid of the nutrients your body needs to survive. The problem is also the chemicals added to the majority of the food supply, along with a widespread tendency to rely on pharmaceutical drugs to stay well.

As Hippocrates said, "Let thy Food be thy Medicine and thy Medicine be thy Food."

Fresh, healthy food, along with exercise and a healthy emotional outlook, really is the secret "fountain of youth" that we're all looking for. A lifetime of healthy eating will keep you well, plain and simple.

*Maybe at my age it is too late to save my crap-ravaged body. Yes, I attacked the vending machines at work for countless years. But putting together this text made me aware of all of the mistakes I've made. I had a complete physical recently and all tests were within limits. Phew! So far so good. But it's hard to turn down a bowl of French fries, even if they are cooked in canola oil. Hey! What's wrong with that. At least they weren't cooked in animal fat.*

Yet, less than six percent of graduating medical students in the United States receive any formal training in nutrition.

What has taken food's place? Just one word: drugs.

Enter the massive pharmaceutical industry. It's become a half-trillion dollar per year worldwide conglomerate -- and a \$300,000-billion industry in North America alone.

Think about it. ***Is it really in the best financial interests of Big Business -- the pharmaceutical, medical, and agricultural industries -- to promote natural, fresh food and nutrition to keep people free from disease?*** It doesn't take a rocket scientist to figure out the answer to that question.

Looking at other cultures untainted by the Western world, we see people eating locally grown, unprocessed food. Their incidence of chronic and acute illness, such as heart disease and cancer, pales in comparison.

As Laurentine ten Bosch says:

*"There are simple lifestyle changes that we as individuals can make to combat serious illness, and with access to solid information, people invariably make better choices for their health."*

Dr. Joseph Mercola, who publishes the newsletter I read every week says:

*My life's passion is to expose corporate, government and mass media hype that diverts you away from what is truly best for your health and often to a path that leads straight into an early grave.*

*Mercola.com is not, in other words, a tool to get me a bigger house and car, or to run for Senate.*

*It's a tool to help you take control of your health, using simple lifestyle choices like healthy eating and exercise, and ultimately to help change the fatally flawed paradigm that modern medicine has become.*

*With the information in my web pages, you can break free of the "sickness" paradigm -- the processed food, the chemical additives, the drug solutions -- and create a healthier life for yourself and your family.*

*The old saying "you are what you eat" is probably never more apparent than shortly after you eat a convenient, good-tasting junk-food meal. My guess is that most of the time you begin to feel tired, your mood sinks, your brain feels foggy, and you may even feel hungry again, not to mention all the guilt you have for putting things into your body that you know will move you toward sickness and disease.*

*Fortunately, the opposite also holds true: it takes just ONE good meal to start moving in a positive direction.*

*Just imagine the power that gives you. If you have been eating poorly recently, you can start reversing the process with your very next meal -- and start to improve your health right now.*

*Your body was designed to be healthy. It wants to move toward health and away from disease, and it will do its best to stay that way, provided you give it the proper tools -- the proteins, the healthy fats and the good carbs (mostly from veggies) and micronutrients -- that it needs to thrive.*

*If you end up feeling hungry, irritable, sleepy or sluggish after you eat, these are all signs that you are likely not giving your body the fuel that it needs to do its job*



*properly. This fuel is different for everybody, and you can find out which exact foods your body is TRULY craving by finding out your nutritional type.*

*Whether it's turning around a serious or chronic condition or just protecting your health, I want you to have the solid information you need. There's still time to take that first -- or even fourth -- step in taking control of your health.*

Sign up for Dr. Mercola's FREE newsletter: [www.mercola.com](http://www.mercola.com). Click on Newsletter.

A collaborative study conducted by Agricultural Research Service and Harvard University scientists showed decreased nutritional dietary quality and increased caloric intake among U.S. children on days when they consumed fast food. The study, which appears in the January issue of the journal Pediatrics, confirms other similar, previously published studies.

The authors analyzed existing dietary intake data from 6,212 children and adolescents, aged 4 to 19, from a nationally representative USDA Continuing Survey of Food Intakes by Individuals, 1994-1996, and the Supplemental Children's Survey, 1998. The survey data are collected on two non-consecutive days by ARS, the U.S. Department of Agriculture, chief scientific research agency.

U.S. children who ate fast food, compared with those who did not, consumed more total calories, more calories per gram of food, more total and saturated fat, more total carbohydrates, more added sugars and more sugar-sweetened beverages, but less milk, fiber, fruit and non-starchy vegetables. The study also revealed out of the two days surveyed, those children who consumed fast food on only one day showed similar nutrient shortfalls on the day they had fast food. But they did not show these shortfalls on the other day.

The study's coauthors include nutritionist Shanthy A. Bowman with the ARS Community Nutrition Research Group, Beltsville, Md.; David S. Ludwig and colleagues with Children's Hospital Boston, Mass.; and Steven L. Gortmaker with Boston's Harvard School of Public Health.

Some experts estimate that childhood consumption of fast foods increased fivefold, from 2 percent of daily meals in the late 1970s, to 10 percent of daily meals by the mid-1990s. During that time, the number of fast food restaurants more than doubled to an estimated 250,000 nationwide.

The findings are important because childhood obesity is increasing in prevalence. Inadequate consumption of fruits and vegetables has been associated with obesity-related problems such as cardiovascular disease and

diabetes. Fruits and nonstarchy vegetables may protect against excessive weight gain because of their low energy density and high fiber content.



## Chapter 12.

### *The Fast Food Industry*

Fast food has become an accepted way of life. For over 30 years it has slowly crept into our daily routines. What began as a few hot dog and hamburger stands is now a giant octopus with tentacles reaching into more than 200,000 individual stores. And it continues to spread.

Fast food isn't limited to the myriad stands along the Interstates, you will find them wherever people with a few bucks happen to be like airports, zoos, public schools and colleges, cruise ships, stadiums, K-Mart's and Wal-Mart's, gas stations, and even hospital cafeterias.

The fast food industry caters to the innate laziness of the consuming public. It doesn't matter if it's in downtown Philadelphia or Zebulon, NC, the eating public can find a quick meal without going out of their way. Some industry statistics indicate that while back in 1970 fast food was a \$6 Billion dollar industry, today the American public spends more on fast food than on higher education, computers and software and new cars. More is spent on fast food than on movies, videos, recorded music and newspapers combined. The whole process of consuming fast food has become routine, so mundane, that it is simply taken for granted—it's what we do!

What people actually eat or don't eat is and always has been determined by economic, social and technical considerations. Fast food has reshaped our landscape, workforce, economy and even our culture. And while many view fast food as a benefit, a convenience, it does have serious consequences. In the U.S. alone, one person out of three is overweight and of those stressing the scales, a majority may be considered obese.

As society changes, so has the growth of the fast food industry. One study indicates that hourly wages for the U.S. workforce peaked around 1973 and has been on a downward slide ever since. Some think that what upset the balance was women entering the workforce in record numbers. A basic fact of economics tells us that the more the job market grows, and the more people are available to fill those jobs, the less people will get paid. It's a matter of supply and demand.

America's service economy is now responsible for nearly 90% of our new jobs. I remember the first time I saw a McDonald's. It was back in the 1960's. The marquee out front touted, "More than One Million Sold." In 1968 Mickey D's had nearly 1000 stores (I refuse to call them restaurants—eatery may be a better term). Today the world-wide total is nearly 30,000 and it opens almost 2,000 new spots a year. They are the country's largest purchaser of beef, pork and potatoes. They are the largest holder of property in the world and most of its profit comes from rent, and not from the burgers it sells. McDonald's has the country's largest advertising budget—more than any other brand.

McDonald's management can take pride in the fact that it operates more playgrounds than any private business in the U.S. It distributes more toys than any other entity, and the only fictional character better known than Ronald McDonald is Santa Claus.

Almost every facet of American life is franchised or chained. Our main streets and highways are littered with name-brand stores. Whatever happened to the Mom and Pop hardware stores, barber shops, service stations, clothing and corner grocery stores? One writer states that a person can go from cradle to grave with never having to deal with an individually owned business.

Hamburgers and french fries became a basic part of our diet in the 1950s. A typical American consumes about three burgers and four orders of fries every week, but the fast food industry seldom mentions where these foods come from or what they are made of. That is left to the imagination of the consumers who really don't seem to give a damn.

A fast food kitchen doesn't rely on cookbooks in the final preparation of their offerings. Fast food is delivered pre-frozen, canned, dehydrated or freeze-dried. Microwave ovens and gas-fired grills have bolstered the term fast food.

According to Eric Schlosser, author of *Fast Food Nation* (The Dark Side of the All-American Meal), "Foods that may look familiar have in fact been completely reformulated. What we eat has changed more in the last 40 years than in the previous 40 thousand...Today's fast food conceals remarkable technological advances behind an ordinary-looking façade. Much of the taste and aroma of American fast food, for example, is now manufactured at a series of large chemical plants off the New Jersey Turnpike."

Schlosser continues, "The fast food chains' vast purchasing power...encouraged changes in how cattle are raised, slaughtered and processed into ground beef. These changes have made meatpacking—once a highly skilled, highly paid occupation—into the most dangerous job in the U.S., performed by armies of poor, transient immigrants (some legal—some illegal) whose injuries often go unrecorded and uncompensated. And the same meat industry practices that endanger these workers have facilitated the introduction of deadly pathogens, such as E.coli ...into America's hamburger meat, a food aggressively marketed toward children.

The federal government has the legal authority to recall a defective toaster oven or a stuffed animal—but still lacks the power to recall tons of contaminated, potentially lethal meat." (*Note: Many of the recent recalls of food products was done on a voluntary basis by the provider.*)

Fast food isn't solely responsible for the many social problems in this country but it has been a catalyst in larger economic trends. Fast food plays an enormous role in the growing obesity of our people. And the trends we establish here quickly spread abroad due to the desire to be "like Americans."

Some researchers label fast food as "junk food." To be fair, junk food is food with hardly any nutritional value in them. But, at least fast food scores a few points on some aspects of nutrition.

Fast food is in fact similar in nutritional value to home cooked meals, but of course, they pack a lot more calories than most foods, plus they come with a lot of added "ingredients" which are not within your control, like chemical additives, salt, sugar, and fat, especially trans fat (trans fatty acids). Notwithstanding a typical hamburger with cheese actually provides about a quarter of an adult's daily nutritional needs for protein, iron, calcium, and zinc!

Despite all the bad press about fast food, why do people continue to throng fast food restaurants? The reasons often given by people are:

- Convenience
- Cleanliness
- Friendly service
- Delicious food
- Value for money
- Speed

Thus, it can be deduced that nutritional concerns rank very low on most people's priorities when it comes to choosing food. Some fast food eaten now and then is OK. But for weight watchers (and people with sensitive physiology, allergies, high blood pressure, and weak digestion), the high calories, salt, sugar, and additives of fast food can inflict health problems, and are therefore best avoided.

**Chapter 13.**  
*Dietary Approaches to Stop Hypertension*  
**\*DASH\***

Let's clear the air first, I am not a doctor, but I have played one on TV. I had a leading role in a training video produced by one of the leading medical schools in North Carolina. Does that make me an expert on the subject of high blood pressure (HBP)? No ... it doesn't, but I do have over 40 years experience in dealing with it.

I was in the midst of an insurance physical when my doctor said, "Don, you have hypertension-high blood pressure. How long has this been going on?"

SAY WHAT? I have high blood pressure? I'm only 30 years old!

Thus began my odyssey of fighting to maintain a healthy BP level. Now, after spending thousands of dollars on ACE Inhibitors, BETA Blockers, diuretics and statin drugs I discovered there were things I could have done way back then—like seeking a way to slam-dunk my BP numbers in a more natural way, without the medications..

During my last visit to my family doctor my numbers were 138 (Over) 88, even though I was taking a double dose of one medication. Normal BP, says the National Institutes of Health, is around 120/80. According to the NIH, "High Blood Pressure is a serious condition that can lead to coronary heart disease, stroke, kidney failure, and other health problems."

Blood pressure is the force of blood pushing against the walls of the arteries as the heart pumps out blood. If this pressure rises and stays high over time, it can cause all sorts of body damage over time.

BP numbers include systolic (the first number) and diastolic (the second number). The systolic number is the pressure when the heart beats while pumping blood. Diastolic is the pressure when the heart rests between beats.

As I mentioned before, normal BP is 120/80 or less. Pre-hypertension is 120-139/80-89. HBP Stage 1 is 140-159/90-99, and Stage 2 is 160 and up/100 and up. As I mentioned before, even fully medicated my BP read 138-88—so despite the medication I was still *hypertensive!* **So what gives?**

It became obvious that the medications I was taking merely treat the symptom, not the cause. The drugs just temporarily mask the underlying problem.

Decades of scientific and medical research indicates that **life-style** choices contribute significantly to the higher numbers. It became apparently that some personal research was in order.

Certain medical problems, such as chronic kidney disease, thyroid disease and sleep apnea are all causes of HBP. Even some over-the-counter medications, like cold remedies can cause elevated BP. Other factors include ( but are not limited to) old age, race/ethnicity, overweight or obesity, gender (fewer women have HBP troubles), unhealthy life-style habits (eating too much salt, drinking too much alcohol, low potassium levels in the diet, too little exercise and smoking).

HPB is often referred to as the “Silent Killer.” Most folks simply don’t exhibit any obvious signs or symptoms of HBP—I certainly didn’t. That’s why regular BP checks are a must for all adults.

My recent research online lead me to a report (more on this later) that may work for you—they are definitely working for me.

1. Cut out the salt! Avoid prepared foods that are loaded with salt.
2. Eat lots of nuts—especially walnuts and almonds—and you guessed it—**unsalted.**
3. Take regular vitamin supplements—but be picky about what you buy. The special report I mentioned will give you the scoop on this. You can see this report by following the link below.
4. Eat seafood regularly, especially the kinds of fish that are high in omega 3 fatty acids.
5. Eat more chocolate!
6. And the toughest tip of all: Make a sincere effort to reduce **STRESSFULL** situations.

In 1998, The national Institutes of Health published the DASH Eating Plan. This manual puts forth the theory that what you choose to eat affects your chances of developing high blood pressure, or hypertension. Recent studies show that blood pressure can be lowered by following the Dietary Approaches to Stop Hypertension (DASH) eating plan—**and** by eating less salt, also called sodium.

While each step alone lowers blood pressure, the combination of the eating plan and a reduced sodium intake gives the biggest benefit and may help prevent the development of high blood pressure.

The menus and recipes published in *the DASH booklet* are given for two levels of daily sodium consumption—2,300 and 1,500 milligrams per day. Twenty-three hundred milligrams is the highest level considered acceptable by the National High Blood Pressure Education Program. It is also the highest amount recommended for healthy Americans by the 2005 “U.S. Dietary Guidelines for Americans.” The 1,500 milligram level can lower blood pressure further and more recently is the amount recommended by the Institute of Medicine as an adequate intake level and one that most people should try to achieve.

*The lower your salt intake is, the lower your blood pressure. Studies have found that the DASH menus containing 2,300 milligrams of sodium can lower blood pressure and that an even lower level of sodium, 1,500 milligrams, can further reduce blood pressure. All the menus are lower in sodium than what adults in the United States currently eat—about 4,200 milligrams per day in men and 3,300 milligrams per day in women. Those with high blood pressure and pre-hypertension may benefit especially from following the DASH eating plan and reducing their sodium intake.*

Considering the fact that I was diagnosed with high blood pressure over 40 years ago you might think I would have heard about this eating plan. It seems like most of the medical profession is keyed to prescribing drugs—thus taking the easy way out.

*High blood pressure affects more than 65 million—or 1 in 3—American adults. About 28 percent of American adults ages 18 and older, or about 59 million people, have prehypertension, a condition that also increases the chance of heart disease and stroke. High blood pressure is especially common among African Americans, who tend to develop it at an earlier age and more often than Whites.*

*It is also common among older Americans—individuals with normal blood pressure at age 55 have a 90 percent lifetime risk for developing high blood pressure.*

*Blood pressure can be unhealthy even if it stays only slightly above the normal level of less than 120/80 mmHg. The more your blood pressure rises above normal, the greater the health risk.*

*Scientists supported by the National Heart, Lung, and Blood Institute (NHLBI) conducted two key studies. Their findings showed that blood pressures were reduced with an eating plan that is low in saturated fat, cholesterol, and total fat and that emphasizes fruits, vegetables, and fat-free or low-fat milk and milk products.*

*The DASH eating plan—also includes whole grain products, fish, poultry, and nuts. It is reduced in lean red meat, sweets, added sugars, and sugar-containing*



*beverages compared to the typical American diet. It is rich in potassium, magnesium, and calcium, as well as protein and fiber.*

*The DASH eating plan follows heart healthy guidelines to limit saturated fat and cholesterol. It focuses on increasing intake of foods rich in nutrients that are expected to lower blood pressure, mainly minerals (like potassium, calcium, and magnesium), protein, and fiber. It includes nutrient-rich foods so that it meets other nutrient requirements as recommended by the Institute of Medicine.*



**Grains\***  
**Vegetables**  
**Fruits**  
**Fat-free or low-fat  
milk and milk  
products**  
**Lean meats,  
poultry, and fish**  
**Nuts, seeds, and  
legumes**  
**Fats and oils**  
**Sweets and added  
sugars**  
6–8  
4–5  
4–5  
2–3  
6 or less  
4–5 per  
week  
2–3  
5 or less  
per week

1 slice bread  
 1 oz dry cereal†  
 1/2 cup cooked rice, pasta, or cereal  
 1 cup raw leafy vegetable  
 1/2 cup cut-up raw or cooked vegetable  
 1/2 cup vegetable juice  
 1 medium fruit  
 1/4 cup dried fruit  
 1/2 cup fresh, frozen, or canned fruit  
 1/2 cup fruit juice  
 1 cup milk or yogurt  
 1 1/2 oz cheese  
 1 oz cooked meats, poultry, or fish  
 1 egg‡  
 1/3 cup or 1 1/2 oz nuts  
 2 Tbsp peanut butter  
 2 Tbsp or 1/2 oz seeds  
 1/2 cup cooked legumes (dry beans and peas)  
 1 tsp soft margarine  
 1 tsp vegetable oil  
 1 Tbsp mayonnaise  
 2 Tbsp salad dressing  
 1 Tbsp sugar  
 1 Tbsp jelly or jam  
 1/2 cup sorbet, gelatin  
 1 cup lemonade

*\* Whole grains are recommended for most grain servings as a good source of fiber and nutrients.*

*† Serving sizes vary between 1/2 cup and 1 1/4 cups, depending on cereal type. Check the product's Nutrition Facts label.*

## Here's brief overview of the foods recommended in the DASH Eating Plan

Whole wheat bread and rolls, whole wheat, pasta, English muffin, pita bread, bagel, cereals, grits, oatmeal, brown rice, unsalted pretzels and popcorn. (Major sources of energy and fiber)

Broccoli, carrots, collards, green beans, green peas, kale, lima beans, potatoes, spinach, squash, sweet potatoes, tomatoes. (Rich sources of potassium, magnesium and fiber)

Apples, apricots, bananas, dates, grapes, oranges, grapefruit, grapefruit juice, mangoes, melons, peaches,



pineapples, raisins, strawberries, tangerines. (Important sources of potassium, magnesium and fiber)

Fat-free (skim) or low-fat (1%) milk or buttermilk, fat-free, low-fat, or reduced-fat cheese, fat-free or low-fat regular or frozen yogurt. (Major sources of calcium and protein)

Select only lean; trim away visible fats; broil, roast, or poach; remove skin from poultry. (Rich sources of protein and magnesium)

Almonds, hazelnuts, mixed nuts, peanuts, walnuts, sunflower seeds, peanut butter, kidney beans, lentils, split peas (Rich sources of energy, magnesium, protein and fiber)

Soft margarine, vegetable oil (such as canola, corn, olive, or safflower), low-fat mayonnaise, light salad dressing. (A DASH study had 27% of calories as fat, including fat in or added to foods)

Fruit-flavored gelatin, fruit punch, hard candy, jelly, maple syrup, sorbet and ices, sugar. Sweets should be low in fat)

The best way to take off pounds is to do so gradually, get more physical activity, and eat a balanced diet that is lower in calories and fat. For some people at very high risk for heart disease or stroke, medication will be necessary. To develop a weight-loss or weight-maintenance program that works well for you, consult with your doctor or registered dietitian.

Combining the DASH eating plan with a regular physical activity program, such as walking or swimming, will help you both shed pounds and stay trim for the long term. You can do an activity for 30 minutes at one time, or choose shorter periods of at least 10 minutes each. The important thing is to total about 30 minutes of activity each day. (To avoid weight gain, try to total about 60 minutes per day.)

You should be aware that the DASH eating plan has more daily servings of fruits, vegetables, and whole grain foods than you may be used to eating. Because the plan is high in fiber, it can cause bloating and diarrhea in some persons. To avoid these problems, gradually increase your intake of fruit, vegetables, and whole grain foods.

## Chapter 14

### *The Paleolithic (Caveman) Diet*

Some say we should learn from our elders—we should fashion our lives by studying history. Well ... who has time to do that? Most folks with a weight problem (nearly 1/3 of the U.S. population) want fast, painless results.

Medical science tells us that achieving dramatic weight loss over the short periods that some diets claim may be just as unhealthy as keeping the weight on. The moral to this story is—take it off—but take it off gradually... especially if you want to keep it off. So how does 21 pounds in 21 days sound to you? If you are willing to give that plan a shot, more specifics will follow.

OK, so let's go back in history—we're talking about a time period known as the "Old Stone Age," or Paleolithic Period. This would be the time that the cavemen used stone tools and began drawing pictures on cave walls—about 40,000 years ago. *Homo sapiens sapiens* (yes we are descended from them) existed on a very simple but effective diet.

Flash forward to 2007 when the *The Science* daily reported on a study based on the Paleolithic (Paleo-old, lithic-stone) diet consisting of veggies, fruits (mostly berries) lean meat and fish. The study found that this kind of diet was a godsend for present day people with Type II Diabetes (talk about your stone age Atkins Diet).

Meanwhile, back in the caves in Western Europe, it was not until around 12,000 BP (Before Present) with the advent of agriculture, that carbohydrates entered the food chain. The cave dwellers began cultivating grains and starchy vegetables/ This Period is known to science as the Neolithic (New-Stone) Age. And thus began our decline into what has become our national shame—obesity.

Now as most health care providers and nutritionists will explain, "A diet of LOW carbs—and not NO CARBS..." is very beneficial in the "Battle of the Bulge."

Ben Belzer, a family physician from Australia, published the Paleolithic Diet and this was the strongest introduction to the benefits this diet offered. He describes the lives of the last 84 tribes of hunter/gatherers still existing today who are slim and stronger than most of us. It is extremely rare for these people to develop heart disease, cancer, diabetes and many other present-day afflictions we all succumb to.

Belzer confirms the fact that the cavemen ate mostly meat, fish and fowl along with certain nuts, roots, leaves and the fruits of assorted plants.

Prior to the advent of cooking food—around 10,000 years ago—many raw foods like beans, potatoes and grains were not eaten raw due to their being toxic to the point that they made people sick. So don't eat raw potatoes, most beans and grains or you'll risk an upset stomach or diarrhea.

So how many “diets” are there? If you “Google” the term **diets** it will bring up 20 million websites. How's that for a choice. And it seems like a day doesn't pass that new ones find their way into the marketplace. The “watercooler” or “photocopier” talk of the day is about so and so's newest, best ever fad diet.

Yes, you have unlimited choices but before you nail one down, give it some serious thought. The big sellers on the Internet today are the so called, “fat burner” diets. The truth is if we ate right, we wouldn't have much fat to burn. There are fat-burning pills, fat burning foods. Ho Hum. Pills and food don't burn fat. The human body burns fat.

We are all familiar with the advice that “diet and exercise are the key to a long, and healthy life.” Well we are...aren't we familiar with that term? Well, we should be, but there is so much crap being offered today masquerading as a diet that it's no wonder we have so many obese people walking, or barely walking around.

So ... CAN the paleo diet benefit us. Most certainly it can ...but WILL it? Will it be a benefit to us even if we cheat a little. Jon Benson believes so. He wrote the book called. “The Every Other Day Diet.” And he believes that the EEO Diet makes it possible to cheat a little and he offers numerous ACTUAL testimonials to substantiate his theory. Jon combines the benefits of the Old World with an occasional OFF DIET treat—like a slice of pizza.

More information on the “Every Other Day Diet may be found [HERE](#).

I thought it only appropriate to include some of Dr. Balzer's findings since I have spent considerable time researching them and I have adopted many of its components in my own life.

*The Paleolithic Diet is the only diet that is over 2 million years old. While it is ideal for most people, there are exceptions. It is definitely not suitable for people with iron overload (haemochromatosis, hemochromatosis) as it is very high in iron. It is not suitable at this stage for people with kidney disease as it is high in protein. Its effect on gout is not yet known and it should be avoided in uncontrolled gout.*

*It is recommended that you have regular checkups from your registered licensed health care provider and follow their advice.*

*In pregnancy and other situations, care must be taken to observe advice from your registered licensed health care provider- for example to avoid foods that are at risk for Listeria infection in pregnancy.*

*The information (here) is of a general nature only and may not be suitable for you. It is not a substitute for advice from your registered licensed health care provider. This (information) is not intended to diagnose treat prevent or cure any illness.*

*Wishing you the best of health*

*Dr Ben Balzer*

For millions of years, humans and their relatives have eaten meat, fish, fowl and the leaves, roots and fruits of many plants. One big obstacle to getting more calories from the environment is the fact that many plants are inedible. Grains, beans and potatoes are full of energy but all are inedible in the raw state as they contain many toxins. There is no doubt about that- please don't try to eat them raw, they can make you very sick.

Around 10,000 years ago, an enormous breakthrough was made- a breakthrough that was to change the course of history, and our diet, forever. This breakthrough was the discovery that cooking these foods (grains, beans and potatoes) made them edible- the heat destroyed enough toxins to render them edible. Grains include wheat, corn, barley, rice, sorghum, millet and oats. Grain based foods also include products such as flour, bread, noodles and pasta. These foods entered the menu of New Stone Age (Neolithic) man, and Paleolithic diet buffs often refer to them as Neolithic foods.

The cooking of grains, beans and potatoes had an enormous effect on our food intake- perhaps doubling the number of calories that we could obtain from the plant foods in our environment. Other advantages were soon obvious with these foods:

- they could store for long periods (refrigeration of course being unavailable in those days)
- they were dense in calories- i.e., a small weight contains a lot of calories, enabling easy transport
- the food was also the seed of the plant- later allowing ready farming of the species

These advantages made it much easier to store and transport food. We could more easily store food for winter, and for nomads and travelers to carry supplies. Food storage also enabled surpluses to be stored, and this in turn made it

possible to free some people from food gathering to become specialists in other activities, such as builders, warriors and rulers. This in turn set us on the course to modern day civilization. Despite these advantages, our genes were never developed with grains, beans and potatoes and were not in tune with them, and still are not.

Then followed the harnessing of dairy products around 5,000 years ago, which allowed man to obtain far more calories from the animal over its lifetime than if it were simply slaughtered for meat. Dairy products are interesting as they combine a variety of components- some of which our genes were ready for and some not. Whilst cows milk is ideal for calves, there are several very important differences between it and human milk. For example, the brain of a calf is only a tiny fraction of its body weight whereas humans have very big brains. Not surprisingly, cows milk is low in critical nutrients for brain development, particularly omega 3 fats.

Paleolithic Diet buffs refer to the new foods as Neolithic foods and the old as Paleolithic Diet foods. In simple terms we see Neolithic as bad and Paleolithic as good.

Since then, some other substances have entered the diet- particularly salt and sugar, and more recently a litany of chemicals including firstly caffeine then all other additives, colorings, preservatives, pesticides etc.

Grains, Beans and Potatoes (GBP) share the following important characteristics:

- They are all toxic when raw- there is no doubt about this- it is a fact that no competent source would dispute- they can be extremely dangerous and it is important never to eat them raw or undercooked. These toxins include enzyme blockers, lectins and other types. I will talk about them in detail later as they are very important.
- Cooking destroys most but not all of the toxins. Insufficient cooking can lead to sickness such as acute gastroenteritis.
- They are all high in carbohydrate, and once cooked this is often rapidly digestible- giving a high glycemic index (sugar spike). They have greatly increased the amount of carbohydrate in the diet and therefore the demand for insulin and this creates a strain on the body with a strong tendency towards diabetes. Europeans are more used to these foods, yet 20% of Europeans will develop diabetes. Races who have more recently been introduced to these foods are much more prone to diabetes which may affect of 50% of some groups of Aborigines, Polynesians and Eskimo and American Indians.
- They are extremely poor sources of vitamins (particularly vitamins A, B-group, folic acid and C), minerals, antioxidants and phytosterols.

Therefore diets high in grains beans and potatoes (GBP):

- Contain toxins in small amounts

- Have a high glycemic index (ie have a similar effect to raw sugar on blood glucose levels)
- Are low in many vitamins, minerals, antioxidants and phytosterols- ie they are the original “empty calories”
- Have problems caused by them displacing other foods

As grains, beans and potatoes form such a large proportion of the modern diet, you can now understand why it is so common for people to feel they need supplements or that they need to detoxify (ie that they have toxins in their system)- indeed both feelings are absolutely correct.

### The essentials of the Paleolithic Diet are:

#### Eat none of the following:

- **Grains**- including bread, pasta, noodles
- **Beans**- including string beans, kidney beans, lentils, peanuts, snow-peas and peas
- **Potatoes**
- **Dairy products**
- **Sugar**
- **Salt**
- **Processed factory manufactured foods**

#### Eat the following:

- **Meat, chicken and fish**
- **Fruit**
- **Vegetables** (especially leafy greens and root vegetables, but definitely not including potatoes)
- **Eggs** – preferably omega 3 enriched types.
- **Nuts** –eg walnuts, brazil nuts, macadamia, almond. Do not eat peanuts (a bean) or cashews (a family of their own)
- **Berries**- strawberries, blueberries, raspberries etc.

#### Try to increase your intake of:

- **Root vegetables**- carrots, turnips, parsnips, rutabagas, Swedes
- **Organ meats**- liver and kidneys (I accept that many people find these unpalatable and won't eat them)

1. Fat- medium amount. Excellent omega 3 and omega 6 amounts and ratio. Low in saturated fat. No trans-fat.
2. Protein- high levels of top quality protein from fish, meat/offal, nuts, eggs.
3. Carbohydrate- low to medium. Low Glycemic Index.
4. Fibre- 47g very high



## 5. Micronutrients:

### Minerals:

Iron=5.82x current (2)

Zinc= 2.74x current(2) .

Calcium=1.67x current(2)

Sodium= 768mg/day =0.136x current(2) BUT difficult to obtain this low level in Western supermarket foods.

Potassium= 10,500 mg/day =2.97x current(2)

Na/K= .073 excellent (2) BUT difficult to obtain this low level in Western supermarket foods

### Vitamins:

Vitamin A & beta-carotene= very high (liver, kidney, root vegetables). 2.71x current (2)

Vitamins B= vitamin B1 would be 4.6 mg or 417% the RDA, for B2, 281% the RDA, for B3 374% the RDA, for B6 369% the RDA, for B12 513% the RDA, for biotin 174% the RDA, for folate 506% the RDA, for pantothenic acid 209% the RDA (1)

Vitamin C= ~600mg excellent 8.38x current (2)

Vitamin E= excellent 3.11x current(2)

### **Antioxidants:**

High in quantity and variety

### Phytosterols:

High in variety. High levels in root vegetables. Although these levels aren't as high as in soy products, it is not yet known which phytosterols are most important, particularly after bioconversion. Root vegetables also have lower antinutrient levels than soy products.

**Antinutrients:**

Enzyme inhibitors (protease/amylase inhibitors)= very low compared to Standard Western Diet

Lectins= very low compared to Standard Western Diet.

Allergenic substances= generally low in Paleolithic foods.(3).

**Undiscovered micronutrients and antinutrients:**

Anyone who hasn't changed their diet in the past 10 years on the basis of discoveries in antioxidants and phytosterols need not read this. If asked to guess which diet will have optimal levels of these, one can only resort to logical tools such as Occam's Razor ("that the proposition with the least number of assumptions is most likely to be correct" is one common interpretation). As the Paleolithic diet is based on only one or two assumptions (eg "the oldest diet is the best" or "the most natural diet is the best" or "The ideal diet for any animal is that which it eats in the wild. Humans are no exception."). It then follow that it is the diet most likely to have optimal levels of undiscovered factors.

**Associated illnesses:**

Hunter-gatherer tribes eating a paleolithic style diet exhibit extremely low levels of the following illnesses that are major Western health problems:

Heart disease and stroke

Hypertension

Diabetes mellitus

Overweight and obesity

Osteoarthritis

Rheumatoid arthritis

Depression

Cancer

**Paleolithic Diet References:**

[www.paleodiet.com](http://www.paleodiet.com) has many links and email groups

The Paleo Diet book by Prof Loren Cordain [www.thepaleodiet.com](http://www.thepaleodiet.com) has many references.

[Purchase a copy of the Cro-Magnon \(EODD\) Diet Plan](#)

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So there you have it. Quite a history lesson wasn't it. Physical anthropology has always fascinated me so any time I see something on the subject of the evolution of a species—especially man—holds my interest.

The point I am trying to make by including the Paleo Diet is that we need to keep an open mind about what we consume on a daily basis. Yes I occasionally indulge in a burger and fries or a couple of slices of pizza. And like I said in the beginning of this guide, I am not overweight! I just have a big gut. But I'm working on that.

## Chapter 16

### *The Good, The Bad, The Ugly*

As I mentioned earlier, the real intent of this text is to enlighten—to paint a broad picture of the foods that are readily available: The good, bad and ugly. We are blessed in this country with a relative amount of freedom of choice. But as of late the government is encroaching into our freedoms—all for the sake of keeping the costs of healthcare under control. At least that’s what they want us to believe.

We have all been reminded over and over to eat a balanced diet, yet some of us question just what exactly a balanced diet consists of. A balanced diet provides you with a variety of nutrients including vitamins, minerals, fiber, fluids, and macronutrients such as carbohydrate, protein, and fat. Your diet must not be excessive or deficient in any one nutrient category and will provide enough nutrients to maintain health without contributing to weight loss or gain. Balance your caloric intake with physical activity, so you can maintain a healthy weight.

Make healthy food choices. Be sure that the majority of your daily intake comes from the good proteins. “Avoid the whites,” a good friend told me. He was referring to white bread, potatoes, sugar and white rice. Adults should eat 20 to 35 grams of fiber a day. Replace white rice, bread, and pasta with brown rice and whole grain products and whole grain cereals. Two to three times per week, trade legumes (beans) for meat in chili and soups. Children over age 2 should consume an amount of fiber equal to or greater than their age plus five grams per day.

Eat two to four servings of fruits and five or more servings of vegetables each day. Fruits and vegetables provide important vitamins as well as necessary fiber, fluid, electrolytes, and phytochemicals. To enhance intake of all the beneficial nutrients in fruits and vegetables, it is best to select fruits and vegetables of all colors. Raw fruits and vegetables contain the most vitamins, minerals, and fiber. Be sure not to overcook your vegetables.

Milk and dairy products are rich in calcium, vitamin D, and vitamin A. Eating 2 to 3 servings daily will help promote optimal bone health as well as muscle and nerve function. Remember, when selecting milk and dairy products, it is best to choose low fat varieties. At least 3 servings of dairy products a day are needed by teenagers and young adults to age 24 and women who are pregnant or breastfeeding.

Balance carbohydrates with proteins. Eat at least 8 grams of protein per 20 pounds of body weight. Eat a variety of foods to be sure that you get all of the amino acids you need. Soybeans, tofu, and other soy-based foods are excellent alternatives to red meat. A high protein diet (such as red meat, cheese, and full-

fat dairy products) that is high in saturated fat and low in vitamins and minerals may increase the risk for heart disease. Cut back on highly processed carbohydrates (like commercially prepared foods) and increase protein to improve levels of blood triglycerides and HDLs.

Salt is 40 percent sodium. Six grams of salt contain 2400 milligrams of sodium. One teaspoon of salt has about 2000 milligrams of sodium. That means we need about one teaspoon of salt per day or less per day. To find out how much sodium is in a food product, read its food label located on the back or side of the package.

Refer to food labels to identify the amounts of sodium, fat, protein, carbohydrate, fiber, sugars, vitamins, and specific ingredients in the food you are buying. If you have children under the age of 2 years, check with your pediatrician to find out the best balance of foods and servings for their diet.

Disclaimer: This content is reviewed periodically and is subject to change as new health information becomes available. The information provided is intended to be informative and educational and is not a replacement for professional medical evaluation, advice, diagnosis or treatment by a healthcare professional.

That sums it up my friend. The *choices* you make will ultimately determine the outcome. Eat well, eat often, eat with your own survival in mind. Avoid fad diets and wonder drugs. There is no quick cure to good health and a slim, trim body. Yes it takes willpower, which most of us lack. If you only pay attention to half of what is written here, you will be all the better for it.



## **Recommendations For Further Research**

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