



# **The Low Stress Diet**

**Eating For A Healthy Immune System In a Stressful World**

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Title Slide: The Low Stress Diet



**Certain  
foods  
and  
eating  
habits  
can be  
serious  
stressors  
to the  
body**

**Certain foods and behaviors can be serious stressors to the body.**

(The rest of the slide show will illustrate this point.)



***“Let food be your medicine  
and let medicine be your food.”***

***—Hippocrates***

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Quote from Hippocrates (the father of western medicine.) He was also the same guy, who said of physicians, “First... do no harm.”

Today, physicians take “The Hippocratic Oath” (First...do no harm). Sadly, most physicians have no background in nutrition.



# Five Aspects of Nutrition

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## **The Five Aspects of Nutrition**

Nutrition is comprised of these five areas.



# Five Aspects of Nutrition

## 1. Nutrients

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### **Nutrients**

The basic nutrients are:

Carbohydrates, proteins, fats (lipids) vitamins, minerals and water. As upcoming slides will suggest, stress prone habits greatly limit the intake of various nutrients for optimal health.

What is a balanced diet? This is the million dollar question! From the ZONE Diet to the Pritikin Diet, the answer will vary on whom you ask, but the factors in the equation are Carbs, Proteins and Fats of daily intake.

(e.g., CHO = 50% PRO = 20% and Fat = 30%)

As you may have heard by now, Americans tend to have too much fat in their diets. Here is an interesting fact: Fats and lipids are broken down into fatty acids, but they cannot go directly into the blood stream, so they first must travel via the lymphatic system where they can be transported to the liver. Too much fat in the diet can compromise the immune (lymphatic) system. Moreover, an imbalance of unhealthy fats can led to chronic, systemic inflammation and a host of other compromising disease conditions.



# Five Aspects of Nutrition

## 1. Nutrients

## 2. Digestion

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### **Digestion**

Simply stated, chronic stress will compromise the digestive process, in essence, trying to rush food through the Gastro-Intestinal (GI) track for purposes of Fight or Flight.

*As a side note:* Digestion takes place not only in the stomach, but the small intestine as well. The small intestine contains friendly bacteria, known as intestinal flora (e.g., acidopholus). Antibiotics are known to kill this friendly bacteria, thus decreasing the body's ability to digest food properly. The word used in nutrition circles is "Probiotics." Under best conditions, healthy bacteria tell our immune system to upregulate when necessary. Some evidence suggests that an imbalance of intestinal floral can result in the proliferation of Candida (also known as a yeast infection). There is speculation that the over-use of antibiotics in cows, beef, and chickens, which we then consume, contributes to the problem of bacteria resistant to antibiotics, a well-known problem in medical circles.



# Five Aspects of Nutrition

1. Nutrients

2. Digestion

3. Absorption

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## Absorption

For the same reason, stress will also compromise one's ability to absorb food particles broken down for assimilation into the body.

To complicate matters, some nutrients are not "*bio-available*," meaning that they will not be absorbed (caffeine interferes with the absorption of calcium) or they need to be in the presence of other nutrients to be absorbed (e.g., calcium needs to be in the presence of magnesium to be absorbed properly.)



# Five Aspects of Nutrition

1. Nutrients

2. Digestion

3. Absorption

4. Metabolism

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## **Metabolism**

This is the real biochemistry of food. How does maple syrup or potatoes become glucose? How does a salmon steak become the proteins that then become fingernails and red blood cells? The body is truly amazing! This topic, however, is WELL beyond the scope of this PowerPoint presentation. Suffice to say that stress will affect all aspects of metabolism because in an effort for human survival, fight or flight takes precedence over all other metabolic functions.



# Five Aspects of Nutrition

1. Nutrients

2. Digestion

3. Absorption

4. Metabolism

5. Elimination

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## **Elimination**

Not exactly the best topic for a brown bag lunch seminar, but what comes in has got to go out. Stress affects this aspect in many ways including constipation, gas, diarrhea, etc.



# **Five Aspects of Nutrition**

**1. Nutrients**

**2. Digestion**

**3. Absorption**

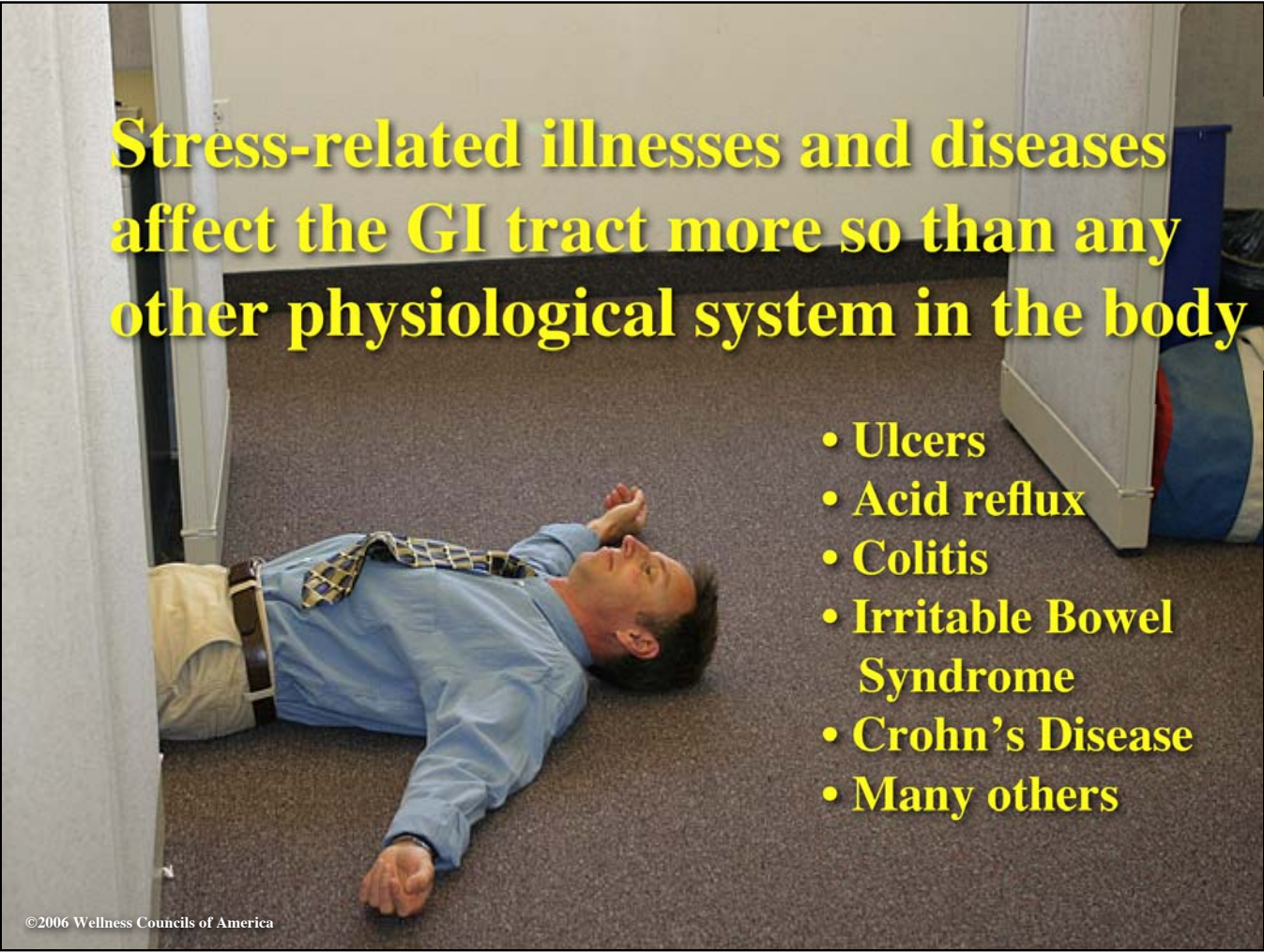
**4. Metabolism**

**5. Elimination**

**Stress affects all aspects of nutrition!**

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It cannot be overstated that emotional **Stress affects all aspects of nutrition.**



# Stress-related illnesses and diseases affect the GI tract more so than any other physiological system in the body

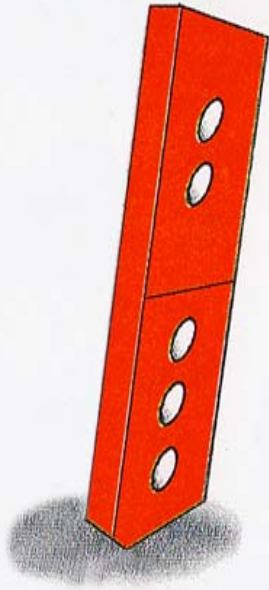
- Ulcers
- Acid reflux
- Colitis
- Irritable Bowel Syndrome
- Crohn's Disease
- Many others

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## Stress-related illnesses and diseases with the GI tract

Muscle tension may be the number one symptom of stress, but more people go to their doctors and the ER for gastro-intestinal problems than all other physiological problems; the majority of which have a very strong stress component to them. The connection of neural endings to the entire GI tract is phenomenal. This could explain the association between stress and the increasingly high incidence of problems like ulcers, irritable bowel syndrome, acid reflux, Crohn's Disease and many others.

# Domino #1



## Depletion of Nutrients

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# Vital Nutrients Are Depleted With Chronic Stress

### **Domino # 1: Depletion of Nutrients**

(Note: I have placed four slides with a succession of falling dominos to illustrate the cumulative effect of stress-prone problems associated with the stress, nutrition and disease scenario.)

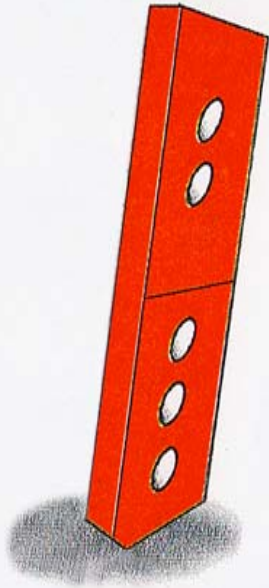
Think about it.... The Stress Response is fight or flight; either action requires lots of energy. Stress utilizes many nutrients for energy production, even if you sit in front of your computer screen all day and stew over various problems. The water-soluble vitamins ( B &C) are greatly affected (remember that elimination of fluids is part of fight or flight response and in this process you can flush out the water soluble vitamins.) Also The B-complex vitamins (e.g., B-6, B-12, Folate, Niacin, Thiamin, Riboflavin), are used in the process for energy metabolism.

One of the symptoms of chronic stress is fatigue, and this may come about as a result of depletion of these vitamins. Many of the minerals are also involved with energy production and will become depleted with chronic stress. Remember energy only comes from Carbs and Fats (and in times of starvation, proteins) vitamins and minerals are regulators of these chemical processes. In other words, vitamin supplements do not count as a meal.

Most minerals are involved with 5-10 metabolic processes. Magnesium is involved with over 300 of these. Being deficient with Magnesium is not good!

The body requires a delicate balance of nutrients, yet also has an amazing ability to compensate... to a point. Then various physiological systems begin to show signs of dysfunction (e.g., nervous system, reproductive system, immune system, etc.)

# Domino #1



**Depletion of Nutrients**

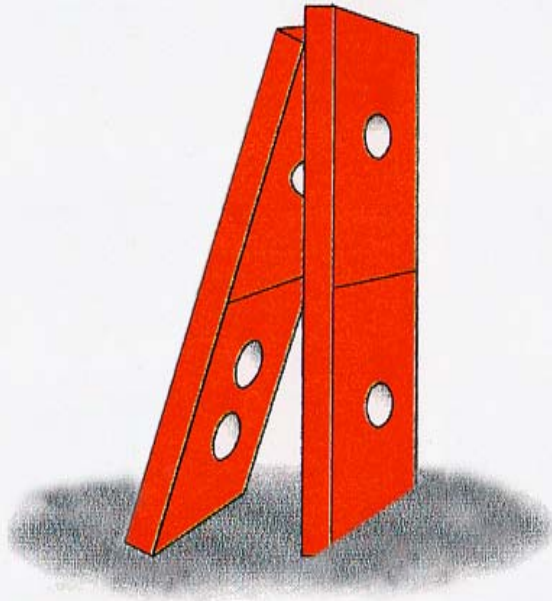
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**Vitamin C**  
**B-Complex**

**Magnesium**  
**Calcium**  
**Potassium**  
**Zinc**  
**Copper**

Lists of depleted nutrients

# Domino #2



**Poor Eating Habits**

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**Vital nutrients  
are not replaced  
with stress-prone  
eating behaviors**

## **Domino # 2: Poor Eating Habits**

This would be a good time to introduce the concept of EMPTY CALORIES (foods with little or no nutritional value.) We know these foods well because they (junk food, processed food, fast food) comprise the majority of the Standard American Diet (S.A.D.) And yes, it is sad. By the way the opposite of empty calories is nutrient density. An egg is nutrient dense. Cupcakes, candy bars and soda are not.

By NOT replacing the nutrients we need, various physiological systems continue in a downward spiral of dysfunction. This downward spiral is considered a stressor to the body as well, thereby compounding the stress issue.

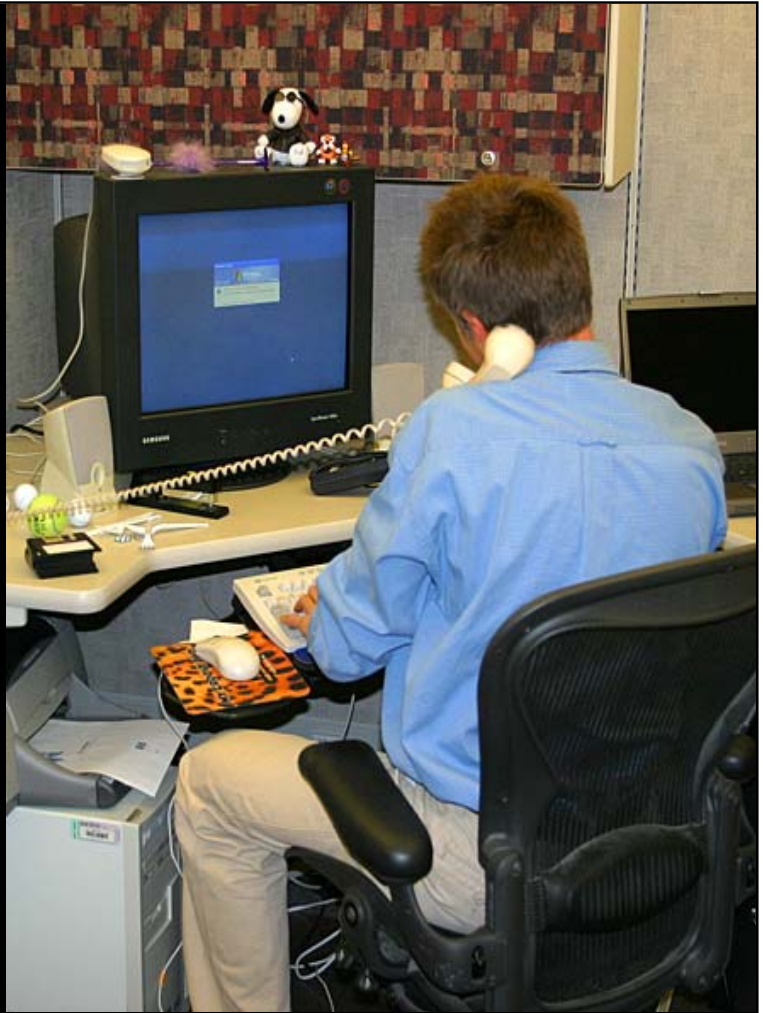
An example of not replacing nutrients might include a lack of essential amino acids (from proteins) that are needed to maintain the production of white blood cells.

Another example might include the lack of various B vitamins needed for energy metabolism.

## Reasons:

- Lack of time
- Processed foods
- Junk foods
- Comfort foods
- Lack of food variety
- Lack of moderation
- Other reasons

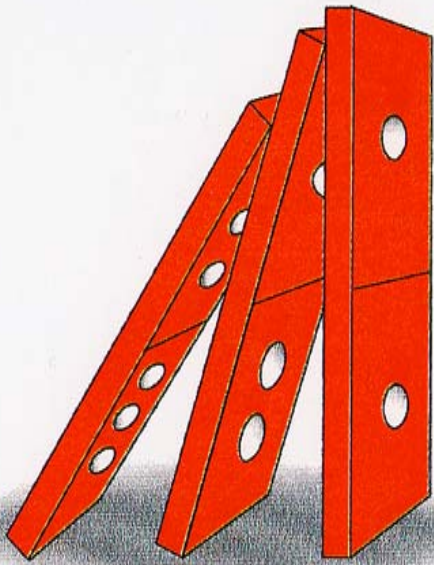
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### Reasons...

This slide suggests reasons (various eating behaviors) that lead to a nutrient deficit.

## Domino #3



**Foods That Trigger  
the Stress Response**

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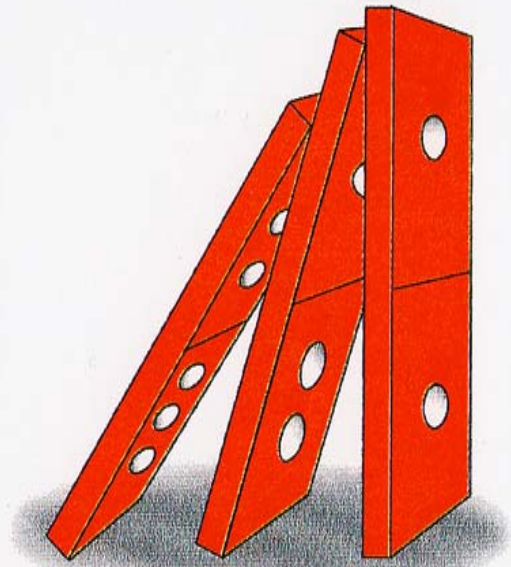
**Stressed  
people typically  
eat foods  
that promote  
the stress  
response**

### **Domino # 3: Foods that Trigger the Stress Response**

Not only do processed foods and junk foods contain empty calories, they also contain substances that excite the sympathetic nervous system to release epinephrine and nor-epinephrine. Needless to say... if you are already stressed, this is like throwing gasoline on the fire. Processed sugar and processed flour are known to have this effect. The big substance that tips this domino over is a substance found in caffeine that really excites the nervous system. This, most likely is the reason WHY people drink coffee in the morning. But... it's not just coffee. It's also tea, sodas, chocolate (sorry) and "energy drinks."

Salt falls in another category. Salt is known to cause water retention. This results in an increase in blood pressure. The typical American's diet is LOADED with salt.

# Domino #3



**Foods That Trigger  
the Stress Response**

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- **Refined Sugar**
- **Processed Flour**
- **Salt**
- **Caffeine**
- **Various Synthetic Chemicals**

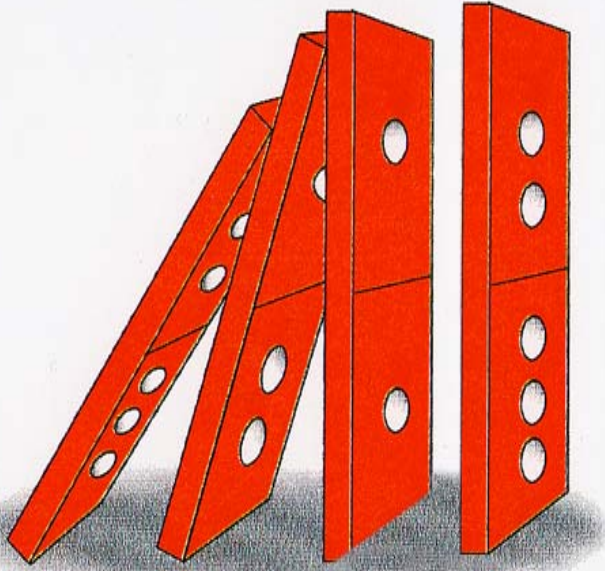
**List of foods that trigger the stress response**



It's true, Americans consume LOTS of sugar every day. Perhaps it's fair to say that we have an addiction to sugar.

One nutritionist suggests that people try going a day without ingesting sugar. Consider putting this challenge out to your audience. Consider trying this yourself. Even if you think you don't consume much sugar, read the food labels. It's hard to avoid. By the way, the pancreas wasn't designed to process this much glucose on a daily basis. This is why experts suggest that we have such a problem with Type II Diabetes.

# Domino #4



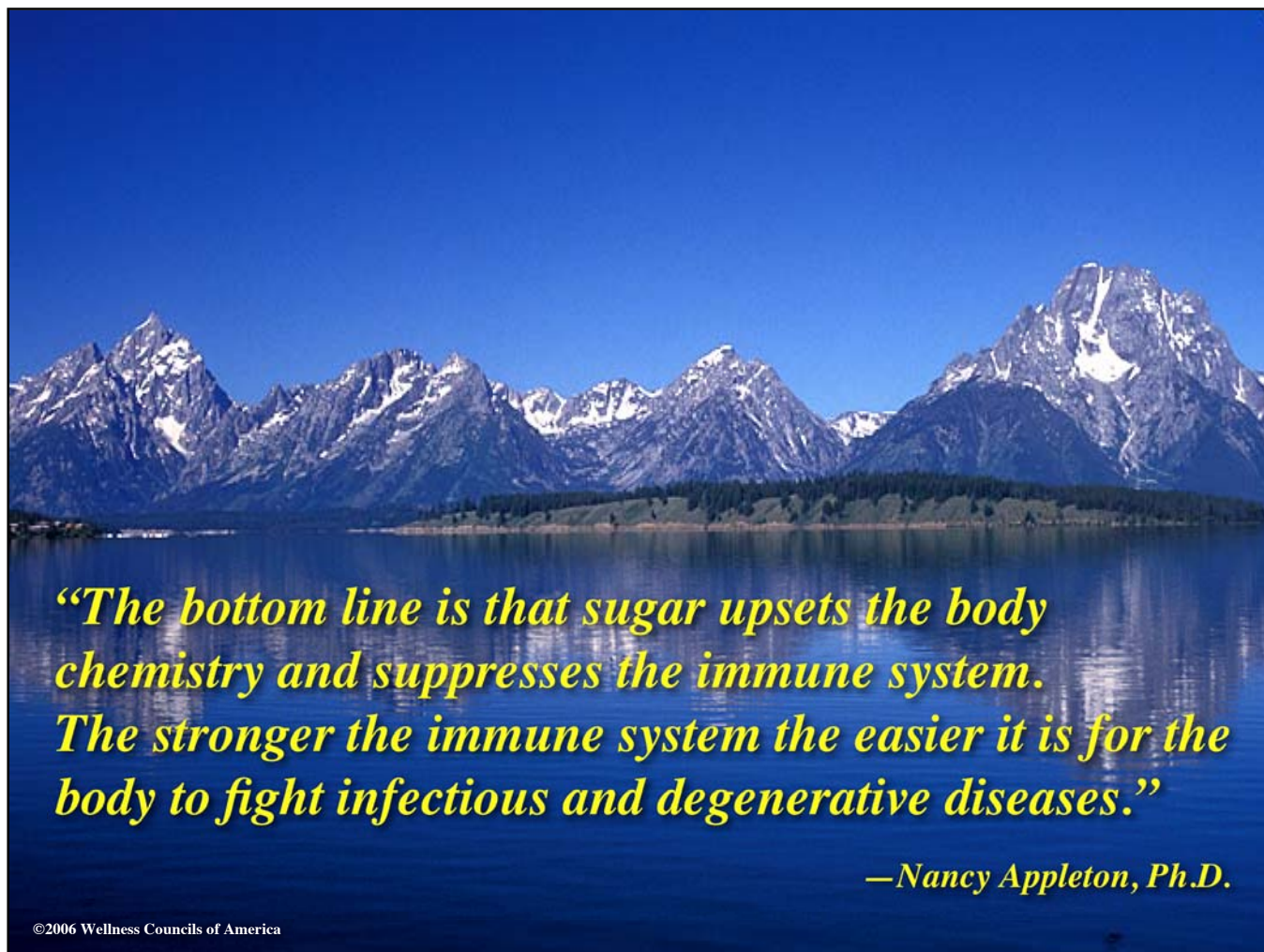
**Immune System Becomes  
Compromised**

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**Various foods  
can compromise  
the immune  
system**

## **Domino # 4: A Compromised Immune System**

What foods compromise the immune system? Let's start with sugar (see next slide). But there is a whole cadre of synthetic chemicals in our foods (and this list grows exponentially each year). Synthetic hormones, trans-fatty acids, additives, preservatives also top the list (many of which were grandfathered into our food supply without any research to know the ill affects. Red dye # 3 comes to mind). When the immune system works to rid the body of these substances it becomes compromised in its ability to fight off pathogens (microbes) that result in infectious diseases, etc. Immunology is a lot more complex than this slide can ever hope to communicate, but suffice to say that there are A LOT of toxins in the foods we consume and this distracts the immune system from other problems, both internal and external.

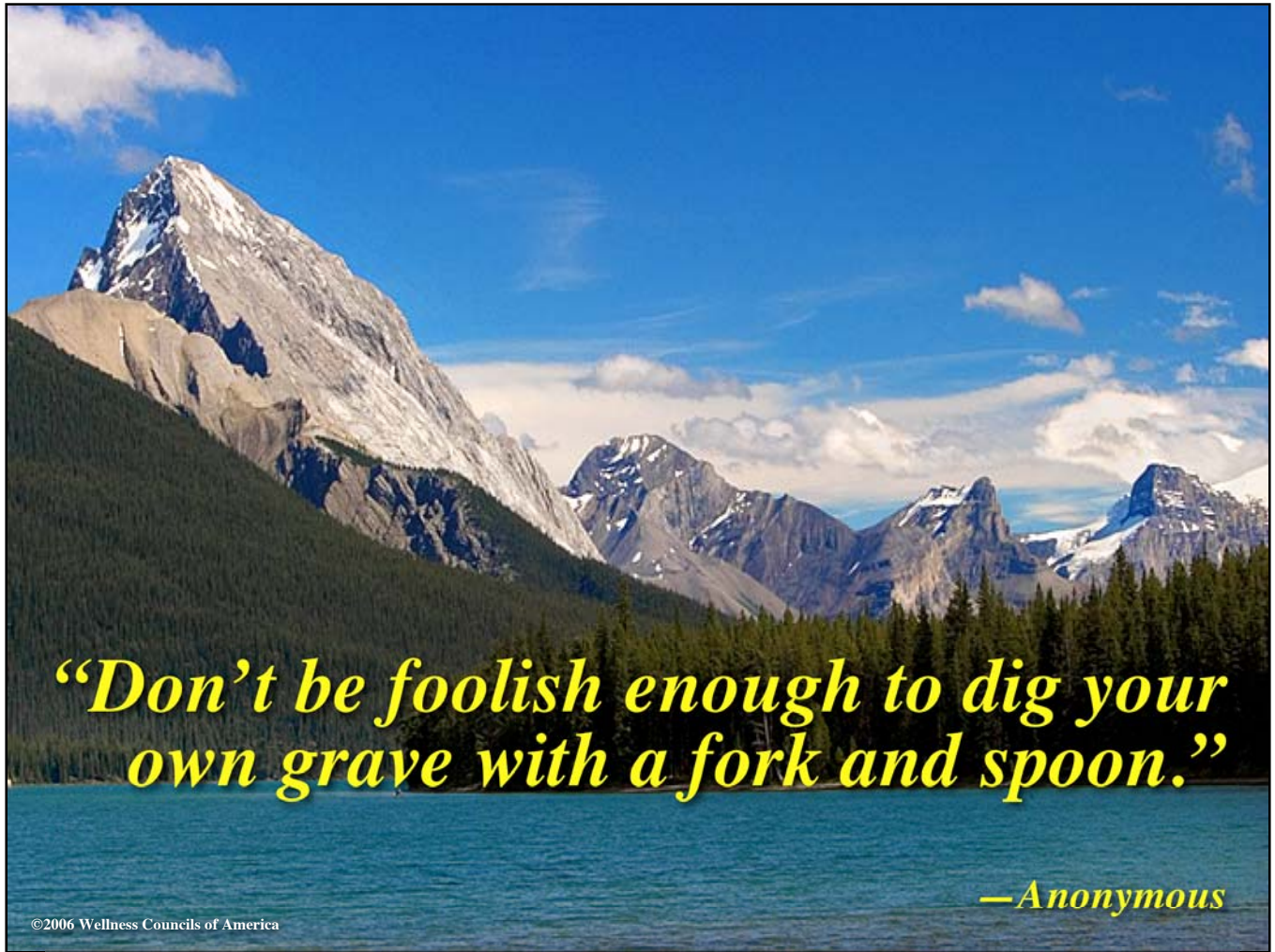


*“The bottom line is that sugar upsets the body chemistry and suppresses the immune system. The stronger the immune system the easier it is for the body to fight infectious and degenerative diseases.”*

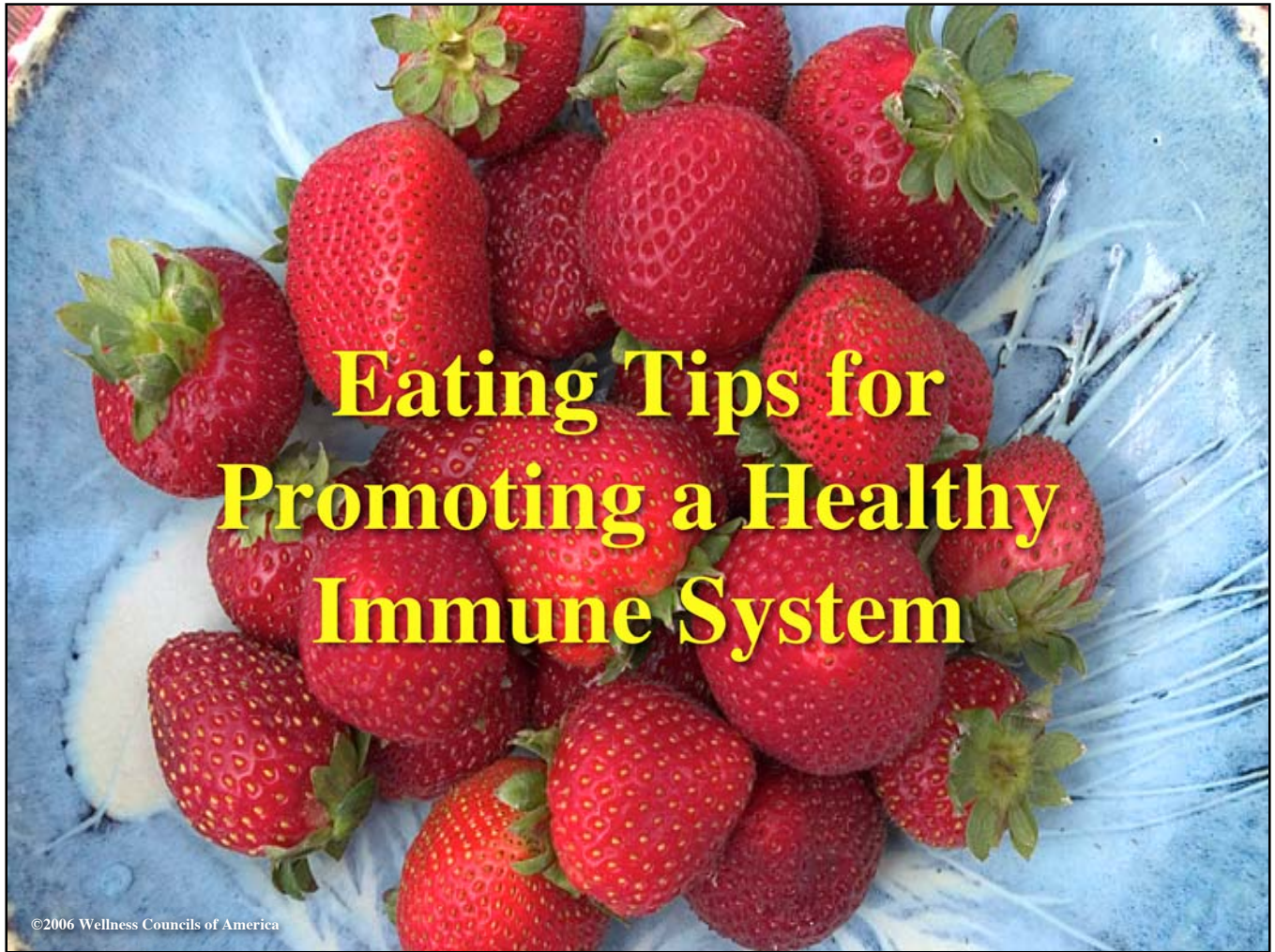
*—Nancy Appleton, Ph.D.*

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**Quote from Nancy Appleton** (noted researcher in the field of nutrition.)



Quote: Don't dig your own grave



Eating Tips for promoting a healthy immune system

# Tip #1

## Eat A Variety Of Food Colors



### Tip # 1: Food colors

The substance that gives foods (fruits and vegetables) their color are called phytochemicals (e.g., bio-flavonoids.) For a great number of years researchers called these “non-nutrients”. Now they consider many phytonutrients (e.g., bio-flavonoids) essential in helping to fight cancer.

They may also act as anti-oxidants. (e.g., the red bio-flavonoid in cranberries may be the active ingredient for urinary tract infections. ) Here are some additional websites for information on phytonutrients:

[http://en.wikipedia.org/wiki/Phytochemicals#Families\\_of\\_phytochemicals](http://en.wikipedia.org/wiki/Phytochemicals#Families_of_phytochemicals)

<http://www.phytochemicals.info/>



## Tip #2

### Choose Foods High In Antioxidants

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#### Tip # 2: Antioxidants

Most phytochemicals are known to have antioxidant activity. There is much talk today about antioxidants. Here is the simple low-down on all of this. Free Radicals are oxygen molecules with an aberrant electron. We breathe these in all the time. Metabolically speaking, this electron configuration causes damage to the following: Cell membrane (allowing things to go in that shouldn't enter, and things to leave that should stay) DNA, RNA and mitochondria. To be blunt, Free Radicals are a hazard to the body's integrity... at the cellular level. They are thought to be associated with the development of cancer and heart disease, perhaps other diseases as well. By the way trans-fatty acids, a process to turn an oil (liquid) to a fat (solid) to delay rancidity also acts the same way, which is why trans-fatty acids (partially hydrogenated oils) should be avoided at all costs. Antioxidants come to the rescue by destroying Free Radicals. The four major antioxidants are: Beta Carotene (a precursor to Vitamin A) Vitamin C, Vitamin E, and the mineral, Selenium. Antioxidants are found largely in fruits and vegetables. Note: you are not going to find these in processed foods, junk foods, or fast foods.

Common sense would dictate that if we don't consume these in our foods, we are going to have problems with cell integrity — all over the body. This can and most likely will lead to disease and illness.



## Tip #3

### Choose “Organic” Foods Whenever Possible

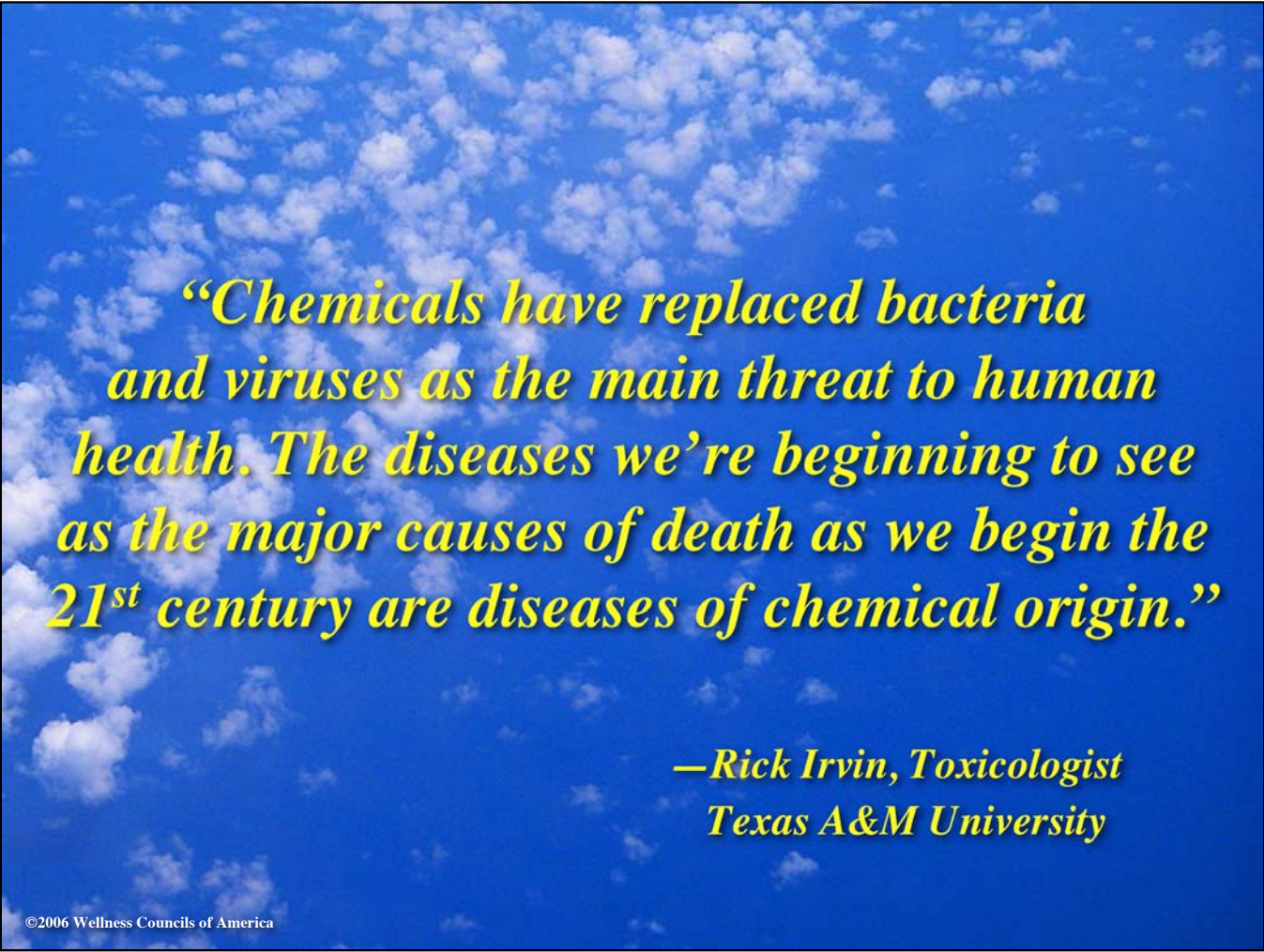
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#### Tip # 3: Choose Organic Foods (whenever possible)

In simplest terms, our foods are laced with chemicals:

Synthetic fertilizers, pesticides, herbicides and fungicides. (the term now being used is called “bio-burden”) when these show up in the body, (e. g. , the liver, kidneys, breasts and adipose tissue). Fresh strawberries can have as many as 70 different chemicals on them. Celery, tomatoes and coffee beans are not far behind. These chemicals are not only on the plants, they seep into the soil, where upon the plant draws them into their stems, leaves and fruit. Merely washing off produce does not get rid of these chemicals! Many of these chemicals are derived from petroleum (that’s right, fossil fuels..., the same stuff that is used to make gasoline). The processing of these chemicals produces “synthetic estrogens,” which, when ingested, mimic the female hormone, estrogen. Synthetic estrogens are frequently found in the biopsies of women with breast cancer. Is there a connection between various types of cancer and these chemicals? If you do a little surfing on the Internet, you will have your answer, but it won’t be research funded by the companies that make these chemicals. For foods to be certified “Organic” the soil they are grown in must be clean of these chemicals for a minimum of three years. No exceptions! Sadly government regulations (due to powerful lobbying efforts) are loosening the definition of the word organic. Let the buyer beware. Being organic is like being pregnant: Either you are or you are not, there is no in between.

One comment I hear from my students is: “Organics are SO expensive!” This is true and the reason is that currently organic farmers, unlike non-organic farmers do not receive government subsidies. A good resource to read is the acclaimed book, *The Omnivore’s Dilemma* by Michael Poland.



*“Chemicals have replaced bacteria and viruses as the main threat to human health. The diseases we’re beginning to see as the major causes of death as we begin the 21<sup>st</sup> century are diseases of chemical origin.”*

*—Rick Irvin, Toxicologist  
Texas A&M University*

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**Quote:** This quote, in my humble opinion, says it all.



## Tip #4

### Drink *Filtered* Water To Keep Hydrated (eight 8oz glasses/day)

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#### Tip # 4: Filtered Water

By and large, Americans are walking around dehydrated.

We don't drink enough water! Many beverages we do drink (coffee, tea, sodas, etc.) act as diuretics, meaning they increase urination, thus tipping the scales toward dehydration. Various studies show that our water supply is not as clean as we would like to believe. Tests show that many sources of city drinking water contain sizable traces of antibiotics, hormones from birth control pills and chemicals from agricultural run-off. It is in everyone's best interest to install a high-end water filter system in your kitchen to be used for all drinking water (and cooking). Remember to replace the filter once a year (or as often as needed). You should also know that at this time, there is no federal regulation on bottled water. Most bottled water is ordinary tap water, sitting in plastic containers on pallets, stored in warehouses months before store delivery. It might be best to carry your own filtered water in a suitable water bottle.

Here is the bottom-line message about being hydrated: water helps flush out metabolites, waste products and toxins throughout the body ready for elimination. Dehydration will compromise this process, hence not flushing things out as they should be. How much water is enough per day? Well, the recommendation is the proverbial eight 8 oz glasses per day, but considering this recommendation when comparing a 120 lb woman and a 289 lb man working in the same office reveals it's only a recommendation. Experts suggest the best indication of being hydrated is near-clear urine (by the way, dark urine may be a sign of dehydration).



## Tip #5

### Reduce Your Caffeine Consumption

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#### Reduce Your Caffeine Consumption

Caffeine, in all the sources it's found in, tends to give the body a boost, a spike in the energy levels. Well, there is a reason for this.

A substance in caffeine (mentholated xanthines) promotes the release of epinephrine and nor-epinephrine from the neural endings. This may very well be the reason why you consume it. As mentioned before, if you are stressed (the physical symptoms include increased heart rate, increased blood pressure, increased muscle tension, etc.) This will either increase these levels or keep them there longer. By the way, many people do not know that "decaf" is not the same thing as "caffeine-free." Decaf merely means *less* caffeine than regular caffeine. Americans are not the only people with an affinity for caffeine. An article in the *National Geographic* magazine (January, 2005) cited that caffeine is THE number one drug in the world. In simple terms, caffeine in excess amounts is stress to the body. If you are already stressed, it is like throwing gasoline on the fire.

While new research studies come out daily about the benefits of coffee, there are also negative effects too. Also, it's always a good idea to see WHO is funding the studies. As a side note, many women who drink several cups of coffee a day are prone for fibrous tissues (lumps) in their breasts. While these are not cancerous, in essence, they represent the body's inability to remove toxic substances.



# Tip #6

## Avoid/Minimize Genetically Modified Foods

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### **Tip # 6: Genetically Modified Foods (GMO's)**

Known in nutrition circles as “Franken-Foods,” genetically modified foods are also known as G.M.O.’s.



# **Tip #6**

## **Avoid/Minimize Genetically Modified Foods**

**Corn  
Soy  
Tomatoes**

- **As much as 60% of grocery store food products are Genetically Modified Organisms (GMO's)**

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### **Tip # 6: Genetically Modified Foods (GMO's)**

While it may seem advantageous to have tomatoes with the gene of a flounder fish that can sustain cold temperatures to avoid frost damage, the idea of tinkering with mother nature indicates that there can be some serious consequences. A couple of years ago, there was a recall of many corn-based products (taco shells, corn flakes, etc.) because of the chemical pesticide, ROUND-UP inserted into the DNA of corn plants. The EPA, not the FDA deems this brand of corn a pesticide (a toxin). By the way, this is the type of corn fed to cattle to “fatten” them up for that all-American marbled beef look.



# **Tip #6**

## **Avoid/Minimize Genetically Modified Foods**

**Genetically modified foods are now associated  
with an increased incidence of food allergies**

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### **Tip # 6: Genetically Modified Foods (GMO's)**

Sadly, it's not just corn that's been tinkered with. Estimates are as high as 60 percent of all grocery store foods are GMO's and not labeled as such! The biggest concern today with GMO's is the corresponding increase with food allergies. The three foods that were known to have caused allergies were milk, eggs and peanuts. Now we are seeing wheat, soy, and corn allergies as well. Moreover, there are foods we are not ever aware of that have been tinkered with. Simply stated, the human body has adapted over millennia with natural grains etc. Again, the best choice is to avoid or minimize your consumption of these foods, and the way to do this is by eating "certified organic" foods.



## Tip #7

### Include Fresh Herbs And Spices In Your Cooked Meals

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#### Tip # 7: Herbs and Spices

Before the advent of processed foods and fast food restaurants, the majority of people cooked their meals at home. In each kitchen it was not uncommon to find a spice rack containing fresh spices and herbs (FYI: Salt is not an herb). Backyard gardens also contained herb plants including Rosemary, Thyme, Sage, Cilantro, Oregano, Garlic, and many others. These spices and herbs were not only added for taste, they had a well-known health benefit (essential oils of herbs enhance the immune system). We now know that the leaves, stems, and roots of these plants contain phytochemicals such as bio-flavonoids and antioxidants. By now most people have heard of Echinacea, but there are several mushrooms (Shiitake, Maitake and Reishi) that are known to enhance the immune system as well. Astragalus is also well recognized to boost white blood cells and of course Milk Thistle is known to help cleanse the liver of toxins. Most men today know the benefits of Saw Palmetto. Feverfew is recognized as a remedy for migraines and it is a well known fact that garlic helps reduce cholesterol levels. Herbalists will also tell you that many herbs are known for their anti-microbial abilities (to reduce colds and flues). Sadly, most if not all processed foods, junk foods and comfort foods do not contain herbs and spices.



# Tip #8

## Consume Free-Range Meats

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### **Tip # 8: Consume Free Range Meats**

Free range means that cows and cattle are allowed to eat as they roam... anywhere—for their entire lives. Once born, many animals are quickly moved to factory farms and fed on feed lots (corn). Once again, corn is not a food source in their normal diet (see above slide on synthetic fertilizers, herbicides, fungicides, pesticides, etc.). Also living in such close quarters gives rise to infections, hence more antibiotics. Hormones and steroids are also given to increase yield. Cows, chicken, lamb, pigs, salmon; I think you get the idea.

*Continued...*

# Tip #8

## Consume Free-Range Meats

**Avoid consumption of:  
Synthetic hormones, antibiotics,  
pesticides, herbicides, fungicides and  
synthetic fertilizers.**

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The best way to go is organic. Speaking of which, the word “Natural” doesn’t mean the same thing as “organic.” Close, but not the same thing. The word natural is now used as a marketing term. Sadly, there are many foods marketed as “Natural” which are anything but! Cows (for dairy and hamburgers) are BIG business these days. I highly recommend buffalo. At this point in time, ranchers haven’t messed up this option—yet. I would steer clear of any chicken that is not organic, as they are now a vehicle for disseminating antibiotics and hormones. Once again, please consider reading the book, *The Omnivore’s Dilemma* by Michael Pollan.



## **Tip #9**

### **Consume An Adequate Amount Of Fiber** **(30-40 grams/day)**

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#### **Tip # 9: Fiber**

Current estimates suggest that Americans eat about 9 grams of fiber a day... if that. The topic of fiber (roughage) has been in the news enough that we all should know about this now. So, just to review: Fiber is found in fruits, vegetables, grains and legumes (peas, beans, lentils, etc.). It is a compound in carbohydrates that is not digestible. We simply don't have the enzymes to break this stuff down. As such, it acts like a broom in that it sweeps out both the small and large intestine, carrying with it things like fat molecules (which is why fiber is said to lower cholesterol) and even some toxins that haven't made their way into the blood stream. The World Health Organization suggests that each person consume 30-40 grams of fiber a day. Like your mother told you repeatedly, the message here is to eat a good amount of fruits and veggies each day. As one of my guest speakers said, "There's not a lot of fiber in iceberg lettuce!"



## Tip #10

### Add Omega 3 Oils To Your Daily Diet

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#### Tip #10: Omega 3's

OK, let's review: Omega 3 & Omega 6 oils are essential fatty acids. This means that your body cannot produce them internally and hence they must be obtained from outside sources (just an FYI, your body can produce cholesterol all on it's own). We have an imbalance in the American diet, in that our diet is overloaded with Omega 6's (vegetable oils) and severely lacking in Omega 3's. It is important to know that the Standard American Diet, which is high in Omega 6 oils tend to cause inflammation by stimulating the immune system response, thereby leading to immune compromise or dysregulation.

Sources of Omega 3's include cold-water fish (e.g. Salmon, Cod, Tuna) flax seed oil, walnuts, and a few other foods.

Why are Omega 3's so important? Well for starters, these healthy fats acts as anti-inflammatory agents. They are also essential for brain cells and we know how important this is. Research now suggests that Omega 3 oils may also help prevent cancer. Here is one more tip. If you choose salmon, I highly recommend buying wild Alaska salmon or Norwegian salmon, NOT farm bred salmon. This is known to have a high PCB content (a carcinogen). As a rule, restaurants serve farm-bred salmon (it's cheaper). Here is a great website on the topic of Omega 3's: <http://www.omega-3info.com/faqs.htm#4>



## **Tip #11**

### **Good Food Preparation Is Essential**

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#### **Tip #11: Food preparation**

How food is cooked is as important as what you eat. For example, if you throw some veggies in a pot of water to cook, the water soluble vitamins will leach out into the water. So will some minerals. The end result is that you are not getting the nutrients you think you are getting and you are throwing away some really good water. Please, steam your veggies.

Next, it is a great idea to keep all of your cooking oils in your refrigerator. Oils tend to go rancid quickly. Some people suggest that rancid oils act as Free Radicals and we now know what these do in the body. Heat and light speed up the rancid process of oils. Most people keep their oils over the stove (heat). Not good! Also you might want to purchase oils that are best used for cooking with high heat, such as walnut oil or almond oil.

By now you may have heard that the material used to make Teflon non-stick pans, when used with high heat, changes its molecular structure to mix with the foods cooked in the pan. This plastic-based substance is now known to be linked with cancer. As with so many other nutritional behaviors we have substituted convenience for health. For this reason, it is not recommend to cook with Teflon pans.

Lastly, do not, repeat, do not cook food in a microwave oven! Whenever possible, use natural cooking methods and low to moderate cooking temperatures.

# Tip #12

## Apply Only Natural Skin-Care Products To Your Skin



### Tip # 12: Natural Skin Care- Products

Now, you may wonder why this slide is in a nutrition presentation. Here is the answer. Your mouth is not the only source to take in nutrients. We take in nutrients through our skin, the largest organ of our body. Example: we take in sunlight, which reacts with the cholesterol in our skin to form Vitamin D. But there's more:

Consider this: The average person uses between 9-12 personal care products a day (e.g. , deodorant, shampoo, moisturizer, eye liner, mouthwash, shaving cream, aftershave lotion, soap, lipstick, lip balm, sun block, hand cream, etc., etc. etc.). Many of these products also contain an exhaustive list of chemicals, many of which are petroleum-based. Your skin will absorb these chemicals and circulate them throughout your body. These chemicals are foreign substances that the immune system regards as a potential threat. One bit of advice that is given to women with breast cancer is this: Stop using chemical deodorants. Reason: Several lymph glands, which circulate the family of white blood cells, reside under your armpits. An apt metaphor is dumping toxic material into a river right by the drinking source.

Consider buying organic personal care products — They may cost a bit more but consider these (as well as organic foods) an investment in your health. As the expression goes, don't put on your skin what you wouldn't swallow.



# A Word About Vitamin & Herbal Supplements

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## A Word About Supplements

I have always been a proponent of the idea that the best source of nutrients (e.g., vitamins and minerals) is from natural sources like fresh (organic) fruits and vegetables. Most nutritionists will tell you that our soil is so depleted of nutrients today that we can no longer obtain them solely from the foods we eat. In the past few years, after doing some research on my own, I am inclined to believe this is true.

You should know that not all supplements are equal. The biggest problem we have today is lack of standardization of supplements. Another factor to consider is this: the essential oils in these herbs etc. will lose their potency the longer they sit on a store shelf. The best type of herbal supplements are those made with an alcohol tincture. The best companies are those that are small, where personal care is given to the products, rather than multinational business where things tend to slip through the cracks. Teas are great too as long as the tea bags haven't been sitting around for years on the shelf (yours or the stores). Capsules are OK as long as the contents are 1) fresh, and 2) absorbed into your body, otherwise they are a waste of money.



# What Is The Bio-Availability Of Your Supplements?

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## **The Bioavailability of supplements**

I was shocked to hear from many guest speakers and even students of mine who worked as plumbers and port-o-john collectors, that many well-known brand vitamins go in one end and come out the other. Translation: They are not bio-available. They are not absorbed into the body. They are eliminated—in whole. The reason: the binders used to make them are stronger than the enzymes the body has to digest them. This translates into a lot of wasted money. I won't name names here, but you can probably guess the common well-known brand names. I learned something else from my students who worked in Mall chain stores where these and other products are sold: employees work on commission, meaning they will most likely direct you to the more expensive products so they can earn a bigger paycheck. Again... let the buyer beware.



# The B-Complex Vitamin Is Known As The “Stress Vitamin”

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## **B-Complex is known as the “Stress Vitamin”**

Because many of the B-vitamins are used to assist metabolic processes for energy production (fight or flight), the B-complex is widely known as “the stress vitamin.” You can walk into any store and find bottles in the vitamin section labeled “Stress Vitamins: B-Complex” (note: if you read the label, most likely you will see Vitamin C as well). These are the water-soluble vitamins, and in this case, what you don’t need/utilize your body, in all its great wisdom, will excrete (eliminate) as excess. Excess B-complex in the urine looks like the aftermath of a Pink Floyd laser light show. The urine is florescent yellow, green or orange. If you happen to note this, the thought should occur to you that you are flushing down the drain the vitamins you recently purchased. While we all need the B-complex vitamin, start with small doses.



*“Sixty percent of all cancers  
could be eliminated if people  
ate healthier foods.”*

*— The American Cancer Society*

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**American Cancer Society Quote**

*“Sixty percent of all cancers could be eliminated if people ate a better diet.”*

*—The American Cancer Society*



***“Eat at least one meal a day  
for your immune system.”***

***—Brian Luke Seaward, Ph.D.***

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**Quote: Eat at least one meal a day for your immune system**

At the end of each semester, I wrapped up my class with this sentence. “*Eat at least one meal a day for your immune system.*” It’s good advice. Given all we come in contact with today, I think it’s excellent advice.

Let’s face it, behaviors can be hard to change, and eating behaviors are among the hardest to change. Knowing what you now know, based on this presentation, I think it is easy to see that we tend to take our bodies and our health for granted, that is until something stops working well. Don’t try to change all eating behaviors at once. You will drive yourself mad. Pick one, master it and then try another habit to change or modify.

This presentation and the suggested tips are a reminder that our behavior has an impact on our health. While it is a fallacy to think that we will live a disease free life, we can take steps to promote a healthy immune system, and hence optimal well-being. Good nutritional habits serve as the foundation for this path to optimal health. Best of luck!

# References & Resources

**Blaylock, R.,** *Excitoxins: The Taste That Kills.*  
**Health Press. Sante Fe. 1994.**

**Fitzgerald, R.,** *The Hundred-Year Lie.*  
**Dutton Press. New York. 2006.**

**Goodall, J.** *Harvest of Hope.*  
**Warner Books. New York. 2005.**

**Lyman. H.,** *Mad Cowboy.*  
**Touchstone Books. New York. 1998.**

**Margel, D.,** *The Nutrient Dense Eating Plan.*  
**Basic Health. New York. 2005.**

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## References and Resources

Blaylock, R, *Excitoxins: The Taste That Kills.* Health Press. Sante Fe. 1994.

Fitzgerald, R. *The Hundred-Year Lie.* Dutton Presss. New York. 2006.

Goodall, J. *Harvest of Hope.* Warner Books. New York. 2005.

Lyman. H., *Mad Cowboy.* Touchstone Books. New York. 1998.

Margel, D., *The Nutrient Dense Eating Plan.* Basic Health. New York 2005.

# References & Resources

**Nestle, M., *What To Eat*.  
North Point Press. New York 2006.**

**Nestle, M., *Food Politics*.  
University of California Press. Berkeley, CA. 2003.**

**Pollan, M. , *The Omnivore's Dilemma*.  
Penguin Press. New York. 2006.**

**Robbins, J. *The Food Revolution*.  
Conari Press. Berkeley, CA. 2001**

**Roundtree, R. and Colman, C.. *Immunotics*.  
Putnam Press. New York. 2000.**

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## References and Resources

Nestle, M., *What To Eat*. North Point Press. New York 2006.

Nestle, M., *Food Politics*. University of California Press. Berkeley, CA. 2003.

Pollan, M. , *The Omnivore's Dilemma*. Penguin Press. New York. 2006

Robbins, J. *The Food Revolution*. Conari Press. Berkeley, CA 2001

Roundtree, R. and Colman, C.. *Immunotics*. Putnam Press. New York. 2000.

# References & Resources

**Rubin, J. Patient, *Health Thyself*. Freedom Press. Topanga, CA. 2003.**

**Schlosser, E., *Fast Food Nation*. Houghton Mifflin. Boston. 2000.**

**Simone, C., *Cancer and Nutrition*. Avery Publishing. Garden City Park. 1994.**

**Sommer, E., *Food and Mood*. Henry Holt. New York. 1995.**

**Weil, A., *Eating For Optimal Health*. Knopf. New York 2000.**

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## References and Resources

Rubin, J. Patient, *Heal Thyself*. Freedom Press. Topanga, CA 2003.

Schlosser, E., *Fast Food Nation*. Houghton Mifflin. Boston. 2000.

Simone, C., *Cancer and Nutrition*. Avery Publishing. Garden City Park. 1994.

Simopoulous, A. *The Omega Diet*. Harper Collins, New York, 1999.

Somer, E., *Food and Mood*. Henry Holt. New York. 1995.

Weil, .A., *Eating For Optimal Health*. Knopf. New York 2000.

# Websites

<http://www.drweil.com/u/Home/index.html>

<http://healthletter.tufts.edu/>

<http://nutrition.about.com/>

<http://www.organicconnection.net/nutritional.htm>

<http://www.omega-3info.com/faqs.htm#4>

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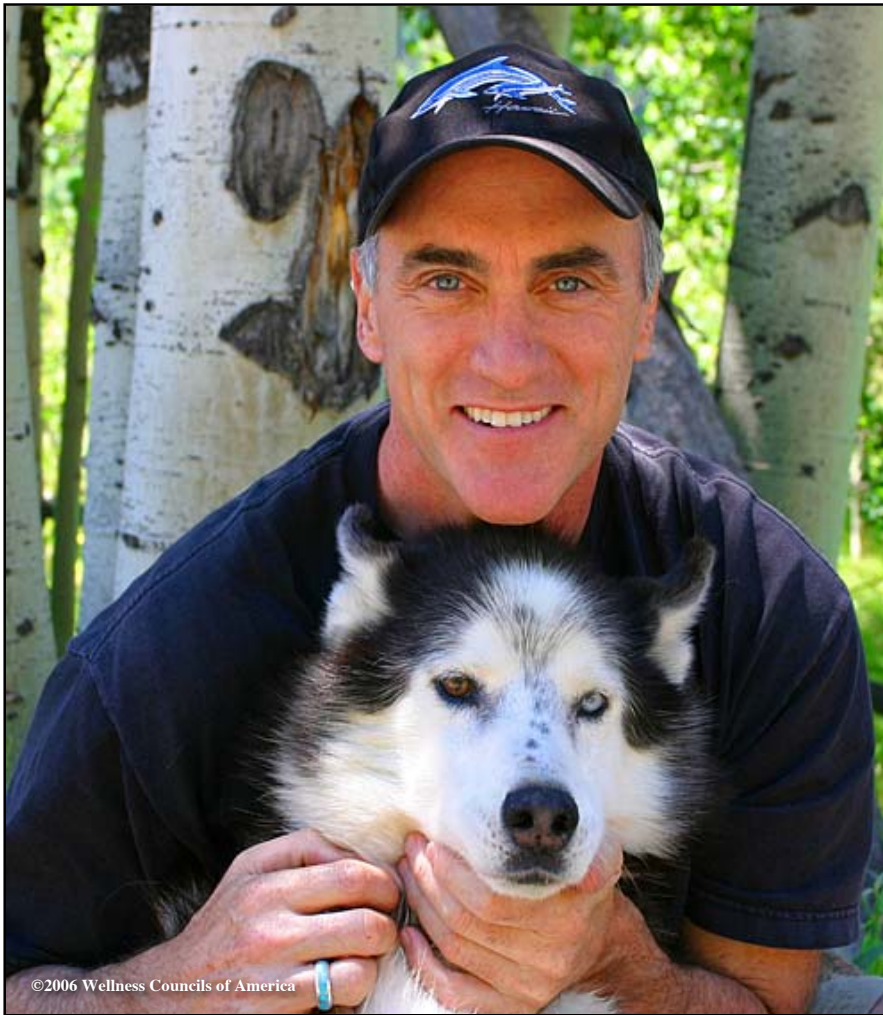
<http://www.drweil.com/u/Home/index.html>

<http://healthletter.tufts.edu/>

<http://nutrition.about.com/>

<http://www.organicconnection.net/nutritional.html>

<http://www.omega-3info.com/faqs.htm#4>



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**Additional Websites Provided by my colleague, Julie Almond, R.D. (thanks Julie).**

**Food Synergy:**

<http://www.5aday.org/html/research/consensus.php>

<http://ars.usda.gov/News/docs.htm?docid=9308>

<http://onhealth.webmd.com/script/main/art.asp?articlekey=55804>