Have you noticed that the product labels on many foods today seem to be a list of scientific mystery words? That's because more and more manufacturers are opting to use dangerous preservatives, sprays, and chemicals to increase the shelf life of their products and to enhance taste, texture and visual appeal, all at the cost of our nutritional needs. Many natural ingredients in processed foods are being replaced with their "chemical taste-alikes" to cut costs.

Chemicals create mutations through chromosome damage, interfere with immune system function, and have been shown to cause a multitude of serious health conditions, including cancer, heart disease, liver disease and diabetes. Even if all of the food additives used in our foods were safe individually, rarely does any food have only one additive in it. Nobody knows the effects of the many different additives used in the thousands of different combinations.

Food Additives

Food additives are largely found in processed and packaged foods, and in candy, soda and other "junk" food, so limit those foods as much as possible. Eating a balanced diet of fresh produce and whole grain foods will go a long way towards keeping additives out of your system. Organic packaged and processed foods have little or no added synthetic colors or preservatives, and of course, organic fruits, vegetables, nuts and seeds are always your best choice.

Children

Because children tend to consume more heavily processed foods than adults, these additives have a disproportionately higher impact on them.

Cravings:

High doses of sugar, salt, and trans fat, which are cheap fillers in convenience foods, cause cravings because they disrupt the brain's natural chemical balance. The more processed foods you eat, the more you crave them...and the vicious cycle continues. Natural hunger becomes *distorted* when the body's chemical balance is upset.

Worst Food Additives

Here is a list of some of the worst food additives. Check food labels to make sure that what you buy does not contain these ingredients.

BHT, legal in the U.S. but banned in England, is associated with liver and kidney damage, behavioral problems, infertility, weakened immune system, birth defects and cancer.

Artificial coloring - contribute to hyperactivity in children; may contribute to learning and visual disorders, nerve damage; may be carcinogenic.

Aspartame and all artificial sweeteners - may cause central nervous system disturbances, menstrual difficulties; may affect brain and growth development in unborn fetus. Dangerous excitotoxins.

Brominated vegetable oil - linked to major organ system damage, birth defects, growth problems; considered unsafe by the FDA, can still lawfully be used unless further action is taken by the FDA.

Carrageenan - stabilizer and thickening agent; linked to toxic hazards, including ulcers and cancer; In addition to suppressing immune function, carrageenan causes intestinal ulcers and inflammatory bowel disease in animals and some research indicates that carrageenan is associated with causing cancer in humans.

Partially Hydrogenated vegetable oils - associated with heart disease, breast and colon cancer, atherosclerosis, elevated cholesterol, depressed immune system, allergies

Nitrates - form powerful cancer-causing agents in stomach; can cause death; considered dangerous by FDA but not banned because they prevent botulism.

MSG - may cause headaches, itching, nausea, nervous system and reproductive disorders, high blood pressure; pregnant, lactating mothers, infants, small children should avoid MSG; allergic reactions common; may be hidden in infant formula, low fat milk, candy, chewing gum, drinks, over-the-counter medications. (MSG - A dangerous excitotoxin)

Neotame - similar to aspartame, but potentially more toxic; awaiting approval. A dangerous excitotoxin.

Olestra - causes gastrointestinal irritation, reduces carotenoids and fat soluble vitamins in the body.

Potassium bromate - can cause nervous system, kidney disorders, gastrointestinal upset; may be carcinogenic.

Saccharin - delisted as a carcinogen in 1997, however, studies still show that saccharin causes cancer. A dangerous excitotoxin

Sulfites - destroys vitamin B1; small amounts may cause asthma, anaphylactic shock; dangerous for asthma, allergy sufferers; has caused deaths; banned on fresh fruits and vegetables, except potatoes.

Sweet 'N Low - contains saccharin. A dangerous excitotoxin.

If the list of ingredients on a package label is long, there are probably a lot of chemical additives in the product, and you're risking your health by eating it.

It's absolutely imperative that you try to limit processed and pre-packaged foods, because unless you're eating organic, you may still be exposed to dangerous toxins on the foods you probably consider to be the most healthy! For example, sulfur is used to keep dried fruit fresh, formaldehyde is added to disinfect frozen vegetables, and potatoes are coated with maleic hydrazide to inhibit their natural "sprouting" tendencies. Sodium nitrate, a suspected cause of stomach cancer, is used as a preservative for bacon, sausage, ham, and bologna. Even lettuce in a bag is sprayed to extend it's shelf life. Do you like ice cream? You have carboxymethylcellulose, to thank for that super creamy, smooth texture. It has produced tumors in 80% of rats injected with this chemical "stabilizer". Not even bottled fruit juices can escape profit driven chemical interference. Brominated oils are added to bottled juice to maintain a look of freshness even after months of storage. Aluminum compounds, which are added to baking powder, aspirin, antacids, beer, and table salt, have been discovered in high concentrations in the brain of Alzheimer's patients.

Additives and Preservatives

Hydrogenized Oils and



Hydrogenized Oils and Margarine

Vegetable oils are processed through industrial means. They are extracted by the use of petroleum-based chemical solvents, and then, to remove impurities, must be highly refined. Through this process, taste, colour as well as nutrients are lost.

Extra virgin olive oils is the only oil that is naturally made. Olive oils are not processed or refined. They are "fresh squeezed' from the fruit of the olive tree without alteration of the colour, taste, nutrients or vitamins. It's antioxidant properties allows the oil to be kept for approx. 2 years, (stored in a dark dry place), much longer than the industrial made oils.

Hydrogenation is a process where hydrogen is forced into formerly unsaturated oils to make them more saturated. This process is indeed detrimental, as it creates aberrant compounds, known as trans fatty acids. They are associated with a wide variety of ailments, including heart disease and cancer. Through the Hydrogenized process, trans-fatty acids are created. Trans fatty acids have two effects, one of increasing LDL's (lipoproteins) the "bad cholesterol" and lowering the high density lipoproteins (HDLs) the "good cholesterol".

Butter and margarine are essential fats like cooking oils. 1 tablespoon of butter contains 12 grams of fat of which 8 grams (66%) are saturated. In addition, a serving of butter contains 33mgs of cholesterol. (Olive oil is free of cholesterol) Saturated fat and cholesterol have been linked to increased levels of low density lipoproteins (LDLs) "the bad cholesterol". Margarine varies per product but typically margarine contains approx. 10 grams of fat per tablespoon. Do you really want to put this celluloid like product into your body and blood stream? These oils are far too processed for your body to deal with.

Margarine is made by turning "pure liquid polysaturated oil" into a solid bar of grease, This is the process of Hydrogenation. When polysaturated fats is hydrogenated, it is converted to a totally saturated fat. This type of fat causes an extremely high rise in cholesterol, death from heart disease and cancer are highest among consumers of this type of fat.

Additives and Preservatives

Processed Foods are natural foods that are put through a procedure that is designed to kill harmful bacteria. Although these procedures are meant to be beneficial, often they are more hazardous. When a natural food source is processed, it is heated, pulverized, impaired, degraded and eventually devoid of any nutritional content. Additives are then distributed to regain back the vitamins and nutrients lost through this process. More than one billion pounds of chemicals are routinely added to food each year. They put all sorts of elements on our foods, to give it colour, flavour, anti-caking agents to prevent clumping, preservatives to stop spoilage, I could go on...and will.

An additive is added to a food product either intentionally, to produce a desired effect or unintentionally through processing, storage or packaging. Preservatives are added to help maintain a food's freshness and to keep it from spoiling, or oxidizing. Salt, sugar and vinegar were the first ways to preserve foods. Technology has further advanced our food choices and as a result, the use of additives and preservatives have exploded into N. American's food supply. In thirty years,



(click on GM Foods to lead to the next category) there has been an incredible increase of additives since processed foods have become more abundant. I like to call these products, 'man-made' since there is no resemblance to the natural food it once was. Most additives are considered 'safe' but some are known to be carcinogenic even toxic. Hyperactivity, allergies, asthma and migraines are common reactions to food additives. We have researched some of the most common food additives and their related illnesses. Here are our findings:

- <u>Nitrates and Nitrates of Sodium and Potassium</u> can be found in some cheeses, adds flavour, maintains pink colour in cured meats and prevents botulism in canned foods. Can cause adverse reactions in children, and potentially carcinogenic.
- <u>Sulphur Dioxide and Sulphites</u> are used as bleaches and antioxidants to prevent browning in alcoholic beverages, fruit juices, soft drinks, dried fruits and vegetables. It prevents yeast growth and also retards bacteria growth in wine. Can cause breathing problems and hyperactivity. Sulphites destroy vitamins as well as the above illnesses.
- <u>Benzoic Acid and Sodium Benzoate</u> are used to preserve oyster sauce, fish sauce, ketchup, nonalcoholic beverages, fruit juices, margarine, salads, confections, baked goods, cheeses, jams and pickled products. May cause hyperactivity and reacts with 222.

- <u>BHA and BHT (Butylated Hydroxyanisole) and</u> (<u>Butylated Hydroxytolulene)</u> are preservatives that block oxidation in fats and oils, preventing rancidity. These chemicals can be found in snacks, cereals, and instant potatoes.
- <u>Ascorbic Acid and Ascorbates</u> are used to preserve pork sausages by blocking oxidation.

Food Web

(Click on Food Web to go to the beginning of the article.) Emulsifiers, Stabilizers and Thickeners:

- <u>Carageenan</u> added to ice cream, jellies, cakes, decorations, cheese, and salad dressings to thicken the product. Can cause allergies, and intolerances.
- <u>Mannitol</u> found in ice cream, confections, and low calorie foods. Known to cause allergies, diarrhea, and nausea.

Ingredients

The <u>ingredient list on food labels</u> is the most important bit of information on the package. It is often hidden under a flap of packaging material in very tiny print, just barely visible without a magnifying glass. This is where you find out what's really in the product and how healthy it is. But in order to understand the healthfulness of the product, you have to know what each ingredient means. Some are obvious, like carrots. Some may seem obvious, but are actually a way of hiding harmful ingredients the manufacturer doesn't want you to know are in the product. A good example of this is broth. It seems like a safe ingredient unless you know that broth usually contains MSG and that this is one way that food manufacturers hide MSG in their products. Other ingredients may seem like a and you don't have the foggiest idea of what they are, like BHT.

The main purpose of food labels is to sell the product, not tell you what's in it. You will find the truth about how nutritious a product is only if you know how to read and interpret the ingredients and nutrition information on food labels. The truth about what's really in the food you buy may shock you.

A general rule of thumb:

• If the list of ingredients is long, there are probably a lot of chemical additives in the product, and you're risking your health by eating it.

• If the list of ingredients is short, it may or may not have harmful additives in it, so read the ingredients carefully before you decide to purchase it.

Ingredients are listed on the label according to quantity; the ingredient making up the

- largest quantity of all the ingredients is listed first
- smallest quantity is listed last

Generally only those ingredients that are required <u>by law</u> to be listed on the label are listed. So, you never really know if there are any other ingredients in the product that are not listed on the label.

Watch out for statements like these on packages:

- NATURAL FRUIT FLAVORS, with Real Fruit Juice
- ALL NATURAL INGREDIENTS
- NO ARTIFICIAL PRESERVATIVES
- 100% NATURAL
- REAL FRUIT
- NO PRESERVATIVES
- NO ARTIFICIAL INGREDIENTS

Statements like these do not mean there are no harmful additives in the product. There may be harmful ingredients. The manufacturer hopes you'll think there are no harmful ingredients, but as you will see from the following examples, it's not true. So, it's important to always READ LABELS VERY CAREFULLY." ...

ALL NATURAL INGREDIENTS and NO ARTIFICIAL PRESERVATIVES ADDED does not mean there are no harmful additives in the product. The ingredients from a loaf of bread that states on the label in big letters, 'ALL NATURAL INGREDIENTS,' and 'NO ARTIFICIAL PRESERVATIVES ADDED,' are: Enriched wheat flour (wheat flour, malted barley, niacin, reduced iron, thiamine mononitrate, riboflavin), water, high fructose corn syrup, yeast, wheat bran, vital wheat gluten, butter. Contains 2% or less of each of the following: rye meal, corn flour, molasses, rolled whole wheat, salt, dough conditioners (ammonium sulfate, sodium stearoyl lactylate), brown sugar, honey, vinegar, oatmeal, soy flour, mono and diglycerides, partially hydrogenated soybean oil.

Here is an analysis of the ingredients.

- Enriched wheat flour is white flour. The bran and the germ portion of the whole wheat, which are rich in vitamins and minerals, have been refined out. To compensate for refining out approximately 20 nutrients, they add back 4 synthetic nutrients, niacin (vitamin B3), reduced iron, thiamine mononitrate (synthetic vitamin B1), and riboflavin (vitamin B2). These nutrient additives...are added to mostly refined and processed foods giving a false sense of nutritional value and can lead to nutritional imbalances.
- **High fructose corn syrup** is basically sugar derived from corn. It is associated with blood sugar problems, depression, fatigue, B-vitamin deficiency, hyperactivity, tooth decay, periodontal disease and indigestion.

- **Dough Conditioners**, in general, can cause mineral deficiencies.
- **Ammonium sulfate** may cause mouth ulcers, nausea, kidney and liver problems.
- **Sodium stearoyl lactylate** may be corn, milk, peanut or soy based, and may cause blood pressure and kidney disturbances, and water retention.
- **Brown sugar** is frequently white sugar with molasses added. It is associated with blood sugar problems, depression, fatigue, B-vitamin deficiency, hyperactivity, tooth decay, periodontal disease and indigestion.
- Mono and diglycerides may be soy, corn, peanut or fat based..
- **Partially hydrogenated soybean oil** is associated with heart disease, breast and colon cancer, atherosclerosis and elevated cholesterol.

So, ALL NATURAL INGREDIENTS and NO ARTIFICIAL PRESERVATIVES ADDED does not mean there are no harmful additives in the product. The manufacturer hopes you'll think that, but as you can see from the above list of ingredients, it's not true."

There are more than 3000 different chemicals that are purposefully added to our food supply. The testing for the safety of these chemical additives is generally done by the company that wants to produce the chemicals or to use the chemical additives in the foods they produce. The Delaney Clause of the 1958 Food Additives Amendment states that any additives shown to cause cancer in humans or animals are not permitted to be added to our food. However, political pressure has caused the FDA to relax these standards and allow small amounts of cancer causing substances to be used in foods.

Even if all of the food additives used in our foods were safe individually, rarely does any food have only one additive in it. Testing for additive safety has been done for individual additives, not for combinations of additives. Additives that are safe individually may be harmful in certain combinations. Nobody knows the effects of the many different additives used in the thousands of different combinations."

Worst Food Additives

Here is a list of some of the worst food additives. Check food labels to make sure that what you buy does not contain these ingredients.

- Acesulfame-K "Sunette"; may cause low blood sugar attacks; causes cancer, elevated cholesterol in lab animals.
- **Artificial colors** contribute to hyperactivity in children; may contribute to learning and visual disorders, nerve damage; may be carcinogenic
- Artificial sweeteners associated with health problems; see specific sweetener.
- **Aspartame** may cause brain damage in phenylketonurics; may cause central nervous system disturbances, menstrual difficulties; may affect brain development in unborn fetus.
- **BHA & BHT** can cause liver and kidney damage, behavioral problems, infertility, weakened immune system, birth defects, cancer; should be avoided by infants, young children, pregnant women and those sensitive to aspirin.
- - see FD&C colors.
- - see FD&C colors.

- **Brominated vegetable oil** linked to major organ system damage, birth defects, growth problems; considered unsafe by the FDA, can still lawfully be used unless further action is taken by the FDA .
- **BVO** see brominated vegetable oil.
- **Caffeine** psychoactive, addictive drug; may cause fertility problems, birth defects, heart disease, depression, nervousness, behavioral changes, insomnia, etc.
- Citrus Red No. 2 see FD&C colors.
- Artificial colors Blue No. 1, Blue No. 2 colors considered safe by the FDA for use in food, drugs and cosmetics; most of the colors are derived from coal tar and must be certified by the FDA not to contain more than 10ppm of lead and arsenic; certification does not address any harmful effects these colors may have on the body; most coal tar colors are potential carcinogens, may contain carcinogenic contaminants, and cause allergic reactions.
- **Free glutamates** may cause brain damage, especially in children; always found in autolyzed yeast, calcium caseinate, enzymes, flavors & flavorings, gelatin, glutamate, glutamic acid, hydrolyzed protein, hydrolyzed soy protein, plant protein extract, protease, protease enzymes, sodium caseinate, textured protein, yeast extract, yeast food and yeast nutrient; may be in barley malt, boullion, broth, carrageenan, malt extract, malt flavoring, maltodextrin, natural flavors, natural chicken flavoring, natural beef flavoring, natural pork flavoring, pectin, seasonings, soy protein, soy protein concentrate, soy protein isolate, soy sauce extract, stock, whey protein, whey protein concentrate, whey protein isolate, anything that is enzyme modified, fermented, protein fortified or ultrapasteurized and foods that advertise NO MSG; see MSG.
- **Green No. 3** see FD&C colors.
- **Hydrogenated vegetable oils** associated with heart disease, breast and colon cancer, atherosclerosis, elevated cholesterol.
- **MSG** may cause headaches, itching, nausea, brain, nervous system, reproductive disorders, high blood pressure; pregnant, lactating mothers, infants, small children should avoid; allergic reactions common; may be hidden in infant formula, low fat milk, candy, chewing gum, drinks, over-thecounter medications, especially children's, binders and fillers for nutritional supplements, prescriptiona nd non-prescription drugs, IV fluids given in hospitals, chicken pox vaccine; it is being sprayed on growing fruits and vegetables as a growth enhancer; it is proposed for use on organic crops.
- **Neotame** similar to aspartame, but potentially more toxic; awaiting approval.
- **Nitrates** form powerful cancer-causing agents in stomach; can cause death; considered dangerous by FDA but not banned because they prevent botulism.
- **Nitrites** may cause headaches, nausea, vomiting, dizziness; see nitrates.
- **Nutrasweet** see aspartame.
- **Olean** see olestra.
- **Olestra** causes gastrointestinal irritation, reduces carotenoids and fat soluble vitamins in the body.
- Partially hydrogenated vegetable oils see hydrogenated vegetable oil.
- **Potassium bromate** can cause nervous system, kidney disorders, gastrointestinal upset; may be carcinogenic.
- **Red No. 3** see FD&C colors.
- **Saccharin** delisted as a carcinogen in 1997, however, studies still show that saccharin causes cancer.

- **Sulfites** destroys vitamin B1; small amounts may cause asthma, anaphylactic shock; dangerous for asthma, allergy sufferers; has caused deaths; banned on fresh fruits and vegetables, except potatoes.
- Sweet 'N Low contains saccharin.
 Yellow No. 6 see FD&C colors.