

Health Hunter[®]

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NEWSLETTER

JULY/AUG. 2006

Trans fatty acids and hydrogenated fat

by Rebecca K. Kirby, M.D., M.S., R.D.

The Food and Drug Administration (FDA) made a ruling that went into effect on January 1, 2006, that requires food manufacturers to provide information on the amount of trans fats in their products. This information is now provided on the labels of any food packaged since January 1 of this year. The FDA has required the amount of saturated fat and cholesterol to be listed on food labels since 1993.

The best way to avoid trans fat in the diet is to eat whole foods.

So what prompted the new disclosure on trans fats for food labels? Over 10 years ago in 1994, scientists estimated that trans fatty acids (trans fats) accounted for 30,000 premature deaths from coronary heart disease (CHD) each year. However, no action was taken at that time because the food industry sponsored a review that concluded the evidence was insufficient and further research was needed.

Further research was conducted, and the studies continued to document the same deleterious effect of trans fats on heart disease until the body of scientific evidence was so weighted against trans fats that the FDA issued the ruling. The research showed that the consumption of trans fats in the diet raises LDL-cholesterol and lowers HDL-cholesterol. This combined effect on blood lipids doubles the risk for heart disease over that of saturated fats in the diet.

Where are we getting these trans fats in the food supply? In the 1960's,

the consumption went on the rise with the increased use of margarines and solid vegetable shortenings. The majority of trans fats in the American diet are from margarines, commercially-prepared bread, cakes, cookies, crackers, pies, and fried potatoes. They can also be found in snack chips and popcorn, household shortening, salad dressings, breakfast cereals, and candies. In addition, trans fats are found in some animal products, primarily beef fat due to a conversion by anaerobic bacteria in the digestive system of ruminant (cud-chewing) animals.

Margarines became popular in the 1950's as an inexpensive alternative to butter. However, when saturated fat became targeted as a risk factor for heart disease, vegetable oil margarines were promoted as a healthy alternative to butter and consumption doubled that of butter. Americans also began eating more commercially-prepared baked goods and fast foods which drove the trans fat consumption up to anywhere from 3 to 13 grams a day.

Fatty acids are what make up oils and fats. The trans fatty acids in margarine and shortening are created from the processing of vegetable oils to make them solid at room temperature. This process is called hydrogenation or partial hydrogenation because the oil is heated in the presence of hydrogens. A chemical bond is changed so that hydrogens are now configured across (trans) the double bond from each other. This changes the property of the vegetable oil so that it hardens and therefore can be formed into

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Low fruit, vitamin C intake increases asthma risk

People with symptomatic asthma eat less fruit and consume less vitamin C and manganese than people who don't have asthma, according to a study that appeared in the journal *Thorax* recently.

"Diet may be a potentially modifiable risk factor for the development of asthma," according to Dr. N.J. Wareham of the Medical Research Council in Cambridge, U.K., and colleagues.

The researchers compared the diets of 515 adults who had been diagnosed with asthma with 515 controls who did not have asthma. Each person reported their food intake for one week. Those who ate 46.3 grams (about 7.2 oz) of citrus fruit daily had about half the risk of having symptoms of asthma when compared to those who ate no citrus fruit at all.

The subjects with a lower intake of both vitamin C and manganese showed a higher risk of having asthma. HI

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Nutritional Medicine

by Marilyn Landreth, M.A.

Hope is a powerful "nutrient"

We serve the most wonderful people in the world. They come to The Center because they are hurting or just to make sure they are on the right health track. Now if you have a broken bone or need your appendix out you would want to go to your family physician to be treated. We see ourselves as working in conjunction with standard medicine.

We see a lot of people who have been told that there is nothing wrong with them or they just need to live with their painful symptoms. What the doctor really means is that he/she can't find the source of the problem and have exhausted their knowledge. People who come to The Center for treatment have decided that they expect to find a solution for their problem and want to keep trying. That is where the wonderful part comes. They haven't given up; they still hold the hope for a solution. They are committed to finding a solution.

We believe that people know more about themselves than anyone; they just may not always be aware of what they

know. Working in conjunction with the knowledgeable staff at The Center allows the person to be involved with the treatment plan. The person observes connections between how they feel and what is happening nutritionally, behaviorally, and environmentally. They are encouraged to share those observations with our "Sherlock" doctors.

We have learned so much over the years from treating and by partnering with those who start out as patients and then become co-learners. A great deal of information is readily available through the internet and in books. We find that most people who come to The Center are highly informed about their symptoms and are committed to being a part of the solution to their problems.

As our editor, Richard Lewis, often says, "Knowledge is power." Also, believing that there is an answer to problems is indeed a powerful "nutrient." When you know there is an answer to your problem, you keep on searching and expecting that there is a solution. Hope is a nutrient for your soul. HH

Trans fatty acids—Cont'd from page 1

a stick of margarine or a solid shortening which in baking will provide a more tender and flaky product.

The process of hydrogenation not only makes liquid oil more solid, it also improves shelf life and is more stable at high frying temperatures. In 1990, the fast food industry converted from beef fat to heavily hydrogenated vegetable fats for frying. Therefore, with the increased popularity of fast foods, commercially-baked goods, as well as margarine, the consumption of trans fats has become significant.

An association between the risk of heart attack and the increased consumption of margarine was found in a number of studies in the U.S. and other countries such as Italy, Australia, and Greece. In the Nurses' Health Study, the intake of trans fats for 80,000 women was surveyed. The investigators found a higher dietary intake of saturated fat

and trans fat was associated with an increased risk of coronary heart disease. The foods that contributed the most trans fat to the diet of the nurses included margarine, cookies, and bread.

To understand the mechanism of the increased risk for heart disease, studies were conducted where subjects were fed trans fats and their blood lipids were measured. Results consistently showed that the trans fats increased LDL-cholesterol and decreased the HDL-cholesterol, worsening the ratio of total cholesterol to HDL which is a predictor of coronary heart disease risk.

Trans fats have also been shown to effect inflammation which is not only a risk factor for heart disease but many other conditions. In the Nurses' Health Study, inflammatory markers were increased in women with a higher body mass index and who had the highest

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intake of trans fatty acids.

The kind of fat we eat will determine the fatty acids in our cells and cellular membranes and is cumulative over time. This can affect brain and nerve health also. Trans fats are incorporated into the protective myelin sheath around neurons. In the brain, trans fats can replace the omega-3 fatty acid, DHA, which is crucial for brain development and function. These changes will affect the fluidity, flexibility, and electrical activity necessary for brain cell and neuron communication.

How do we get away from trans fats? The best way to avoid trans fat in the diet is to eat whole foods that have not been refined, and if you eat animal products choose low fat such as lean beef or low fat dairy. Avoid fried foods and fast foods.

The fast food industry is exempt from labeling regulations so watch out for the claim that their food is cholesterol-free or cooked in vegetable oil; these could still be hydrogenated vegetable oils. Fast food French fries have about 8 grams of trans fats for a medium serving, one doughnut has about 6 grams of trans fats, and a candy bar 3 grams. Remember, as little as 5 grams of trans fat a day raises the risk for heart disease by 25%!

When shopping for prepared foods, the best tactic is to read the labels. Labels can report no trans fats, even if there are some partially hydrogenated oils in the food if the total fat in the food is less than 0.5 grams per serving. If you are unsure about the trans fat content, the best information will be in the list of ingredients which are ranked from the most abundant ingredient in the product down to the least. Look for the words hydrogenated or partially hydrogenated which will tell you if the fats have been processed to produce trans fatty acids. The more liquid the margarine, such as in a tub or squeeze bottle, the less hydrogenated.

The final word—try to choose unrefined, whole foods with a variety of fruits and vegetables (these are trans fat free in the first place) and if buying packaged or prepared foods, read food labels and make those choices wisely. [H]

HEALTH HUNTERS AT HOME

Trans fat in popular foods

“The daily intake of about 5 grams of trans fat [trans fatty acids] is associated with a 25 percent increase in the risk of ischemic heart disease,” according to an article in *Lancet* and quoted in a letter that appeared in *The New England Journal of Medicine* from James Kirpatrick, M.D., Martin Burke, D.O., and Bradley Knight, M.D., of the University of Chicago.

The authors continue by saying that for this reason they recommend that the consumption of trans fat be as low as possible.

To keep trans fat as low as possible, the authors made two charts, one for McDonald's hamburgers and the second for Kentucky Fried Chicken. In these they compared New York City and Atlanta in the U.S. with several other countries, including Russia, the Czech Republic, Germany, Spain, and Denmark, to name a few of the countries. There were 24 locations from around the world for McDonald's and 19 for Kentucky Fried Chicken.

They took samples over several months of French fries and chicken nuggets from McDonald's and fried chicken, along with French fries, from Kentucky Fried Chicken. Each food from each location was mixed together and then the fatty acids were analyzed using capillary gas chromatography according to a method approved by the International Organization for Standardization. This is what they found.

For McDonald's, New York City was the highest in trans fats with 23 percent of trans fats in French fries and 11 percent of trans fats in the chicken nuggets. Atlanta came in third at 19 percent trans fats in their French fries and 11 percent trans fats in their chicken nuggets. Denmark came in last with one percent in both the French fries and the chicken nuggets. Denmark was rated excellent, while New York City was terrible, with Atlanta not far behind in third place.

For Kentucky Fried Chicken, Hungary came in first with 35 percent of their French fries having trans fats and 31 percent of their chicken con-

taining trans fats. That is pretty bad, but you probably won't be eating much Kentucky Fried Chicken in Hungary.

New York City came in eighth with 16 percent of their French fries containing trans fats and only five percent of trans fats in their chicken.

Denmark came in third from last with two percent of the French fries and the chicken containing trans fats. Germany came in last with only one percent of each one containing trans fats. Atlanta was not counted in the Kentucky Fried Chicken chart.

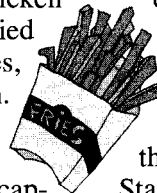
The cooking oil used by McDonald's to make French fries contains 23 percent trans fatty acids, while there is only one percent found in Denmark and Germany. It is obvious that industrially produced trans fatty acids are not required to make oils for frying foods in these countries as opposed to the United States.

The singular advantage to having these trans fatty acids in the oil is shelf life. They can be stored much longer than the Danish or German oils—a great deal longer. But the Danes and the Germans just ship oils more quickly and use it more rapidly than they do at McDonald's in the United States. But then, the McDonald's in the United States may ship quickly; they just use oils that are industrially produced with high trans fats.

“Owing to the very high content of industrially produced trans fatty acids in certain fast foods, in many countries [including the United States] it is possible to consume 10 to 25 grams of these trans fatty acids in one day and for habitual consumers of large amounts of this food to have an average daily intake far above 5 grams. This is a matter of concern, particularly for low-income people, who already have an increased risk of ischemic heart disease owing to other lifestyle factors,” wrote the authors of the letter.

As Dr. Kirby points out in her lead article, eat more whole foods. This is such an easy recommendation. [H]

—Richard Lewis



INFORMATION WORTH KNOWING

It is estimated that 15 million people in the United States are currently afflicted with asthma, and countless others are plagued by diseases such as allergies and lupus. Would it surprise you to learn that these "diseases" are not really diseases at all, but the result of unintentional dehydration? In his book, *ABC of Asthma, Allergies and Lupus*, Dr. Fereydoon Batmanghelidj discusses the idea that adequate water intake is the cornerstone of disease-free living. Dr. Batmanghelidj first discovered water's healing abilities while carrying out a prison sentence in 1979. During his imprisonment, he came across a fellow inmate who was experiencing extreme peptic ulcer pain. Forced to treat the man without the aid of traditional medication, Dr. Batmanghelidj gave him two glasses of water. The inmate was pain free within eight minutes of drinking the water. While serving his 31 months as a political prisoner, Dr. Batmanghelidj used this water technique to treat more than 3,000 people suffering from peptic ulcer pain. Once out of prison, he used these findings to further research the role water plays in preventing, treating, and even curing disease. The questions this month are taken from his book.

1 The Native American tribes were the first peoples to use _____ as a remedy for asthma.

- a. meditation
- b. salt
- c. tobacco
- d. ginger root

2 When your body is suffering from a shortage of water, certain areas are affected more adversely than others. In dehydration, only _____% of water is lost from the blood circulation.

- a. 12
- b. 8
- c. 5
- d. 26

3 Salt is a strong natural anti-histamine that can be used to treat the effects of asthma.

- a. True
- b. False

4 Lupus is an autoimmune disease that causes _____ as well as other problems. Lupus causes the body to produce antibodies that attack its tissues.

- a. eventual blindness
- b. excessive hair growth on the face, arms, and legs
- c. sexual dysfunction
- d. skin rashes

5 Water distribution and its intake in the body is managed by an important neurotransmitter

known as _____. It also rations water during drought management and generates emergency thirst signals.

- a. serotonin
- b. acetylcholine
- c. histamine
- d. dopamine

6 It is vital that the human body maintains a normal pH balance. When carbon dioxide leaves the lungs, the body fluids become more acidic—an ideal situation for a healthy body.

- a. True
- b. False

7 Our breathing quite noticeably changes when we are in distress. On average, we breathe about _____ times a minute and exchange 500 ccs of air each time. People who become short of breath can breathe up to _____ times a minute and draw in about 3,000 to 4,000 ccs at a time.

- a. 12; 50
- b. 30; 100
- c. 5; 25
- d. 65; 150

Insect control in the organic garden

by Gary Branum, Ph.D.

One of the major problems facing the organic garden is the control of harmful insects. Although the occasional use of specific pesticides is sometimes allowed by the certifying agency (OCIA, the Organic Crop Improvement Association), alternative methods not using insecticides are preferable.

Squash bugs are considered to be the most destructive pest of squash and pumpkins. Squash bugs tend to congregate under garden debris, so removing old plants, dead leaves, and other hiding places will help. Some gardeners lay an old board on the ground in the evening. The bugs will collect under the board and can be physically removed the next morning.

Many plants produce natural insect repellants or toxins. Companion planting may ease your insect crop damage. Marigolds, tansy, mint, catnip, nasturtium, bee balm, and radishes, when planted near squash, will help repel squash bugs.

A large number of plants can be used to help repel insect pests. French marigolds, when planted among tomatoes, repel greenfly and blackfly. Nasturtiums repel aphids when planted near broccoli and squash, and they attract cabbage caterpillars which minimizes damage to cabbage plants.

If you have a specific insect problem and you would like to solve it by organic companion planting, consider placing these plants in your garden. Cilantro repels aphids, and the seeds (cilantro seeds are the spice known as coriander) can be used to make a spray that is effective against red spider mite. Chives, garlic, and chervil also repel aphids. Tansy is offensive to ants and has been traditionally planted near the kitchen door to prevent ants from entering the house. Dill is used as a food source by the caterpillar of the black swallowtail butterfly and also attracts predatory wasps which prey on other pests. Sage repels many pests when planted near brassicas (this family includes all the cabbage-like crops such as cabbage, kohlrabi, and broccoli as well as the mustards, including turnips).

Good luck with your insect control!

• FOR ANSWERS, SEE PAGE 7 •

Test of the Month

by Dr. James A. Jackson,
Director, Bio-Center Laboratory

The Basic Urinalysis Test

I know what you are thinking. "UGH! Another urine test! Urine pyroles, urine indican, and now, urine again. Dr. J, tell us about some important tests!" Well...urine is an important test! It was the first specimen used by ancient medical workers to help diagnose patients. They looked at the color, odor, volume, and smell and could tell a lot about the patient. The ancient Egyptians had a test for a disease called the "wasting disease" (diabetes). They would pour the urine out in the sand near an anthill. They would watch the ants, and if they came to the urine in a large group, this was called "honey urine" (for the sugar) and confirmed the wasting disease.

In the 1940's, 50's, and 60's, diabetics injected insulin and controlled the disease by measuring the amount of glucose in their urine using the CLINITEST® Tablets from the AMES Company. Dr. Bright had a kidney disease (Bright's Disease) named after him by heating a glass tube containing urine over a flame and watching albumin clump (much like frying the white albumin of an egg). Today an early test for kidney disease, especially in diabetics, is a urine test called "micro albumin." And don't forget, the specimen of choice for drug abuse screening is URINE!

A properly performed urine test using a modern dipstick can be performed in two minutes. We can measure pH, specific gravity, nitrite and leukocyte esterase (both for bladder or kidney infection), blood/hemoglobin (kidney, bladder disease, cancer, stones, etc.), glucose and ketones (for diabetes), bilirubin and urobilinogen (for liver disease or hemolysis), and protein/albumin (kidney disease or hypertension). If any abnormal results show up, we spin the urine in a centrifuge and look at the sediment under a microscope. I will go into further detail on what the results mean in a future newsletter. [H]

Herbal History

by Chad A. Krier, N.D., D.C.

Curcuma longa (Turmeric)

Turmeric has been used throughout India, China, and Indonesia as a spice and medicinal agent. It has gradually become one of the more popular medicinal herbs used in the U.S., thanks to its many beneficial properties. Curcumin is considered to be the most active constituent in Turmeric. Much of the understanding of the pharmacology of Turmeric derives from research on curcumin.

Curcumin and Turmeric as a whole plant extract demonstrate many useful medicinal properties, including anti-inflammatory, antioxidant, antineoplastic, anti-hepatotoxic (liver supportive), choleric (bile flow), anti-cholesterolemic (improves lipids), platelet aggregating factor antagonism (decreases platelet stickiness), and carminative (eliminates gas).

Curcumin is one of the most potent

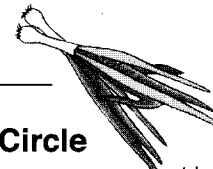
anti-inflammatory herbals around. Curcumin decreases inflammation through inhibition of oxidation, inhibition of leukotriene formation, inhibition of platelet aggregation, promoting the breakdown of fibrin, thereby reducing swelling, inhibition of white blood cell response to various stimuli involved in the inflammatory process, stabilization of intracellular membranes in white blood cells, and direct inhibition of various chemical mediators of inflammation.

Moreover, orally dosed turmeric and curcumin extracts decrease total cholesterol and LDL cholesterol and increase HDL cholesterol, leading to heart healthy benefits.

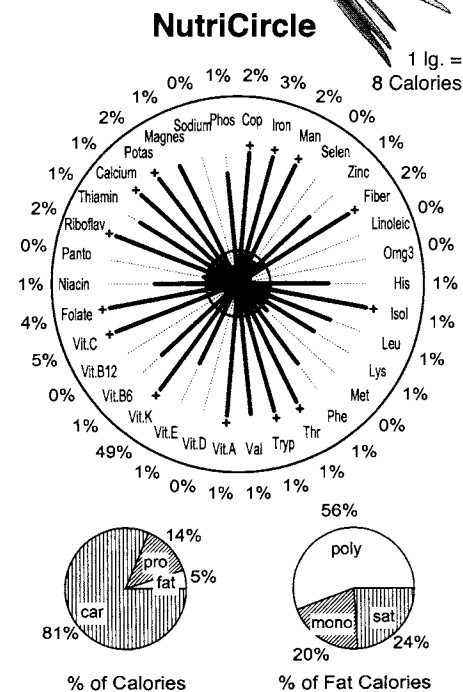
Oral dosing of curcumin for anti-inflammatory effects is 500 mg 2-3 times daily. [H]

Food of the Month

by Donald R. Davis, Ph.D.



GREEN ONIONS or scallions are immature onions that have not yet formed a bulb. They are used mainly to flavor salads, soups, and mixed dishes such as stir-fried recipes, casseroles, and omelets. The amounts commonly eaten are too small to provide much nutrition, with the possible exceptions of vitamin K and diverse phytochemicals that are not yet well studied. One large green onion (about an ounce) contains half an RDA of vitamin K, which helps build strong bones. Many other nutrients are also present in rich amounts relative to its meager 8 Calories, but in low absolute amounts (1% to 5% of the RDA).



The length of each bar shows the amount of one nutrient. If a bar extends out to the inner circle, the food has enough of that nutrient to match the calories it contains. The numbers show nutrient amounts in RDAs per serving shown. The pie charts show the sources of calories (left) and the types of fat (right). [H]

Mental Medicine

by Marilyn Landreth, M.A.

Fishing or digging in the dirt?

Have you ever had a day when all the traffic lights were red, people missed appointments with you, and it was raining? Nothing seemed to be going right and it was a Monday on top of all that? I recently had a day like that and it caused me to stop and figure out just what was going on.

Earl Nightingale said, "Attitude is the reflection of a person and our world mirrors our attitude." Do we tend to blame others when things are not going right for us? When we really look the situation over, sometimes we realize that the problem may start within ourselves. Maybe some changes need to be made that will take energy and time but will give a new purpose and enthusiasm to our everyday life. My attitude has a great deal to do with how well my day goes



and also affects how well other people's day goes. Elwood N. Chapman said, "Attitudes are caught, not taught." A bad attitude is easy to catch and difficult to duck unless we are aware of how easy it is to catch.

It is so easy to get caught up in the hurry, hurry, get as much done as fast as you can get it done, eat fast, and drive faster way of surviving. We need to slow our lives D. .O. .W. .N. Take the time to get a new perspective on what is happening. Clyde Abel said, "All is perspective. To a worm, digging in the ground is more relaxing than going fishing." Maybe realizing what we do have rather than focusing on what we don't have is the key to finding joy, satisfaction, and a connection to life. It might even lead to a few more green lights. ☐

CENTER UPDATE

Lowering junk food availability for kids

Two reports were released on May 4 of this year that asked for a reduction of junk foods to children and teens in America.

Since 1980, according to one report, obesity rates have doubled among younger children and tripled among adolescents between the ages of 13 and 17. An estimated 16% of children between the ages of 6 and 19 are obese today. That is a big jump in just 25 years.

In one report, U. S. regulators urged food companies to voluntarily limit their advertising of sugary snacks, soft drinks, and other junk food to children to combat obesity.

The Federal Trade Commission and Department of Health and Human Services wants to expand current, self-imposed guidelines on advertising to children, and said that the industry should consider setting nutritional standards for foods marketed to children. Both sugar (cane and beet) and high fructose corn syrup are among the main culprits in regulating obesity for

children. Sugary cereals, soft drinks, and chips with their high calorie content of sugar and trans fatty acids are big contributors to obesity.

The second report comes from former president Bill Clinton and his New York based foundation. "The former president, who has had two heart-related operations in recent years and was overweight as a child, has made child obesity one of his top public policy issues since leaving the White House in 2001," the report said.

Coca-Cola, PepsiCo, Cadbury Schweppes, and the American Beverage Association joined a volunteer program that will ban some of their best-selling products from a market of about 35 million U. S. school children, according to the report.

Both reports agree on one important point—that sugar, high fructose corn syrup, and trans fatty acids have been the bad guys for over 25 years and have contributed to the rising cause of obesity in America. It is time to cut back on these fat producers. ☐

Case of the month

This patient originally came to The Center in July 1996 at age 46 years. Her main concern at that time was hair loss. She continued coming to The Center for several years. Then she came again in early April 2004 with a brain tumor that was called a glioblastoma. Most people who have this diagnosis live about six months, even when they do all that the doctors recommend, such as chemotherapy and radiation.

She decided to take an alternative approach to the cancer, along with the recommendations of the oncologists. The doctors at The Center used various approaches to help her with her cancer.

Most importantly, Dr. Hunninghake used intravenous vitamin C for treatment. Dr. Hunninghake used 15 grams of intravenous vitamin C which was followed by a 25-gram intravenous vitamin C three days later. He had the laboratory run a G6PD test to see if a larger dose of vitamin C would be appropriate. When this test came back from the laboratory, it showed that she could handle a greater dose of vitamin C. He increased the dosage to 50 grams of vitamin C, along with 2 ccs of magnesium chloride in each intravenous dose. This was combined with taking an oral dosage of Poly MVA four times a day.

The intravenous vitamin C was increased to 75 grams for about four months in April 2005, the first anniversary of discovering the glioblastoma cancer, and then returned to 50 grams of vitamin C per dosage.

Remember, most people die of glioblastoma cancer in about six months. She is now in the third year of living with her glioblastoma cancer, and she is doing well.

She has taken various other nutrients since April 2004. For instance, she has taken EnteroPro (good bacteria) before breakfast. She takes biotin and Nystatin for candida. She also takes flax oil capsules to help balance the omega 6/3 ratio, L-glutamine powder to reduce chemotherapy related gastrointestinal upsets, along with manganese and zinc orotate to help with her mineral balance. ☐

1 c. Native Americans were the first to use tobacco as a treatment for asthma although this practice later became popular in Europe.


2 b. The blood vessels will correct for this small shortage of water and may not show signs of dehydration.

3 a. Salt is said to be as beneficial as an inhaler minus the toxic side effects. After drinking one or two glasses of water, salt on the end of the tongue can help relieve asthma.

4 d. Tissues that are most affected are the blood vessels in the kidneys, the lungs, the brain, the skin, and the joints.

5 c. Histamine production and its activity increases greatly during hydration.

6 b. The acidity of the body is regulated by normal air exchange in the lungs. When this rate of air exchange is low, the acid in the body cannot be eliminated properly.

7 a. People who become short of breath cannot sustain this high rate of airflow for very long and the exchange of air will significantly decrease. 

SPECIAL DISCOUNTS

Audio Tapes: Regular Price—\$7.95; Health Hunter Price—\$7.16
Video Tapes: Regular Price—\$14.95; Health Hunter Price—\$13.45

ABC OF ASTHMA, ALLERGIES & LUPUS

by *Fereydoon Batmanghelidj, M.D.*
Did you know that unintentional dehydration could lead to many degenerative diseases? This book explains the direct relationship between water deficiency in the body and allergies, asthma, and lupus. Soft cover. Retail Price: \$17.00
Health Hunter Price: \$15.30

DECLINING FOOD QUALITY AND EFFORTS TO IMPROVE IT

with *Donald R. Davis, Ph.D.*
Recent research shows declines in some nutrients during the last half century to vegetables, fruit, and wheat. There is growing evidence that organic farming methods may improve the nutrient content. Dr. Davis highlights the facts on food quality as presented at a national symposium.

TREATING VARIOUS MENTAL AND BEHAVIORAL DISORDERS

NATURALLY: the Histamine Test
with *James Jackson, M.T.(ASCP), Ph.D.*
Histamine is not just associated with allergies. Dr Pfeiffer found that histamine imbalances compromised almost two-thirds of schizophrenics. He coined the term histapenia for low histamine conditions; histadelia for elevated histamine. Dr. Jackson discusses The Center's 30-year history with histamine testing.

SOLVED: THE RIDDLE OF FIBROMYALGIA

with *Ron Hunninghake, M.D.*
For so many women, fibromyalgia is a devastating mystery illness. Symptom relief is usually not enough. Learn about correctable underlying causes of this devastating chronic illness.

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Upcoming Events. . .

Lunch & Lectures:

July:

- 13 The Role of the Compounding Pharmacist in Health Promotion
- 20 Tomatoes: Wolf Peach or Love Apple
- 27 Monitoring the Effects of IV Vitamin C in Cancer Patients

August:

- 3 Enhance Your Vitality with Hydrotherapy
- 10 Keeping Meals Healthy with the Taste of Health Restaurant
- 17 Taking Care of Yourself: Getting the Stress Out
- 24 Zoonotic Diseases: Animal Diseases and YOU

Carotenoids may lower diabetes risk

For non-smokers, the risk of developing diabetes is lower for those with higher levels of carotenoids in their blood, according to a report in the *American Journal of Epidemiology*.

Carotenoids are plant-derived antioxidants found in vegetables such as carrots, tomatoes, and spinach. These carotenoids may reduce the risk of diabetes for non-smokers by reducing oxidative stress, the authors said, and high levels may help to reduce the oxidative stress caused by smoking.

The researchers analyzed the data from 4493 subjects between the ages of 18 and 30 in the Coronary Artery Risk Development in Young Adults study. The study focused on 148 cases of diabetes that arose during the follow-up period from 1985 to 2001.

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- Trans fatty acids and hydrogenated fat
- Trans fat in popular foods
- Lowering junk food availability for kids
- Carotenoids may lower diabetes risk

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