

# Health Hunters

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NEWSLETTER

MARCH 2010

## Mushrooms for nutrition and cancer prevention

by Donald R. Davis, Ph.D.

**M**ushrooms are unusually rich in both nutrients and unusual phytochemicals that likely have many health benefits. They have been prized as food and medicine for thousands of years, especially in Asia. Besides their taste appeal, they have a long history of use in folk medicine to improve health and treat disease. Here we will discuss the nutrients in mushrooms and highlight diverse studies suggesting that regular mushroom consumption can stimulate the immune system and help prevent major types of cancer.

Mushrooms are members of the large class of fungi, which also includes truffles, yeasts, and molds. Unlike plants, they don't require sunlight. They live by decomposing organic matter, typically in soil or on old or decaying trees. In this process, they consume oxygen and produce carbon dioxide, like animals. There are an estimated 40,000 types of mushroom, about ten percent of which are considered edible. Some 200 varieties are cultivated worldwide, but only about 20 commercially.

Many Americans know only the white button mushroom. Per capita consumption in the U.S. has tripled in the last 40 years, but it remains low compared to Canada, Western Europe, and, of course, Asia. Consumption likely will increase as Americans learn more about the benefits and varieties of mushrooms. In recent years, two additional types have become widely available in the U.S., crimini or brown mushrooms and portabella mushrooms. Crimini mushrooms are closely related to white buttons and appear similar, except they have a brown color and slightly more flavor. Portabellas

are crimini mushrooms that have grown to a more mature shape and larger size, about 3 or 4 inches in diameter.

Additional varieties of fresh and dried mushrooms are available in Asian food stores. These include oyster, enoki or enokitake, shiitake, maitake, king oyster, and beech or bunashimeji. Shiitake mushrooms are popular worldwide, usually prepared from the dried form, which has enhanced flavor. Their Chinese name translates as "fragrant mushroom." In Asia mushrooms are considered both food and medicine, with a wide range of benefits. Some mushrooms are hard and inedible, such as Reishi. They are consumed as teas, extracts, or powders and used for medicinal or tonic purposes.

Nutritionally, mushrooms are extraordinarily rich, relative to the few calories in a typical portion. Two ounces of raw white button mushrooms have only 13 calories, but contain 13% to 30% of the RDAs for four vitamins and 6% to 38% of the RDAs for six trace minerals and minerals. In all, 34 of 40 measured nutrients are adequate in relation to calories. Less complete data for the mushrooms commonly limited to Asian groceries show that they are mostly similar to white buttons, but they tend to have somewhat higher amounts of selenium, copper, and riboflavin (and also more calories).

Fifty years of research have found over 200 mushrooms that contain substances that markedly inhibit cancer cells in test-tube experiments. Wikipedia, the free, online encyclopedia, highlights this research for 17 varieties, including white button. It cites over 230 references,

*continued on page 2*

## "Junk food" and hyperactivity

In one of the first studies of "normal" children (as opposed to children diagnosed with behavior problems or food sensitivities), British researchers found that diet at age 4.5 years predicted hyperactivity at age 7. They enrolled healthy infants at birth in 1991-1992, and collected parents' reports of food consumption at ages 3 and 4.5. Using a behavioral assessment at age 4, they excluded children with current behavior problems, and later assessed behavior in the remaining 4000 children at age 7. Diets at age 4.5 that were relatively low in vegetables and high in "junk foods" such as ice cream, popsicles, potato chips, and soft drinks were associated with hyperactivity at age 7. There was also a weak association with conduct problems. These suggestive results add to evidence that childhood diet matters.

—*Eur J Clin Nutr* 2009; 63:491 

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# Nutritional Medicine

by Ron Hunninghake, M.D.

## Lifestyle medicine

The creation of better habits of health lies at the very heart of true health care reform. When individuals responsibly re-form their daily choices to intelligently reflect a growing body of solid evidence that whole foods nutrition does matter, supplements can help, exercise will heal, sleep can regenerate, poor stress management does hasten sickness, and toxins silently weaken health...then, and only then, the age of lifestyle medicine will have arrived.


The term "lifestyle medicine" joins two forces that were previously not on speaking terms. "Lifestyle" has meant "what we personally chose to do to take better care for ourselves." "Medicine" has meant "what a medical professional decided to do to take care of a patient." Person and patient were somehow separated in this prior conception of lifestyle and medicine. One was an active chooser of self-care, and the other was a passive recipient of "authoritative treatment."

In today's world of internet, smart phones, and ubiquitous "health information," the power of knowledge has shifted. The doctor no longer commands ultimate authority in matters of health (unless the situation is acute and potentially lethal). Nowadays, patients arrive at doctor appointments with reams of articles, recent studies, and internet downloads from the millions of health-related websites out there. Patients WANT to be involved as co-learners, as true health care partners.

Will health care professionals

allow patients to become partners? Will doctors acknowledge that modern chronic degenerative disease demands more intensive patient involvement in their treatment plan than ever before? Will the pivotal role of therapeutic lifestyle change and the crucial coordination of community resources, education, and care be appropriately provided by today's front line physician?

Certainly there is hope. There is a national movement afoot that seeks to transform the way medical care is delivered by primary care doctors [See [www.transformed.com](http://www.transformed.com)]. The emerging concept of the "medical home" is built on a team concept, where the patient is the key part of a team of professionals dedicated to optimal coordination of that patient's services, pertinent medical information, and disease prevention/management. Inherent in the ideal conception of this model is patient responsibility, a pro-active attitude, and lifestyle transformation. With obesity and diabetes now at epidemic proportions, the role of personal choice can no longer be overlooked.

Lifestyle medicine, the medical home, personal responsibility, and lifetime habits of health...these are all ways for saying the same thing: the world is waking up to the importance of informed personal choice as the foundation of better health and wellness. And until the politicians wake up to this irrefutable fact, true health care reform will continue to be an elusive goal. 

### Mushrooms—Cont'd from page 1

of which show that mushrooms help stimulate immune system cells in various ways that are potentially protective against bacteria, viruses, and fungi.

Studies in mice have gone a big step further. They show that anti-cancer substances in extracts of various mushrooms are absorbed through the digestive tract and help prevent the growth of cancer cells that researchers inject into the mice. Most such studies have used mushrooms that aren't commonly eaten by Americans. However, two recent studies used

an extract of white button mushrooms.

One study in mice found that oral white button extract reduced the size of tumors from injected breast cancer cells. It limited proliferation of the cells, but didn't kill them. In the second study the same extract inhibited tumors from two different types of prostate cancer cells. For both cell types, the oral extract reduced proliferation and also killed the cells. The researchers estimate that their doses in mice may be the human


*continued on page 3*

roughly 3.5 ounces of white buttons per day. They also suggest that long-term consumption of smaller amounts may be enough to prevent the beginning of breast and prostate cancers.

These ideas are consistent with two recent epidemiological studies in Asia that found reduced risk of breast cancer in women who frequently ate mushrooms. In one study, 1009 Shanghai-area women with breast cancer were compared with the same number of similar women without breast cancer. The cancer-free women reported historical consumptions of about 25% more mushrooms than the cancer patients, mostly as fresh white button and dried shiitake. Compared to non-eaters of mushrooms, the risk for breast cancer was only about one-third for those who reported average consumptions of at least 10 grams (one-third ounce) per day of fresh mushrooms. The risk was only about one-half for at least 4 grams per day of dried mushrooms. These minimums represent one mushroom per day of about 1 inch in diameter. The benefits were observed equally for pre- and post-menopausal women.

In the other study, 362 Korean breast cancer patients were compared with the same number of similar women. Again, the cancer-free women reported greater consumption of mushrooms, in this case mostly shiitake, oyster, and enoki. The reported average daily amounts were 11.4 vs. 8.4 grams per day. Compared to non-eaters of mushrooms, the risk of breast cancer was only about one-sixth in post-menopausal women who reported consuming mushrooms at least three times per week or in amounts of at least 15 grams per day. The apparent benefit was smaller and less reliable for pre-menopausal women.

Although these studies adjusted for many other differences between the women (body fatness, hormone replacement therapy, etc.), the results are only suggestive. More rigorous and difficult studies are needed in which healthy women eating different amounts of mushrooms are followed for several years.

Meanwhile, we can enjoy mushrooms for their flavor, texture, and nutrients, with the reasonable hope that modest amounts will also improve our resistance to infections and reduce our risk for perhaps several types of cancer. 

## HEALTH HUNTERS AT HOME

### Improving national health through improved dental care at home

by Norvalee Kolar



It has become increasingly clear that one of the main highways to prolonged life and health is simply good oral hygiene. We really could change long-range outcomes in a generation. Consider the reduced need and cost of medical care.

Think about it; how incredibly cheap to solve a national crisis within one generation. It would rely on parents teaching and overseeing the oral health of each child. They would have to be vigilant. And the cost is minimal to bring about this shift in conscience. No, it isn't going to happen, but it could.

Continuing research has found that plaque buildup in arteries, when removed and studied, shows the presence of the same microbes present in the plaque of gingivitis and periodontal disease. When the microbes enter the bloodstream they contribute to inflammation, such as fibrinogen (blood clotting), C-reactive protein, and several cytokines (hormone proteins). They cause atherosclerosis, a multistage process characterized by plaque deposits on the lining of large and medium-sized arteries, that occurs as the result of high blood pressure, smoking, toxic substances, and other agents.

The *Harvard Heart Letter* (Feb. 2007) reported that several trials showed that intensive treatment for periodontal disease reduced blood levels of inflammation-related proteins, such as C-reactive protein and interleukin-6, improved artery function, and even led to better cholesterol and blood pressure readings.

In the *Journal of the National Cancer Institute* (2007; 99:171-175), it was reported that gum disease may increase the risk of pancreatic cancer, which is the fourth leading cause of cancer deaths in the United States. Study researchers speculated that explanations may include "systemic inflammation caused by gum disease, which is believed to contribute to increased levels of carcinogenic compounds generated by bacteria in the mouth."


It isn't clear yet how gum disease leads to pancreatic cancer. The research-

ers themselves have stressed the need for further studies. It was suggested that longstanding gum infections trigger a body wide immune response: inflammation. Inflamed tissues give off chemical signals that promote tumor growth.

The pancreas produces enzymes that contribute to the digestion of food, and it also secretes hormones which maintain and regulate body sugar levels, among other things. High blood glucose levels help germs grow. These germs build a sticky film on your teeth, which if not removed regularly can lead to red, sore, and swollen gums. This can harden and grow under your gum line. Losing a tooth during the past four years from gum disease was associated with a 2.7-fold increase in cancer of the pancreas.

*Grand Rounds in Oral-Systemic Medicine* (Feb. 2006; vol.1, No. 1, pg 18) notes that coronary disease was more prevalent among edentulous than dentate subjects (19.8% vs. 12.1%, respectively). Further, coronary disease was more common among patients with positive antibody levels (seropositive) for *P. gingivalis* (a microbe) as compared with those who were antibody-negative. Seropositive individuals had a risk ratio of 1.6 for an ischemic stroke event. In addition, subjects with a history of stroke or coronary heart disease were more often seropositive for *P. gingivalis* and had a risk ratio of 2.6 for a secondary stroke event. It has been suggested that periodontal inflammation may contribute to a prothrombotic state via recurrent bacteremias, platelet activation, and elevated clotting factors, thereby increasing the risk of embolism formation and ischemic stroke.

So many chronic disease conditions are turning out to be the result of poor oral health that we could, within one generation of dedicated effort, completely turn around the current trend of increasing disabilities with aging.

One more thing, for those who truly love their pets, get their teeth cleaned as well, and regularly, because their health is affected too. 

## INFORMATION WORTH KNOWING

by Marilyn Landreth, M.A.

Are you pregnant, trying to get pregnant, or know someone who is? Then Frances Largeman-Roth, R.D., has written *Feed the Belly* just for you. She explains in a fun-to-read way the importance of nutrition before getting pregnant and what is needed before and during pregnancy to have a healthy baby. As well as great information, she has provided interesting stories, recipes, and fact filled tips for navigating the challenges and surprises of pregnancy. Included in her book are chapters on what to eat to get pregnant, how to pick foods to make your baby smarter, information on healthy seafood, choosing the best fast-food, how to stay fit, and much more. The questions this month are taken from her book.

**1** During the first month of pregnancy, the baby is developing part of her/his brain along with other organs. For the proper development of the neural tube (part of the brain), it is important to have enough \_\_\_\_\_.

- lipoic acid
- folic acid
- ascorbic acid
- linolinic acid

**2** Having enough iron is essential before getting pregnant since the baby uses the mother's iron during gestation. Vitamin \_\_\_\_\_ helps the mother's body absorb iron.

- B6
- E
- D
- C

**3** During pregnancy, it is important for the mother to visit her local Starbucks store for a coffee fix as many times as she wants since it helps her to relax and have more energy.

- True
- False

**4** When trying to get pregnant both male and female fertility is necessary. A recent study showed that getting only \_\_\_\_\_% of a woman's calories from trans fat, as opposed to healthier fat, can increase infertility up

to \_\_\_\_\_%.

- 2, 20
- 5, 50
- 5, 95
- 2, 95

**5** Fifty percent of infertility is linked to the male. Diet plays an important part in quality of sperm. Sperm need vitamin \_\_\_\_\_ for development and vitamin \_\_\_\_\_ for movement.

- C, E
- C, D
- D, E
- B3, D

**6** It is easy to get the right nutrients to develop a healthy baby because the Standard American Diet (SAD) is rich in nutrients.

- True
- False

**7** Most women experience a heightened sense of \_\_\_\_\_ during pregnancy. This is the most common cause of nausea and vomiting during pregnancy.

- touch
- taste
- smell
- hearing

• FOR ANSWERS, SEE PAGE 7 •

Beware of two pitfalls:

- There is no one best way or most important supplement, no matter what anyone may tell you or what you believe you have experienced.
- If you want to repair an old chain, you would not make any link enormously strong and stop there! You would, no doubt, continue to look for the weakest link to strengthen. So continue in this vein, keeping in mind Le Compte's Law: The rate of Aging is proportional to the number of deficiencies ("weak links") and their severity.

From *Longevity, 2: Past, Present, Future* by Johan Bjorksten, Ph.D.

Please, visit the Mabee Library often, located in lower dome 2.


## Test of the Month

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

### Liver function tests - #1 Alanine aminotransferase (ALT/SGPT)

The liver is the largest organ in the body and performs more than 500 separate activities that are necessary for life. It has a tremendous reserve capacity and a remarkable ability to repair itself. The liver can function within normal limits until 80% of the liver cells have been destroyed. Since all substances eaten, digested, and absorbed go directly to the liver from the intestine, it is exposed to many potential toxic organic and inorganic substances. These include bacteria, viruses, some parasites, drugs, alcohol, etc. It also is important in removing old red blood cells, hemoglobin components, and makes about two-thirds of the circulating cholesterol in the blood. Damage to the liver may be due to liver cell injury or liver obstruction.

The laboratory tests for the liver are usually a hepatic (liver) function panel that contains seven tests: alanine aminotransferase (ALT/SGPT), albumin, alkaline phosphatase, aspartate aminotransferase (AST/SGOT), bilirubin direct, bilirubin total, total serum protein, and gamma glutamyltransferase (GTT). Any test ending in "ase" usually indicates an enzyme.

The first test we will discuss is alanine aminotransferase (ALT). ALT increase is more sensitive to liver cell damage than obstruction. ALT is useful for hepatic cirrhosis, increased in Reye syndrome and any type of hepatitis. Remember, hepatitis means inflammation of the liver, not necessarily a viral infection (hepatitis A, B, C). Elevated ALT may be found in drug-induced hepatitis, infectious mononucleosis, some types of heparin treatment, in children with acute lymphoblastic leukemia (ALL), in patients ingesting large amounts of alcohol and acetaminophen. ALT may also be increased in obese patients. 

## The Center's ecosystem

by Gary Branum, Ph.D.

The Center has three ponds that have water in them year-round and two others that are at the whim of available rainfall. Although at first glance it may appear that the three interconnected ponds near the Pyramid are neglected, nothing could be further from the truth. Those three ponds (the bridge pond, the middle pond, and the big pond) have actually been designed and constructed to provide a healthy, natural habitat for the Center wildlife.

Let me explain... Several years ago, the ponds were in bad shape. The bridge pond had no inflow of water except rainfall, so during the summer it was almost dry. In addition, the fish in that pond provided significant amounts of waste so that the pond frequently resembled a septic tank. The middle pond was dry except when it rained. It also had no outflow, so rainwater just collected and evaporated. The big pond collects rainfall and runoff from the parking lots and the area around the domes. Even today, the only source of water in those ponds is rainfall, something we haven't had significant amounts of for about 4 months. That's why the water level is low right now.

A pump was installed in the big pond about three years ago. This pump moves water from the big pond to the waterfall at the east end of the bridge pond. That water then keeps the bridge pond full, and the overflow flows into the middle pond. The middle pond is actually functioning as a bog. The excess nutrients from the fish waste are removed from the water by the large number of plants in the middle pond, thus providing a natural purification system. The clean water then flows back into the big pond.

In the past three years, this system has resulted in a cleaner, healthier environment in all three ponds, and by keeping the top two ponds full has improved the appearance of The Center. As with any natural ecosystem, there will be some plants and animals we find unattractive. However, those plants are necessary in order to maintain the health of the overall system. Our next project is to provide a reliable year-round source of fresh water so that we can keep all three ponds full. [H]

## Mental Medicine

by Marilyn Landreth, M.A.

### What's that smell?

Have you ever been going along and suddenly an odor or fragrance catches your attention and reminds you of something you had not thought of in years? Well, that happened to me the other day. It was a cold and snowy day and I'm not sure what the smell was, but suddenly I was back in the one-room country school I attended as a child.

The aroma was made up of several things: orange peelings, the oily sawdust product used to sweep the floors, unwashed humanity, and chalk dust. Just for a moment I was back in a time that seemed much simpler than today. No instant news because we didn't have a television for many years. Families still ate three meals together around the table, and if we misbehaved at school we were also punished at home. We were really very conservative with water because we had to pump the water and carry it

into the house. The wood for the big pot belly stove had to be cut and hauled into the house. When times were good we had coal to burn but it also had to be handled just to provide needed warmth. It caused me to stop for a moment to appreciate all the modern conveniences we have today.

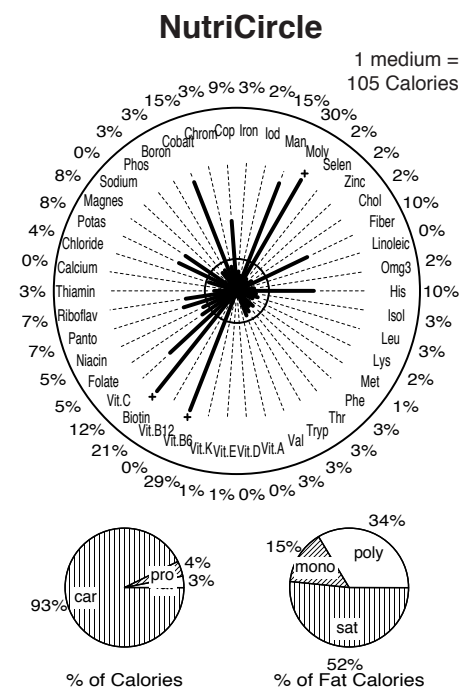
Oliver Wendell Holmes said, "Memories, imagination, old sentiments, and associations are more readily reached through the sense of smell than any other channels." Other smells that tend to have happy memories for me are: a baby after he/she has been bathed; any kind of baking, such as apple pie, cinnamon rolls, and turkey. Although I don't like to drink coffee, I like the smell of it brewing, and clothes that have been dried outside on a clothesline, to name a few. Have you noticed which smells have a pleasant association for you? [H]



## Food of the Month

by Donald R. Davis, Ph.D.

**BANANAS** are curiously famous for potassium (shown at 10 o'clock). A medium banana does contain 420 mg, 8% of the estimated RDA. But it also contains similar or greater amounts of vitamin B<sub>6</sub> (29% of the RDA), biotin (21%), vitamin C (12%), folate (5%), magnesium (8%), and fiber (10%). Somehow these nutrients missed their share of fame, as well as several others that merit honorable mention. For us in the know, bananas can be famous for simply good nutrition, with low levels of pesticides. And for versatility—as a convenient snack or dessert for young or old, in fruit salads, and as a wholesome sweetener for cereals, smoothies, and unsweetened yogurt.



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]

# Physical Medicine

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

## Myofascial therapy/fascial relief

We know that bones are connected to each other and protected from excess movements in the body by ligaments. We also know that muscles connect to bones for the purpose of creating movement. As the muscle contracts, it shortens creating movement of body parts.

Muscles are covered by a blanket-like structure called fascia. Fascia covers all of the internal structures of the body, including the muscles and the organs. The fascia is very strong; it has a tensile strength of nearly 2,000 lbs per square inch.

Many important structures run through the fascia, including the lymph vessels, blood vessels, and nerves. Because these important structures lie between the fascia and the muscle, they can be easily compressed or restricted by tightened fascia. Using mechanical force, we can heat and change the fascia, which in turn will change the structure of the body, improving lymph, blood, and nerve flow.

Utilizing mechanical force and heat to change the form of the fascia is known as myofascial therapy. The term "active release therapy" implies that the patient is actively moving a body part during the therapy. The term "manual trigger point therapy" implies that the patient is static. There are basically (4) levels of myofascial therapy.

Level 4 includes fascial release, where static pressure is utilized while the patient is actively moving their body part. This is used to break up scar tissue and lengthen fascia, which will improve postural distortions. The motion also increases the firing of receptors known as mechanoreceptors. The mechanoreceptors inhibit pain pathways known as nociceptor activity. The patient's active movement allows the nerves to send input to higher centers of the brain. This input affects cerebellar activity, which improves muscle tone, allowing the body to change its structure. The cerebellum is largely responsible for balance, so

by sending signals to this part of the brain we also improve body-spatial recognition.

Level 3 myofascial therapy utilizes static pressure into a passively moving body part. We use this therapy if the patient is not able to perform the active motion that is needed. Level 3 therapy is also used if the patient's active movement makes it impossible for the doctor to maintain their treatment contact.

Level 2 myofascial therapy includes active pressure into a body part that is not moving. We use this when we cannot use level 4 or level 3 due to the size of the patient, or when the area that we are trying to perform active therapy on is difficult to move. Level 2 is more uncomfortable for the patient compared to the higher levels.

Finally, we have Level 1 myofascial therapy, which is known as trigger point therapy. Level 1 uses static pressure into a static body part. This is also known as ischemic compression or "Nimmo technique." Level 1 is generally used for acute conditions in order to decrease pain, swelling, and irritation from metabolic waste buildup in the muscles (decrease trigger points). It is also used to decrease pain in the muscles that are stretched, but in a contractive position (eccentric contraction).

The principles of myofascial release include utilizing motion if able, while moving the muscle from a shortened position to a lengthened position. The doctor or therapist looks for fascial restrictions by pushing into the tissues and looking for a lack of springiness.

Contraindications for myofascial therapy include malignancy, hemorrhage, vascular disorders, hemophilia, late stage diabetes, inflamed varicosities, thrombophlebitis, and localized infection in the area being treated.

I have found that myofascial relief can be a great tool for relieving muscular aches and pains. [H]

## Case of the month

A 70-year-old female came to The Center for an evaluation in September of 2009 with reports of sinus/facial pain, fevers, headache, rashes, fatigue, and loss of memory. She explained that she had consulted with many different doctors and sought varying treatments with little or no relief.

Her initial visit began with Dr. Ron Hunninghake. After reviewing a thorough health history with her, Dr. Hunninghake ordered a complete set of initial lab work including C-reactive protein to look for systemic inflammation in the body, a thyroid panel, candida antibodies, a 6-hour post DMSA test for heavy metals, and food sensitivity testing. He also ordered a variety of other lab work that would evaluate vitamin and mineral deficiencies.

The lab results revealed vitamin C and B vitamin deficiencies. The C-reactive protein was greatly elevated as was the co-learner's mercury level. She also had quite a few food sensitivities that were possibly contributing to her pain, fatigue, and rashes.

She was placed on Captomer to assist the body in removing mercury. She was also encouraged to eliminate foods from her diet that she reacted as sensitive to, and she was offered auricular and I.V. therapy to improve her health and decrease her pain level. She also began using the supplements that were recommended to her by the doctor.

Four months later our co-learner had her DMSA test repeated, and we found that she had eliminated a great deal of mercury from her body. She also reported feeling so much relief from the auricular and I.V. therapy that she scheduled more treatments to maintain how much better she felt. She comes regularly for I.V.s and continues the supplements that were recommended to her on a daily basis.

She recently stated to one of the nurses, "I just don't feel well unless I stick with the plan. These I.V.s have restored my faith." [H]

- ❖ 1 b. Without enough folic acid the baby could develop spina bifida. Getting enough folic acid before getting pregnant can guard against that problem.
- ❖ 2 d. Make sure that you include a vitamin C-rich food along with an iron-rich meal. Salsa along with black beans is an example.
- ❖ 3 b. Coffee and tea reduce the amount of iron that is absorbed, so a pregnant woman should plan her coffee/tea intake between meals.
- ❖ 4 d. Most products list the amount of trans fat they contain, but they can legally list a product with up to 0.5 gram trans fat as 0%.
- ❖ 5 a. Having a diet rich in nutrients rather than empty calories can help increase fertility.
- ❖ 6 b. SAD is high in calories but low in nutrients. Now is the time to concentrate on getting the right nutrients to keep mother and baby healthy.
- ❖ 7 c. Many pregnant women avoid those smells that contribute to morning sickness. Eating less at a time but more often helps as well. H

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### FEED THE BELLY

*By Frances Largeman-Roth, R.D.*

This book is written for people who are pregnant, plan to get pregnant, or live with someone who is pregnant or planning to be pregnant. It is an eating guide that helps the person indulge their cravings while giving both the baby and mom the essential nutrients they need. Softcover. (\$14.49 HH price \$13.05)

### VITAMIN B-5: the Missing Key to Weight Loss and Adrenal Health

*with Ron Hunninghake, M.D.*

Co-enzyme A is the most abundant metabolic enzyme in the body and is the key enzyme for burning fat. There are three ingredients to co-enzyme A: ATP, cysteine, and vitamin B-5. Without adequate B-5, optimal fat burning and adrenal health cannot be achieved. Learn how B-5 can help you lose weight and improve your energy.

### LEARNING TO LOVE WHAT IS

*with Mary Braud, M.D.*

Byron Katie calls her process of examining thoughts “The Work.” Dr. Braud presents an introduction to Byron Katie and to this process that can be used to shift any undesirable feeling and restore a sense of peace and acceptance in any situation.

### VITAMIN C AND CANCER

*with Joe Casciari, Ph.D.*

One of the keys to tumor growth is a process of making new blood vessels called “angiogenesis.” Some of our most recent research at the Bio-Communications Research Institute suggests that high doses of ascorbic acid (vitamin C) may affect the “angiogenesis” process. Learn more about these data as well as The Center’s 30 years of experience with vitamin C, cancer, and angiogenesis research.

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## Upcoming Events. . .

### Lunch & Lectures:

#### March:

- 4 Gluten Sensitivity and Celiac Disease
- 11 The High Cost of Hidden Stress - Healing Chronic Illness Through the Recovery of Self
- 18 Optimism: Is It the Key to Happiness and Success?

For reservations, call 316-682-3100 or register on our website at [www.brightspot.org](http://www.brightspot.org).

## Special Upcoming Events. . .

**April 1** - Health Hunter/Beat The Odds "Ask The Doctors" Evening event

**April 2 & 3** - Health Hunter/Beat The Odds Days  
Discount Laboratory Testing & Double Discounts on Gift of Health Items

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### Preventing diabetes

A major diabetes-prevention trial studied high-risk subjects with fasting glucose 95-125 mg/dL, impaired glucose tolerance, and body mass index of at least 24. They were randomly assigned to 3 groups—diet-plus-exercise, the drug metformin, or placebo. The placebo treatment was ended early, after 3 years, because the incidence of diabetes was reduced by 58% in the diet-plus-exercise group and by 31% in the metformin group. The study continued, with all 3 groups offered support to diet and exercise at least 2.5 hours per week. During 7 more years, their rates of progression to diabetes were about equal, but the benefits of early intervention persisted. The 10-year incidence of diabetes in the original diet-plus-exercise group is down by 34% and in the metformin group by 18%, compared to the former placebo group, which now has had 7 years of diet and exercise. So 7 years of diet and exercise did not make up for waiting 3 years to start.

—*Lancet* 2009; 374:1677