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Aging and the loss of energy

by James A. Jackson, Ph.D.

To find the reasons that we age and lose our energy we need to answer several questions. The first question is, what is aging? As we age, there is a functional degeneration and loss of the body's reserve in tissues, cells, and energy. Some of the changes of aging are inevitable and some are reversible.

...the body cannot make many of the nutrients we need to maintain good health and energy.

Three major factors associated with aging include:

1. genetic programming—which accounts for only about 30 percent of our tendency to age,
2. accumulated wear and tear on the immune and endocrine system in response to dietary, emotional, and/or environmental factors (mainly from "free radicals" or oxidants),
3. weakened immune system and the breakdown of the body's inherent ability to repair itself.

As cells and function are lost, various biomarkers of aging start to appear. These are:

1. loss of strength and flexibility,
2. decreased cardiovascular endurance and increased body fat, lower kidney clearance, reduced cell-mediated immunity, altered hormone levels, increased autoantibodies, and loss of energy,
3. damage to cell membranes that impair the ability of cells to transport nutrients in and waste products out of cells.

How are free radicals, or oxidants, associated with aging? In 1954, Dr. Denham Harman theorized that the aging process and the degenerative diseases that accompanied aging were caused, in part, by free radical damage. Free radicals are produced from the body's normal use of oxygen, or from reactive oxygen compounds such as hydrogen peroxide. They can be produced from the action of UV light on the skin, medications, radiation, chemicals, pesticides, etc. Free radicals (oxidants) lack an electron and try to obtain an electron (or oxidize) from any molecule in the body, especially cell membranes, DNA, and proteins. This oxidation is what causes metal to rust and apples and potatoes to turn brown when exposed to air. In other words, if not protected properly, your body will start to "rust away."

The amount of oxidation that the body's tissues are exposed to is tremendous. Dr. Bruce Ames, an expert in nutrition and free radical chemistry, estimates that each of the approximately 80 trillion cells in your body suffers about 10,000 "hits" from free radicals a day. Over a period of time this free radical damage may cause genetic mutations and increase the risk for cancer and degenerative diseases (heart disease, arthritis, cataracts, etc). Free radicals tend to increase as we age. An "elderly person" has nine times the frequency of mutations as do infants. If a person lives to be 70 years old, the body may produce over 17 tons of free radicals. These, of course, have to be neutralized or destroyed, or your body will start to "rust" away. The good

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Red wine may keep arteries open

A glass of red wine may help keep your arteries open and cut down on the symptoms of heart disease, according to Roger Corder and colleagues at Queen Mary, University of London.

These researchers set out to test whether drinking red wine would affect the endothelin-1 (ET-1) production. ET-1 is a chemical produced by cells in the artery walls. When ET-1 increases, the arteries tend to constrict adding to the cause of heart disease.

The researchers found the effect of red wine by adding various amounts of alcohol free red wine extracts to cow's blood vessel cells. The more extract they added, the less ET-1 the cells released.

Red grape juice, which has less of the polyphenols the researchers believe cause the reduction of ET-1, has less effect on ET-1. White and rose´ wines have relatively few polyphenols and have little effect on ET-1 production. HH

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Nutritional Medicine

by Ron Hunninghake, M.D.

The anatomy of energy

Health is having the reserve to do what you need to do and want to do with ***energy*** *and enthusiasm.*

The Center's definition of health makes it clear that energy and health are co-essential to one another. Can you imagine feeling vibrantly healthy without energy? Have you ever known anyone with that *jour de'vive* (energetic joy of life) who wasn't healthy? Energy is literally the spark that ignites events and transforms them into precious moments. Effort requires energy. We must exert effort to be fully present to our moments in life. Otherwise we are bored, sick, tired, depressed, dulled, and asleep to the fantastic opportunity that each moment affords us. Energy is the life current that awakens and inspires our reality.

But what is energy, in human terms? The highest energy to which we can aspire is spiritual energy, which fuels our quest to know and be the highest truth. This spiritual current of absolute love is directed through our concepts, thoughts, perceptual acuity, and imagination, which are the energetic faculties of our minds. The meaningful direction of our attention could not happen outside the context of our relationships. Friendship, family, marriage, church, and community thrive on our relational energy, which fuels our will to connect and live together. This is also described as the energy of love. Love gets its vitality from feelings: emotional energy in motion.

Spiritual, mental, relational, and emotional energy...but what feeds these four higher human forms of energy? The most fundamental form of human energy is physical/biochemical. "What you eat is what you get!" Physical energy is nothing other than biochemistry. Dr. Roger Williams calls biochemistry "growth and maintenance chemicals." Thus, all human forms of energy described above can be reduced to the fantastic interplay of cellular chemistry. This should redefine for you the utmost importance of your dietary choices and the periodic necessity for testing key nutrient levels to assure optimal supplementation. Your biochemical completeness thus becomes the basis of ideal emotional health, out of which spring fulfilling relationships, which give meaning to the core mental concepts that direct your life to its ultimate fulfillment in the spiritual realm... "with energy and enthusiasm." HH

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news is that after the age of 40 years, 75 percent of our health and life expectancy is modifiable by the selections we make concerning diet, lifestyle, and environmental factors.

As we age, we also tend to lose energy. Energy is defined as the ability to do work. In the body, energy is associated with calories (calor is the Latin word for heat). Lack of energy leads to fatigue, which is the Latin word meaning "to tire." Some of the causes for the lack of energy are:

1. circulatory disturbances, such as heart disease, or anemia. Both of these interfere with the supply of oxygen and energy materials to tissues,
2. respiratory problems that interfere with the supply of oxygen to blood and tissues,
3. infections that produce toxic products in the body or alter metabolism,
4. hormone imbalance from diabetes, hypothyroidism, menopause, adrenal problems, etc.,
5. psychological or emotional problems such as depression, anxiety, neurosis, frustration, boredom, etc.,
6. nutritional problems that lead to a lack of carbohydrates, minerals, vitamins, protein, and essential cofactors.

It is important to remember that the body cannot make many of the nutrients we need to maintain good health and energy. There are 55 essential fac-

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tors that must come from the diet or as supplements; 45 of these are nutrients.

Deficiencies of two nutrient cofactors that may cause loss of energy are L-carnitine and coenzyme Q_{10} (CoQ_{10}). The body can make a little of each, but the amount needed for good health and energy production are obtained through the diet or as supplements.

L-carintine can be made in the body from a combination of two amino acids, L-lysine and L-methionine. There are four other micronutrients necessary for the body to produce L-carnitine. These are iron, vitamins C, B_6, and B_3. Therefore, if one is deficient in one of these micro-nutrients, there will be a deficiency of L-carnitine. L-carnitine is located near the mitochondrial membrane. The mitochondria are the "powerhouse" of your cells. Each cell contains about 1000 to 1500 mitochondria, which are like the cylinders in your car engine. L-carnitine helps produce energy (ATP) by transporting long chain fatty acids (LCFA) in the mitochondria. L-carnitine acts like a spark plug to burn gasoline (acetyl-carnitine and acetylCoA) and produce energy in the form of ATP. With no ATP, there is no energy.

The average adult body contains about one ounce of L-carnitine and the average half-life in the blood is about 2 to 15 hours. Carnitine comes from the Latin word "Carnis," meaning flesh. It is not surprising that animal meats, especially beef (120 mgs carnitine/100 gms) and pork (85 mgs carnitine/100gms) are very high in carnitine. Dairy products are also high in L-carnitine. Plants, on the other hand, are very low in carnitine. Since a lot of energy is needed for muscles and heart, it is not surprising that the heart and skeletal muscles contain over 95 percent of the body's supply of L-carnitine. L-carnitine is very protective of the heart. It helps with congestive heart failure, increases the heart ejection and increases coronary blood flow by 60 percent. L-carnitine also improved symptoms in patients on long-term dialysis. Patients receiving 0.5 gms a day showed improved energy, less aches, cramps, and weakness. Another important function of L-carnitine is that it is a very potent

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HEALTH HUNTERS AT HOME

The vitamin A controversy

A recent research article by Diane Feskanich, ScD, and colleagues and the accompanying editorial in *The Journal of the American Medical Association* brings to mind a paraphrase from a line in a Shakespearean play: "To take or not to take vitamin A. That is the question."

First, we will take a look at the article, "Vitamin A Intake and Hip Fractures Among Postmenopausal Women." This article, as the title describes, looks at the relationship of taking vitamin A supplements and/or eating a variety of foods high in vitamin A and the increased number of hip fractures in older women.

At the end of this epidemiological study, the researchers concluded, "Long-term intake of a diet high in retinol [a form of vitamin A] may promote the development of osteoporotic hip fractures in women. The amount of retinol in fortified foods and vitamin supplements may need to be reassessed."

Data for this study was taken from the Nurses' Health Study that included 72,337 postmenopausal women aged 34 to 77 who were followed from 1980 to 1998. There were 603 hip fractures from this group during the time of the study.

Now don't rush to your vitamin shelf to throw away your vitamin A or beta carotene. Take a minute and read on.

In the women studied, the researchers found the relationship between vitamin A intake and hip fractures "only among those not currently using postmenopausal hormones." The results did not show up for women taking hormones.

Sure, vitamin A is one of the four fat-absorbable vitamins and you can take too much. That is why The Center staff use laboratory results to suggest taking vitamin A. If your laboratory results are low in vitamin A, you may need to take it. If your results are in the normal range, you don't need to take vitamin A.

Now for the editorial titled "Dietary Retinol—a Double-edged Sword," written by Margo Denke, M.D. After examining the journal article by Feskanich and colleagues, she opens with this statement, "This association raises important questions on the safety of long-term ingestion of dietary retinol [vitamin A]. But should these observations alter recommendations for retinol or provitamin A intake from foods, fortified foods or supplements?"

First Dr. Denke points out the women in this study were eating more vitamin A than the average woman. Women who were in the top 1/5 of the Feskanich study would have been in the top 10% of women who were in the NHANES III food study. Those in the bottom 1/5 would have compared with women at the 50th percentile of the NHANES III women. Women in the Feskanich study ate a diet higher in vitamin A than the women in the NHANES III study.

Secondly, there are other considerations that could not be considered in the study, according to Dr. Denke. For instance, women with higher vitamin A intake consumed less alcohol, and moderate alcohol consumption has been associated with 10% to 12% higher bone mineral density. In a study of 10,000 postmenopausal women, the researchers found that moderate drinking reduced hip fractures by 30%. "In addition, alcohol is known to exacerbate retinol deficiency and retinol toxicity," Dr. Denke added.

She closes by "question[ing] whether the women represented by this study—white U.S. women of high socioeconomic status—should avoid supplements containing retinol if their diet is rich in low saturated fat, low-trans margarine, low-fat dairy products, and fruits and vegetables. Other populations with diets less rich in vitamin A will require further study to avoid confronting the other, even more hazardous side of the sword—vitamin A deficiency."

Again, it boils down to laboratory testing. This is the best way to find out if you need more vitamin A or if you are in good shape with what you are eating. HH

—Richard Lewis

INFORMATION WORTH KNOWING

If you are a long time Health Hunter member, then you already know that you build your body chemistry on the kinds of foods you eat. But did you know that your health is determined as much by the foods you don't eat as well as the foods you do eat? While genetics may play a role in your health, that role may not be the only one. A healthy lifestyle including exercise, diet, making good choices, and stress management plays the starring role. Bernard Jensen, D.C., Ph.D. shares with you what he has learned from his over seventy years of studying food, healing, and nutrition in his book, *Dr. Jensen's Nutrition Handbook*. The questions are taken from his book.

1 There are three basics that lead to disease. The first basic is the weaknesses that we inherit from our parents. The second is the environmental toxins we accumulate in our body. The third is chemical deficiencies we develop in the body due to an inadequate diet or _____ problems.

a. digestive
b. absorption
c. assimilation
d. all of the above

2 If you want to develop a healthy body and abundant energy, focus on the foods that are natural, whole, fresh, and _____.

a. green
b. pure
c. cooked
d. none of the above

3 In nature, foods containing groups of vitamins, minerals, enzymes, and other nutrients work synergistically when all are eaten together in a whole food.

a. True b. False

4 A Harvard University study of nurses found that nurses with the lowest intake of _____ and highest intake of sugar showed a greater increase in diabetes than those nurses who had a lower intake of sugar and higher _____ intake.

a. water
b. B12
c. fiber
d. none of the above

5 Close to 80% of the nutrients carried in the blood are alkaline and about 20% are acid. To help keep the blood at the right acid/alkaline balance, Dr. Jensen says that we should eat six vegetables and two _____ to make up the 80% alkaline foods we need.

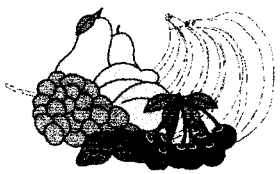
a. pork chops
b. starches
c. fruits
d. none of the above

6 Proteins and many starches are acid-forming, and nearly all the metabolic wastes of the body are acidic. We need alkaline-forming foods such as fruits and vegetables.

a. True b. False

7 Eating a variety of foods everyday is important to ensure a variety of nutrients. Some people think that it is important to count calories. They do not realize that 160 grams of spinach may have _____ calories but has more nutritional value than many other foods.

a. 11
b. 37
c. 129
d. 142



• FOR ANSWERS, SEE PAGE 7 •

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antioxidant and destroys free radicals. Best of all, there are few side effects from long-term use of L-carnitine.

Another nutrient necessary to help maintain energy is Coenzyme Q_{10} (CoQ_{10}). CoQ_{10} is chemically a fat-soluble quinone and is classified as a co-enzyme. Co-enzymes are necessary for enzymes to work. CoQ_{10} was discovered in 1940 and is structurally related to vitamin K. CoQ_{10}, like L-carnitine, is located in the mitochondria and is important in producing ATP. It is a very strong antioxidant and may inhibit certain enzymes involved in the formation of free radicals. There are various forms of CoQ, from CoQ_6 to CoQ_{10}, however, only CoQ_{10} is found in mammals. The average adult body contains only about 0.5 to 1.5 gms of CoQ_{10}. The average half-life in blood is very short, about 34 hours. The highest concentrations are found in the heart, liver, adrenal glands, spleen, kidney, and pancreas. The body can make about 6 mgs of CoQ_{10} in the liver a day and the diet can furnish about 4 mgs a day; however, researchers estimate that a "normal" person needs about 90 mgs a day and a "sick" person may need up to 300 mgs of CoQ_{10} a day.

CoQ_{10} decreases with age and a loss of energy may be associated with altered CoQ_{10} availability. We do know that when cellular CoQ_{10} is low, aging accelerates in all individuals and degenerative diseases start to appear. Low levels of CoQ_{10} have been associated with congestive heart failure, cardiomyopathy, hypertension, cancer, periodontal disease, male infertility, and miscarriage. It has also been shown that when 2 mgs/kg of CoQ_{10} was given to patients for one year, there were reduced hospital admissions for worsening heart failure and less pulmonary edema in a treated group when compared to a placebo group. Also, there have been no serious side effects reported with long-term use of CoQ_{10}. Several million patients in Japan have been taking CoQ_{10} for years with no side effects.

So what have we learned about these two nutrients dealing with aging and loss of energy? Both compounds are necessary in energy production and

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act as free radical, or oxidant, scavengers. Both tend to decrease with age. Research shows that when taken together a synergistic effect occurs between the two compounds. Both coQ_{10} and L-carnitine have a very low toxic profile and may be used to treat or prevent a number of diseases and increase energy. Of course, exercise and other lifestyle changes may also improve your energy.

Keeping memory alert as you grow older

When you were young, you could remember everything you needed to recall at the time. As you get older, you find yourself walking into a room and wondering why you came into it. Here are four ways you can keep your memory sharper, much like when you were younger.

- **Regular exercise.** Take a walk. Do some yoga. These and other types of exercise have been proven to help your memory. Activity promotes blood flow to the brain and promotes higher cognitive scores for older adults.
- **Sleep.** When you get older, you may be plagued with sleep disturbance. Failure to get enough sleep, and especially enough REM or dream sleep, slows your cognitive ability. There are many books on sleep or you can talk to your health professional for help.
- **Stress reduction.** Animal studies have shown that chronic stress alters the structure of the brain and interferes with normal physiological functions. This can hurt cognitive functioning. Meditation, meditative prayer, and/or physical activity are excellent stress reducing techniques.
- **Good nutrition.** Eat whole foods, including lots of fruits and vegetables. This is the best way to get good nutrition. You can also have your nutrients tested and supplement the ones that are low. Three in particular that need testing are beta carotene and vitamins C and E. These directly affect your cognitive functioning.

If you will do these four things, you will find that your cognitive ability will continue to work as you get older.

Herbal History

Butterfly milkweed, *Asclepias tuberosa*

The Omahas' and Poncas' names for the butterfly milkweed are "makan saka" meaning raw medicine and "kiu makan" meaning wound medicine, according to John Gilmore.

The perennial herb grows from one to three feet tall with woody root stalks. The stalks grow erect and have a watery sap. Its many leaves, smooth on top and velvety on the bottom, grow alternately from the sides of the stalk and reach as much as four inches long.

From May to August, flowers grow on the ends of branches at the top of the stalk. They are in attractive groups with five petals bent down with colors from yellow to red-orange, topped by a crown of five erect hoods surrounding the fruit divided into five parts.

The root is used for medicinal purposes by the Native Americans. The Omahas and Poncas ate the root of the butterfly milkweed for bronchial and pulmonary problems. The milkweed was also chewed and placed on wounds or dried, pulverized and then blown into wounds for healing.

In 1883, Dr. F. Andros reported in the *American Medical Association Journal* that the Dakotas used the butterfly milkweed as an emetic.

The Menominis, in the Great Lakes Bioregion, considered the butterfly milkweed, called the "deceiver," as one of their most important medicines.

It was also used in Anglo Folk medicine. The butterfly milkweed was called the pleurisy root because it was used to relieve inflammation in the lungs and the thorax, and probably relieved the "muscular rheumatism of the walls of the chest," wrote Erika Gaertner in a 1979 issue of *Economic Botany*.

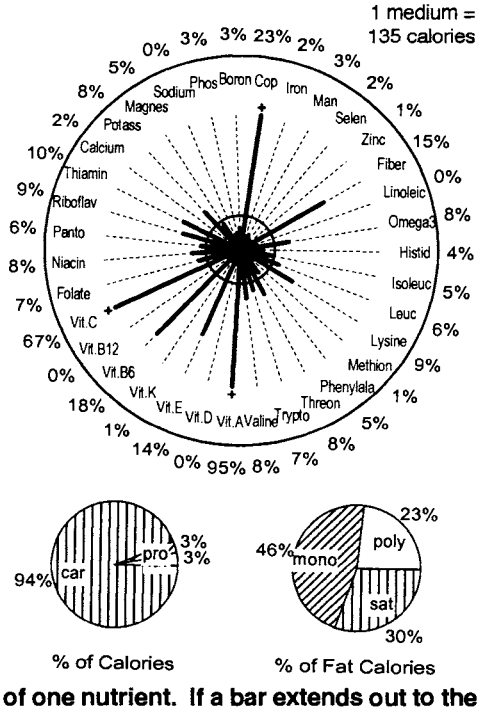
Because of its bright yellow to red-orange flowers, the butterfly milkweed is often used in wildflower gardens.

Food of the Month

by Donald R. Davis, Ph.D.

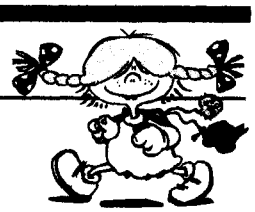
MANGO is called the King of Fruits in Southeast Asia, where many varieties have been cultivated for about 5,000 years. Mangoes are now an important source of nutrition in tropical regions worldwide. Green, yellow, and red varieties of these uniquely flavored fruits recently have become widely available in the U.S. One medium fruit contains 5% or more of the RDAs for 9 vitamins, 2 minerals, fiber, omega-3 fat, and 6 amino acids. Especially rich are copper, fiber, and vitamins A, E, B_6, and C. Despite their low total fat and negligible linoleic acid (omega-6), mangoes contain significant heart-friendly omega-3 fat.

NutriCircle



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).

Mental Medicine



by Marilyn Landreth, M.A.

Keep on shooting

Have you ever wondered what character strength causes people to keep trying even when the odds of succeeding seem insurmountable? I observed my youngest granddaughter, Jadyn, as she first learned to walk and then to talk. It took her some time to get the hang of balancing herself, taking a few steps, and finally taking off in a run. Paul Harvey said, "I hope someday to have so much of what the world calls success, that people will ask me, 'What's your secret?' and I will tell them 'I just get up again when I fall down.'" Jadyn has learned at least one of the secrets of success in learning to walk.

When Jadyn learned to talk she went about it in a completely different way. She did not babble and try out words. It seemed like she listened and then almost overnight she was talking in sentences with a large vocabulary. W. Steven Brown said "Communication does not begin with being understood, but with understanding others." I wonder how much we would learn if we listened and observed as a toddler does when she/he is learning to talk.

Practicing mental medicine that encourages us to keep trying is healthy. Many times the difference between success and failure is all in the way we perceive it. Have we failed to reach our goal or can we discard another way that does not work? Is it failure or merely a practice run? Rick Pitino said, "Failure is good. It's fertilizer. Everything I've learned about coaching, I've learned from making mistakes." Or as Christopher Morley said, "Big shots are only little shots who keep shooting." HH

CENTER UPDATE

Multivitamin, mineral helps bipolar patients

People with a bipolar condition took a multivitamin and mineral supplement for at least six months and had very positive results, according to a report in *The Journal of Clinical Psychiatry*.

Bonnie Kaplan, Ph.D., the lead author for the report, and colleagues wrote, "Our preliminary data and the general clinical experience of psychiatrists who are monitoring patients in our trials indicate that the supplement has a beneficial psychotropic effect and is not acting in only an adjunctive manner."

In short, the supplement, and especially the chelated minerals in it, worked with the bipolar patients . One of the instructions given the psychiatrists following the patients was to reduce the medications, if indicated, but continue the nutrient supplement at the level started in the trial. In fact, the psychiatrists lowered the medications in all but one of the 14 patients in the trial.

The results of this new study are not surprising to The Center. Dr. Riordan is a psychiatrist by training and learned through his standard practice that psychiatric patients, bipolar patients among them, responded better to nutrients than giving them drugs and "keeping them on the couch." He started The Center 26 years ago so that he could have a laboratory to test the nutrient levels of psychiatric patients and then give them the nutrients that showed up to be low on the tests.

They did well 26 years ago and continue to do well today with this individualized treatment.

In the research report, Dr. Kaplan further wrote that "Patients generally reported a subjective sense of improved well-being when taking the supplement, and several patients described this well-being as feeling more normal than what they had experienced with psychotropic medication." Again, they did better and felt better on the vitamins and minerals than they did on the drugs. HH

Case of the month

A 42-year-old woman came to The Center in early December, 2001, complaining of pains in the neck, shoulders, back, arms, wrists, hands, hips, knees, and her left foot. She had been diagnosed with inflammatory polyarthritis secondary to ankylosing spondylitis. In short, she hurt all over.

In addition, she also had fatigue and premenstrual syndrome. During her initial interview with Dr. Riordan, she said her energy is "pretty good in the morning—coffee helps." If she can take a nap in the afternoon, she feels better. Since she is a nurse, she can tailor her work hours so she works on Monday, Wednesday, and Friday with a day of rest in between.

After his evaluation, Dr. Riordan suggested, in addition to laboratory testing, that she have a magnesium injection, an intravenous vitamin C infusion, and throw blue rock.

Two days after receiving her initial magnesium injection, she called and said that she felt a little better, particularly her left knee felt better. She came a week later to receive another magnesium injection and, since she was a nurse, took the material for three injections home with her to do one a week. She also continued the 15 gram vitamin C infusions here one week and then took another one home to do there because she felt that these were also helping her.

She called Mavis Schultz, the nurse clinician at The Center, on January 14, 2002 to ask for the materials to do two more vitamin C infusions at home. She told Mavis that she can "start the infusion sitting in my front room and read a book while I get it."

She also told Mavis that she "feels a whole lot better—about 80% better" and that her arthritis doctor is working with her to reduce the amount of prednisone she is taking.

These are short-time results and she might see a slowing of the recovery time in the future, but having an 80% recovery this early is remarkable. She will continue with the magnesium injections and the vitamin C infusions until she is well and healthy again. HH

Answers from page 4

1. d. As well as getting the right kinds of food, how our body utilizes them also plays a role in how healthy we are.

2. b. Foods that are considered pure are without chemical additives, salt, or sugar. This includes foods that are packaged, processed, or manufactured.

3. a. Synergy means "mutually enhancing." Whole means that no nutritional valuable part of the food is removed.

4. c. The refining process also removes lignins, phytophenolic acids, and phytoestrogens, as well as fiber.

5. c. One protein and one starch make up the 20% acid foods when proper portions are used.

6. a. The fresher the food, the more alkaline it is. The longer it is kept, the more acid it becomes.

7. b. The same amount of pecan pie contains 670 calories. It is the quality of food that is important. We need a certain amount of calories to run our bodies properly, but the calories need to come from a wide variety of nutrient dense foods.

SPECIAL DISCOUNTS

Audio Tapes: Regular Price—$7.95; *Health Hunter* Price—$7.16
Video Tapes: Regular Price—$19.95; *Health Hunter* Price—$17.95

DR. JENSEN'S NUTRITION HANDBOOK
by Bernard Jensen, D.C., Ph.D.
In his book, Dr. Jensen offers a practical, step-by-step program to guide you into a healthy lifestyle so that you can know how to meet the nutritional requirements of your body. Advice and tips for supporting all body structures, restoring nutrient-depleted tissues, and repairing damaged tissues are given. Softcover.
Retail Price: $14.95
Health Hunter: $13.46

16 WAYS TO REDUCE STRESS
with Hugh D. Riordan, M.D.
Feeling a little stressed? Dr. Riordan discusses stress-reducing strategies that are simple and effective. His fun presentation focuses on several strategies to help you improve the quality of your life including how to breathe correctly to de-stress, what foods to eat, why growing something is important for optimal health, and many other strategies to help reduce stress in your life.

IS YOUR WEIGHT, BLOOD PRESSURE, AND CHOLESTEROL UP? COULD IT BE SYNDROME X?
with Ronald Hunninghake, M.D.
The standard American diet (SAD), rich in high glycemic carbohydrates, is overloading our cells' ability to process glucose. Insulin levels are skyrocketing. The cells are becoming less sensitive to insulin; glucose is being stored as abdominal fat. Cholesterol and triglycerides are rising and, with them, blood pressure. Learn how to reverse this damaging pre-diabetic trend with a low glycemic index diet and proper supplementation.

NATURAL WAYS TO RAISE HDL CHOLESTEROL
with Donald R. Davis, Ph.D.
HDL cholesterol is the "good" kind that helps keep cholesterol out of the wrong places. Many foods, herbs, and other natural measures help raise HDL/LDL ratio by lowering LDL "bad" cholesterol. These methods include eating more of the right kinds of fats.

• To Order, Fill Out the Form Below •

TITLE	AUDIO OR VIDEO TAPE (circle one)	PRICE	QUANTITY	TOTAL
Dr. Jensen's Nutrition Handbook (book)		_____	_____	_____
16 Ways to Reduce Stress	audio video	_____	_____	_____
Your Weight, Blood Pressure, and Cholesterol	audio video	_____	_____	_____
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Upcoming Events. . .

Mark your calendars!

Lunch & Lectures begin February 21.

The following topics will be offered:

Weight Management

The Anatomy of Food

Hypertension/Osteoporosis

Inflammation, Pain, and Aging

Aging and Eye Disease

Hyperbaric Oxygen Treatment

...and more!

Epstein-Barr virus and risk of multiple sclerosis

"Our results support a role of EBV (the Epstein-Barr virus) in the etiology of MS (multiple sclerosis)," report Alberto Ascherio, M.D., DrPH, of Harvard's Department of Nutrition and his colleagues in a recent issue of *The Journal of the American Medical Association.*

Many people who have EBV do not get MS. There are other co-factors that may cause the development of MS, the researchers said. These may include a genetic predisposition and, perhaps, age at primary infection or infection with other microbes. This remains to be seen, according to the researchers.

The researchers learned that it boils down to the fact that EBV is a primary cause of MS. They feel this understanding will lead to novel therapeutic approaches.

INSIDE THIS MONTH'S ISSUE . . .

- Aging and the loss of energy
- The vitamin A controversy
- Keeping memory alert as you grow older
- Epstein-Barr virus and risk of multiple sclerosis

Health Hunter

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