A service of The Center for the Improvement of Human Functioning International founded in 1975 CELEBRATING 20 YEARS

Health Hunters NEWSLETTER

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Hypoglycemia

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

What do these symptoms have in common: weakness, sweet cravings, trembling, irritability, headaches, fatigue, heart palpitations, blurred vision, excess sweating, anxiety, light-headedness, personality changes, depression, fits of anger, hunger, and a foggy mind? The answer is that all of these symptoms can be related to hypoglycemia (low blood sugar). Is hypoglycemia always the cause for these symptoms? No! However, a good deal of the time low blood sugar turns out to be a culprit.

The average American takes in around 130 pounds of added refined sugar each year.

Normal fasting blood sugar generally runs around 70-110 mg/dl. Hypoglycemia is commonly defined as any blood glucose level below 60 mg/dl. Hypoglycemia can be diagnosed through the use of the infamous GTT (glucose tolerance test). This is where you swallow a big ole nasty glob of syrupy goop and watch how your blood and hormones respond on repeated blood draws. This test generally lasts 3-6 hours and involves multiple blood draws, so it can be a real hoot. During the test, blood sugar, urine glucose, and often insulin are measured. The doctor is looking for peaks and valleys associated with taking in a large sugar bolus which is meant to mimic a meal loaded with sugar. (Bring on the Ben and Jerry's.)

Causes for low blood sugar are varied. Something as simple as not eating for long periods of time can drop your blood sugar (duh!). However, over consumption of snoogy snacks (sugar foods), as my buddy Chris likes to say, can also lead to sugar drops. Allergic reactions, alcohol, and nutrient imbalances also play a role. We know that various endocrine gland hormones, nutrients, and the nervous system are also involved in the regulation of carbohydrate metabolism. The hormones and nervous system provide a system of checks and balances to keep our blood sugar stable. Insulin (from the pancreas) helps get glucose into the cells and promotes glucose storage in the liver in the form of glycogen. Insulin's net effect is to lower blood sugar.

On the other side of the coin we have glucagon (pancreas), adrenaline, cortisol (adrenal), and growth hormone. Their role is just the opposite of insulin. These hormones play a role in helping the body to manufacture blood sugar, and so they tend to increase the blood concentration of glucose. Our blood glucose levels then are based on food intake, how tissues are utilizing sugar, our body's own production of glucose, and the health of the glands and nervous system that regulate hormonal responses to sugar.

In the good old days, our ancestors weren't exposed to nearly as much pure junk as we are today. The average American takes in around 130 pounds of added refined sugar (can you say CORN syrup) each year. Our hormones go into conniptions, spiking our insulin levels and dropping our blood sugar. Chronic consumption of refined sugars leads to chronic high levels of insulin. The prolonged high levels of insulin cause

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Benefit of folic acid for strokes

"Our meta-analysis provides coherent evidence that folic acid supplementation can significantly reduce the risk of stroke in primary prevention," wrote Dr. Xiaobin Wang and colleagues in *Lancet*, a leading British medical journal.

As early as 1969, a sulfur containing amino acid called homocysteine was suspected to affect the atherosclerosis or the narrowing of the arteries caused by plaque buildup. Since then there has been substantial evidence linking homocysteine in the blood with cardiovascular disease.

The researchers went on to say that although another meta-analysis showed that the overall effect of folic acid supplementation on stroke was not significant, "the association became significant after removal of [one] trial which was done in individuals with a history of stroke."

The researchers further stated that the benefits of treatment with folic acid did not begin to show for 24 to 36 months, depending on the trial the researchers used.

Inside this issue...

PUBLICATION INFORMATION

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Nutritional Medicine

by Ron Hunninghake, M.D.

Bio-Logical thinking

When I was a junior in college, everyone kept asking me: "What are you going to do when you graduate?" Although I wasn't sure, I did have a plan...and a backup plan.

I wanted to become a doctor. I had heard that getting into medical school was tough. I had good grades, I was a premed chemistry major, and my college had a good reputation for getting its good students "in," but there were stories of good students getting "passed over." I had read about the Passover in the Bible and wanted no part of that! I needed a failsafe backup plan. If med school didn't want me, I would become a small college biology professor.

Either way, I reasoned, I would be joining the ranks of those who valued bio-logical thinking. This was my term for trying to think how the body "thinks." I loved learning about the miracle of life and life processes. By teaching biology, I believed that I would be in a position to learn more about these mysterious life processes.

Well, I made it into med school... and for the first few years of my basic science study I was immersed in bio-logical thinking. Strangely, as I moved into my clinical years of study, biology was replaced with pharmacology. Even more disconcerting, my ability to observe and reason in a bio-logical fashion was discouraged in favor of "thinking by convention." I was expected to see patients, listen to their story, do some tests, make a diagnosis, and prescribe a treatment—all wrapped up in a neat insurance code package. The focus of my training was disease. Where could I learn about the body's natural tendency to maintain health and to heal in the face of injury?

Fortunately, 10 years into the frustration of my medical career, I ran into Dr. Hugh Riordan. He invited me to come to The Center where I was encouraged to see with fresh eyes, to measure rather than assume, to think rather than code, and most importantly, to co-learn in a bio-logical fashion rather than pretend to know what I really didn't know.

In short, I had unexpectedly executed my backup plan: I had fulfilled the true meaning of the word "doctor."

It means...teacher. HH

Hypoglycemia—Cont'd from page 1

our cells to quit responding to insulin (like the boy who cried wolf). Insulin resistance develops and poof, like magic, we start to get high blood sugar. All that sugar has to go somewhere. After all our liver and muscles can only store so much. Our bodies generally store the leftovers as fat (yippee). The elevated fat (triglycerides and cholesterol to be quite proper) gets stored on our sticky buns, thighs, abdomen, and blood vessels, or wherever we can find room to stuff it. This, of course, leads to heart problems, obesity, and high blood pressure—you know, all the good stuff. (I feel like subsidizing corn and sugar growers more and more each sentence.) Hypoglycemia basically sets the stage for eventually developing hyperglycemia, which leads to a whole host of other problems.

What do we do about all this?

- First, throw out all the refined, devoid of nutrients sugars—like white sugar, brown sugar, corn syrup, dextrose, fructose, sucrose, pop, candy, jam, ice cream, white flour, white rice, and most grocery store breakfast cereals. Shop the periphery at the stores and choose whole foods (vegetables, dried beans, peas, whole fruits, and whole grains). The whole foods noted contain fiber, which is needed to slow the absorption of sugars, increase insulin sensitivity, and promote blood sugar stabilization.
- Second, choose foods with beneficial dietary fats that support cell membrane fluidity while promoting the health of the cellular insulin receptors. Beneficial unsaturated fatty acids come from cold ocean fish, nuts, seeds, olive oil, and plants. Limit intake of animal fats, hydrogenated fats, fried foods, and fast foods. These foods contain

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Hypoglycemia—Cont'd from page 2

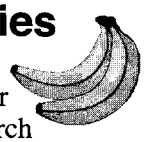
saturated and trans fats that promote insulin receptor problems.

- Third, it may be wise to eat 3 moderate meals with 2-3 snack times in-between to stabilize blood sugar.
- Fourth, limit alcohol and food allergies as they can stress blood sugar control mechanisms.

Beyond diet, there are several nutrient options to consider for promoting blood sugar regulation. Chromium is a component of glucose tolerance factor (a biologically active complex of chromium and nicotinic acid that facilitates the reaction of insulin with receptor sites on tissues) and promotes insulin sensitivity. Vitamin B5 (pantothenic acid) supports the health of the adrenal glands. Vitamin B3 (niacin) is another component of the glucose tolerance factor. Magnesium is known to improve glucose handling. Biotin improves the metabolism and utilization of glucose.

Many botanical options for regulating blood sugar also exist. Cinnamon may enhance insulin signaling. The botanical Gymnema suppresses sugar cravings while making sugar taste bad for some time after ingestion of the liquid. HH

Good news about fruits and veggies



We know that fruits and vegetables are good for us to eat, but a recent research paper gives us the facts. Researchers found that each fruit or vegetable serving you add each day may reduce your risk of heart disease by as much as 7%, according to the *Journal of Nutrition.*

This means that if you add a banana at breakfast, an apple at lunch, and a big salad at dinner, you could reduce your heart risk factor by as much as 25%.

You won't go wrong by eating more fruits and vegetables, even if these researchers are a little optimistic about the percent that each one may reduce your heart disease risk factor. Fruits and vegetables are low in calories and rich in fiber, vitamins, minerals, and phytonutrients. HH

HEALTH HUNTERS AT HOME

Is acne related to diet?

We have read a lot about low-glycemic diets to help with obesity and heart disease. But for acne? Well, no. We, at least I, have not heard anything about a diet that is rich in low-glycemic foods being one that helps kids, as well as adults, get rid of their acne problems.

But think about it for a little bit. First of all, acne is a fairly common problem that affects individuals of all ages. According to *The American Journal of Clinical Nutrition*, it is a disease whose cause is unknown. But the clinical arm of The Center for the Improvement of Human Functioning has had good luck treating individuals who happen to have acne. Why does The Center have good fortune with acne while standard doctors find the cause of acne to be unknown?

First of all, we don't treat people for acne. We treat people who happen to have acne. The key is we treat the person, not the acne.

After checking the person over very thoroughly when she/he first comes to The Center, the doctor asks the person to consider doing some laboratory testing. One of the tests the doctors often suggest for a person who has acne is a cytotoxic food sensitivity test. This is a blood test that produces a reaction between food extracts and the blood. It incubates for a short time, and then the lab looks at the blood cells under the microscope to see just how many of the cells have died off by reacting to the food extract.

We suggest this test for people who have other chronic problems, but we almost always suggest it for acne. We want to find out what foods the person is sensitive to in his/her diet and then adjust the diet to eliminate these foods.

We often find foods to which the person is sensitive, and occasionally the foods are high-glycemic foods. In that case, a diet that emphasizes low-glycemic foods would work, and it just might be good for the waistline as well.

The advantage of the cytotoxic food sensitivity test is that it looks at 90 foods the individual may be sensitive to and then gets the ones that he/she has a sensitivity to out of her/his diet to help get rid of the acne. The doctors often suggest nutrients to work with the acne and any other problems the person may have, but the cytotoxic test really works well.

Now, back to the low-glycemic diet mentioned in the beginning of this article. "The improvement in acne and insulin sensitivity after a low-glycemic diet suggests that nutrition-related lifestyle factors may play a role in the pathogenesis of acne," said Robyn Smith and colleagues in their report appearing in *The American Journal of Clinical Nutrition.*

For decades, there has been an ongoing debate surrounding the subject of diet in the management of acne. In the 1930's, acne was considered a disease of "disturbed carbohydrate metabolism." Doctors often discouraged patients from eating excessive amounts of carbohydrates and high-sugar foods to help reduce their acne.

Then, in 1969 a study was presented that found no effect on acne lesions when one group of patients ate a chocolate bar compared with a group that ate a placebo. Diet fell from favor because of this research paper, even though it was criticized for a number of design flaws, including the similarity between the chocolate bar and the placebo bar.

This went on until recently when there was a reappraisal of diet and acne. One research group postulated that high-glycemic foods might be a contributing factor to acne in the Western countries. The debate goes on.

The Center opened for business in 1975 and shortly thereafter began doing the cytotoxic test. Doctors have continued to ridicule The Center for suggesting acne just might be caused by food sensitivities, but The Center's patients continue to get rid of their acne when the food sensitivities are discovered. Maybe the research by Robyn Smith and colleagues will help other doctors learn what The Center has known for years. HH

—Richard Lewis

INFORMATION WORTH KNOWING

by Marilyn Landreth, M.A.

Although some people have been on a "diet" for many years, Americans continue to gain weight. We are one of the most advanced countries in the world but we still struggle with how to lose weight. We have been told that we need willpower, exercise, and calorie counting. *The Glycemic Load Diet,* written by Rob Thompson, M.D., introduces another way to lose weight and reverse insulin resistance (IR). He is convinced that willpower has nothing to do with losing weight. He thinks the key to losing weight is finding the right strategy and knowledge. Understanding the physiological disturbances that caused the weight gain will help you to know what you need to do to shed pounds and keep them off. Dr. Thompson views insulin resistance as part of the problem but sees it as a hormonal imbalance rather than a character flaw. The questions this month are taken from his book.

1 In recent years scientists who study body chemistry have discovered hormones that regulate body weight. Most of us know that the thyroid plays a role in weight regulation, but did you know that another (others) is (are) _____.

a. ghrelin, secreted by your stomach to signal when it is empty
b. peptide YY, produced to curb your appetite
c. leptin, secreted by your fat cells to reduce appetite
d. all of the above

2 IR affects your health, leading to many health problems. One problem is type 2 diabetes, where the insulin production can't keep up, allowing glucose levels to rise. An opposite problem is called _____.

a. anemia
b. hypoglycemia
c. Factor 5 syndrome
d. all of the above

3 According to researchers, about 22% of Americans have a genetic variation in the way their body processes carbohydrates and they can't handle starch and sugar in their diets without producing excessive insulin. If you have the genetic predisposition to this problem, then you will invariably gain weight.

a. True b. False

4 In a recent study, 22% of Americans were found to have IR. Forty-four percent of that number was older than 50 years. Overweight individuals made up _____% of that number.

a. 10 b. 50
c. 85 d. 95

5 Dr. Thompson states that IR can be reversed by restoring your slow-twitch muscles' sensitivity to insulin and by reducing _____ in your diet.

a. sugar
b. starch
c. proteins
d. dairy

6 There are three kinds of foods: fats, protein, and carbohydrates. Each has its own building blocks that your body needs. Fat is made up of fatty acids; proteins are amino acids; and carbohydrates are glucose. It really doesn't matter what kinds of carbohydrates that you eat since they all turn to glucose.

a. True b. False

7 The difference between people who are genetically predisposed to develop IR and those who are not is that the _____ of those predisposed to IR go into a deeper than normal "sleep mode" when they haven't been used.

a. mitochondria
b. synapse
c. cortical
d. mid brain

• *FOR ANSWERS, SEE PAGE 7* •

A new idea in lawn watering

by Gary D. Branum, Ph.D.

We're all familiar with the myriad of ways to keep our lawn watered during the summer. Most of us started with stationary sprinklers, which required dragging a heavy hose around the lawn whenever the sprinkler needed to be moved.

Then, somebody invented "tractor" sprinklers. Just lay out the hose, turn on the water, and the tractor follows the hose.

The next big improvement in lawn watering eliminated the hose-dragging step. Permanent hose or pipe was buried in the lawn and pop-up sprinkler heads were attached at intervals. An electrically operated water valve could be attached to the system, making lawn watering automatic.

However, sprinklers waste water. In hot, dry conditions, as much as 70% of the water passing through the sprinkler evaporates before it ever reaches the ground. In addition, sprinkler heads contain small, breakable plastic parts.

There is a way to get the best features of a drip system along with the best of an automatic sprinkler system. Half-inch diameter drip hose is available that has drip emitters manufactured *inside* the tubing at 18 inch intervals. Thus, there are no sprinkler heads to break, no hoses to drag, and it's still a water-saving drip system.

By using drip hose, water soaks into the ground and saturates the area around the emitter with little water loss. This type of hose can be installed in a lawn in a "back and forth" pattern, placing the hose so that the emitters in one row alternate with the emitters of the adjacent row. The hose can be buried 2-4 inches below ground without harm since the emitters are self-healing and the hoses can be attached to an automatic sprinkler timer.

Using this system, a lawn can be watered regularly and evenly by an efficient, water-saving drip system at any time of the day. I'm in the process of landscaping the front of my house and this is the system I'm going to install to water the lawn. I'll let you know how it works. HH

Test of the Month

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

Thyroid function tests - part one

Another alphabet name, another laboratory test! TSH stands for **T**hyroid **S**timulating **H**ormone. It is a great test for measuring thyroid function, especially for hypothyroidism, or low functioning thyroid gland. The thyroid is located at the base of the neck below the "Adam's apple." It is a "butterfly shaped" gland (organ) and is one organ that is necessary for good health, not life. Millions of people worldwide have had their thyroid removed or destroyed through disease. A common cause of hypothyroidism, especially in women, is an autoimmune disease called Hashimoto's hypothyroidism. Replacement with thyroid hormone is the treatment.

A test for thyroid function is one of the required tests for all newborns in the U.S. This is called neonatal hypothyroidism. It is important to diagnose these children early and start them on thyroid medicine. If not, they will be mentally retarded for life and dwarf-like. This condition is referred to as "cretinism" and still exists in parts of the world today.

The thyroid is controlled by three mechanisms. A hormone (factor?), TRH (**T**hyropin **R**eleasing **H**ormone) is produced in the hypothalamus located in the brain. TRH stimulates the anterior pituitary gland to produce TSH. TSH then stimulates the thyroid to produce T4 and T3, the thyroid hormones. Iodine is a major component of T4 and T3. A major cause of goiter in the early 1900's in the U.S. was a lack of iodine in the diet. Now, iodine is added to salt and bread. In many developing countries, goiter is still prevalent. The hormones control the production of TSH through a "feedback" mechanism. A lot of T4 in the blood shuts down the production of TSH. Low amounts stimulate the production of more TSH. Further discussion of the thyroid will follow in the next issue.

Herbal History

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

Soothing throat spray

Herbal Throat Mist by Wise Women Herbal is a very popular remedy used here at The Center. It works great for coating sore, scratchy, and irritated throats, while relieving throat pain through anesthetic properties. The throat mist provides a direct topical source of natural antibacterial and antiviral herbs. It comes in an easy to use spray bottle that can be carried around in your pocket for convenience. The spray contains Echinacea, Hyssop, Monarda, Osha, Prickly ash, Propolis, and Bitter orange oil.

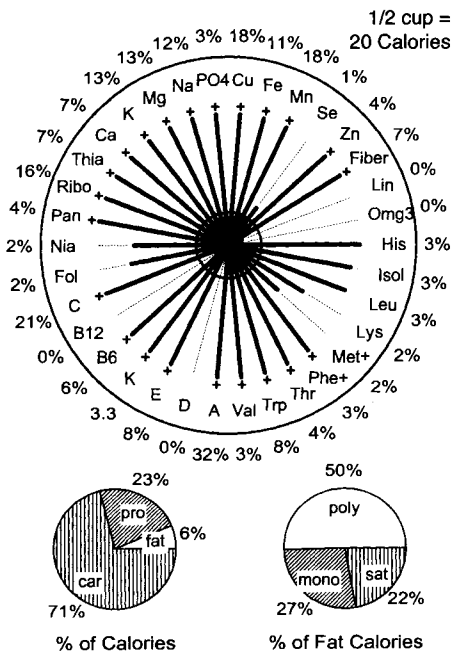
Echinacea (Echinacea angustifolia, purpurea) is an antiseptic, anti-inflammatory, antifungal, antiviral, and immune stimulant. Echinacea is useful for various infectious conditions of the throat. Hyssop (Hyssopus officinalis) works as an immune stimulant, expectorant, and astringent (decreases congestion). Monarda fistulosa works to relieve congestion while soothing throat irritation. Osha (Ligusticum porteri) is an antiviral herb that has the ability to anesthetize the throat. Prickly ash (Zanthoxylum clava-herculis) promotes salivary flow, decreases inflammation, and fights microbes. Propolis (plant material collected by bees) works as a natural antiseptic and expectorant that coats and soothes irritated areas. Bitter orange oil is antimicrobial and provides anesthetizing properties.

For prevention, I recommend 2-3 sprays to the back of the throat 2-3 times daily. In cases of active sore throats 3-4 sprays up to 10 times daily may be used.

Food of the Month

by Donald R. Davis, Ph.D.

BEET GREENS are unusually rich in nutrients compared to their few calories. Like their close relative, Swiss chard, they may be eaten raw or cooked. A half-cup of boiled and drained greens contains 3.3 times the RDA for vitamin K, which helps keep bones strong. It also contains 10% to 32% of the RDAs for 9 other nutrients, plus at least 5% of the RDAs for 8 more, all in only 20 calories. If you can buy beets with the tops attached, you get two nourishing vegetables with one purchase. Both also contain the beneficial phytochemicals, lutein, betaine, and betacyanins.



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.

How clearly do you see?

Have you ever thought that the way we perceive our lives is how we judge if it is "good" or "bad," "happy" or "sad?" After getting my eyes checked the other day, it struck me that the way we look at the world defines how that world is for each of us.

The doctor decided that my glasses needed to be changed and told me that it might take a few days to get adjusted to those changes. Looking through the new glasses made the world seem like it was bowl shaped and very disorienting.

Seeing things in another way reminded me of the statement my grandfather made to my aunt many years ago. She was yelling at her four children trying to get them into the car to go home. They were all running in different directions and giving her a great deal of aggravation. He said, "You don't know it now, but this is the happiest time of your life."

A dear friend is facing some critical challenges. She has had to make some very difficult decisions and faces many more in the months ahead. She recently wrote a letter to us to let us know how she was getting along. The last sentences of her letter urge us to appreciate what we have. She said, "Enjoy your life. Take care of what you have. Everything you have is the best. Nobody knows what will happen tomorrow. Everyday is your wonderful day."

We all need to step back from the day-to-day busy-ness and take a good look at the big picture. How do you find ways to appreciate "your wonderful day?"

CENTER UPDATE

Whole grains help prevent atherosclerosis

Since the latter part of the Paleolithic age, that is anywhere from 40,000 to 12,000 years ago, cereal grains have been an important part of the human diet. The entire grain was stone ground, producing whole grain flour that included the germ, bran, and endosperm.

Then, in the late 19th century came the invention of the roller mill and its capability of mass refining the grains. With the advent of the industrialized roller mill came the elimination of the germ and bran, leaving only the endosperm or the white flour. This also eliminated most of the fiber, vitamins, minerals, lignans, phenolic compounds, and the phytochemicals.

In the 1970s, Denis Burkitt, M.D., and colleagues discovered a link between refined grain consumption and chronic disease by observing the African natives. These natives still consumed large quantities of whole plant foods and Dr. Burkitt found that they had a lower prevalence of coronary heart disease, diabetes, and cancer than those in the West who consumed refined grains.

Dr. Burkitt became a friend of Dr. Riordan and was a presenter at The Center's 2nd International Conference on Human Functioning held in 1978.

This brings us to 2007. Phillip Mellen and colleagues published a paper in *The American Journal of Clinical Nutrition* that opened with, "The concurrent pandemic of type 2 diabetes and cardiovascular disease have followed a shift in population dietary patterns from whole to refined carbohydrate sources."

They concluded with "whole-grain food intake was inversely associated with common carotid intimal medial thickness..." In short, they agree with Dr. Burkitt. Eating whole-grain foods, as opposed to refined-grain foods, will not only cut down carotid artery atherosclerosis, it will reduce diabetes and cardiovascular disease. It is time to increase your consumption of whole grains and other whole foods if you eat refined foods.

Case of the month

A five-year-old boy came to The Center with liver cancer in March of 2004. He had surgery for the cancer and started taking a 12-week course of chemotherapy so that he could proceed with either radiation or follow-up surgery. This would be followed by a 42-week course of chemotherapy. His oncologist did not want him to have intravenous vitamin C (IVC) during this time. Dr. Kirby did what she could do for him under these circumstances.

After surgeries, chemotherapy, and radiation, the now 8-year-old started a 7.5 gram IVC followed by a vitamin C level in October of 2006. The results: 89 mg/dL. This was way below the 300 mg/dL the doctors like to see. Dr. Hunninghake then increased the vitamin C level to 15 grams per IVC twice a week. He continued the infusions near home under a physician's supervision.

The young man came again for 15 grams of IVC followed by another plasma vitamin C level in early November. This came back from the laboratory at 148 mg/dL. This was better so he continued the 15 grams per infusion until mid December. The results of the December post plasma vitamin C were 153—still below 300 mg/dL. Again, Dr. Hunninghake increased his dosage to 25 grams of vitamin C per infusion with two infusions a week.

Again, a post plasma vitamin C level was drawn in mid January 2007. The results of this plasma vitamin C were 314 mg/dL. Dr. Hunninghake wrote on the laboratory sheet, "Wow!! Much better." The results slipped some but still remained in the upper 200s. Dr. Hunninghake wrote on his July of 2007 laboratory sheet, "[He] continues 'to hold his own' quite well."

He and his father reported he is improving over time. His father wrote that he is still "taking the oral vitamin supplements that you prescribed" and is taking a teaspoon of Beyond-C morning and evening. He continues gaining weight and doing quite well despite a doctor saying, "I'm sorry" your son's chances of cure are "not good."

Answers from page 4

1. d. Body weight is not just a matter of choice. Powerful chemical reflexes regulate the way you take in calories and burn them.

2. b. The pancreas produces too much insulin, causing the glucose levels to drop too fast.

3. b. Something has to trigger the gene for that response to happen, either by your eating habits or lack of exercise.

4. c. If you are overweight, you have a greater chance of having IR.

5. b. Eliminating blood glucose surges and improving your muscles' sensitivity to insulin makes each one more effective.

6. b. The digestive system works differently for various kinds of carbohydrates. Since starches do not have indigestible fiber and cellulose to slow the digestion down, its glucose enters the bloodstream faster.

7. a. It takes about 20 to 30 minutes of walking to switch on insulin sensitivity. Deep breathing also helps. HH

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by Rob Thompson, M.D.
Learn how glycemic load differs from glycemic index (GI) and how that difference can be used to allow you to control your weight better. Normal food servings are used in this informative book rather than laboratory controlled servings. Recipes are included. Softcover. $16.95 HH price $15.26

FOOD PHARMACY III: HOW TO USE FOOD AS NUTRIENT POWERHOUSES
with Chad Krier, N.D, D.C.
There are many common nutrient deficiencies seen in laboratory testing at The Center. Nutrients are known to affect various disease states. Learn how foods can help treat illnesses as various foods used to heal common conditions are explored.

CONTROL INFLAMMATION, LOSE WEIGHT, GAIN ENERGY
with Ron Hunninghake, M.D.
The American diet is pro-inflammatory, resulting in insulin resistance and the tendency to gain weight. The same diet tends to zap your energy. Learn how to control inflammation naturally, lose that midline bulge, and boost your energy levels, all in one.

UNDERSTANDING HOW NUTRITION FITS US TODAY
with Rebecca Kirby, M.D., M.S., R.D.
Nutrition is often forgotten in our fast paced lifestyles in today's world. The dietary intake of most Americans is less than optimal. Learn the importance of nutrition and how The Center addresses the uniqueness of each individual in the nutritional approach to health.

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September:

13 Ear Infections: A Naturopathic Approach
20 How Chelation Works to Improve Your Circulation
27 Tap Into Wellness

October:

4 Oh, My Aching Back: a Mechanical and Nutritional Approach to Managing Back Pain
11 Hyperbaric Oxygen Therapy (HBOT): How Oxygen Under Pressure Can Help Heal Many Diseases
18 Top 10 Reasons to Eat More Whole Foods
25 Eating Low on the Glycemic List for Better Health, Weight Loss, and a Healthier You

October 4
Health Hunter/Beat The Odds "Ask The Doctors"
Winners of the Health Hunter Contests
will be announced during this event.

October 5 & 6 - Health Hunter/Beat The Odds Days

Lower blood pressure with cocoa

A new study in *The Journal of the American Medical Association* shows that cocoa does lower blood pressure, at least in modest cases of elevated blood pressure.

"In this randomized controlled trial, we demonstrated that intake of low habitual amounts of dark chocolate caused progressive reduction of systolic and diastolic [blood pressure] in older subjects with pre-hypertension or stage I hypertension without inducing weight gain or other adverse effects," according to Dirk Taubert and colleagues.

They closed by saying that "small amounts of commercial cocoa...convey a similar BP-lowering potential compared with comprehensive dietary modifications that have proven efficacy to reduce cardiovascular event rate."

A cup of cocoa or two may not only be enjoyable with breakfast but beneficial as well.

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