

Health Hunters

Newsletter

A service of the Riordan Clinic, cofounded in 1975 by Olive W. Garvey and Hugh D. Riordan. The Riordan Clinic is a not-for-profit 501(c)(3) corporation. Go to www.riordanclinic.org to make your tax deductible donation today.



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The Value of Nutrient Testing, or Why Didn't Somebody Tell me?

by Charles Hinshaw, M.D.

Remember the old comment, "If I'd only known how bad it is for me, I'd have stopped drinking a long time ago." Well, today we'll learn about how bad it is for you to eat improperly—so no excuses about not having been told about the hazards of a bad diet.

We will take a rather circuitous course, touching on the effects of dietary deficiencies as well as excesses; this also includes supplementation. We'll even touch on the sensitive issue of the cost of nutrient testing, the cost of chronic illness, the societal costs of disability care and the cost of nursing home care.

Unfortunately, most of today's doctors have received very little specific training in nutrition. I gave a talk about 30 years ago on this subject and, in preparation, found that the average medical school scheduled two hours of formal lecture on nutrition. That, of course, was not, and is not, the entirety of nutritional training, because medical students are immersed in courses such as biochemistry, pharmacology, pathology etc, where the diagnosis of illnesses related to nutrition is taught. Nevertheless, formal training in nutrition in our medical schools is very limited. With a backward look at the Riordan Clinic and BioCenter Laboratory we are reminded that nutritional testing was at the roots of our beginning. As moderator of a recent roundtable discussion on The Value of Nutrient Testing (*Alternative and Complementary Therapies*, June 2011), Dr. Ron Hunninghake quoted Dr. Riordan:

"It will not be until doctors actually measure nutrient levels that nutritional medicine will finally find its proper place of esteem in the field of medicine."

Now, rather than reciting a laundry list of illnesses and conditions caused by nutrient deficiencies or excesses (such a list is readily available in promotional materials for our upcoming Check Your Health event), I thought it might be interesting to emphasize the role of nutrients in some psychological disorders and the role of antioxidants in inflammatory disorders.

In 1975, Dr. Riordan received a grant from Mrs. Olive W. Garvey specifically for the purpose of establishing a laboratory capable of nutritional testing. It turns out that Mrs. Garvey and Dr. Riordan were both deeply interested in nutrition. From that beginning, the BioCenter Laboratory grew to become nationally known in the field of orthomolecular psychiatry. Many cases of depression, anxiety, hallucinations, paranoia, irritability, hyperactivity, autism and psychosis have



The Value of Nutrient Testing continues on page 2...



Letter from the Editor:

by Amanda Hawkinson

Have you ever wondered if your current nutritional supplement regimen is what it should be? Whether you have been a long time health enthusiast or have only just become interested in optimizing your health, you have probably asked yourself this very question. Recently, more and more companies are advocating a "must take" protocol. Although there are many articles that praise a particular herb, vitamin or mineral as a one-size-fits-all wonder tonic, this is rarely the case. The idea that every individual is unique in their internal chemistry (biological individuality) is being recognized as a vital concept in building a supplement regimen that is truly effective, not only in results but in overall cost as well.

By learning what your current personal health needs are and tracking how they change over time, the Riordan Clinic physicians are able to prescribe the correct nutritional supplements that your body is missing. But how can you learn what your current health needs are? — Nutritional Laboratory Testing.

This issue of the *Health Hunters Newsletter* is dedicated to informing our readers of the importance and benefits of nutritional testing. Bi-annually, we welcome patients, as well as the community, to participate in our Check Your Health event (September 19–24, 2011). This event allows participants to receive drastically discounted rates not only on laboratory testing but on nutritional supplements as well.

At the Riordan Clinic we believe that prevention is the key to a healthy, vibrant and enjoyable life. If you or someone you know would like to learn more about the Riordan Clinic, please call us at 316-682-3100 to schedule an appointment.

Thank you for reading!

Amanda Hawkinson
Editor

newseditor@riordanclinic.org

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The Value of Nutrient Testing continued from page 1...

been found to have nutritional deficiencies and have been treated successfully with diet and supplements. Vitamins B1, B6, B12, C and folic acid have been especially helpful, along with amino acids, especially methionine, minerals, especially zinc and magnesium, pyrroles, and identification of food and chemical sensitivities. Testing for all of these is performed at BioCenter Laboratory.

As you all know, the capabilities and interests of the doctors at the Riordan Clinic reach far beyond just diagnosing and treating illness. One of our missions has been described as, "stimulating an epidemic of health." One of the tests most frequently ordered by our doctors is CRP-hs (C Reactive Protein-high sensitivity). This is an excellent test for detection of inflammation, regardless of the cause. I mention this because inflammation is a part of almost every illness and because one of the major effects of inflammation is oxidative stress. Research has shown that about 1% of the oxygen molecules entering the body each day damages proteins and one-half of one percent damages DNA. Under normal conditions, oxidant levels are controlled by natural levels of antioxidants, which destroy the oxidants. Our cells are normally loaded with



these antioxidants, which include Vitamin E, beta carotene, glutathione, Vitamin C, manganese, glutathione peroxidase, catalase, superoxide dismutase, copper, zinc and others. Oxidative stress and excess free radicals can cause cancer, stroke, heart disease, dementia and other degenerative diseases. See where I'm going? We can test for antioxidant levels and use test results to guide supplementation.



Well, we have learned (I hope) about reasons for nutrient testing, but what about costs? Is nutrient testing expensive? Yes and no. In terms of dollars, the costs can range from a single test for \$19.00 (cholesterol) to amino acids-fractionated (\$292.00), to our Mega Health Panel (\$3,167.00 for more than 70 test measurements). We all know that medical care is expensive. It always has been. We also know that a major portion of medical care costs comes in the form of laboratory tests, x-ray exams, endoscopic procedures and hospital charges. In that light, laboratory tests don't look so bad. Now, let's add in the fact that at the Riordan Clinic, 99% of your tests will be for evaluation of your nutritional status. This is of immense importance because these tests can frequently assist our doctors in diagnosing chronic illnesses heretofore unresponsive to conventional treatment.

And don't forget, these same tests can provide vital information for maintaining optimal health at any age. Think of it this way. One less chronic illness, or one less month in a nursing home, will easily cover the annual costs of nutrient testing and wellness care here at the Riordan Clinic.

Finally, I would be remiss not to mention one of modern medicine's favorite concepts, with which I heartily agree. That concept focuses on what is called biochemical individuality. This simply means that there is no one else in this world that is exactly like you. Of course there is an exception to every rule, which in this case is the identical twin.

The importance of biochemical individuality in this discussion is to remind everyone that a "normal" laboratory test result for you may not be a normal result for me.

This accounts for the "normal range" seen in laboratory test results. Actually, five percent of laboratory test results falling outside of the normal range may actually be

The Value of Nutrient Testing continues on page 3...

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Patient Profile

By Julie Sullivan

In the fall of 1996, a male executive, age 50, became a new patient at the Riordan Clinic. Having been diagnosed 4 ½ weeks earlier with muscle invasive bladder cancer (Stage III Grade 3 transitional cell carcinoma), he had undergone two resections of the bladder for tumor removal. Post-surgery, he sought out the opinions of specialists from four cancer centers across the U.S.; they all recommended a rigorous schedule of chemotherapy and radiation and/or partial to total removal of his bladder. Upon researching the ravaging effects of this traditional protocol, he decided to seek out alternative options. Further research familiarized him with the work of twice Nobel laureate and vitamin C proponent, Linus Pauling. It was his interest in pursuing a holistic approach that included vitamin C therapy that brought him to the Riordan Clinic.

Following his initial consultation with the physician, comprehensive laboratory tests were ordered. The results revealed abnormal findings in his essential fatty acids, complete blood count, and urine. He was also found to be positive for Candida and an intestinal parasite. Prior to his cancer diagnosis, he had considered himself relatively healthy. A husband, and father of three, he abstained from smoking, practiced good eating habits and engaged in adequate exercise. The receipt of his laboratory report was his first glimpse of the true condition of his body's functioning.

Based on his results, he was prescribed the following regimen: Vermox and Parex to eliminate the intestinal parasite; Emergen-C twice per day to improve vitamin C level



and Potassium/Sodium ratio; a Flax oil capsule per meal for essential fatty

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normal for that individual. However, 95% of test results falling outside of the normal range are indeed abnormal. This concept holds true for nutrient test results just as much as for all other test results.

We have broadly covered two classes of illnesses which can be effectively treated or prevented through the use of nutrient testing. Costs of nutrient testing have been discussed in actual dollars as well as costs relative to benefits. For anyone interested in their nutritional status, I invite you to avail yourself of the upcoming opportunity. During September 19–24, you can save 45% on the cost of our "Check Your Health" nutrient panels, plus an extra 25% savings on all vitamins and minerals sold in our Riordan Clinic Supplement Store. Call 316-684-7784 or 1-800-494-7785 to schedule your appointment.

Don't let me hear anyone say, "No one ever told me."

Press Release

Riordan Clinic Research Institute Article Published

An article by Riordan Clinic Director of Research, Dr. Nina Mikirova, with Dr. Joseph Casciari, Dr. Ronald Hunninghake, and Meg Beezley has recently been published in the *International Journal of Medical Sciences* entitled "Effect of Weight Reduction on Cardiovascular Risk Factors and CD34-positive Cells in Circulation."



Being overweight or obese is associated with an increased risk of the development of diabetes-mellitus, hypertension and cardiovascular disease. Riordan Clinic researchers studied the effect of a low calorie diet in combination with oral complementation by vitamins, minerals, probiotics and hCG on the body composition, lipid profile and stem/progenitor cells in circulation.

The study found that the physician supervised low calorie diet with hCG and supplemental vitamin support had positive results in reducing type of cholesterol, that are considered as cardiovascular risk factors: LDL, total cholesterol, and LDL to HDL ratios. Furthermore, the diet also improved body composition by reducing fat mass by 12.4% ±8.7. Although lean mass also reduced, it only decreased by 5.7% ±4.7. As a result participants went from an average BMI of 34.0 ± 7.2 (SD) to an average BMI of 28.5 ± 6.7 (SD). In other words, some of the key risk factors associated with cardiovascular disease were reduced by the diet.

As there is strong evidence of the role of endothelial progenitor cells including population of CD34-positive cells in the artery repair and maintenance of vasculature, the level of stem/progenitor cells was measured before and after of weight reduction. The study showed that the diet improved number of circulating CD34-positive cells, and this improvement correlated with reduction of the proportion of fat mass. The subjects exhibited an average increase of forty percent CD34-positive cells per micro liter.

According to our study, the weight loss program resulted in the improvement of the number of stem/progenitor cells in circulation and the decrease of the values of cardiovascular risk factors.

To read this entire article and others published by Riordan Clinic researchers, visit our website at www.riordanclinic.org.

Patient Profile continued from page 3...

acids; and 30 gm IV vitamin C twice per week for cancer treatment. Within a year of starting the Riordan Clinic prescribed protocol, he found he was cancer-free! But his journey did not end there.

His cancer diagnosis had served as an unexpected wake up call. Now more aware of his mortality, he decided to make a determined effort to be proactive about his health. Exposed to the power of laboratory measurement, he no longer had to rely on mere perception to determine his health standing. Since 1996, he has come in each year for lab work.

He is an avid participant in the Riordan Clinic's semi-annual **Check Your Health event**, taking advantage of the discounted laboratory panels; he orders the Mega Health lab panel every six months to a year. The report he receives provides him with a clear gauge of the operational status of his body systems. This valuable knowledge allows him to make necessary adjustments to his regimen in order to maintain optimal health and to prevent illness.

This patient is a prime example of the Riordan Clinic's concept of being a Co-learner. He took an active role in his health by researching his options, "checking his health," and seeking healing with a positive attitude. The fruit of his faithful diligence is invaluable. Not only did he beat the odds by conquering a life-threatening cancer, but he has enjoyed a higher quality of life by continually pursuing wellness.



If you have chronic health issues, make an appointment today by calling 316-682-3100. The health, hope, and healing we provide can make a positive impact in your life, just as it did for this patient.

Healthful Hints from Dr. K ...

by Jennifer Kaumeyer, N.D.

☺ Like this...	♥ Love this...
Tuna Salad Sandwich	instead of bread, serve over a bed of lettuce and top with pineapple chunks, red onion, and toasted pecans (just microwave for a minute or two to heat!)
Chips and Salsa	replace the chips with cucumbers!
Chinese Food	ask for extra veggies and hold the rice!



Exercise Tips: (continued from August Newsletter)

Now that you are able to walk 30 minutes at a time—aim for at least 30 minutes of walking every day. Although you can "power walk" if you would like, it is not mandatory. We are meant to walk, and the average human used to walk 4–16 miles per day!

This month we will work on pushups—if you cannot do them on your toes, then switch to your knees or do them standing against a wall or counter. On the first day, do as many push-ups as you can. You may only be able to do one or two or maybe none at all. Switch to the wall if you are unable to do them on the floor. For beginners, try for at least one to five push-ups with good form—spine straight from head to lower back. Each day add one additional push-up or do your best to add one. If you cannot, hold the push-up position for as long as you can. Ten to sixty seconds is a good place to start. This is called a plank and can also be used to build up your upper body muscles.

FYI, your abdomen may get sore from doing these push-ups, so don't be alarmed. Push-ups really work the whole body, especially what we call the "core" muscles.

IF you ever feel pain, stop immediately. However, soreness is usually completely normal.

As always, contact your doctor with any questions or concerns before starting a new exercise program.

Enjoy and Good luck!



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HCG Weight-Loss Intervention—The Success Continues!

Since introducing the HCG Weight-Loss Intervention program in January, participants have lost over 2,800 pounds! Here is one success story:

A 63-year-old patient came to the Riordan Clinic with the intention to start the hCG program, however, she was skeptical because she had tried so many other weight-loss programs in her lifetime. Although she had succeeded to lose weight on the previous programs, she always seemed to gain it back with little effort. She desperately wanted to protect herself from the inevitable future of diabetes or heart disease if she was unable to lose weight. She came to the Riordan Clinic with a basic knowledge of our hCG program and also with the hope that she had finally found a weight loss program that might help her not only to lose the extra pounds but to keep them off.

Standing at 5' 9", she began the program weighing 287.0 pounds. Her first appointment was filled with anticipation; she was nervous and wondered whether she could succeed. However, with the support of the nurse educator and her family, she was on her way to transforming herself.

In the first 2 weeks, she experienced predictable symptoms of lethargy, feeling achy, and even an occasional headache. This was explained in her previous meeting with the nurse educator, so she was not alarmed and knew it would pass in a few days. She also experienced a little bit of dry mouth and skin but overall, felt great once the detox period had passed.

In 6 weeks, she had lost a total of 25.7 pounds. She felt the eating regimen had become a routine for her and therefore, was relatively easy. She always saw to it that each week, she was prepared by having all the necessary foods available to her. Some foods she precooked and froze, while others, such as vegetables, were chopped and stored in the refrigerator. She knew that preparation was the key to her success. Having the foods ready and available stopped her from being tempted to eat other inappropriate foods.

At the end of her first 85-day cycle she had lost 46.7 pounds. She adhered to the program protocol, and through her tenacity, she had gotten almost 50 pounds closer to her goal. Because she had more weight that she wanted to lose, she chose to do a second cycle of the 85-day hCG weight loss program.

Her second cycle went well because of the new found knowledge she had gained from her first cycle. She knew what level of hCG worked best for her, and she also knew the correct amount of protein intake her body responded to the best. As the weeks past, the weight continued to dwindle down. At the time of her last hCG appointment with the nurse educator, she had lost a total of 78.8 pounds.

The feeling of being successful and reaching her goal was overwhelming for her. She never thought there would be a time that she could lose the excess weight and successfully maintain it. Through the Riordan Clinic hCG program, she learned what foods are best for her to eat and what portions are healthy for each meal. She also came to understand how important water is for the body. This knowledge will allow her to make better choices in the future. It will also allow her to be healthy and maintain her weight for life. Her empowerment was regained, and to this day, she has continued to lose weight on her own through the healthful knowledge she gained through the hCG program.



This patient is a great example of the weight loss success that awaits you with the Riordan Clinic HCG Weight-Loss Intervention. Go to www.riordanclinic.org for additional information. If you are ready to improve your health and well-being, call 316-682-3100 to get started today!



In Gratitude ...

As a not-for-profit organization, we rely on many to make our vision a reality. *So many come together to provide our patients with a place of hope, health and healing.* Here are just a few we'd like to thank.

- Crestcom International, a management training group, for meeting space rental
- The Wichita Downtown Kiwanis Club and The Wichita Care Planning Council for inviting Drs. Hunninghake and Kaumeyer to speak at their group meetings
- Our wonderful volunteers who give their time weekly and monthly to help in all areas of our operations, such as our laboratory and new patient services.



September is Fruits and Veggies More Matters Month. Marketing in magazines and on television suggests that the sugar in fruit and in table sugar are basically the same, but is this true? From the Fruits and Veggies More Matters website, www.fruitsandveggiesmorematters.org, the article below discusses the truth about sugar in fruit versus table sugar.

The Sugar in Fruit and Table Sugar are Basically the Same?

August 17, 2011



TheBUZZ:

The sugar in fruit and *table* sugar are basically the same?

WHAT THEY'RE SAYING

Fruits are composed mainly of sugar, making them a less healthy choice.

WHAT WE KNOW

Peaches, plums, berries, melons are all at their juicy peak! Despite the smorgasbord of flavors and colors offered by summer's fruits, many people pass them by in fear of their sugar/carbohydrate content. What many people do not know is that there is a huge difference between naturally occurring sugar found in fruits, dairy, and other foods and *added* sugars.

The primary sugar in fruit is fructose, which some refer to as *fruit sugar*. Fruits contain water, fiber and other beneficial nutrients, making them an optimal choice to include in a **balanced and healthy eating regimen**. Purified forms of sugar—including table sugar, honey, and **high fructose corn syrup**—consumed as added sugar to soda, candy, and sweetened baked goods should be consumed in moderation. Too much added sugar can contribute to weak bones, obesity, fatigue, lack of concentration and tooth decay.

Researchers are learning that Mother Nature put more thought and chemistry into her fruits than just sweetness. Many fruits contain **phenols**, a form of antioxidants that offers many health benefits including protection from heart disease, cancer, and other damaging effects of free radicals in the body. Added sugars certainly do not provide this benefit. In addition, the benefit seems to be derived from eating the fruit, not a mixture of added sugars and phenols.

HOW DO WE KNOW THIS?

Strawberries, for example, were recently found to help with glucose metabolism and the reduction of increases in blood lipid levels after meals. This research study published in the *Journal of the American College of Nutrition* supported the role of phenols in strawberries in decreasing the oxidation of fatty acids that could cause a buildup of plaque in the arteries.¹

It's not just strawberries that contain these phenols that protect the body from many of the leading causes of death, but most fruits do as well! Stone fruits including peaches, plums, apricots, and pluots are also high in phenols. For example, a study published in *Molecules* found that apricots have 15 different phenol varieties.²

OUR ADVICE

Yes, fruits contain sugar, but this sugar is different from *added* sugar! Added sugar lacks the multiple health-promoting qualities of fruits provided by **phenols, fiber, vitamins, and minerals**. When it

The Sugar in Fruit and Table Sugar are basically the same?
continues on page 7...





It's time again for our semi-annual Check Your Health event! Schedule tests during this event and save 45% on the price of a test panel.

- Select a panel that addresses your specific health concerns—12 panels to choose from
- Tests assess your individual nutrient status
- Use the results to address specific nutrient needs via food choices and supplementation
- Go to www.riordanclinic.org for detailed information and pricing
- Available for out-of-towners. Ask us how when you call.

Don't wait until a chronic illness develops. Act now while information about prevention can make a difference!

DATES:
Monday 9/19 – Saturday 9/24

APPOINTMENT:
Call 316-684-7784 or 1-800-494-7785 to schedule your appointment



The Sugar in Fruit and -Table Sugar are basically the same? continued from page 6...

comes to reducing sugar intake, your goal should be to **limit foods that have listed ingredients such as corn sweetener, corn syrup, honey, dextrose, molasses, malt syrup, glucose, fructose, lactose and maltose.**

The antioxidant quality of fruits and vegetables is just one of the many ways fruits and vegetables protect your health. Consuming a diet that meets your daily recommendation for fruits and vegetables and getting adequate exercise is a great way to give your body a strong defense against cancer and other diseases. While some cancers and diseases are not preventable, eating your fruits and vegetables helps remove those free radicals that can damage tissues in your body and contribute to many of the leading causes of death.

¹ Burton-Freeman, B., A. Linares, D., and T. Kappagoda. "Strawberry Modulates LDL Oxidation and Postprandial Lipemia in Response to High-Fat Meal in Overweight Hyperlipidemic men and women. *Journal of the American College of Nutrition* (2010); 29(1); 46-54.

² Sochor J, O. Zitka, H. Skutkova, et al. "Content of Phenolic Compounds and Antioxidant Capacity in Fruits of Apricot Genotypes." *Molecules* (2010); 15(9); 6285-305.

Lecture Series 2011

The Importance of Nutritional Testing

Presenters: Dr. Ron Hunninghake
Dr. Jennifer Kaumeyer
Dr. Charles Hinshaw

Date: Thursday, September 15, 2011

When: 12:00 p.m. to 1:00 p.m.*
6:00 p.m. to 7:00 p.m.

Cost: FREE

Don't be left in the dark about your health status. Come to this important lecture and learn how our specialized nutrient testing can benefit you.

- Mainstream medicine does not normally test for vitamin, mineral and other nutrient deficiencies.
- Nutrient deficiencies have been shown to suppress immune system function, which leads to chronic disease.
- The 36 year Riordan Clinic history is built on nutrient testing to measure your individual biochemical status.
- People with degenerative diseases can still receive benefits from our nutritional panels. By increasing nutrients to optimal levels, a better response to treatment may occur.
- Results from our exclusive test panels are an important tool to measure your health status.

*Lunch is not included during the 12-1pm session. Please feel free to bring your own lunch.



Dr. Ron Hunninghake



Dr. Jennifer Kaumeyer



Dr. Charles Hinshaw

For reservations: call 316-927-4723 or email us at reservations@riordanclinic.org

The Nutrition Reporter™

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The independent newsletter that reports vitamin, mineral, and food therapies

New Benefits of Omega-3 Fish Oils: Increasing Muscle, Reducing Body Fat

Maintaining a relatively healthy ratio of lean muscle tissue to body fat – and a body mass index (BMI) under 25 – can lower your long-term risk of diabetes, heart disease, and other health problems. Eating healthy foods, keeping portion sizes small, avoiding junk foods, and exercising can all contribute to a healthy BMI.

But can consuming fat, even healthy fats, increase muscle and reduce body fat? Apparently yes, according to two recent studies of people.

Bettina Mittendorfer, PhD, of the Washington University School of Medicine, St. Louis, Missouri, and her colleagues gave either daily fish oil capsules or placebos to 16 healthy older men and women for eight weeks. The fish oils added up to 4 grams daily, including 1.8 grams of eicosapentaenoic acid (EPA) and 1.5 grams of docosahexaenoic acid (DHA).

During this time, the fish oil capsules led to an increase in the rate of protein synthesis in muscle – important, Mittendorfer wrote, because it might help prevent or treat age-related muscle loss.

“Loss of muscle mass with aging is a major public health concern because it impairs physical function, which reduces quality of life and may lead to frailty and premature death,” she explained.

The production of lean muscle typically decreases in the elderly because of “anabolic resistance,” often in spite of a diet high in protein.

In the other study, Eric E. Noreen, PhD, of Gettysburg College, Pennsylvania, and his colleagues asked 44 men and women to take either 4 grams of fish oils (consisting of 1,600 mg of EPA and 800 IU of DHA) or placebos daily for six weeks.

By the end of the study, subjects had a notable increase in lean muscle. Their body fat decreased by about 1 pound, and their percentage of body fat declined by about 0.4 percent.

Citing other research, Noreen wrote that EPA and DHA can reduce the activity of fat-promoting genes, as well as increase the burning of body fat.

Noreen reported one other benefit from the fish oils. People taking them had a decrease in cortisol levels (measured in saliva). Cortisol is a stress hormone, and high levels increase the risk of heart disease and death.

References: Smith GI, Atherton P, Reeds DN, et al. Dietary omega-3 fatty acid supplementation increases the rate of muscle protein synthesis in older adults: a randomized controlled study. *American Journal of Clinical Nutrition*, 2010; doi 10.3945/ajcn.110.005611. Noreen EE, Sass, MJ, Crowe ML, et al. Effects of supplemental fish oil on resting metabolic rate, body composition, and salivary cortisol in healthy adults. *Journal of the International Society of Sports Medicine*, 2010;7:31. Note: you can calculate your own BMI at www.nhlbisupport.com/bmi/ □

Perspectives

Do You Get Enough Vitamin D?

The U.S. National Institute of Medicine (IOM) recently recommended a slight increase in the recommended daily allowance for vitamin D. But the committee cautioned against taking large amounts of vitamin D and calcium, and it wrote that large amounts of vitamin D daily was potentially harmful.

The IOM committee consisted of bone doctors and none of the recognized experts on vitamin D. It was a politically “safe” recommendation for the committee members, but one that is medically harmful to nearly everyone else.

Taking 600 IU of vitamin D daily might help you protect your bones, compared let’s say to no vitamin D at all. However, the research is overwhelming that much larger amounts – 2,000 to 5,000 IU and above daily – can reduce your long-term risk of multiple types of cancer, heart disease, depression, diabetes, flu and other infections, and, yes, osteoporosis.

In my opinion, the IOM committee is guilty of malpractice. It’s members have reversed the Hippocratic Oath from “first do no harm” to “first do harm.” Shame on them. Keep taking your D. –JC

More research summaries on next page

Taking Multivitamins Appears to Reduce Risk of Heart Attack

Taking a daily multivitamin supplement, especially in combination with other types of nutritional supplements, appears to significantly reduce the risk of a heart attack.

Alicja Wolk, Dr. Med. Sc., of the Karolinska Institute, Sweden, and her colleagues tracked the health of 31,671 women with no history of cardiovascular disease and 2,262 women with heart disease. The women ranged from 49 to 83 years of age and were all living in Sweden.

During an average of 10 years of follow up, 932 women in the first group and 269 women in the second group had suffered a heart attack.

Overall, women taking a low-potency multivitamin, roughly equivalent to the recommended daily allowance, were about 27 percent less likely to have a heart attack. Those who took a multivitamin along with some other type of supplement had a 30 percent lower risk of a heart attack.

Women who had taken a multivitamin for longer periods seemed to benefit more. Those who had taken a multivitamin for more than five years were 41 percent less likely to have a heart attack.

Reference: Rautiainen S, Akesson A, Levitan EB, et al. Multivitamin use and the risk of myocardial infarction: a population-based cohort of Swedish women. *American Journal of Clinical Nutrition*, 2010; doi 10.3945/ajcn.2010.29371. □

Abundant Magnesium Reduces Risk of Sudden Cardiac Death

Maintaining relative large reserves of magnesium may help prevent sudden cardiac death (SCD). SCD accounts for about half of all deaths from coronary heart disease – literally with people dropping dead. More than half of the people who suffer SCD have no signs of heart disease. Often, erratic heartbeats known as arrhythmias, play a role in SCD.

Christine M. Albert, MD, MPH, of the Harvard Medical School, and her colleagues investigated the relationship between SCD and magnesium, largely because the mineral has been shown to reduce arrhythmias. Albert compared 99 cases of SCD and 291 similar people who did not suffer SCD. The subjects were drawn from a larger study of 88,375 nurses, whose eating habits and magnesium levels were regularly assessed over 26 years.

Women who had the highest dietary intake of magnesium were 37 percent less likely to suffer SCD. Meanwhile, those with the highest blood levels of magnesium were 77 percent less likely to experience SCD.

“If the observed association is causal, interventions directed at increasing dietary or plasma [blood] magnesium might lower the risk of SCD,” wrote Albert.

Reference: Chiuev SE, Korngold EC, Januzzi JL, et al. Plasma and dietary magnesium and risk of sudden cardiac death in women. *American Journal of Clinical Nutrition*, 2010; doi 3945/ajcn.110.002253. □

Skipping Breakfast Increases Risk of Overweight, Prediabetes

People who skip breakfast as children and adults are more likely to become overweight and develop several risk factors for prediabetes and heart disease.

Alison J. Venn, PhD, of the Menzies Research Institute, Australia, and her colleagues analyzed dietary and health data first collected from nine to 15-year olds in 1985. During follow up between 2004 and 2006, when the subjects were 26 to 36 years old, they obtained updated dietary information.

People who skipped breakfast as both children and adults had waistlines that were on average almost two inches greater, compared with people who consistently ate breakfasts. In addition, the breakfast skippers had higher fasting levels of insulin (a sign of insulin resistance, a form of prediabetes), higher total cholesterol levels, and high LDL cholesterol levels.

Venn cited other research indicating that people who skip breakfast tend to have other unhealthy dietary and lifestyle habits, such as eating a poorer diet and engaging in less physical activity.

Reference: Smith KJ, Gall SL, McNaughton SA, et al. Skipping breakfast: longitudinal associations with cardiometabolic risk factors in the childhood determinants of adult health study. *American Journal of Clinical Nutrition*, 2010L doi.3945/ajcn.2010.30101. □

Vitamins Give Women Better Odds Fighting Breast Cancer

A study of women with invasive breast cancer has found that taking modest amounts of vitamin supplements improves the chances of survival and reduces the odds of breast cancer recurrence.

Xiao-Ou Shu, MD, of Vanderbilt University, Nashville, and her colleagues studied 4,877 women, ages 20 to 75 years, who were living in Shanghai, China. The women were treated with surgery, as well as with chemo and/or radiation.

Overall, women who took multivitamins, vitamin C, or vitamin E supplements were more likely to live longer and experience fewer recurrences of cancer. Taking any of these vitamins was associated with an 18 percent lower risk of death and a 22 percent

reduced risk of cancer recurrence during four years of follow up. The benefits were observed whether the women took the supplements during chemotherapy or whether they stopped taking them during chemotherapy. However, no benefits were seen among women taking vitamins who also underwent radiation therapy.

The benefits seemed to increase with the duration of supplementation. Women who took vitamin C for more than three months had a 44 percent lower risk of death and a 38 percent decrease in risk of recurrence. The benefits of vitamin E supplements were similar.

“Our results do not support the current recommendation that breast cancer patients should avoid use of vitamin supplements,” wrote Shu.

Reference: Nechuta S, Lu W, Chen Z, et al. Vitamin supplement use during breast cancer treatment and survival: a prospective cohort study. *Cancer Epidemiology, Biomarkers and Prevention*, 2011; 10.1158/1055-9965.EPI-10-1072. □

Modest Increases in Protein and Fiber Helps Lead to Weight Loss

Increasing the consumption of both protein and fiber – both of which help stabilize blood sugar – leads to greater weight loss and other improvements, compared with a standard low-fat, high-carbohydrate diet.

Lisa Te Morenga, PhD, of the University of Otago, New Zealand, and her colleagues asked 89 overweight or obese women, ages 18 to 65 years, to follow one of two diets for 10 weeks. One diet was a traditional high-carbohydrate, low-fat, low-protein (20 percent of total calories) regimen, whereas the other had slightly larger amounts of protein (30 percent of total calories) and much more fiber (35 grams daily). Women on the high-protein, high-fiber diet were *not* asked to restrict their calories.

By the end of the study, women eating the high-protein, high-fiber diet lost substantially more weight and body fat, compared with those following the more traditional diet. The high-protein, high-fiber group lost an average of almost three pounds of weight, two pounds of body fat, and a pound and one-half of fat around the belly. They had no loss in lean muscle tissue.

In addition, the high-protein, high-fiber diet led to reductions in total cholesterol and low-density lipoprotein (LDL) cholesterol.

Reference: Morenga LT, Williams S, Brown, R, et al. Effect of a relatively high-protein, high-fiber diet on body composition and metabolic risk factors in overweight women. *European Journal of Clinical Nutrition*, 2010;64:1323-1331. □

Distracted While Eating? You Probably End Up Eating More

Nearly everyone multitasks, and if you try to focus on tasks when you’re eating, you’re likely to eat more food and not realize it. The consequence: Probably gaining more weight than you’d like.

Jeffrey M. Brunstrom, PhD, of the University of Bristol, United Kingdom, and his colleagues asked 22 people to eat identical meals for lunch. Some of the people were asked to play computer solitaire during lunch and others were not. Thirty minutes later, all of the subjects were asked to “taste test” cookies and then to recall what they ate for lunch.

The people who had played computer solitaire had more difficulty remembering what they ate for lunch, and they described themselves as feeling less full. They also ate twice as many cookies compared with people who did not have any distractions during lunch.

Brunstrom noted that other studies have also found that distractions lead to increased food intake – such as when snacking while watching television, or using a smart phone while eating. His study was unique in that it showed that distractions do interfere with the ability to remember what a person has eaten.

Reference: Oldham-Cooper RE, Hardman CA, Nicoll CE, et al. Playing a computer game during lunch affects fullness, memory for lunch, and later snack intake. *American Journal of Clinical Nutrition*, 2010; doi 10.3945/ajcn.110.004580. □

Amino Acid Supplements Can Help People with COPD

A study of 32 patients with severe chronic obstructive pulmonary disease (COPD) and sarcopenia (i.e., age-related muscle mass) has found that daily amino acid supplements can lead to significant physical and cognitive improvements.

Roberto W. Dal Negro, MD, of Orlandi Hospital, Verona, Italy, and his colleagues asked 25 men and seven women with severe COPD and secondary sarcopenia to take either 4 grams of essential amino acids or placebos twice daily for 12 weeks. The supplements provided the eight essential dietary amino acids, which are the building blocks of protein.

“Chronic obstructive pulmonary disease is often associated with substantial weight loss and reduced skeletal mass and function ... Weight loss and muscle wasting contribute to a reduction in physical performance and can lead to disability,” Dal Negro wrote.

The subjects’ health was assessed at the beginning of the study and again after four and 12 weeks.

Continues on next page

Quick Reviews of Recent Research

- Living longer comes at a price – disability
Most people want to live longer, but greater life expectancy increases the odds of disease and physical disability. Researchers from the University of Southern California, Los Angeles, analyzed data showing increases in life expectancy over the past 10 years. However, the prevalence of serious diseases, such as cancer, cardiovascular diseases, and diabetes, increased as people got older. In addition, the prevalence of physical disability grew as well. The researchers noted that while people lived longer, it wasn't because they were free of disease. Rather, they lived longer with disease or disability.

Crimmins EM. *Journal of Gerontology: Social Sciences*, 2010;10.1093/geronb/gbq088.

- Fried fish may be culprit in “stroke belt”
Researchers at Emory University, Atlanta, Georgia, analyzed dietary habits and the risk of stroke nationwide in a study of 21,675 people. Overall, people consumed the same number of servings of fish each week. However, people in the “stroke belt,” in the South were one-third more likely to eat fried fish, which destroys or displaces the healthy fats normally found in fish. The researchers attributed part of the risk of stroke in the South to consumption of fried fish.

Nahab F. *Neurology*, 2010: epub ahead of print.

- Low vitamin D levels in orthopedic patients
Patients about to undergo orthopedic surgery commonly have marginally deficient or seriously deficient levels of vitamin D, a nutrient needed for healthy bones. Physicians at the Hospital for Special Surgery in New York City measured vitamin D levels in 723 patients scheduled for various types of

orthopedic surgery, including sports injuries, trauma, and hip and knee surgery. Overall, 43 percent of the patients had borderline deficiencies and, of those, 40 percent were classified as being deficient. Men were more likely than women to have low vitamin D levels, and people with darker skin tones (e.g., Blacks and Hispanics) were 5.5 more likely than others to have low vitamin D levels.

Bogunovic L. *Journal of Bone and Joint Surgery*, 2010; 93:2300-2304.

- Coffee and tea reduce brain cancer risk
Researchers at the Imperial College, London, and other institutions analyzed the relationship between coffee and tea consumption and the risk of two types of brain cancer, glioma and meningioma. The subjects were drawn from nine European nations, and over eight years of follow up, the researchers noted a significant protective effect among people consuming 3.38 ounces (100 milliliters) or more coffee and/or tea daily. The researchers speculated that antioxidants in coffee and tea might help protect against some types of brain cancer.

Michaud DS. *American Journal of Clinical Nutrition*, 2010;92:1145-1150.

- Yoga improves mood, GABA levels
Adopting 12 weeks of yoga practice does a better job of improving mood, compared with walking, according to a study by researchers at the Boston University School of Medicine. Nineteen subjects were asked to practice yoga and 15 were asked to walk three times weekly for 12 weeks. People practicing yoga had greater improvements in mood, less anxiety, and higher brain levels of gamma amino butyric acid (GABA), a calming anti-anxiety neurotransmitter.

Street CC. *Journal of Alternative and Complementary Medicine*, 2010;16:1145-1152.

Amino Acids and COPD...

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People taking the amino acid supplements had progressive improvements during the course of the study. They gained an average of 13 pounds of body weight and eight pounds of fat-free (muscle) mass. Other tests indicated an increase in energy-generating biochemical pathways and improvements in physical activity.

The amino acid supplements also led to improvements in cognitive function. None of these changes occurred among people taking placebos.

Reference: Dal Negro RW, Aquilani R, Bertacco S, et al. Comprehensive effects of supplemented essential amino acids in patients with severe chronic obstructive pulmonary disease and sarcopenia. *Monaldi Archives for Chest Disease*, 2010;73: 25-33. □

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