Coaches help to keep people in the Zone

Our new Zone Coaches have been featured in past editions of Zone Living. This month we are going to give examples about how our coaches help people stay in the Zone.

Ellen Trebbin

My customer ordered a Fast Track (containing ZoneFast Foods) because of some medical issues and the need to lose a significant amount of weight. Initially, there were many questions about how to use the baked goods and how to incorporate them into the meal planner. My client felt like he was asking silly questions, and that there were too many of them. I assured him that there is no such thing as a silly question and that getting as many questions answered as possible could ensure better success with the program. He had questions about how to incorporate the Daily Essentials and when minor problems with digestion came up, I helped him solve those as well. To date, there has been great success in weight loss and complete independence by eating in the Zone. I believe that my role is to communicate, support, guide and educate my customers.

Alex Haller

I've been working with a woman for a few months now who has been receiving weekly shipments of custom packages of the baked foods. She started off using primarily our baked foods and recipes to ease into the Zone diet. Our relationship started off with me answering questions about portion sizes, recipe ideas and how to correctly incorporate our foods into her lifestyle. As she has become more comfortable using our foods, she has started to transition into a combination of a ZoneFast/Classic Zone program. We still chat back and forth if she has questions or wants to make changes to her orders, but communication has decreased since she now knows what works for her. I am happy to say she has lost 10 pounds and feels better than ever now that she is "in the Zone!"

Chris Kelley

I have been working with this client now since Feb. 17. They, husband and wife, have been receiving ZoneFast foods every couple of weeks and are taking the OmegaRx and polyphenols as well. In the past, protein in the form as meat, tofu, dairy and eggs was making her feel sick and adding more weight. They recently went away for three weeks, bringing the supplements and baked foods with them and have successfully learned, through coaching, our dietician Mary Perry, and the many Zone books they have read how to incorporate these foods into her diet. Within a month both lost more than 10 pounds, and they report at least one pound per week since. Both say they have much more energy at work and around the house, and now when they get hungry, they do not crave junk food, but want a healthy Zone meal because they now realize how great and healthy you feel once you have learned how to eat the Zone way. We still speak once a week, and I will place orders for her, review her food log and answer any questions that may have come up.

Bill Devine

I had a call from a person who had failed with many previous diets and wanted to find out about the Zone diet programs. Through conversation, I learned that she had a goal of losing 25 pounds. I explained about the food, cost and weight-loss expectations. After the first week the customer was feeling better, but was disappointed that she didn't seem to have lost any weight. However, four or five days later during our next conversation, the weight results were showing, with a loss of five pounds. Over the last month, while buying some Zone Foods and using Classic Zone recipes, she has lost a total of 18 pounds, is feeling much better overall and is well on the way to her goal weight.

A Zone Coach will contact all new customers of Zone Labs to answer any preliminary questions they may have. A coach will contact them again a week later. After that, customers may call when they have more questions. For more information, call 1-800-404-8171.



Sherlock dines at Seasons 52

Sherlock Zone, our intrepid food detective, recently dined out at Seasons 52, a restaurant that promises to offer "seasonally inspired cooking with every item less than 475 calories."

There are several Zone-friendly salads: BBQ Chicken Salad with organic greens, jicama, tomatoes, toasted sunflower seeds and shaved Parmesan; Mediterranean Shrimp Salad with organic greens, garbanzo beans, roasted peppers, cucumber and feta cheese; Maui Tuna Crunch Salad, sushi-grade seared tuna, tropical organic greens, toasted almonds and miso vinaigrette; and Lemongrass Salmon Salad with organic field lettuce, teardrop tomatoes, almonds and white balsamic vinaigrette.

Favorable entrees include: Farmer's Market Vegetable Plate with spring snap peas, grilled ponzu tofu and toasted almond tabbouleh (go easy on the tabbouleh); Grilled Boneless Rainbow Trout with spring new potatoes, roasted vegetables and broiled lemon (substitute a double order of vegetables for the potatoes); Roasted Artichoke-Stuffed Shrimp with wilted leaf spinach, pasta pearls (omit) and clam cioppino sauce; Wood-Roasted Pork Tenderloin with herb polenta, broccoli, cremini mushrooms and shallot-Dijon glaze (say no to the polenta); and Cedar Plank Roasted Salmon with whole-roasted sweet carrots, fresh asparagus and red bliss potatoes (again, ask for extra vegetables and ditch

You might need to ask for extra vegetables to bring your carbs up to the right level

There are also special menus: gluten free, lactose free, vegetarian, vegan, low sodium and garlic free.



Obesity starts in the womb

By Dr. Barry Sears

A new study from Harvard Medical School strongly suggests that childhood obesity begins in the mother's womb (1). Specifically, the lower the EPA and DHA concentrations in either the mother's diet or her umbilical cord attached to the fetus, the more likely the child will develop obesity by age 3.

It is well known from animal experiments that omega-6 fatty acids make the offspring fat, and omega-3 fatty acids make the offspring thin (2-4). This new study now confirms the same thing is happening in humans (1).

It has been demonstrated in animal models that it only takes three to four generations of a high omega-6 fatty acid intake to increase obesity in the offspring (5,6). I believe one of the driving forces for the increase in child-hood obesity has been the dramatic increase in omega-6 fatty acids over the past 100 years (7). However, much of that omega-6 fatty acid

increase has come from the massive increase in soybean oil consumption that started in the early 1970s. That 40-year period only represents about two generations of humans, which means it is quite likely there will be higher childhood obesity rates coming with the next generations as long as omega-6 fatty acid consumption stays elevated.

At the molecular level, the problem really starts when these excess omega-6 fatty acids are activated by ever-increasing insulin levels caused by refined carbohydrate consumption to create increased cellular inflammation. In my book "Toxic Fat" I describe some of the political decisions and their meta-

bolic consequences that have led to the epidemic increase of cellular inflammation that has resulted in the rapid deterioration of American health (8).

The bottom line is that this dramatic increase in omega-6 fatty acids in the diet of American mothers is causing transgeneration changes in our children due to fetal programming. This occurs in the womb and results in the final tuning of the genetic code of the fetus by changing the gene expression of the unborn child. This is called epigenetic programming and begins to explain why each succeeding generation of Americans is getting fatter and fatter (9).

Even more ominous warnings are animal studies that indicate the "reward" response (increased dopamine levels) induced by consuming junk food experienced by the mother can also be transferred to the next generation by fetal programming (10).

So what can you do about this growing genetic disaster? If you are contemplating

having a child, then beginning to cut back on omega-6 fatty acids and eating more omega-3 fatty acids is a good starting point. The benefits include having a thinner and smarter child. If you already have children whose gene expression has already been altered by fetal programming, then you have to control their diet for a lifetime to prevent reverting to that altered gene expression. It's not a pretty picture. Although you can't escape the dietary consequences of fetal programming, you can minimize the damage by treating food as drug to manage increased cellular inflammation that is making us fatter, sicker and dumber.

- 1. Donahue, SMA, Rifas-Shiman SL, Gold DR, Jouni ZE, Gillman MW, and Oken E. "Prenatal fatty acid status and child adiposity at age 3y." Amer J Clin Nutr 93: 780-788 (2011)
- 2. Gaillard D, Negrel R, Lagarde M and Ailhaud G. "Requirement and role of arachidonic acid in the differentiation of pre-adipose cells." Biochem J 257: 389-397 (1989)
- 3. Kim HK, Della-Fera M, Lin J, and Baile CA. "Docosahexaenoic acid inhibits adipocyte differentiation and induces apoptosis in 3T3-L1 pre-adipocytes." J Nutr 136: 2965-2969 (2006)
- 4. Massiera F, Saint-Marc P, Seydoux J, Murata T, Kobayashi T, Narumiya S, Guesnet P, Amri EZ, Negrel R, and Ailhaud G. "Arachidonic acid and prostacyclin signaling promote adipose tissue development: a human health concern?" J Lipid Res 44: 271-279 (2003)
- 5. Blasbalg TL, Hibbeln JR, Ramsden CE, Majchrzak SF, and Rawlings RR. "Changes in consumption of omega-3 and omega-6 fatty acids in the United States during the 20th century." Am J Clin Nutr 93: 950-962 (2011)
 - 6. Hanbauer I, Rivero-Covelo I, Maloku E, Baca A, Hu Q, Hibbeln JR, and Da-

- vis JM. "The Decrease of n-3 Fatty Acid Energy Percentage in an Equicaloric Diet Fed to B6C3Fe Mice for Three Generations Elicits Obesity." Cardiovasc Psychiatry Neurol: 2009. Article ID 867041 (2009)
- 7. Massiera F, Barbry P, Guesnet P, Joly A, Luquet S, Moreilhon-Brest C, Mohsen-Kanson T, Amri EZ, and Ailhaud G. "A Western-like fat diet is sufficient to induce a gradual enhancement in fat mass over generations." J Lipid Res 51: 2352-2361 (2010)
 - 8. Sears B. "Toxic Fat." Thomas Nelson. Nashville, TN (2008)
- 9. Godfrey KM, Sheppard A, Gluckman PD, Lillycrop KA, Burdge GC, McLean C, Rodford J, Slater-Jefferies J, Garratt E, Crozier SR, Emerald BS, Gale CR, Inskip HM, Cooper C, and Hanson MA. "Epigenetic gene promoter methylation at birth is associated with child's later adiposity." Diabetes 60: 1528-1534 (2011)
- Ong ZY and Muhlhausler BS. "Maternal "junk-food" feeding of rat dams alters food choices and development of the mesolimbic reward pathway in the offspring." FASEB J 25: S1530-6860 (2011)

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CARBOHYDRATES:

The good and the bad

By Dave Schreck

If there were one food group that's responsible for our nation's stunning rise in obesity and decline in heath, it would be too many "bad" carbohydrates. However, most of us don't know what carbohydrates are. Hint, they grow in the ground.

The 1977 Dietary Goal for the United States was to increase our "bad" carbohydrate consumption (grains and starches) to 60 percent of calorie intake. Today's USDA Food Pyramid recommends the majority of our carbohydrates come from grains. No wonder we're the fattest and sickest nation in the world! These "bad" carbohydrates raise insulin; elevated insulin makes you fat and keeps you fat!

Most of us assume "good" carbohydrates are pasta, breads, corn chips, beans, rice and cereals and fail to realize the healthiest carbohydrates are non-starchy, colorful vegetables. The Zone recommends approximately 40 percent of our calories come from these "good" carbohydrates. Why? They have a low glycemic index (they control your blood sugar and insulin) and are loaded with polyphenols, the compounds that give vegetables their color. Emerging science is beginning to demonstrate that these compounds may be more beneficial than vitamins and minerals because of their antioxidant and anti-inflammatory properties. Examples are asparagus, broccoli, cabbage, eggplant, kale (green leafy veggies), red and green peppers, snow peas, summer squash, spinach, Swiss chard, sprouts, tomato, watercress, and zucchini to name a few. Fruits? Mixed berries are the best because they are loaded with polyphenols and have a low glycemic index.

What to look for when shopping for "good" carbs? Bright color, firm texture, crispness, no bruising, dents, wrinkles or dark spots. How do you store these foods? Have you noticed that you have two food bins in your refrigerator? Fruits contain compounds that affect the ripening process; therefore, fruits and vegetables need to be stored separately. Leafy greens are best wrapped in damp paper towels and stored in open plastic bags to allow for air circulation. Broccoli, cabbage, eggplant,

What to look for when shopping for "good" carbs? Bright color, firm texture, crispness, no bruising, dents, wrinkles or dark spots.

peppers, snow peas, summer squash and zucchini are best stored unwrapped in open plastic bags. Tomatoes should be kept at room temperature because the cool temperature of the fridge activates enzymes that make them lose their texture and flavor. The ideal shelf life of most vegetables is less than five days as the vitamins and polyphenols become depleted; therefore, to obtain the highest amount of nutrition, you'll have to shop often.

The Zone recommends consuming eight to 12 servings of vegetables per day. If this is a concern for your budget, consider these economical alternatives to high-priced grocery store produce: Farmer's markets, food co-ops like CSA (community supported agriculture), wholesale food clubs and even Wal-Mart. Also, purchase foods that are in season and watch supermarket flyers for sales.

I know what you're saying. OK, colorful, non-starchy vegetables and mixed berries are important. But, it takes time to shop, I've got to shop frequently, they can be expensive, and it takes time to prepare. Is there an easier way to obtain the benefits? Yes, consider frozen fruits and vegetables. They are often more nutritious than many fresh vegetables because they are frozen at harvest, and much of their nutrient content is preserved. Stock up during sales.

And some of you are thinking, I don't have the time to shop and cook and really don't like vegetables. Any options? While the Zone recommends fresh whole foods, supplementing with a high-quality polyphenol is a wise decision. Both the Polyphenol Plus capsules and the SeaHealth Plus liquid provide the same amount of antioxidants as you would find in 10 servings of fruits and vegetables.

For additional information regarding carbohydrates go to www.drsears.com. Click on Resources then the icon titled "Understanding Anti-Inflammatory Diets." For information on polyphenols go to www.zonediet.com. Click on the Wellness frame, then products.



High-intensity interval training – Bump it-up for greater health and fitness gains

By Lisa Zeigel

The latest exercise guidelines released by the experts (including scientists, public health experts, advisors from the American College of Sports Medicine and the Center for Disease Control, and more) in 2008 attempted to clear up all the confusion about just what the minimum amount of exercise is needed for us to stay healthy. A lengthy document (more than 60 pages), the publication states several times that at the minimum, adults need 150 minutes per week of moderate-level activity, and the easiest form of this is brisk walking. It goes on to mention that more activity than this is even better, and that higher intensity, longer duration, or greater frequency can result in added health benefits.

Most people who would actually take the advice of health professionals when they are told they need to get active (and the majority of the population is still not doing this) and prefer to stay at the lowest level. This is, of course, doing a great deal of good in lowering the risk of many conditions, (including heart disease, diabetes, osteoporosis, and more) by 20-35 percent! Findings from a study conducted in 2006 saw a further risk reduction by 20 percent for those who doubled the amount of activity (1). So longer endurancetype activity (such as walking) can be very beneficial except for one problem: If most people balk at taking the time to get the minimum 150 minutes in each week, would getting in 30 minutes five days a week be any easier? Based on my observation, probably not; however, the guidelines also mention that just 75 minutes per week of vigorous activity will produce the same reductions in health risks and improvements in body composition/ strength/cardiovascular performance, etc., as the longer-endurance recommendations. Does spending less time to get the same results sound good? You bet it does!

To quote many famous infomercials, "But wait, there's more!" Another recent study found that vigorous-intensity exercise actually provides an increased beneficial reduction in health risks, more so than the equivalent recommendation of moderate intensity (2). So not only do you save time, you get more out of it! The physiological reason for this is not fully understood. We do know that aerobic capacity improves with a higher level of training, but the main question is just how does this lower cardiovascular disease risk? One theory suggests that it is the autonomic nervous system, which controls coronary function that improves the most. Whatever the actual reason for this boon, who would not find it appealing? Well, I can think of a couple

In working with beginning exercisers, I find that fear is a big factor holding them back from increasing exercise intensity. Many people are afraid of hurting themselves, some don't like to be out of breath, and others do not like to sweat! So they are content to stroll along on a treadmill at a leisurely pace, or gently pedal on a stationary cycle, avoiding that over-exertion that they fear. If I were to tell someone like this to bump it up and hit it hard for 20 minutes, they would tell me I am crazy! However, I have found that sneaking in higher intensity levels into smaller, more manageable increments will not only help people get over this fear, they can actually learn to enjoy this type of training, and thus experience the added benefit of vigorous training without the feeling of being overexerted! We call this type of training "high intensity interval training" or "HIIT," and it can be utilized anywhere, with or without any type of equipment, and anyone can do it!

The beauty of this type of training is that the exerciser can use his or her "RPE" as a measure of intensity, that is, the level of exertion is relative to their "rate of perceived exertion." For example, if using a scale of 1-10, with 1 being at rest and 10 being maximal effort, one might consider 4-6 to be a moderate level, and 7-10 vigorous. The idea would then be to incorporate short bursts, or intervals, of activity in the high end of the scale within the moderate levels. Activities can include walk-

ing on a treadmill - - say you walk at a level equivalent to #5 on your RPE scale for two minutes and then bump up the speed or the incline on the treadmill until you reach 8-10 (whatever you are comfortable with) on your RPE scale. Maintain this pace for one minute, then slow the treadmill down or lower the incline back to reach the #5. You would then repeat these intervals up to eight times for a total workout time of 24 minutes (along with a thorough warm-up of at least five minutes at a slower pace beforehand and a five-minute cool-down at the end). Your reward for this effort will be improved oxygen consumption and an increased calorie burn that can last long after the exercise session is over! All for less time and less fuss and muss. I regularly see people spending from 45 minutes up to an hour on the treadmill, thinking that longer is better, and they are not necessarily enjoying it!

As I mentioned, this technique can be used on any type of equipment, from stationary cycles to elliptical machines and stair-steppers. It can also be applied to strength training. I teach a class that utilizes strength-training intervals interspersed with cardio intervals. Apart from the physiological benefits, you also get a mental boost – it can make exercise seem less of a chore when you know you are not going to spend as much time doing it, it can add fun and interest and there are so many different ways to mix it up, you will almost never run out of options!

Of course, when starting any new activity program, newcomers are cautioned to check with their health-care provider before starting a program like this, and consulting with a professional trainer or instructor who can help you safely progress to high-intensity interval training is highly recommended.

HIIT is a great option for everyone. You can still work at your own pace, only bumping it up for short bouts. Although you do have to go outside your comfort level, the good news is that you don't have to stay there for long, and you might find that it really feels good and gives you a greater sense of accomplishment!

- [1] Warburton, D.E., Nicol, C.W., & Bredin, S.S. (2006). Health benefits of physical activity: the evidence. Canadian Medical Association Journal, 174(6), 801-809.
- [2] Swain, D.P. and Franklin, B.A. (2006). Comparison of cardioprotective benefits of vigorous versus moderate intensity aerobic exercise. American Journal of Cardiology, 97: 141-147.