
Weighing In November 2016

But this program doesn't work!"

This newsletter is a little different than the ones we usually write. We recently adopted a program that tracks our received complaints along with our positive affirmations. Although most of our feedback is 90% positive, there are some complaints. I wanted to look at these complaints and negative comments and then see which patients wrote them and what their charts said about them. What I found was quite amazing.

One young lady, who had been a patient of ours for a few years but had left approximately two and half years ago, commented that the program simply doesn't work. So, I looked up her name and noted that the years she'd stayed with us she had done fairly well when she would stick to the program. Then she would slip back to her old habits. Notes in the chart suggested that she went back to her drinking diet drinks along with eating cereal with her morning Starbucks mocha latte! This was pointed out in the chart more than 16 times. She would then apologize for straying from the program and once again would become more focused. The following week showed a loss of approximately 2 ½ to 3 pounds. This went on for many months going back and forth, back and forth.

Then her attitude changed. She began telling us that she stuck with the program completely yet she couldn't lose a pound. Upon further questioning though she would admit that she hadn't exactly stayed on program at all. Now this became a constant source of tension in the office with her visits. She would convince herself that she was doing everything right, and yet the program wouldn't work for her.

Now that she's been gone for approximately two years, she decided to take it out on us again. She wrote, "I lost 66 pounds on this program, but after two years I gained it all back. I've now gone on to use other programs, and I'm quite happy. But I admit that I can't lose as much weight as I had before." I recalled her addiction to diet drinks. She also had addictions to other food groups. Until this lovely young woman comes to grips with her reality, there will be no program that can help her. This is quite a shame because we here at The Weigh Station want to help everyone.

So let's talk about those addictions that so many of us fight with. We have another patient who is a real estate agent in her 60s. She admits that she buys approximately two liters of Diet Coke at the beginning of each day, more if she's stressed. She drinks a Diet Coke on her way to work and keeps her glass nearly full by her side at all times throughout her day. Then at the end of the day, she puts away another two liters of diet drink. "I just love it," she had said. "You know, I crave it. I need it. My food tastes better with it!" She sure sounds like an addict to me. Some patients may not sound as gung-ho as she does, however there are people who drink even more than this lady.

Recent government surveys have found that people who drink diet beverages average more than 28 ounces per day and many people drink far more than that. So what is it that is causing these folks to go after these diet drinks? Some say it's the artificial sweeteners that are contained in the drink that work as a psychological addictive factor. Others think it may be related to caffeine, but it doesn't explain the diehard drinker who prefers caffeine free drinks, does it?

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So there has to be something more to their addiction. A Recent study showed that both aspartame and sucralose (Splenda) trigger responses inside our brains. In 2008 a study done at Stanford University, for instance, showed that women who drank water that was altered with a dash of sugar or a dash of Splenda couldn't tell the difference between the tastes of the artificially sweetened water and the slightly sugar sweetened one, but the brain could. The functional MRI brain scan revealed that while both drinks lit up the brain's reward center, sugar made it much more active. While the artificial sweetener did light up the brain's reward center, it was not as powerful of a reward as the sugar was. "Your sense tells you there's something sweet that you're tasting, but your brain tells you that it's not as much of a reward as we expected," explained professor of psychiatry at the University of California, San Diego, Dr. Martin P. Paulus. He opined that it is possible that the consequences of drinking sodas with these artificial sweeteners might be that the brain says, 'Well, I might just have more of this.' Artificial sweeteners may spur drinkers, or their brains, to keep chasing a "high" that diet soda keeps forever just out of reach. "It's not proven that this teasing effect can lead to dependence, but is very possible," says Dr. Paulus. He goes on to explain that artificial sweeteners have a positive reinforcing effect meaning humans will work to get that pleasure just like they would with other substances such as alcohol or even drugs of abuse. He adds, "Whenever you have that, there is a potential that a subgroup of these people...will have a chance of getting addicted."

At Tulane University School of Medicine in New Orleans, Dr. Harlan offers a slightly different opinion. He says that while diet soda dependence appears to be real phenomena, it is probably caused by a mix of behavioral factors, not necessarily just the artificial sweeteners. He does add, however, that although there is no clear-cut evidence of biochemistry dependence on diets that include soda, his sense is that certain people do become habitual drinkers of diet soda and eventually depend on it greatly.

The American Psychiatric Association says a key sign of substance dependence is when a person continues to use the substance that he or she knows is causing physical or mental health problems. Our earlier mentioned real estate agent fits this category. Diagnosed with brittle bone syndrome about six years ago, she was strongly urged by her internist to quit diet drinks because the phosphoric acid in soda (both diet and regular) leeches calcium from the bones which makes osteoporosis worse.

Yet this lady was not having anything to do with her doctor's warning. She had commented, "It's not like I smoke or have any other bad habits. This is just my thing." Another distinguishing factor of substance abuse or dependence is the painful withdrawal symptoms that occur for person tries to just quit cold turkey. This is true whether it is caffeine, nicotine or hard drugs like heroin. Although it's difficult to pinpoint if it is aspartame, sucralose, or caffeine in the ingredients that cause the problem, people who cut back on diet drinks report symptoms such as headaches, nausea, and irritability.

So if you should hear someone say that the Weigh Station program doesn't work, maybe you can enlighten them that while it may not have worked for certain people, it does work successfully for the many who honestly follow the program. All we can do is try to help as many people as we can to overcome their addiction to certain food groups as well as to diet drinks, and to carbohydrates that they cannot tolerate. There are so many areas of addiction that we are able to successfully help patients to conquer.

So as you face the holidays knowing that there will be a lot of food choices you will have to make, remember that there are three beautiful words in the English language that will help you with your eating---"No thank you." Wishing you a wonderful Thanksgiving and praying that we will have a new President that truly understands the needs of the American people, particularly those in private practice or small business.

Blessings to all,
Chuck Shaffer MD

Exercise May Change Fat Cells!

Once you get through the first week of our program we often begin asking about exercise. We all know exercise is good for us and new research may provide even more motivation to fit it into your regular weekly routine!

New research is now showing that exercise may help ward off diabetes by improving the ability of fat cells to burn calories. It may do this in part by boosting levels of a hormone called irisin, which is produced during exercise. Researchers believe that this hormone may help to turn white fat into much more metabolically active brown fat, the findings suggest.

Irisin recently entered the scientific literature in 2012 after researchers from Harvard and other universities published a study that showed that irisin was created in working muscles in mice. From the muscle, it would enter the bloodstream and move to other tissues, especially fat tissue, where it would jump-start a series of biochemical processes that caused some of the fat cells, normally white, to turn brown.

Brown fat, which is actually brown in color, is more metabolic and therefore burns calories. It also is known to contribute to improved insulin and blood sugar control, decreasing the risk for Type 2 diabetes. When we are born, we have lots of brown fat, but we lose most of our brown fat as we become adults.

In the 2012 study, the investigators found that if they injected irisin into mice, it not only turned some white fat into brown fat, it also kept the rodents from becoming obese, even on a high-fat, high-calorie diet. STOP Interestingly, some scientists have questioned whether irisin affects fat cells in people to the same extent as it seems to in mice and whether irisin was even present in humans at all. Researches who conducted a recent study in Cell Metabolism established that irisin is infact produced in humans. They found some irisin in sedentary people, but the levels were much higher in those who exercised on a regular basis.

But whether irisin acted beneficially in human fat cells the same way as it did in the bodies and cells of mice was still an open and disputed question.

So in August a follow up study was conducted to answer this. It appeared in the American Journal of Physiology — Endocrinology and Metabolism. Scientists at the University of Florida took white fat tissue from women who had undergone breast reduction surgery and also took a very small amount of brown fat from people who had had surgery to treat kidney cancer. The researchers, who had previously studied irisin's effects in mice, had a form of the human hormone available and now set out to marinate the fat cells with it, using three different dosages.

Some of the white fat cells that they treated were mature, while others were baby cells, essentially stem cells that could grow into fat or other types of tissue. They also bathed the brown fat with irisin.

All of the cells were soaked with the hormone for four days.

During the experiment, scientists checked the levels of a protein called UCP1 that is known to contribute to the browning of white fat, as well as for other biochemical markers that would indicate that the white cells were browning.

These markers were identified, especially in the cells that were exposed to moderate or high doses of irisin. Those cells soon began to produce significantly more UCP1 than other cells and also were more metabolically active, meaning that they burnt more calories.

At the same time, many of the stem cells in the fat tissue exposed to irisin turned from fat cells a type of cell that matures into bone. The tissue treated with irisin, in fact, wound up with about 40 percent fewer mature fat cells than tissues unexposed to the hormone.

Irisin had no effects on brown fat.

The results strongly indicate that irisin nudges human white fat to become brown and also suppresses the formation of new white fat, says Li-Jun Yang, a professor of hematopathology at the University of Florida and senior author of the study (which was funded by the scientists themselves). It also seems to promote the formation of bone.

“I think this study helps us to understand how, at a cellular level, exercise makes us healthier,” Dr. Yang says.

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Although the experiment was done using living cells, it was not done inside a living body, and the effects of irisin in actual people still need to be established. Especially since many studies have shown that exercise rarely results in significant weight loss. Scientists also do not know what types of exercise lead to the greatest production of irisin or what amount of irisin might be ideal for health purposes.

Dr. Yang hopes to conduct studies of the hormone in people.

But even now, the science related to irisin is compelling enough, she says, that “my advice is, exercise as much as you can. We know it’s healthy and now we’re beginning to understand better why.”

<http://www.nytimes.com/2016/10/12/well/move/how-exercise-may-fight-obesity-by-turning-white-fat-into-brown.html>

Announcements:

- Check out our website under the “Recipes” tab for a copy of our Thanksgiving menu!
- Injections: Due to Board of Pharmacy changes we are able to offer lipo-B injections to patients without pre-ordering. The cost is also included in the price of a non-discounted weekly visit! Please let our staff know if you would like the injection instead of the tablets. *Discounted weekly visits will incur a \$10.00 additional charge.
- Holiday Special: Schedule a Initial Visit and receive your supplements (and Phentermine) at that visit for no additional cost. (Up to \$50.00 savings!) Check our website for details! www.theweighstation.com
- Want to receive special offers? Text “Start” to 540.364.5198