

Nutrition *News and Views*

March/April 2012

Vol.16, No.2

For health professionals

SECRETS OF SUCCESSFUL WEIGHT LOSS, Part 1

By Judith A. DeCava, CNC, LNC

Well, they're not actually secrets. But many people aren't aware of some or most of them. Or they're compelled to fall for ultra-fast weight loss claims; magic drugs or supplements to burn fat, stimulate metabolism or suppress appetite; the latest miracle diet book; or other appealing proposals. So what **should** you do?

GET FOCUSED. If current trends continue, half of North Americans will be obese—not just overweight—by 2030. Losing weight is a goal for multitudes. There are 48,450 diet books on amazon.com. Anyone can lose weight. Starvation will work, but you won't like the way you look or feel. Weight loss alone does not bestow health. Becoming overweight is a **symptom** of an unhealthy lifestyle, malnutrition, toxicity, excess stress, submission to a sick food industry, and disconnection with nature. Lessening the symptom is like taking a drug to mask it without healing the reason the symptom exists in the first place. Many health problems are more commonly related to excess weight—hypertension, diabetes, osteoarthritis, asthma, fatty liver, cancer, and more. But you can become skinny and still be in poor health, still have the deficiencies, imbalances, poor cellular functions. Instead, focus on **building health**. Rather than **subtracting** calories that 'make you fat,' you need to **add** foods and activities that improve health and well-being. Loss of excess weight and fat will be a positive side-effect. Changing unhealthy eating habits and increasing physical activities should **not** be a temporary program of rules. Even if you do lose weight, chances are you'll gain it back once you're off the program. Plus you don't change much of what's going on inside your body. Your goal should **not** be to lose weight but to **improve** your lifestyle. Cultivate a **life-long** way of eating and living.¹

DON'T COUNT ON JUST COUNTING CALORIES. 'Calorie' is shorthand for kilocalorie (kcal or 1000 calories), the energy needed to raise a liter of water 1°. To determine calories, food is burned in a water-enclosed chamber (bomb calorimeter). The number of degrees by which the burning food raises the water's temperature equals the number of calories in the food. Your body isn't a water-enclosed chamber in a laboratory. It's a lot more complicated. Still, your body is said to 'burn' calories in the process of **metabolism** (all material and energy transformations that occur in your cells). Your body expends this energy in many ways, from breathing to exercising. How many calories should you eat each day? Since a calorie is a measurement of burning, that's difficult to answer. It depends on your age, gender, activity level, hormonal balance, weight-loss goals, and much more. We're told that burning 3500 calories equals a loss of one pound. But it's not that simple. The 3500-calorie number is mathematically derived from measuring the energy content of weight lost, but in real life with real people, it doesn't account for "dynamic responses in human metabolism to changes in diet and body composition." The math looks good on paper but doesn't translate into unique and complicated vital functions of a living being. Researchers report that "a given diet results in an uncertain degree of energy deficit." They **can't tell** how much weight you'll lose. If cutting 500 calories a day truly meant losing a pound a week, a dieter weighing 300 pounds would disappear in six years. When people reduce calories below what they're 'burning,' the baseline begins to change too. At some point, weight loss stops even while continuing the lower calorie intake. The more you slash calories, the more your metabolism slows, and the less weight you lose. Reduction of calories does not consistently decrease excess weight. Obese people often lose only a small amount of weight on a low-calorie diet. The point is that **only** lowering calories is not the answer.

It also matters **where** calories come from. Our bodies can distinguish one type of calorie from another. **What** you eat has a huge influence on long-term weight management and how the body determines whether to store fat or use it for energy. Foods and drinks must be looked at not for just their calories but how they affect your body. You can count calories and eat junk. If you eat nutrient-poor nonfood, your body can do little else but quickly 'burn' it or store it as fat; if you eat nutrient-dense real food, your body uses it for healthy function and to maintain muscle. Muscle tissue continually burns energy. The more lean muscle you have, the greater your metabolic rate and fat-burning capacity. Usual calorie-counting weight-loss diets can decrease muscle mass and lower metabolic rate by 10 to 20%. By reducing calories with low-nutrient **nonfoods**, you may lose weight, but your body suffers, you lose muscle tissue, and it will be easier to regain weight. People who focus on **nutrient-dense** foods tend to consume fewer calories. One big reason is that your body knows it's getting the nourishment it needs so you don't need to eat more. "To lose weight," says Neal Barnard, MD, "you do have to

eat fewer calories than you burn, but you don't have to do it through willpower. If you change the type of food you eat, it happens more or less automatically." Being overweight indicates you need more nutrition. If you're overweight, your body is hungry. If you're obese, your body is starving. Not for calories, but for **nourishment**. Sure, cut calories and weight may come down, but your body's cellular composition and function may not be further affected. While restricting calories seems to ease a few health risk markers, most markers of cellular stress/defense, illness or disease are not changed. Nothing much changes in cells or messages being sent to cells. Actually, severe calorie restriction can have a number of harmful effects—from loss of muscle to serious nutritional deficiencies. "Weight loss regimens that blindly prescribe" calorie restriction "are only partially successful and can produce undesirable effects," explains an article in *The Journal of Nutrition*. Author Gary Taubes contends "that we're making a fundamental mistake even thinking in terms of calories." Counting calories even takes away from enjoyment of food. Overall, you miss the point of eating.

Even Weight Watchers® changed its calorie-counting emphasis—its President, David Kirschhoff, explains: "We needed a program that recognized that calories are most definitely not created equal." Food choices need to be based on something besides calories. "You're not going to get healthier, even if you manage to shed pounds, by eating fewer cookies than you did before. If you really want to lose weight and improve your health, then you must replace empty calories and denatured foods with nutrients!" Nutrient-deficient nonfoods must be replaced with nutrient-dense real foods. Calories are **not** created equal. They won't have identical effects on your weight or health. Overweight doesn't result from just eating too many calories and not exercising enough. It results from eating the wrong **kinds** of calories and probably not exercising enough. If over-processed 'junk' food caused healthy weight loss, the US would be the healthiest nation in the world. It is definitely not.²

DON'T GO ON A DIET. Dieting refers to a **temporary** restriction of eating. Once weight is lost, the dieter returns to his/her 'normal' way of eating and usually regains weight. Various diet plans have pretty much the **same** results: Average weight loss is 6% (about 10 to 15 pounds) and most dieters regain all the weight they lost within five years. Programs in which food is purchased or diets from diet books don't teach people enough about food so old eating patterns, when resumed, lead to weight regain. Instead, eating well should be a **lifetime goal**, not something to do for a few months or a year. Actually, many successful weight losers don't use any specific type of diet. They learn what their bad habits have been and make healthful changes. Indeed, **long-term** changes in diet and exercise have been shown to have the **best** effect on weight reduction and maintenance. **Drop** the 'dieting' and **go for** 'eating better.' Focus on consuming and **enjoying** real nutritious foods that promote health. Many people associate weight-loss diets with feeling hungry and being miserable. Without enough energy, they don't feel like exercising. Yes, restraint is needed. So is retraining of tastes. But feeling hungry need not be an issue. Weight loss can be a positive experience. Replacing depleted, over-processed, altered non-foods with nutrient-dense real foods provides our bodies with what they need to function properly so that we feel **satisfied** and well. We look better too.

Although most diet books or diet programs claim to be **the** one and only way to lose weight, research reveals there are many ways to achieve successful weight loss. A custom, individualized program allows the person to create his/her own program of food and activity. The **chief** rule is that natural, preferably organic, unprocessed, un-messed-with-real foods should comprise what is eaten. So whether the individual feels better eating more meat, less meat, more grains, few grains, more dairy, less or no dairy, more fats, less fats, and so on—that's what should be consumed. "The ratios of fats, carbohydrates and protein differ from person to person, and while some thrive on greater amounts of vegetables and very little meat, for example, others will experience deteriorating health unless they eat sufficient amounts of high quality proteins." This may even change with circumstances. Imbalances in biochemistry, illness, disease, disturbances in function of any gland or organ or system can compromise the function of any **other** tissue or organ or system in the body. Thus getting to 'the only' cause of overweight is, according to an article in *Science*, a "formidable challenge, in part because so many body systems are affected." A real food diet and possibly some real-food supplements can aid in restoring balance to the body's systems, tissues, organs, and glands. Diets that simply proportion protein, fats, and carbohydrates or limit calories are, say scientists in a *Nutrition Reviews* article, "often not sustainable for long periods of time." Instead, the "ideal diet should be personalized to each patient and should include those dietary factors that imbue healthy and satiating dietary habits that are beneficial not only for effective weight loss, but are also good for body-weight maintenance as well as for reducing" risk of illness and disease. Experts stress individual differences and the need for a **personalized** plan for the unique needs of the

individual. Don't diet, '**my**' it. Remember, real changes and improvements in your body and health take **time**. For example, studies find that overweight and obese people have **deficiencies** of numerous nutrients. They eat too much of what their bodies don't need (nonfoods) and not enough of what their bodies do need (real food). Improving nutritional status takes time. And changes to high quality foods and changes in behavior may need to be made gradually so they become integrated into the lifestyle. Besides, quick weight loss is not healthy. Learn to enjoy real food and physical activities as a normal part of your life. ³

EAT FOR QUALITY. "The idea that there are no 'good' or 'bad' foods is a myth that needs to be debunked," says Harvard professor Frank Hu, MD, PhD. A registered dietician I met said she keeps Twinkies and Snickers in her desk for snacks since she didn't see them as 'bad.' **Wrong**. Your body needs nourishment from real, naturally nutrient-rich foods, not over-processed nonfoods low or devoid of nutrients. Overweight usually means **under-nutrition**, a body craving vital nutrients. Studies have even shown that "early under-nutrition may be a determinant of obesity later in life." Will popping a multi-vitamin/mineral supplement daily solve the problem? No. Real foods (and real food supplements) are required because of the "unique nutrient interactions that are only optimal when provided by the natural food sources." Real food contains complexes—**clusters**—of many interrelated, interworking nutrients. You can't get that in isolated or synthetic nutrients, even if there are many of them in one pill. Real 'skinny' foods are packed with nourishment and are satisfying, keeping you full longer. Fresh vegetables and fruits; whole grains; beans; eggs; quality meats, poultry and seafood; nuts and seeds; and certified raw milk products benefit weight loss, weight maintenance, true health. Natural, unaltered fats and unrefined oils are also important to healthful weight loss. Omega-3 fats, coconut oil, and conjugated linoleic acid (in whole milk products), for instance, have been shown to aid satiation, weight loss, general metabolism, and blood sugar metabolism. All these foods fill you up while packing far more nutrients than 'empty' calorie items such as soda, refined bakery items, chips, hot dogs, ice cream, and the like. For example, people who ate eggs for breakfast lost **twice** as much weight as those who started their day with bagels. Eggs contain valuable nutrients, increase satiety, decrease hunger, and don't adversely affect the cardiovascular system. Bagels are made from chemical-laden, low-nutrient flour fried in morphed, toxic refined oils.

The **big** obstacle to surmount is we tend to like foods we're used to eating. Yet retraining your taste buds is not as difficult as it seems. Genes alone do not dictate what you like and don't like, though your genes may influence how much protein, fat, carbohydrates, animal foods and vegetable foods you feel best eating. So you're not born loving pastry and hating broccoli. You **learned** to enjoy foods and nonfoods. You can re-learn to enjoy more healthful foods. Find palate-pleasing preparation methods. Pay attention to texture, flavor, spiciness and various nuances of real foods. Many people are amazed to discover that they begin to savor foods they used to (or think they used to) dislike. Later, when they eat a nonfood they used to cherish, it doesn't taste as good; they've lost their enjoyment of it. This transition takes time, but it definitely happens. Cultivating a taste for unfamiliar foods requires exposure—try and try again. Children learn to like what their caregivers eat. 'Good' is what parents or peers think is 'good.' The best way to teach someone that healthful, nutritious foods are important and delicious is to eat them **yourself**. This works for children and adults. When we see others enjoying different foods, we **want** to try them ourselves. However, too many offerings or flavors at once can lead to overeating. For example, you can eat a huge savory dinner and still find room for a sweet dessert. Food manufacturers combine a variety of flavors into processed foods that spur appetite and promote excess intake. Thus, limit flavors at a meal so you feel satisfied and stop eating. Enjoy real foods without having to excessively complicate them with souped-up hyper-flavors. Quality foods taste good. Education and support also motivate positive dietary changes. When people discover the benefits of healthful foods and that it's not so difficult to put into practice new ways of eating, they generally **want** to change. Environment is another factor. Whereas one place may not be a health-food mecca, another may foster more health-conscious eating. Choose restaurants carefully. Home is high-priority—don't stock nonfoods in your pantry and refrigerator. Your home should be chock-full of real, nutrient-dense foods. Then that's what you'll eat.

A stubborn **sweet** tooth may be curbed by eating fruit—people drawn to candy, ice cream, and pastries also find fruit appealing. Eating more fruit and gradually weaning off refined-sugar nonfoods can solve the tendency. **Freshly**-made juices, even fruit juices, have been acquitted of causing excess weight gain. Fresh juices are loaded with nutrients to supplement whole fruits and vegetables. Bottled or canned juices are acid-forming and depleted of nutrients; they should be avoided. Eating more **raw** foods (vegetables, fruits, raw milk products, nuts, seeds) can result in dramatic improvements in weight and health. Try beginning each meal with raw fruit,

a veggie-rich salad or a broth-based soup. Drink plenty of water throughout the day. Instead of chips or pretzels, eat raw nuts or seeds (combined, if desired, with dried fruits) or raw milk cheese. Eating breakfast may help keep you lean while skipping breakfast is linked to weight gain. There's a lack of consensus on whether or not drinking **alcohol** increases or decreases weight. Evidence indicates that alcohol can result in weight gain at higher levels of drinking, drinking large amounts during a short time, or consuming hard liquor. Light-to-moderate alcohol intake, especially wine, may be more likely to protect against weight gain. Beers and most types of liquor tend to contain more additives, residues, and toxins that may affect health and weight.

Real foods not only satisfy your appetite but also change your biochemistry. For example, nutrient-rich foods were found to change the composition of fat cells in overweight and obese people. Fat cells exhibit remarkable adaptability and communication with other cells in the body. They alter their composition in response to changes in the diet. Eating better quality foods positively affects the inflammation process, metabolism, insulin response, blood sugar stabilization, stress markers, tissue integrity, gland function, and much more.

Some research links **leaky gut** (increased intestinal permeability) to excess visceral (internal) fat, higher liver fat, and larger waist circumference. This suggests either leaky gut promotes accumulation of fat or the causes of excess fat contribute to leaky gut. This condition occurs due to minute breaks in the membrane lining the intestinal wall. The tiny gaps allow toxins, wastes, and undigested bits of food to escape into the bloodstream. Many items can contribute to intestinal-wall damage including refined sugars, refined grains, prednisone, antibiotics, other drugs, chlorinated or fluoridated water, pesticides, other toxic chemicals, and more. Virtually anything that can upset the balance of bacteria in the digestive tract can foster damage to the intestinal lining, leading to leaky gut. The trillions of bacteria in the human gut are influential in aiding or disturbing weight, depending on amounts, types, and whether they are healthy or 'sick.' Obese people have higher amounts of certain types of bacteria; lean people have higher amounts of other types. When obese people lose weight, changes occur in the ratios of various types of bacteria. Does excess weight trigger changes in bacteria? Or do changes in bacteria contribute to obesity? Do 'sick' bacteria promote weight gain and healthy bacteria help balance weight? Not yet known. But it **is** known that **what** you eat determines what bacteria you have in your gut. Eat well. Plus, eating non-pasteurized fermented foods and/or taking pre- and probiotics can help. ⁴

DON'T EAT LOW QUALITY. If you eat a lot of over-processed, fast-food, takeout, or supermarket-prepped meals, you **don't** know what you're consuming. The food industry turns foods into nonfoods, nonfoods into worse nonfoods. Typical nonfood diets result in "the alarming prevalence of obesity." Removing nutrients and fiber, adding refined sugars or toxic fats, and other prevalent aspects of food processing "have created an environment in which our foods are essentially addictive," says Dr Robert Lustig, University of California. A study by the Scripps Research Institute found that over-consumption of fast food "triggers neuroaddictive responses" in the brain. The more nonfood you eat, the **more** you need in order to get the pleasure 'high.' Current research indicates that excess food intake can be due to addiction—certain foods or ingredients added to foods can trigger an addictive process in susceptible people. Eating certain items (especially "high-fat sweets") can cause endogenous opiate-like substances (with narcotic-like effects) to be released in the brain. High-fructose corn syrup, trans fats, refined salt, MSG, and various chemical preservatives may cause changes in brain activity and function that mirror those that occur with drug addiction. Striking similarities are found between refined sugar and classic drugs of abuse regarding use and withdrawal patterns. Director of the National Institute on Drug Abuse, Nora Volkow, said concerning study findings: "The data is so over-whelming the field has to accept it." Scientists find a tremendous overlap between drugs in the brain and non-foods in the brain. If you're '**addicted**' to refined sugar or any other nonfood, it will take effort to break the habit. You may even temporarily gain a little weight, but eventually weight will come off and health will improve.

Some people lose control easier, don't sense satiety, and become preoccupied with food. About 50% of obese, 30% of overweight and 20% of normal weight people score high in these characteristics. Again, one **reason** is they're not getting the nourishment they need; they eat too many nonfoods that contain little or no nutrition. The body signals the brain that it needs nutrition; areas of the brain continue to be activated, signaling more food is needed. Dr William Albrecht called the craving for nonfoods the '**hidden hunger** phenomenon.' His research showed that animals were fatter and less muscular when grazing on lands where the soil was depleted by heavy industrial farming and use of pesticides. The grass and grains fed to the animals contained less protein, fewer minerals, and were depleted in other nutrients. The animals experienced more sickness,

more disease, and sometimes failed to reproduce normally. Dr Albrecht found that people who ate meat from such animals suffered because they, too, didn't getting needed nourishment. The lack of nutrients in our soils, common with modern agricultural methods, can only produce nutrient-deprived, calorie-rich foods. Nonfoods.

Some overweight people have specific food **intolerances**. A food to which one has an intolerance can be hard to resist and may temporarily relieve symptoms that develop because of regular consumption of that food. If foods to which one has an intolerance or addiction can be avoided for three weeks or so, the craving often lessens or disappears. Among the most common culprits are refined sugars, corn, soy, dairy, and wheat: ingredients in most altered, over-processed nonfoods. People talk about being addicted to sugar, pasta, potato chips and chocolate. You don't hear anyone claiming to be addicted to carrots, lentils or fish. It's especially the altered-fat, sugary or salty kinds of nonfoods that capture people. It is necessary to retrain your brain to resist non-foods. For example, tell yourself you'll harm yourself if you eat that, or substitute an enjoyable healthier food or activity for the nonfood, or make rules to resist temptation and avoid cues that could prompt unhealthy eating. Cravings are largely governed by memory and reinforced by habit. Remove visual and sensory cues. In one study, people who identified a goal and stated three ways they'd accomplish it were much better at achieving the goal than those who hadn't verbalized a way to resist temptation. Make a contract with yourself.

Food (or nonfood) **cravings** can also reflect hormone imbalances, blood sugar fluctuations, a poor sense of taste or smell, a lack of digestive enzymes, or use of medications that increase appetite. Adrenal fatigue, for example, often causes cravings for salty items and/or chocolate. Cravings can point to nutrient deficiencies as well. I recall a client who craved mayonnaise; she would get a spoon and eat it straight from the jar. Of course, it contained refined, altered fats. She had difficulty digesting fats and deficiencies of fatty acids. Her body was trying to tell her what was wrong but her mind misdirected her to an erroneous solution. Once support to fat digestion and supplemental sources of fatty acids improved her situation, the craving disappeared. Cravings **always** mean something, but some detective work may be needed to discover what it is.

Studies **link** nonfoods with weight gain. For example, deep-fried foods, refined sugar, high-fructose corn syrup (HFCS), artificial sweeteners and fake fats have all been shown to promote poundage. Deep-frying employs toxic cooking oils; high temperatures deplete nutrients and alter composition. HFCS, used to sweeten a myriad of processed foods and beverages, is not handled like other sugars in the body. Refined vegetable oils and HFCS damage biochemistry and are obstacles to weight loss. Refined sugars and flours result in blood sugar spikes and crashes, excess insulin, decreased insulin sensitivity and other consequences that "play a role in body weight regulation and therefore these parameters may affect individual responses to hypocaloric diets." In other words, a reduction in calories while still eating refined carbohydrates may **not** result in weight loss. Increased insulin levels, for example, suppress hormones that promote fat- and sugar-burning and muscle building, increase hunger only a couple of hours after eating, and make it almost impossible to use stored body fat for energy. 'Diet foods' often include artificial sweeteners such as aspartame (NutraSweet) and Splenda or artificial fats such as Olestra. Artificial sweeteners often lead to **increased** eating and weight gain: your body senses sweetness, so prepares for carbohydrates by increasing insulin secretion for one thing. Excess insulin over time leads to insulin resistance, elevated blood sugar, more weight, more problems. Artificial fats prevent your body from digesting beneficial fats and fat-soluble vitamins. This disturbs the body's ability to control food intake. You crave sugars and other refined carbs. You'll become deficient in vital fat-soluble nutrients and disturb your body's ability to properly process fats. Trans fats (partially-hydrogenated vegetable oils) disrupt biochemistry; weight loss becomes difficult, weight gain easy. Foods with altered, stripped, or fake ingredients won't improve your weight or your health. They're far more likely to cause problems in both categories.

Also, "the ubiquitous presence in certain foods of chemicals...can promote obesity." Toxins; additives; artificial preservatives, flavors, colors; and other chemicals contribute to the problem. Does avoiding **gluten** (a protein in wheat, rye and barley) help you shed pounds? You may lose some weight, but it's more likely from avoiding **refined** wheat rather than avoiding gluten per se. On a gluten-free diet you eliminate bread, muffins, pastries, and other baked goods and desserts that contain refined flour. **Whole** wheat, rye and barley contain more fiber than most other grains, so they may actually help weight loss. Gluten can cause a cascade of adverse reactions in people with celiac disease. But shunning gluten because you think it will encourage weight loss or increase energy has no scientific evidence behind it. Worse still, if you believe gluten is the culprit and you swap refined, gluten-containing foods for refined gluten-free counterparts, you can end up gaining weight.

Industrial food manufacturing practices have created a “toxic environment” that promotes overweight and obesity. An article in *The Lancet* concurs: “The simultaneous increases in obesity in almost all countries seem to be driven mainly by changes in the global food system, which is producing more processed, affordable, and effectively marketed food than ever before.” Don’t be a victim of the nonfood industries.⁵

For more specific information on supportive quality foods and non-supportive non-quality foods, see my book, *Good Foods, Bad Foods*. For some supplemental support when beginning weight loss efforts:

15 or 20 Minutes Before Lunch and Dinner:

1 Tablespoon SP Complete (or SP Complete Dairy-Free)
1 Tablespoon Whey Protein (or 2 teaspoons Calcifood Powder)
1 teaspoon Whole Food Fiber

Mix or blend powders with freshly-made juice or certified raw milk, or ‘clean’ water.

¹ Tufts Univer Hlth & Nutrition Ltrr, Aug 2008, 26(6):3; *Consumer Mags Dig*, May 2010, 22(4):5; K Arnold, *Nat Solutions*, Dec 2010/Jan 2011, 130:45-7.

² S Heymsfield, J Harp, et al, *Am J Clin Nutr*, Feb 2007, 85(2):346-54; D Mozaffarian, *Lancet* 27 Aug 2011, 378(9793):759; M Meydani, S Das, et al, *J Nutr Health Aging*, 2011, 15:456-60; J Bland, *Integrative Med*, Jun/Jul 2007, 6(3):22-4; J Roth, AL Szulc, et al, *Am J Clin Nutr*, Apr 2011, 93(4): 875S-83S; G Loewenstein, *Am J Clin Nutr*, Apr 2011, 93(4):679-70; S Pasiakos, L Vislocky, et al, *J Nutr*, Apr 2010, 140(4):745-51; *Consumer Mags Digest*, Dec 2009, 21(12):4; *UC Berkeley Wellness Ltrr*, Dec 2008, 24(3):4 & Jan 2009, 25(4):2-3 & Mar 2009, 25(6):7; S Hall, *Health*, Jan/Feb 2009, 23(1):62; C Corvalan, R Uauy, et al, *J Nutr*, Nov 2008, 138(11):2237-43; M Bes-Rastrollo, RM van Dam, et al, *Am J Clin Nutr*, Sept 2008, 88(3):769-77; J Mercola, <http://articles.mercola.com/sites/articles/archive/2011/03/09/weight-watchers-finally-recognize...>, 9 Mar 2011; *Food & Fitness Advisor*, May 2011, 14(5):2-3; G Taubes, <http://articles.mercola.com/sites/articles/archive/2011/0820/what-if-its-all-been-a-big-fat-lie...>, 20 Aug 2011; Tufts Univ Hlth & Nutr Ltrr, Nov 2011, 29(9):3; J Smilowitz, M Wiest, et al, *J Nutr*, Feb 2009, 139(2):222-9; D Williams, *Alternatives*, Jan 2012, 15(1):6-7.

³ M Katan, D Ludwig, *JAMA*, 6 Jan 2010, 303(1):65-6; R Wing, *Nutrition Action Hlthltrr*, Jan/Feb 2008, 35(1):8; K Jolly, P Aveyard, *Lancet*, 22 Oct 2011, 378(9801):1444-5; Tufts University Hlth & Nutrition Ltrr, Oct 2007, 25(8):8 & Aug 2008, 26(6):3; B Phillips, *Alternative Medicine Alert*, Nov 2011, 14(11):130-2; R Wing, *JAMA*, 27 Oct 2010, 304(16):1837-8; M Rokling-Andersen, J Reseland, et al, *Am J Clin Nutr*, Nov 2007, 86(5):1293-301; J Savage, L Hoffman, et al, *Am J Clin Nutr*, Jul 2009, 90(1):33-40; *Environmental Nutrition*, Jul 2010, 33(7):8 & Jan 2010, 33(1):1,4 & Jul 2010, 33(7):3 & Dec 2011, 34(12):1,4; C Fuzy, *Townsend Ltrr*, Jun 2010, 323:56-7; J Mercola, <http://articles.mercola.com/sites/articles/archive/2011/01/24/8-tricks-for-boosting-your-met...>, 24 Jan 2011; B Wisse, F Kim, et al, *Science*, 9 Nov 2007, 318(5852):928-9; I Abete, A Astrup, et al, *Nutrition Rev*, Apr 2010, 68(4):214-31; O Garcia, K Long, et al, *Nutrition Rev* Oct 2009, 67(10):559-72; S Heymsfield, A Pietrobelli, *Am J Clin Nutr*, Dec 2011, 94(6):1650-1; J Kimmons, H Blanck, et al, *MedGenMed*, 2006, 8(4):59; B Sarter, T Campbell, J Fuhrman, *Alternative Therapies*, May/June 2008, 14(3):48-53; D Heber, *Am J Clin Nutr*, Jan 2010, 91(1):280S-3S; C Ulbricht, C D’Adamo, et al, *Altern & Complem Ther*, Apr 2011, 17(2):76-83.

⁴ *Duke Medicine Hlth News*, Sept 2011, 17(9):3; K Murakami, S Sasaki, et al, *Eur J Clin Nutr*, 2007, 61(8):986-95; C Pagan, *Health*, Dec 2007, 21(10):81-4; L van de Vijver, R Goldbohm, et al, *Eur J Clin Nutr*, 26 Sept 2007, Epub ahead of print; J Davis, V Hodges, et al, *J Am Diet Assoc*, 2006, 106(6):833-40; J Ledikwe, H Blanck, et al, *Am J Clin Nutr*, Jun 2006, 83(6):1362-8; C Sass, *Eating Well*, Jan/Feb 2007, 6(1):43-8; *Nutrition Today*, Sept/Oct 2006, 41(5):192; L Hughes, I Arts, et al, *Am J Clin Nutr*, Nov 2008, 88(5):1341-52; D Sartorelli, M Cardoso, et al, *Nutr Res*, 2008, 28(4):233-8; H Isaksson, J Olsson, et al, *Food Nutr Res*, 28 Jul 2008, Epub ahead of print; R Rowan, *Second Opinion*, Jan 2009, 19(1):3-4; L Tucker, K Thomas, *J Nutr*, Mar 2009, 139(3):576-81; B Buijsse, E Feskens, et al, *Am J Clin Nutr*, Jul 2009, 90(1):202-9; D Romaguera, T Norat, et al, *J Nutr*, Sept 2009, 139(9):1728-37; N McKeown, M Yoshida, et al, *J Nutr*, Oct 2009, 139(10): 1950-55; J Davis, K Alexander, et al, *Am J Clin Nutr*, Nov 2009, 90(5):1160-6; S Griffioen-Roose, M Mars, et al, *J Nutr*, Nov 2009, 139(11):2093-8; M Adams, http://www.naturalnews.com/z027955_fat_cells_calorie_restriction.html, 17 Jan 2010; B Fife, *Well Being J*, Mar/Apr 2010, 19(2):18-22; D Huaidong, D van der A, et al, *Am J Clin Nutr*, Feb 2010, 91(2):329-36; K Fujioka, F Greenway, et al, *J Med Food*, 2006, 9:49-54; H Silver, M Dietrich, et al, *Nutr Metab (Lond)*, 2011, 8(1):8; G Bakker, M van Erk, et al, *Am J Clin Nutr*, Apr 2010, 91(4):1044-59; *Environmental Nutr*, Oct 2010, 33(10):7; N McKeown, L Troy, et al, *Am J Clin Nutr*, Nov 2010, 92(5):1165-71; J Beunza, E Toledo, et al, *Am J Clin Nutr*, Dec 2010, 92(6):1484-93; B Venn, T Perry, et al, *J of Amer Coll Nutr*, Aug 2010, 29(4):365-72; M Lankinen, U Schwab, et al, *J Nutr*, Jan 2011, 141(1):31-6; D Williams, *Alternatives*, Sept 2011, 14(9):1-4; E Granville, *Duke Med Hlth News*, Oct 2011, 17(10):4-5; D Parra, I Thorsdottir, *Appetite*, 14 Jun 2008, Epub ahead of print; L Norris, A Collene, et al, *Am J Clin Nutr*, 17 Jun 2009, Epub ahead of print; S Croezen, T Visscher, et al, *Eur J Clin Nutr*, 28 Nov 2007, Epub ahead of print; M Grimes, http://www.naturalnews.com/z028023_intestinal_bacteria_obesity.html, 26 Jan 2010; E Pennisi, 1 Apr 2011, 332(6025):32-3; T Arora, R Sharma, *Nutr Rev*, Feb 2011, 69(2):99-106; *UC Berkeley Wellenss Ltrr*, Oct 2009, 26(1):6; Weill Cornell Med Coll, *Food & Fitness Advisor*, Nov 2010, 13(11):1; S Baker, http://www.naturalnews.com/z029561_water_diet.html, 25 Aug 2010; K Murakami, S Sasaki, et al, *Nutrition*, 9 Jun 2008, Epub ahead of print; J Mercola, <http://articles.mercola.com/sites/articles/archive/2011/10/12/is-a-leaky-gut-causing-you-to...>, 12 Oct 2011; S Gortmaker, B Swinburn, et al, *Lancet*, 27 Aug 2011, 378(9793):838-47; G Blackburn, S Wollner, et al, *Am J Clin Nutr*, Jan 2010, 91(1):289S-92S; P Lofgren, *Nutrition Today*, Jul/Aug 2005, 40(4):154-5; A Lozada Tequeanes, D Petrucci Gigante, et al, *J Nutr*, Apr 2009, 139(4):750-4; C Sayon-Orea, M Martinex-Gonzalez, et al, *Nutrition Rev*, Aug 2011, 69(8):419-31; N Sprinkle, *Natural Solutions*, Jan 2009:15.

⁵ A Esmailzadeh, L Azadbakht, *J Nutr*, Feb 2008, 138(2):358-63; BA Swinburn, G Sacks, et al, *Lancet*, 27Aug 2011, 378(9793):804-14; *Acres USA*, Apr 2007, 37(4):75; P Guallar-Castillon, F Rodriguez-Artalego, et al, *Am J Clin Nutr*, Jul 2007, 86(1):198-205; *Health & Healing Wisdom*, Fall 2006, 30(3):25, citing Robert Lustig, *Nature Clinical Practice, Endocrinology & Metabolism*; S Rogers, *Total Wellness*, Oct 2006:4 & Jan 2008:2-3; M Tanofsky-Kraff, J McDuffie, et al, *Am J Clin Nutr*, Mar 2009, 89(3):738-45; G Cutler, A Flood, et al, *J Nutr*, Feb 2009, 139(2):323-8; J Temple, A Bulkley, et al, *Am J Clin Nutr*, Aug 2009, 90(2):304-13; Tufts University Hlth & Nutr Ltrr, Aug 2009, 27(6):3, citing *BMC Public Hlth*, www.biomedcentral.com/1471-2458/9/192; *Environmental Nutr*, Aug 2011, 34(8):7; NM Avena, M Gold, *Am J Clin Nutr*, Aug 2011, 94(2):367-8; D Kessler, *Nutrition Action Hlthltrr*, Aug 2009, 36(6):1-6; L Sanders, *Science News*, 21 Nov 2009, 176(11):8; A Pittas, S Roberts, *Nutr Rev*, Oct 2006, 64(10, Part 1):435-48; E Clark, A Dewey, et al, *Am J Clin Nutr*, Feb 2010, 91(2):300-8; Weill Cornell Med Coll, *Food & Fitness Advisor*, Jun 2011, 14(6):3; *Environmental Nutr*, Jun 2011, 34(6):8; L Epstein, K Carr, et al, *Am J Clin Nutr*, Jul 2011, 94(1):12-8; N Seppa, *Science News*, 30 Jul 2011, 180(3):10-1; C Benbrook, A Greene, *San Francisco Chronicle*, Fri, 9 Jul 2010; K Arnold, *Nat Solutions*, Dec 2010/Jan 2011, 130:45-8; N Fuchs, *Women’s Hlth Ltrr*, Nov 2011, 17(11):3-5; Tufts Hlth & Nutr Ltrr, Aug 2009, 27(6):suppl; J Savage, M Marini, et al, *Am J Clin Nutr*, Sept 2008, 88(3):677-84; *Health*, Jul/Aug 2009, 23(6):26; *Consumer Mags Digest*, Sept 2008, 20(9):5 & Mar/Apr 2011, 23(2):5; K Lowenstein, *Health*, Nov 2011, 25(9):24; K Kesitalo, H Tuorila, et al, *Am J Clin Nutr*, Aug 2008, 88(2):263-71; N Gray, www.organicconsumers.org/articles/article_21750.cfm, 1 Oct 2010; *Duke Med Hlth News*, Jul 2011, 17(7):6; A Gearhardt, S Yokim, et al, *Arch Gen Psychiatry*, Aug 2011, 68(8):808-16; *Altern & Complem Ther*, Aug 2009, 15(4):164; J Raloff, *Science News*, 22 Oct 2011, 180(9):16; I MacDonald, *Am J Clin Nutr* Oct 2009, 90(4):908-9; J Mercola, <http://articles.mercola.com/sites/articles/archive/2011/12/22/why-is-it-suddenly-cheaper-to...>, 22 Dec 2011; D Williams, *Alternatives*, Feb 2009, 12(20):157-60; Tufts Univ Hlth & Nutr Ltrr, Oct 2007, 25(8):7; H Galer, *What Doctors Don’t Tell You*, Feb 2007, 17(11):22; E Huff, http://www.naturalnews.com/z034478_junk_foods_addictive_brain_chemistry.html, 24 Dec 2011; R Gorman, *Eating Well*, Mar/Apr 2011, 10(4):44-8.