THE (SAD) STATE OF OUR NATION'S DIET

...and how our government has helped us get here in only 50ish short years!

1955 – Ray Kroc opens his first McDonald's franchise. During the next 49 years, <u>eating out</u> becomes much less of a special event and much more common as people get busier and busier.

1956 – USDA creates <u>A History of Food Guides from the USDA</u>, suggesting two servings of milk, at least 2 servings of meat, at least four of fruits & vegetables, & at least four servings of breads/cereals.

1963 – Weight Watchers is incorporated and the first public meeting is held in a loft in Queens.

1967 – 13 years after the first tv dinner was sold, Amana introduces the Radarange microwave oven to home cooks. It's now even more convenient to eat piles of sugar and refined carbohydrates in the form of <u>frozen foods</u>. Obesity is on the rise.

1975 - The Gov't begins heavily subsidizing our grain-producing farmers, High Fructose Corn Syrup is invented, and portion sizes start to swell. Hamburgers expand by 23% in the next 20 years; a plate of Mexican food gets 27% bigger; soft drinks increase by 52%; snacks (potato chips, pretzels, crackers) grow by 60%. We're now entering the second generation of overeaters who can't believe that a fast food soda used to come in 10 oz. cups. We now have 1,000 more calories readily available to us each day, the number of Americans with heart disease begins to creep upward and the government decides to get into the nutrition business. In search of a fix to increasing heart disease, the federal government decided to recommend a low-fat, high-carbohydrate diet. 1977 - The first dietary guidelines, called *Dietary Goals*, are published in 1977. According to these goals, the key to a healthy diet was to eat more carbohydrates (55 to 60 percent of daily calories) and limit saturated fat (10 percent of daily calories). Americans complied. Consumption of saturated fat dropped while the amount of carbs in the American diet skyrocketed. Unfortunately for America's health, however, the USDA has a serious conflict of interest. Along with promoting "healthy" nutrition, the department is tasked with creating a demand for the country's agricultural products. (anyone see a problem there?) These two responsibilities are often at loggerheads. And, by the basic nature of giving the thumbs up to some foods and the thumbs down to others, the USDA runs the risk of alienating the very industries it's charged with supporting. "Every five years what comes out is nutrition science with a big dose of politics," says Michele Simon, a lawyer who specializes in food advocacy and is the author of Appetite for Profit: How the food industry undermines our health and how to fight back (Nation Books, 2006). "Often many members on the committee have direct financial ties to the food industry." All of this has led to a colossal tug of war. For instance, in the 1970s, most saturated fat in the American diet came from meat, eggs and dairy. After the publication of the Dietary Goals in 1977, people curtailed their fat consumption. Sales of meat, eggs and dairy dropped. Industry bigwigs were outraged. And, later that year, under intense pressure from food lobbyists, the government revised the publication to say that consumers should "choose meats, poultry and fish which will reduce saturated fat intake." And that kind of shenanigans is hardly a thing of the past. According to the <u>Center for Responsive Politics</u>, a research group that tracks money and politics, agribusiness spent more than \$120 million lobbying Washington, D.C., lawmakers in 2010 ALONE.

1980 – The six-week Beverly Hills Diet is publicized which starts dieters off with 10 days of nothing but fruit and water – and a common side effect of diarrhea. Hundreds of "fad" diets soon follow.

1989 – February is declared <u>National Snack Food Month</u> by the Snack Food Association & the National Potato Promotion Board. A month-long campaign results in a 41% increase in snack food consumption. Junk food in general, aided by preservatives and additives and sky high in sugar and calories, contributes to the fact that twice as many children (25%) are overweight today than 30 years ago.

1990s – Foods labeled <u>"Low-Fat" and "Lite"</u> are hitting their stride and people rely on them to make up for other bad eating habits. People find out far too late is that <u>"low-fat" doesn't mean "low calorie."</u>

1991 – The World Wide Web is born, capping four decades of inventions that encourage a sedentary lifestyle, including TV, video games and riding lawn mowers.

1992 – The <u>USDA Food Pyramid</u> is created - it strongly (and visually) suggests that a healthy diet includes 6-11 servings pasta, cereal, rice and bread, up to 4 servings of fruit, and 2-3 servings of dairy. Meats, nuts & eggs are lumped together & limited to 2-3 servings per day - so if you had 2 eggs & 3 sausage links for breakfast, forget about adding protein to the rest of your day! Fats, oil & <u>sweets of any kind</u> are to be consumed 'sparingly' - this

recommendation leads to rapid growth of even more 'low-fat' foods & the proliferation of 'sugar-free' artificially sweetened foods.

1994 – In August of this year, the now ubiquitous "Nutrition Panel" is now mandatory on most foods. Unfortunately - and this is a BIGGIE in the confusion of it all - for some foods the <u>serving sizes in the Pyramid and on the label are not the same.</u> For example, the Pyramid serving size for pasta is ½ cup cooked (about 1 ounce uncooked), while on the label it is about 1 cup cooked (2 ounces uncooked). So while 6 servings on the pyramid = 3 cups of pasta, on a box of pasta 6 servings is actually 6 cups. The calorie count for 'serving' of a bread and cereal group item can vary by over 200 calories! Eleven "USDA approved servings" can just as easily equal a modest 300 calories (rice krispies) or a health-destroying 2500 (pancakes)! And that is just for ONE of the six food groups. ARGH!

1998 – Olestra, a non-digestible, nutrition-less fat substitute is approved by the FDA for use in no-fat snacks. Suddenly, eating has no apparent consequences. Food is merely a placeholder to quell hunger, whether you get the nutrients you need or not.

2001 – The United States Department of Agriculture (USDA) and The National Institutes of Health (NIH) admit that the Food Guide Pyramid has been a total failure. 80% of Americans recognized the symbol, but people have become MUCH sicker and even BIGGER since it was "updated" in 1992. The <u>Pyramid recommendations</u> were based on uncertain scientific evidence, and, while snazzier in design, did not reflect major improvements in our understanding of diet and health. "It troubles me that the public is not getting the best available information," says Walter C. Willett, M.D., D.P.H. '80, professor of medicine and Stare professor of epidemiology and nutrition in the faculty of public health at Harvard University. The U.S. Department of Agriculture (USDA) Food Guide Pyramid, ubiquitous on cereal boxes since 1992, is one major source of false intelligence. Since the department's mission is to promote American agriculture, not public health, Willett asks if it is "the best agency to be giving dietary advice. They have so many conflicts of interest." Given the state of our nation, the answer to that question appears to be a "no".

2005 – After decades of pretty consistent obesity rates, the <u>weight of an 'average' American increased by 20 pounds between 1975 and 2005.</u> In response, the USDA apparently decides that exercise might help things and introduces the new <u>"MyPyramid"</u> which includes the 'concept of physical activity'. It also introduces a band for oils

2010 - 2011 — The 2010 "Dletary Guidelines for Americans" is released and followed by the abandonment of the unsuccessful Food Pyramid in favor of "ChooseMyPlate, released in 2011. It offers the same old advice, but suggestions calorie restriction and increased exercise and now visually reminds you to fill roughly 25% of your dinner plate with each of the following: Veggies, Fruits, Grains & Proteins. It's linked to a comprehensive website that promotes everything from the First Lady's "Let's Move" campaign to a "SuperTracker" that allows you to track your food, health and fitness goals after registering, but sadly, offers the same badly-supported health & cooking 'tips' such as: Use vegetable oils (olive, canola, corn, soybean, peanut, safflower, sunflower) rather than solid fats (butter, shortening). The next update is slated for 2015. Let's hope for some 'change', eh? I'm crossing fingers!

WELCOME TO TODAY!– Due to a <u>'survivalist design'</u>, people are pre-programmed to take advantage of the readily available caloric resources and are now consuming about 300 extra calories per day. As a result of this extended period of "bounty" in America, two-thirds of our country is now overweight and 1 in 3 Americans is "obese". Over 50% of Americans now show 'warning signs' of elevated blood sugars, such as fatigue, frequent urination, and increased thirst, and yet most diabetics go undiagnosed for 10 years and <u>Colorado is the only state still under 25% obesity</u>, most likely due to our outdoor culture, low poverty rate and high educational level. Lest we Colorado are getting fatter at an even faster rate than the adults. We surely won't be under 25% for long!

Our children are seriously at high risk!

- They are much heavier than past generations, especially those in the black and latino populations and even <u>infants</u> are now being treated for obesity by 6 months.
- During 2011-12, 17% of children/adolescents were considered overweight/obese.

- A recent study showed that half of obese teenaged girls become severely obese by age 30.
- Overweight children are highly likely to become <u>overweight teens</u> and then overweight adults and current reports say that 13% of children who die from unrelated causes have 'fatty liver disease' and 30% of obese children who are autopsied have this condition. It is most often caused by alcoholism or eating too much sugar. Alcoholism in children is obviously quite rare.
- Type 2 diabetes is now commonly being treated in children as young as 10 years old, and a caucasian child born in 2000 has better than a 1 in 3 chance of having diabetes. Black and Latino children have more than a 1 in 2 chance of developing diabetes.
- Between 1999 and 2008, the percentage of adolescents between the age of 12 and 19 with diabetes or pre-diabetes increased from 9% to 23%.
- The same study found that 50% of overweight teens and 60% of obese teens had at least one risk factor for cardiovascular disease, including diabetes, borderline high or high Cholesterol levels or high BP.
- Part of the epidemic includes the <u>unrelenting advertising of sugar/HFCS-laden foods to children.</u>
- Compounding this problem is that even if you have no intention of walking in lock-step with the USDA's
 dietary advice, you'd be wrong to dismiss the guidelines as inconsequential because among other
 things, the USDA's Dietary Guidelines set the framework for federal nutrition policy. As such, they dictate
 what food is made available to millions through the National School Lunch Program; Women, Infants, and
 Children Program; and Child and Adult Care Food Program.
- Powerful, pernicious and predatory food marketing to children is one of the leading (and documented) causes of childhood obesity.

Mad and depressed yet? Me, too! So let's stop looking at the results and take a look at the cause and what we can do about it!

- In the past 100 years (and esp. the last 30 years), Americans have increased their fructose consumption from 15 g. a day to **over 75 grams** a day. EVERY SINGLE DAY. In the 1800s, we consumed about 10# of sugar per year, per person. We now consume over a **POUND** of High Fructose Corn Syrup each week, per person, along with ½ a POUND of sugar, for a total of about 150#s of sugar each year.
- Most Americans have tried and failed miserably to remove the extra pounds following the advice of various 'experts' advice to eat the calorie-restricted low-fat, "healthy whole-grain" and "balanced" diets promoted by the USDA, the American Heart Association, the American Diabetic Association, the National Institute of Health, and from books like "Body for Life" & "Skinny Bitch". Most of these diets rely heavily on calorie restriction and give the clear message to "Just say No!" to food leaving many people feeling awful about themselves as though they lack either 'willpower' and 'discipline'.
- Whether you call them "high protein" or "low carb" or "low sugar" diets, the most common resistance to "low carb" diets is the common misperception that "consuming too much protein leads to kidney failure". Despite the fact that most of these diets don't recommend an excessive amount of protein, merely "enough" protein as recommended by many reputable scientists, along with a reduction of refined carbs/sugars, the fear spread like wildfire and remains a pervasive thought among consumers, despite the fact that in 2002, several experts experienced a change of heart and made statements in support of Low Carb. The Gov't response was the following: "Early unpublished data from several groups suggest that maybe Atkins isn't as harmful as we thought," Foster says. "However, all of these are small studies, and we need much larger studies with much broader, comprehensive assessments before we should change the dietary recommendations." And this is why the 2010 Dietary Recommendations are substantially unchanged.
- Are you still unconvinced? Researchers recently looked at protein intake in 1,624 women over an
 11-year period. They found that high-protein diets did not cause any problems in women with normal
 kidney function. But in women who had "mild renal insufficiency," they wrote, consuming large amounts of
 protein accelerated renal decline. University of Connecticut researchers reached a similar conclusion
 when they reviewed years of research on the subject in a 2005 report in the journal Nutrition &
 Metabolism

• What about our elders? Dementia is now being referred to by some experts as 'Type 3 Diabetes". Check out the book "Grain Brain" by Dr. Perlmutter for more information about sugar's toxic effect to our brains!

So...what can you do? Scroll down for some examples of how things have been done (badly) in the last 50 years and what the latest science and/or 'traditional ways' have to say about living a long happy, healthy life!

OLD SCHOOL v. NEW THOUGHT

Old School: You should have a BMI under 25 to be healthy - if not, you'd better lose weight!

New Thought: BMI is a simple mathematical calculation that tries to predict the health of someone based **solely** on their height and weight. Unfortunately, while widely used, it's not very accurate. BMI does not take into account physical fitness or bone structure, and it doesn't differentiate between weight gained at a muscle-building camp or weight gained while munching on M&Ms For instance, Arnold Schwarzenegger had a BMI of 33 (obese) at the height of his bodybuilding career. Keep in mind that people who carry fat around their midsection are at greater risk for illness than their pear-shaped counterparts, who carry weight in the hips, buttocks, and thighs. Belly fat has been linked to a greater risk of Alzheimer's disease, diabetes, erectile dysfunction, and many other conditions. **YOUR BEST BET:** Look to a wide variety of factors when assessing your overall fitness. A better indicator of fitness than BMI is a height/waist comparison. If your height in inches, divided by 2 (e.g. 32" for a woman who is 5'4") is not bigger than your waist-size, you may indeed need to lose a few pounds! Many experts agree that it is wiser to be 5-10 pounds overweight than to yo-yo by that amount. And remember that you do NOT need to be thin to be fit!

Old School: Consume 3,500 calories less than you burn and you'll lose one pound.

New Thought: The reality of weight gain/loss is far more complex than that old adage. Hormones like Leptin and Ghrelin play a huge part in losing, as well as things like sleep and stress. The body actually changes as you lose weight - when you lose 10% or more, your body actually responds by producing MORE hunger hormones (like Ghrelin) and your metabolism slows down. In addition, and quite annoyingly so, the heavier you get, the easier it is to gain weight. In fact, an extra 10 calories a day puts more weight onto an obese person than onto a thinner one. Even after successfully losing weight, it actually takes about three years for a dieter to reach their new "setpoint", which can make weight maintenance a struggle for up to 3 years, due in part to reduced levels of the satiety-hormone Leptin for upwards of a year. Hang in there and stay vigilant!

To illustrate this complex issue, consider the following model devised by mathematician and physicist Carson C. Chow: His model predicts that if you eat 100 calories fewer than you require each day, in three years you will, on average, have lost only 10 pounds — if you don't cheat! Conventional wisdom/math suggests that you would lose over 30 pounds in that time! Is it any wonder that so many have (unnecessarily) felt like 'failures' at weight management? No one 'chooses' to be overweight or obese.

Columbia University Health Sciences researchers report: To overcome the effects of leptin on metabolism, dieters who have lost 10 percent of their body weight have to trim daily caloric intake by 22 percent to stay at their goal weight, For example, if you've dropped from 150 pounds to 135, you'll need to eat about 250 calories less than someone whose stable weight is 135, or torch the 250 calories through exercise. In other words, it's essential to continue the habits that helped you ditch those pounds in the first place.

BEST BET: Record your food consumption in a daily food journal - those that do write down what they eat lose - on average - twice as much weight as those who don't track. Those who are most successful at maintaining significant weight loss continue to weigh and track daily.

Old School: You must exercise to lose weight!

New Thought: Exercise has many health benefits, and is very important for weight maintenance and overall fitness and good health. While both cardio and strength training serve to help you look good and increase your metabolism through increased muscle mass, your actual weight is mostly a reflection of what you eat and not how much you work out. Studies have shown that not only do many people who work out regularly often unconsciously eat more calories to compensate for those burned while exercising, metabolic rates can actually slow to preserve fuel reserves... and to further complicate matters, the hormone Ghrelin ramps up the battle to maintain your status quo each time you do manage to lose weight through diet and exercise! Boo Hiss!

YOUR BEST BET: Add a combination of strength training and cardio to your weekly schedule for better health, but do rely heavily on regular small meals containing sufficient protein, a healthy fat intake, and thoughtful carbohydrate choices - as well as keeping a weather eye on total calories consumed each day.

Old School: All calories were created equal. It's all about "Calories In" vs. "Calories Out"

New Thought: Simply put, calorie-for-calorie, sugar causes more insulin resistance in the liver, causing the pancreas to release extra insulin, which leads to metabolic syndrome, and diabetes, etc. Your body also uses three times more calories to process protein than it does carbohydrates, so you can actually eat more protein calories than carb calories and still maintain or lose weight! Choosing foods with a lower glycemic index (GI) can help mitigate the load on your pancreas and liver and increase insulin sensitivity - leading to better overall health!

BEST BET: Reduce your high GI carbohydrate intake for better health & a leaner waistline!

Old School: "You should eat only when you are hungry"

New Thought: Eating "randomly" or "frequent grazing" behaviour may actually contribute to weight gain, esp. if you fail to consume enough protein and fat on a regular basis. Despite many recent studies, a number of experts still disagree vehemently in this area. In one study, researchers asked women to either A) eat meals at regular, fixed times or to B) break their usual number of daily calories into random meals throughout the day and reported that the women burned more calories in the 3 hours after eating the regular meals than they did during the time following their random calorie consumption. Other studies show no increase to overall metabolic rate when eating regular meals throughout the day. It is important to note that eating regular meals which include protein & fat causes the body to produce less insulin (and various hunger-stimulating hormones), potentially lowering the odds of insulin resistance, weight gain, metabolic syndrome, obesity and diabetes.

BEST BET: Many people experience good results eating 5-6 regular 200-400 calorie meals, even if they aren't feeling 'hungry' - especially where maintaining a healthy weight or reducing blood sugar is important.

Old School: Make sure you are 'really' hungry before eating, and it's not just 'emotion' or 'boredom' We've been told for years not to eat when hunger isn't 'real, but in 1999, Japanese scientists discovered that both 'cravings' and 'hunger' are both pretty darn 'real'. Hunger is controlled by a variety of hunger and satiety hormones including a hormonal gremlin know as Ghrelin. Ghrelin loves to eat! And Ghrelin hates weight loss! Researchers have found that Ghrelin is also quite bossy and hedonistic when it comes to getting what it wants, which (from the outside) can look like an extreme 'lack of willpower' - especially because Ghrelin isn't very discriminating about scarfing up only the yummiest things in its path while turning up its nose at Brussels sprouts and chicken thighs. Left unchecked, this powerful hormone will drive you to crave sugar wherever it can be found...including alcohol, juices, sugary desserts, or soda. Unfortunately, alcohol, juice, cupcakes, soda and other sugary substances just make the Ghrelin more ravenous! Very recently, patients with Prader-Willi disease were found to have the highest levels of Ghrelin ever recorded. These people have to be protected from food sources

because they are so driven by their constant hunger that they will literally eat themselves to death.

The good news is that (unlike those poor folks mentioned above) most people CAN control the level of Ghrelin in their system by ::drumroll please:: eating regular healthy meals! This is essentially why experts suggest that eating frequent 200-400 calorie meals help you avoid being "hungry" and making poor food choices. A balanced meal sends a variety of long and short-acting satiety hormones (Leptin, CCK, PPY3-36) to your brain and effectively puts the hunger-pang-creating Ghrelin to bed - at least for a little while! It is interesting to note that some studies have shown that the fewer meals you eat per day, the more Ghrelin you produce, meaning that those who skip breakfast and/or lunch and 'hoard' their calories for a big dinner, may produce significantly more Ghrelin, and may make less- healthy choices when they do finally decide to eat.

The "bad" news is that your thirst mechanism is separate from your hunger mechanism and when you drink sugary calories that lack fiber/protein/fat and other nutrients your brain doesn't 'register' the calories and tell you to stop eating - which is probably one reason why experts keep pointing the "found guilty" Obesity Finger at sodas and juice. Several drug companies are working furiously to produce a pill that will quiet this hormone! The very much "better" news is that (as with many other health conditions) eating right will do this naturally! Food is often the best medicine!

Leptin is also a key hormone in being a healthy weight - it tells your brain that you are 'fat and happy', and that you can burn fat:) The way to get the biggest bang from your Leptin 'buck' is to keep your blood sugar low/balanced and your body sensitive to insulin and Leptin both:) High sugar levels let your brain think it's starving! Not good:(

YOUR BEST BET: Eat regular meals that contain a good amount of protein, lots of healthier fats and low GI carbs like leafy greens and veggies like squash, peppers, asparagus and mushrooms:)

Old School: It doesn't matter what you eat when, as long as your overall ratios & calorie intake is good. New Thought: Food combining can be the key to minimizing blood sugar spikes and Ghrelin production and increasing Leptin and Insulin sensitivity. For instance, cooked white rice has 0.2% fat and a GI of 64 while a meal of white boiled rice, grilled hamburger, cheese, and butter has a GI of only 24. A Pizza Hut Super Supreme (13.2% fat) has a 30 GI, whereas a lower fat Vegetarian Supreme has a much higher GI of 49 BEST BET: Eat fat - especially if you're also eating high glycemic index food - to inhibit gastric emptying, slow down digestion, and keep blood sugar low! For example, a high-fat mixture of egg yolks, olive oil, and butter leaves the stomach over 50% slower than spaghetti...and that doesn't even count the time taken to digest it in the intestine!(Also note that spaghetti has a glycemic index of 38-61, depending on cooking time—much lower than bread or cereal at 70-80.) The theory of "complex carbs" is just a red herring.

The Addiction Quiz:

- 1. Do you start eating a small amount of certain foods and end up eating way more than you'd planned?
- 2. Do you sometimes eat even when you aren't really "hungry?
- 3. Do you sometimes eat certain foods so often or in such large amounts that it makes you feel bad?
- 4. Do you get physical symptoms such as anxiety or agitation/withdrawal when you cut down on certain foods?

If you answered yes to one of these, you could be a food addict. "Sugar" is more addictive than cocaine! Just like with other addictions, when people are overweight, their brains light up the addiction center when shown photos of food. In normal-weight people it's the executive function/decision-making center that lights up! When you're activating your internal "Executive" rather than your internal "Hedonist" it's far easier to make good choices!

Old School: "Sugar is sugar" - Fructose/sucrose/lactose/glucose, whatever... it's all the same stuff!

New Thought: The body uses glucose and 'other sugars' very differently - unlike glucose, which can be used directly by the entire body, fructose MUST be processed by the liver, much like an alcoholic cocktail, and it tends to build up in the blood. When this buildup happens, the result is that insulin is summoned at higher levels. High insulin levels interfere with the brain's receipt of Leptin (a hormone secreted by belly fat cells which causes us to feel sated and also suppresses fat buildup in the liver). A lack of Leptin basically allows the brain to think it's starving, no matter how much you eat.. This cycle may eventually (depending on the individual and their lifestyle and personal chemistry) cause insulin resistance, metabolic syndrome, Type 2 diabetes and obesity, along with other weight-related diseases/conditions.

BEST BET: Work to eliminate all those 'oses' - from your diet, with the exception of a serving or two of low-fructose fruits each day. Limit your lactose consumption by choosing cheeses carefully!

A Note About Dairy/Cheese: The amount of lactose in cheese is far lower than that in 'milk' As the chief sugar in milk, lactose is the main food source for the various species of Lactobacillus used in making most kinds of cheese. These bacteria, which are also responsible for sourdough bread, yogurt, kimchi, and dozens of other fermented foods, turn lactose into lactic acid, which is easily digested by humans, even those who are lactose intolerant. The longer a cheese ages, the more of its lactose is consumed by the bacteria. "In theory," University of Wisconsin-Madison food science professor Scott Rankin says, "most of the lactose is gone after three months of aging." Processed cheese has the most lactose. Velveeta, which has 9.3 percent lactose—as much as whole milk. (Milk is 9 to 14 percent lactose, with skim on the high side and whole on the low side.) Not only is Velveeta unaged, but it also contains added lactose-laden milk solids. Fresh and/or unripened cheese, including Mexican queso fresco, farmer's cheese, some mozzarella, paneer, cottage cheese, and cream cheese, contains the second-greatest quantities of lactose. The harder the cheese, the older it is, and the lower the lactose. Aged cheeses, including Roquefort and some goat cheeses, typically contain around 2 percent lactose.

Old School: You should eat two to four servings of fruit every day. A piece of fruit makes a great 'snack'! New Thought: In addition to its direct effect on the body's organs, fructose calories fail to blunt our appetites in the same way as other foods, which may cause us to overeat. Whole fruits are not 'bad' for you, but juice is really just vitamin-enriched sugar water. Choosing low-fructose fruits provides vital B, C and E vitamins along with essential minerals and fiber - without increasing your risk from insulin-related health issues. The good news is that the fruits lowest in sugar are some of the highest in nutritional value, incl. antioxidants & phytonutrients. BEST BET: Organically-grown Rhubarb, raspberries, blackberries, and cranberries are the best options. It's best to avoid eating a lot of tangerines, cherries, grapes, pomegranates, mangoes, figs, bananas and dried fruits, as they are the highest in sugar. If you choose fruit as a 'snack', consider the tradition of a small amount of cheese to accompany that healthier choice in order to minimize the impact on blood sugars.

Old School: Sugar Free treats and/or snacks are best - they help you "quiet" those sugar cravings! New Thought: Sugar cravings simply cannot be soothed by artificial sweeteners. In fact, consuming sugar-free low/zero calorie treats may actually increase sugar cravings and increase the chance that you'll 'cheat' with the real thing sometime soon. This happens because consumption of artificial sweeteners stimulates your insulin response, which temporarily drives down your blood sugar and makes you 'hungry', and recent studies indicate that as little as one diet cola a week increases your risk of Type 2 Diabetes by 33%.

BEST BET: While it seems daunting to give up the 'good stuff', many people find that going cold turkey on sugars & grains for even a few days will usually eliminate cravings entirely. An additional benefit is that (like when you give up smoking) less-sweet foods will taste better, and foods you never knew were 'sweet' will show you that characteristic!

Old School: Don't eat High Fructose Corn Syrup - "Pure" Cane Sugar is much better for you!

New Thought: HFCS is nothing but a less expensive mixture of fructose and glucose, and has exactly the same

chemistry as sugar. Sucrose (sugar) and HFCS are both a combo of 1 molecule of fructose PLUS 1 molecule of glucose. In the gut it splits apart almost immediately and the fructose goes to work doing its evil deeds. Dr. Lustig calls it "Poison when taken in high doses."

BEST BET: Eliminate sugars from your diet anywhere possible!

Old School: At least "Real" Natural Sugar is much better for you than the alternatives!

New Thought: Our store shelves and 'diet' product are filled with a confusing array of sweet options: Aspartame, Sucralose(Splenda), Agave Nectar, Turbinado sugar Stevia, Xylitol, Erythritol, ZSweet, Truvia, Honey.. the list is pretty lengthy, and the discussions regarding their safety are even lengthier! So what should we use to sweeten beverages and baked goods? Recent studies have pointed to Erythritol (a fermented extract from sugar commonly used to sweeten sugarless gum) and Stevia (a plant leaf extract) as the safest way to get your 'sweet' on. Erythritol does not cross the blood/brain barrier and has absolutely no spiking effect on your blood sugar, but it's not quite as sweet as sugar and in its crystallized form has a bit of a 'cooling' sensation (like gum) in the mouth, which makes it a great partner to mint-flavored things. Stevia is hundreds of time sweeter than sugar, but lacks the browning and tenderizing effects of sugar in baking.

BEST BET: When used together (in a product like ZSweet, which minimizes the 'cooling' effect), Stevia & Erythritol offer most of the same measuring/tenderizing/browning properties that baking/cooking with sugar does - but without the sugar hit to your body & blood. To minimize the cooling effect of straight Erythritol in baking, measure the crystals (just as you would 'real' sugar') and then pulverize them in a blender before mixing into your other ingredients. Dissolving the erythritol further reduces the 'cooling'.

Old School: I have a history of diabetes in my family, so no matter what, I am always going to be at risk!

New Thought: The chances of being diagnosed with either type 1 or type 2 diabetes are different, depending on various risk factors. Type 1 diabetes is an autoimmune disorder most common in younger people and around 90% of children diagnosed with type 1 diabetes have no family member or relative with the disease. To some extent, it is possible to determine at birth whether a baby has some of the genes associated with risk factors. The chances of getting type 2 diabetes depends more on environmental factors – if you have a family history of diabetes, it will increase your chances of getting it, but only if you lead an unhealthy lifestyle with a high sugar diet and little or no exercise. And there is also some evidence that children are more likely to develop type 2 diabetes if the mother is diabetic, rather than the father. If both parents are diabetic, the chances are even higher.

BEST BET: Don't despair! Even if you have elevated blood sugar levels, better physical health is possible in as few as 30 days! (some say a week!) Studies (including those with identical twins) have shown that different food/exercise choices have vastly different results! You may be stuck with your mom's hair and eye color, but you don't have to be stuck with her diabetes diagnosis!

Old School: As long as you or your kids are thin you don't need to worry much about your health - relax! New Thought: "Normal" weight is not an indicator of good health, nor of an absence of risk from disease. In fact, in some cases, a few extra pounds have been shown to offer protection against disease and assist in recovery post surgery. People who are relatively thin can still carry unhealthy fat internally. This fat is called visceral fat, and it pads vital organs. Thin people who carry this internal fat are at elevated risk for heart disease, type 2 diabetes, and cancer. People often assume that type 2 diabetes is only caused by eating far too much and exercising far too little - in reality, about 25% of diabetics are thin people with one or more other metabolic factors at work.

YOUR BEST BET: A 2008 study found that 1 in 4 normal-weight people had at least two metabolic factors (such as high triglycerides, high blood pressure, or high blood sugar) in the abnormal range.

Bottom Line: Pay attention to your overall health, even if your weight isn't an issue for you! Subtle concerns that you might not notice because of the way you've been eating all your life - aches, pains, tummy distress... often magically disappear when you give up living on a diet heavy in sugars and grains! On an exciting note: some serious autoimmune conditions like MS and Crohn's Disease have been shown to have 'miraculous' remissions when grains/sugars are removed from a patient's diet.

Old School: Saturated Fat (butter, meats, eggs, etc) makes you fat & causes heart disease!

New Thought: The "saturated fat=hard arteries" myth is based on "The Lipid Hypothesis", which - despite its wild continuing media popularity and cultural acceptance - has never been supported by hard science. In fact, while Americans have obediently radically reduced their percentage of daily calories from saturated fat for over 40 years, the obesity rate during that time has more than doubled, diabetes has tripled, and heart disease is still the country's biggest killer. Scientists have demonstrated that fat cannot be stored, or built up in the arteries, unless there are carbohydrates present to assist with that harmful process. Basically, based on limited 'evidence' (and against the recommendation of many scientists), in the early 70's the U.S. Government convicted the wrong killer.

The "low fat" trends of the past 4 decades have caused many related health problems because fat has been removed from processed foods and sugar has been added to them. Last year, several studies were analyzed at one time - they compared the reported daily food intake of nearly 350,000 people against their risk of developing cardiovascular disease over a period of five to 23 years. The analysis, overseen by Ronald M. Krauss, director of atherosclerosis research at the Children's Hospital Oakland Research Institute, found no association between the amount of saturated fat consumed and the risk of heart disease.

YOUR BEST BET: Good health is delicious! Saturated fat can help raise your "protective" HDL cholesterol and grass-fed butter such as Kerrygold brand, is high in Vitamin K2 which appears to reduce, prevent, or even counteract arterial plaque (and it helps the body use calcium correctly and effectively, too!) Keep in mind that eating saturated fats WITH sugars/grains can cause some serious LDL issues.. but it's the sugar that's reported to be the issue!

Old School: Eating fat makes you fat - you should eat a lower fat diet to be healthy!

New Thought: Nutritional satisfaction & satiation sends various signals to your body that food is abundant, causing it to release fat stores. Perhaps even more importantly, fat consumption helps signal the release of several different hormones (cholecystokinin (CCK), PPY3-36, and Leptin) which, among many other things, send both an immediate message to your brain that you are 'full' and keep sending a 'satiated' signal for a few hours. Careful management of this hormonal effect alone can be the key to successful weight management! In addition, many common ailments are helped greatly by consuming 'healthy' fats: fatigue, anxiety, depression, mood disorders, OCD, hypoglycemia, skin ailments, and a host of others!

YOUR BEST BET: If you're looking for ways to manage your weight, look to healthier fats!

Old School: Canola Oil, and other 'vegetable' oils are best (always cook with olive oil!)

New Thought: The problem with soybean oil, cottonseed oil, corn oil, grapeseed oil, safflower oil, canola oil, and other similar oils is that they are mostly composed of polyunsaturated fats (the most highly reactive type of fat) which leaves them prone to oxidation and free radical production when exposed to heat and light. Processed polyunsaturated oils are the most inflammatory inside our bodies because of their high reactivity to heat and light. Inflammation is what causes many of our internal problems such as heart disease, diabetes, and other degenerative diseases, including cancers. Not all polyunsaturated fat sources are evil - especially those found in whole foods like various nuts and seeds... In that case it's usually not inflammatory (as long as it's not been exposed to high heat).

YOUR BEST BET: The healthiest fats include egg yolks, flax oil, various nuts, coconut oil, palm oil, grass-fed butter, and the long-chain fats found in meat and dairy products. Olive oil is best left for 'cold' uses - salad dressings or a drizzle to finish a dish. The dirty little secret of the olive oil industry (and others) is that animal fat is a richer source of oleic acid than olive oil. Cooking with coconut or palm oil, butter/ghee (or a mixture of both), lard, beef tallow or bacon fat is much preferable, and even grain-fed butter is still a better option than conventional cooking oils & margarine. Don't be afraid to request that restaurant food be cooked in butter, even though it's probably grain-fed, the saturated fat isn't any less stable!

Old School: Fat should account for 30% or less of the calories consumed daily, with saturated fats accounting for no more than 10% of the total fat intake.

New Thought: Fats are a concentrated form of energy which help maintain body temperature, affect brain function, and protect body tissues and organs. Fat also plays an essential role in carrying the four fat-soluble vitamins: A, D, E, and K, which are key nutrients that are not readily absorbed without sufficient fat in our diet. Additionally, when we take fat out of our diet and replace it with sugar, the glycemic index of the food we eat goes up dramatically. Carbohydrates, both simple and complex, are digested far more quickly than we can burn them for energy, whereupon our bodies convert them into fat and store them as fat—leaving us hungry, even though we are gaining weight! To make matters worse we then get a transient dopamine rush and subsequent serotonin high before our blood sugar crashes. Interestingly, that decreases over time as we get fatter—meaning that we become chemically as well as metabolically addicted to sugar. Even worse, if this vicious cycle of goes on long enough, you become insulin-resistant, and then diabetic. Our 'obesity epidemic' started once we told people to avoid fat at all costs.

BEST BET: By removing fat from your diet, you are turning everything you eat into candy. There is no scientifically-supported reason to limit your intake of saturated fat or mono-unsaturated fat to less than 10 or 30 percent of your daily calories. While it seems 'bizarre', given our indoctrination into the Low Fat & Fabulous cult of the last 45 years, a diet with over 50% of its calories from fat has been found to offer significant health benefits - including 'normalized' weight and increased 'healthy' HDLs.

Old School: Tropical oils are really bad for you.

New Thought: "Tropical" refers to the oils made from <u>palm</u>, <u>palm kernel and coconut oils</u>, specifically. In the 1980s, the American soybean industry was worried that foreign tropical oils would replace their oils as the number one fat, and take money from the American farmer. A public relations firm working for the American soybean industry devised a campaign that would help to convince consumers that tropical oils were unhealthful. Foods made with soybean oil were labelled "contains no tropical oils." Later the U.S. Federal Trade Commission made that label illegal because there was an implied health claim that tropical oils are harmful and there is no evidence to back it up. The whole issue was a trade war and not about negative health effects.

Palm oil in particular, has been cast as major villain in the U.S., despite the fact that palm oil consumption here is negligible, and it has the lowest percentage of saturated fat of the three 'tropical' oils. In recent years palm oil has been very competitive and has gained a major share of the world's edible oils and fats market. Red palm oil, specifically, is perhaps one of the most nutrient-dense fats on the planet. The allegation that palm oil consumption leads to raised blood cholesterol levels and is therefore atherogenic is entirely unproven.

Examination of the chemical and fatty acid composition of palm oil or its liquid fraction should convince most nutritionists that the oil has little cholesterol-raising potential - it contains a large amount of vitamin E (mostly tocotrienols), vitamin K1, coenzyme Q10 and assorted other fat-soluble constituents. Feeding experiments in various animal species and humans also do not support the allegation that palm oil is atherogenic. On the contrary, palm oil consumption even reduces blood cholesterol in comparison with the traditional sources of saturated fats such as coconut oil, dairy and animal fats. In addition, palm oil consumption may indeed raise HDL levels and reduce platelet aggregability

YOUR BEST BET: Tropical oils are used in foods for functional reasons. They are excellent for shortening because they don't get rancid easily, they produce flaky pastry and good color on fried foods, and they don't give a greasy feel to crackers. The countries with the highest palm oil intakes in the world are Costa Rica and Malaysia. Their heart disease rates and serum cholesterol levels are much lower than in western nations. Coconut oil runs a close second in terms of 'healthy' tropical oils and is very mild in flavor. Red Palm Oil is also one of the cheapest oils available worldwide, due to the oil palm's high productivity. It has a good shelf life and does not require refrigeration. Its strong, savory flavor goes well in stews, particularly meat stews. UU side note: there is some 'green' concern about the impact of palm oil farming!

New Thought: Many recent studies have reported that there is no association between saturated fat intake and

heart disease, and there is no association between egg intake (the largest source of dietary cholesterol) and heart disease. Additionally, "total cholesterol" is not a great predictor of risk. Although saturated fat boosts blood levels of "bad" LDL cholesterol, it also increases "good" HDL cholesterol. In 2008 a study followed 322 moderately obese individuals for two years as they adopted one of three diets: a low-fat, calorie-restricted diet based on American Heart Association guidelines; a Mediterranean, restricted-calorie diet rich in vegetables and low in red meat; and a low-carbohydrate, unrestricted-calorie diet. Although the subjects on the low-carb diet ate the most saturated fat, they ended up with the healthiest ratio of HDL to LDL cholesterol and lost twice as much weight as their low-fat-eating counterparts. In a study of 27,000 Norwegian women, those with higher "Total" Cholesterol of 193-270 were found to live longer than those with 'normal" TC under 199.

BEST BET: Eggs are quality protein - remember that eating cholesterol doesn't raise cholesterol, and consuming saturated fat can raise HDLs that protect your heart! We have also been told to watch our consumption of higher fat dairy products because it raises our bad cholesterol (LDL). But LDL comes in at least four varieties, and only the smallest and densest of them are linked with heart disease. Dairy fat, it turns out, affects only the large, fluffy kind of LDL—the benign kind.

1. Old School: 50% of your calories should come from carbohydrates, including 'healthy whole grains.' New Thought: Consuming carbohydrates is not as imperative as the USDA and grain farmers would like us to believe. Bodies are a bit like hybrid automobiles which run on both gasoline and electricity - in the absence of easily available carbohydrates in the diet, the carbohydrate burning "glycolytic" pathway is less active - and the body automatically turns to a second pathway for its fuel utilizing a process called "beta oxidation" In this fat burning process, the fat is broken down into ketones which the body uses as fuel. Despite anti-low carb propaganda, the brain can and does use ketones for fuel when glucose is unavailable. The heart actually uses ketones exclusively - as does peripheral tissue. Other than harvesting the essential nutrients and fiber found in both veggies & fruits, there is no reason that we 'must' eat carbohydrates.

BEST BET: To help you remember which veggies are best, consider this tip: Leaves (spinach, chard) are best, stems & flowers (broccoli, mushrooms and asparagus, etc) are second best and 'fruits' (including peppers, avocados & tomatoes) come in third. Roots & seeds (potatoes, corn, peas) are worst. There are a few exceptions to the starchy root rule, such as the inulin fiber-rich jicama, radishes, celery root, and carrots.

Old School: "Complex Carbs" are heart smart and much better for you than 'simple' carbs.

New Thought: Simple or complex, a "carb really is a carb" although most low-fat diet pushers (from Pritikin, to Ornish, to the ADA and US government) make a big noise about "complex carbohydrates". The mythology goes like this: Table sugar digests too quickly for our body to use all of it—whereupon the excess is turned into fat, stored as fat, and then we're hungry again. In contrast, we are told, the 'complex carbohydrates' in whole-grain products are good for us because they digest more slowly, which allowing our body to use all of them. Right? Wrong.

The Glycemic Index is based on Glucose = 100 (the measurement of the effect of glucose consumption on blood sugar levels). Everything is measured against that number. Whole wheat bread (Glycemic Index 71) has virtually the same GI as white bread (72), and both of them have a higher GI than plain white table sugar (62)!

Does your child enjoy Cheerios? If the fact that the package has re-arranged the nutritional facts panel to 'minimize' the 17g of 'other carbs' it's feeding you in addition to the 'one gram of sugar' touted on the front label, you might want to keep in mind that those insignificant 'other' carbs bring this cereal to a high GI of (74) for this "heart-loving" "whole grain" "low sugar" breakfast treat. This fact alone proves that the theory of "complex carbs" and "healthy whole grains" is flawed: our bodies absorb the sugar from that 'healthy' whole wheat bread or oat cereal more quickly than…well…pure table sugar! So what's the real story behind the Glycemic Index and its younger cousin the Glycemic Load? Why do we digest some carbs/sugars much more slowly than others? Simply put, "It's the fat."

YOUR BEST BET: If you choose to eat "candy" in the form of bread, look for a lower GI option like chewy Mexican flour tortillas (made with lard) which have a pretty reasonable GI of 30. If you simply must have that plain French baguette (sky-high glycemic index of 95) or cereal or potatoes, eat them with plenty of heart-healthy butter, olive oil, and cream & cheese - adding butter to that baguette can lower its GI to 65!

Old School: "Whole Grains are Healthy Grains & Beans are Heart Smart"

Just because something is 'edible' doesn't mean it's 'healthy'. The reason for this is rooted in the survivalist nature of plants. For example - grains are the reproductive structure of some plants. Anything in biology, if it doesn't have teeth, thorns, horns or poison (or it can't run away) is going to get eaten by something. Certain plants mitigate this by using a give a little/get a little process. where they produce fruit-like "berries" - a bear will eat the "berries" and drop the "berries" off in a fertilized package creating a symbiotic relationship. But the actual seeds in the "berries", for example apples, have things like cyanide, protease inhibitors and chemicals in them - are not digestible. These prevent the breakdown of these things as food- because if they didn't, the species would cease to exist - that's the end of the line for that particular organism. As attractive as this 'low-hanging fruit' may be, these "Berries" are not benignly hanging out shouting, "come and eat me."

Nutritionally-speaking, beans have very poor digestibility (they contain anti-nutrients like Lectins, saponins, phytates, isoflavones, and protease inhibitors that interfere with the absorption of nutrients) and they also fall short on protein when compared to chicken and turkey, seafood, lean beef and pork. The Lectins in beans are potent anti-nutrients, which can be reduced in the cooking process but does not eliminate their negative impact on our bodies. These impacts include inflammation that is directly related to autoimmune disease.

While not technically a traditional 'grain', quinoa is similar to grains and has anti-predation chemicals in it. One of the main ones being saponins, which are soapy like substances that are pretty well understood to cause intestinal permeability. They actually punch holes through the intestinal lining. Then you can get leakage of intestinal contents into the body so you can end up with a leaking gut and an autoimmune response and systemic inflammation. So while may regard quinoa as an ideal vegetarian 'complete protein' these considerations should be kept in mind. Can you soak it and sprout it and decrease these anti-nutrients and their inflammatory effects? Absolutely. But keep in mind that you are taking a substandard food, processing it, and making it "less" substandard. If you have an autoimmune disorder, it's not recommended at all.

YOUR BEST BET: Avoid refined grains and consume 'whole grains' much like sugar- if you simply must eat them, make them a VERY occasional 'treat', and not a part of your daily "healthy" diet and choose legumes that are more 'pod' than 'bean, such as green beans, wax beans, or sugar snap peas Yams/sweet potatoes, bananas and that sort of 'carby stuff' is a better bet because you get more nutrition for your caloric content relative to something like quinoa. Some experts recommend eliminating all grains, legumes and dairy for 30 days and then reintroducing them and seeing how you do. What they have found is that a ton a people with wacky inflammatory problems that were undiagnosed or unknown autoimmune diseases all of a sudden feel a ton better.

Just as an interesting sideline, food biologists know that quinoa has these saponins and that it is tough on the digestive tract. So they've developed a low saponin variety of quinoa and the interesting thing with that is that they cannot get that variety of quinoa out of the field because the birds eat all of it. This should wake people up. If wild critters won't eat it unless it's genetically modified, perhaps you shouldn't either. In fact, the critters eat it at such a fast clip that it's hard for the food biologists to collect any of the seed to bring it back in and analyse it.

Old School: "Very Low carb" diets are harmful - to your kidneys, your heart."

New Thought: Contrary to frenzied media-response to Atkin's "low-carb revolution" there is no scientific evidence that swapping fat/carb ratios in your diet will damage either your heart or your kidneys. It's also important to note that there is no clear or legal definition of "low carb", however most "Very Low Carb Authorities" seem to agree

that anything between 20-50g. of carbs a day qualifies for this title. Less extreme views posit that the best margins for healthy folks to stay within - if you don't have blood sugar issues or wish to lose weight quickly - are about 100-150 grams per day. Some noted authorities suggest that 'easing' into a low-carb lifestyle may prevent fatigue some people experience when going 'low carb' overnight.

If you DO have high blood sugar or wish to lose weight, consuming fewer than 50 grams a day has been shown to offer rapid and highly remarkable improvement in fasting blood sugar readings, weight, and overall health - in some cases allowing patients to wean from drugs they've taken for decades.

No matter how many grams of carbs you choose to consume each day, it is suggested that you get your carbs from natural sources such as non-starchy vegetables and low-carb fruits such as berries. Unlike protein and fat, there is no minimum daily requirement of carbohydrates in order to flourish physically - but they do have many beneficial phytochemicals and fiber, so eating some is fine (as long as they are unprocessed) and within your allowance.

Apart from the occasional treat, it's best to avoid refined processed carbohydrates because they are a major cause of weight gain, obesity, heart disease, insulin resistance, and many other diet related diseases. For Comparison: currently, the USDA recommends you consume between 225 and 325 grams per day, on a 2000 calorie diet, current trends in eating and food marketing support this recommendation, although many people exceed the 325 gram recommendation on a daily basis.

YOUR BEST BET: Each body is very unique in how it processes food and how it responds to the amount of carbohydrates consumed. As a general rule - unless your fasting blood glucose is above 100, a healthy person of 'normal' weight who avoids sugar and eats a 'balanced' diet rich in healthy mono, poly & saturated fats which also contains adequate amounts of protein (half your weight in grams) will probably do very well without following a 'Very Low Carb' diet plan, and will do quite well on 100-200g per day.

Old School: Low Carb diets are dangerous for you because they cause ketoacidosis!

New Thought: Ketoacidosis is the dangerous phenomenon where the body's pH becomes too acidic to survive. It is NOT the same as ketosis, which is the state of 'beta oxidation' where the body burns fat for fuel.

BEST BET: Don't sweat it - Ketoacidosis ONLY happens in type one diabetics.

Old School: "A high-fiber diet helps prevent colon cancer"

New Thought: Fiber was once thought to play an important role in preventing colon cancer and diverticulitis, that has turned out not to be the case. For more than 40 years, scientists and physicians have thought eating a high-fiber diet lowered a person's risk of diverticulosis, a disease of the large intestine in which pouches develop in the colon wall. A new study of more than 2,000 people reveals the opposite may be true, and a high fiber diet may increase the risk of developing this disease. Diets rich in fiber may still be good for your health in many other ways. For example, experts report that fiber slightly reduces bad (LDL) cholesterol, and it may improve insulin resistance (a common precursor to diabetes). Fiber does increase the bulk of foods and creates a feeling of fullness. As a result, fiber may help you avoid overeating and becoming overweight. It may also create significant gas and stomach upset in large amounts.

Fruits and vegetables are all good sources of fiber. In particular, raspberries, jicama, broccoli and apples are all high in fiber.

BEST BET: Although a high-fiber diet does not appear to prevent colon cancer, and may cause other health issues, a diet full of fiber-rich fruit and vegetables will bring you other benefits, including lower blood sugar.

Old School: Salt increases high blood pressure and should be avoided

New Thought: For over 35 years salt has been Public Enemy No. 1 in the kitchens of the misguided and health-obsessed. Back in 1976, Jean Mayer, then president of Tufts University, called salt "the most dangerous food additive of all." Four years later, The New York Times linked excessive consumption of salt to high blood pressure, heart and kidney disease, and stroke. The die had been cast. Salt was an evil thing to be avoided at all

costs.

Science has proven that salt is an essential part of our well-being as humans and very effective in combating iodine deficiencies. Like everything else, the benefits and risks are hotly debated, but in 2000, a study concluded that "no single universal prescription for sodium intake can be scientifically justified." In a more recent statement, the founder of the American Society of Hypertension, Dr. John Laragh, goes further: "Is there any proven reason for us to grossly modify our salt intake or systematically avoid table salt? Generally speaking the answer is either a resounding no, or at that, at best, there is not any positive direct evidence to support such recommendations." Fear-mongering, seems to be the specialty of the Washington, D.C.-based nutritional group called the Center for Science and the Public Interest. Over the last few years, the CSPI has taken on the evils of movie popcorn, called fettuccine Alfredo "heart attack on a plate," labeled Mrs. Fields' Cinnamon Roll with Cream Cheese Icing "food porn," and continues to insist that "a diet high in sodium increases the risk or severity of high blood pressure, which increases the risk of heart attack and stroke. Everyone should eat less salt." Salt is not safe for everyone. Studies show that 30 percent of the Americans who have high blood pressure would greatly benefit from a low-sodium diet. But that's about 10 percent of the overall population -- the rest of us are fine with sodium. And experts report that drastically cutting out sodium may actually hurt some people- they may be more vulnerable to hemorrhaging, diarrhea, and water loss. There were some tragic results when some mothers restricted their infants' salt intake, which sent them into shock. Some even died.

BEST BET: Unless you've got high blood pressure, or another medical condition that precludes sodium intake, the next time you're in the kitchen - don't be afraid to pick up that saltshaker. Your taste buds will thank you! Interestingly, sea salt is alkalizing while table salt is acidifying...but that's a whole 'nother topic

If weight loss is a concern, here is some more information that you might want to know!

On average, members of the <u>National Weight Control Registry</u> (NWCR)—an ongoing study of more than 10,000 adults who have succeeded at long-term weight loss—have lost 66 pounds and kept it off for an average of 5.5 years. How did they do it? The NWCR and other studies point to these 7 habits:

1. Exercise every day

Nine out of 10 NWCR members average an hour of exercise a day, and 62% watch fewer than 10 hours of TV a week.

2. Eat more low-density foods to weigh less

A new review of 17 earlier studies published in the Journal of the American Dietetic Association reports that filling up on low-density foods (those with fewer calories and more water per serving, such as fruit and vegetables) is a key factor in weight control, while trying to limit yourself to smaller portions of higher calorie items is a recipe for failure.

A recent study found that people who ate a three-cup, low-density salad before a meal ate 8 percent fewer calories overall than those who ate a small salad with high-fat ingredients.

3. Don't skip breakfast

Nearly 8 out of 10 (78%) of NWCR members eat breakfast every day. Without a morning meal, your stomach will be pumping out appetite-stimulating hormones like crazy, making the urge to overindulge later in the day hard to resist. (Side note: while intermittent fasting seems to have some really positive effects for men, those effects don't seem true for women.)

4. Weigh yourself regularly

Three out of four NWCR members weighed themselves at least once a week to make sure

they were still on track. For an accurate reading, weigh yourself before breakfast.

5. Keep a food diary

A <u>study</u> by Kaiser Permanente's Center for Health Research found that people who kept a daily food diary lost twice as much weight as those who didn't track what they ate, probably because the act of recording makes you reflect on your food choices.

6. Love your body

Becoming more accepting of what you see in the mir ror can more than triple success with a weight-loss program based on diet and exercise, a <u>study</u> published in the *International Journal of Behavioral Nutrition* reported last year. The researchers found that dieters who dislike their bodies are more prone to unhealthy eating patterns, including bingeing and emotional overeating. Those who attended group sessions to discuss ways to improve body image dropped an average of 7 percent of their starting weight during the 12-month study, compared to a 2 percent loss for the control group.

7. Have self-compassion

When you can forgive yourself for eating a high-calorie treat, you are less likely to trigger the vicious cycle of negative feelings that cause emotional overeating and weight regain. In a 2007 study at Wake Forest University, women—including dieters—were told they were participating in a taste test of various candies and divided into three groups. Two of the groups were given a doughnut to eat before the taste test. Those who were urged to forgive themselves for eating the donut ate significantly less candy than those who felt guilty about breaking their diet with the donut.

Dru's additional NOTES AND SOURCES (and a few random thoughts & tools that aren't very organized yet):

USDA GUIDELINES:

The more recent thinking on fats and carbs were not reflected in the 2010 federal Dietary Guidelines for Americans, which is updated once every five years. Robert C. Post, deputy director of the U.S. Department of Agriculture's Center for Nutrition Policy and Promotion says that "It depends on the strength of the evidence". He explains that Findings that "have less support are put on the list of things to do with regard to more research." Right now, Post explains, the agency's main message to Americans is to limit overall calorie intake, irrespective of the source. "We're finding that messages to consumers need to be short and simple and to the point," he says. Another issue facing regulatory agencies, notes Harvard's Stampfer, is that "the sugared beverage industry is lobbying very hard and trying to cast doubt on all these studies." (Isn't that nice?)

Sources Include:

Dr. Robert Lustig - Pediatric Neuro-endocrinologist at UCSF, and one of the leading authorities on obesity. He is the author of "Sugar: The Bitter Truth", "Sickenly Sweet" and "The Skinny on Obesity", and he will be releasing a book in January titled "Fat Chance". Interestingly his views about sugar and calories were edited out of the upcoming HBO show "Weight of the Nation", which seems to be pushing the same tired advice that got us into this situation in the first place: "Eat low fat and high carb" Dr. Lustig feels that humans' taste for sugar is hard-wired, "engraved in our DNA", and "A little alcohol is okay"

His advice to parents:

- Offer water and milk to drink (Side note: coconut milk has about ⅓ the calories of regular milk and has about the same percentage of vitamins and minerals. Buy the unsweetened and sweeten with stevia if desired.)
- Feed fibrous carbohydrates (e.g. whole fruit, not juice)
- Wait at least 20 minutes before giving a 2nd helping it gives Leptin a chance to kick in
- Limit Screen Time & encourage physical activity which increases muscle, insulin sensitivity and metabolic rate

Dr. Mark Hyman - author of "The Blood Sugar Solution"

10,000 years ago, our biological software was designed to keep us alive. Now? It's killing over a billion people around the world. You can reverse it in as little as a week. "Diabesity is the number one cause of obesity, heart disease, cancer, dementia and type 2 diabetes" per Dr. Mark Hyman, author of The Sugar Solution Diabetes is reversible - treat the insulin issue and weight loss will be a happy side effect!

George L. Blackburn, MD, PhD, associate director of the division of nutrition at Harvard Medical School and author of *Break Through Your Set Point*.

Mark Sisson, Mark's Daily Apple, an American fitness author and blogger, and a former distance runner, triathlete and Ironman competitor. Sisson finished 4th in the February 1982 Ironman World Championship. He has written several books, including *The Primal Blueprint*, which incorporates aspects of the popular Paleolithic diet.

Robb Wolf, The Paleo Solution, "a former research biochemist is the New York Times Best Selling author of *The Paleo Solution – The Original Human Diet*. A student of Prof. Loren Cordain, author of *The Paleo Diet*, Robb has transformed the lives of hundreds of thousands of people around the world via his top ranked iTunes podcast, book and seminars.

Dr. Cate Shanahan, is a board certified Family Physician. She trained in biochemistry and genetics at Cornell University before attending Robert Wood Johnson Medical School. She practiced in Hawaii for ten years where she studied ethnobotany and her healthiest patient's culinary habits.

Feel like testing yourself? Take the Quiz!

"How Much Do You Know that you Know?" Quiz:

- 1. "The best way to lose weight is to eat less and exercise more"
- 2. "Children cannot get Type 2 Diabetes, only Type 1/Juvenile Diabetes"
- 3. "Too much sugar makes you store fat around your belly"
- 4. "Diabetes is both genetic and incurable- if your parents have it, you're at risk!"
- 5. "Pre-diabetes" is not a big deal. You just need to keep an eye on what you eat.
- 6. "Blood sugar is the first thing to increase, giving you time to avoid complications"
- 6. "Shortness of breath is the first symptom of heart attacks"
- 7. "Lowering blood sugar with drugs like Glucophage prevents heart attacks"
- 8. "Thin people gain weight at the same rate as heavier people. Calories in, calories out"
- 9. "If you eat consistently and exercise consistently you will not gain weight!"
- 10. "High cholesterol causes heart attacks"
- 11. "Taking cholesterol-reducing statins lower your risk of diabetes"
- 12. "Diabetes can be improved with diet/exercise- but it can take years"
- 13. "Gastric bypass surgery causes rapid weight loss, which can improve diabetes"
- 14. "Food is just fuel put good food in and you'll get good results"
- 15. "Depression, dementia, obesity are all caused by diabetes"

- 16. "Scurvy is a disease that sailors used to get because of lack of nutrition. No one gets it anymore"
- 17. "Fiber helps prevent colon cancer"
- 18. "If you eat well, you will get all the nutrients that you need."

THE DIABESITY QUIZ:

- 1. Do you have extra belly fat?
- 2. Are you overweight?
- 3. Are you (or someone in your family have diabetes, heart disease, high blood pressure or obesity?
- 4. Are you of non-white ancestry?
- 5. Do you have trouble losing weight?
- 6. Do you crave sugar, bread, pasta, milk or rice?
- 7. Is your blood sugar over 100?
- 8. Do you have triglycerides over 150?
- 9. Do you have HDLs under 50?
- 10. If you jump up and down naked in front of a mirror, does your belly jiggle?
- 11. Do you have any darkening of the skin that you weren't born with, elbows, or maybe where a necklace would lie against your skin?

If you can answer yes to even one of these questions, you may have Diabesity The Food Addiction Quiz:

- 1. Do you start eating a small amount of certain foods and end up eating way more than you'd planned?
- 2. Do you sometimes eat even when you aren't really hungry?
- 3. Do you sometimes eat certain foods so often or in such large amounts that it interferes with your life?
- 4. Do you get physical symptoms such as anxiety or agitation when you cut down on certain foods?

If you answered yes to one of these, you might be a food addict. "Sugar" is more addictive than cocaine!

Obese people's brains light up the addiction center when shown photos of food. In normal-weight people it's the executive function/decision-making center that lights up!

How to Fix This!

- 1. Boost your nutrition! Lose the 'SAD' diet of too many calories and too few nutrients!
- 2. Get your system into balance! Go back 100 years to turn off the chronic disease genes
 - Stop eating pharmacologic doses of sugar average kid has 36 tsp a day!
 - In the 1800s we ate about 10#/per person per year
 - Now we eat, on average 150#/per person per year! that's about ½ a pound a day!
 - Give up HFCS entirely we're eating 66# per year, each!
 - HFCS is often contaminated with things like mercury. It's also the main culprit in 'leaky gut'
 - Eating a naturally high fiber diet is as effective as medication at lowering blood sugar in diabetic.
- 3. Fix your nutritional deficiencies with supplements!
 - Take Omega-3 (krill/fish oil), a good multi-vitamin, and vitamin D3
 - PGX (poly glycoplex) soaks up sugar in your gut (take with a glass of water before every meal)
- 4. Take better care of you!
 - Exercise and de-stress every day yoga, making love, pray, or meditate they all work!
 - Reduce toxins go green and lean
 - drink LOTS of water, empty bowels daily, sweat a lot and breath deeply.

- Drink clean filtered water, eat 'clean' food organic whenever possible.
- Don't eat mercury containing tuna or swordfish.
- Avoid aluminum salts in deodorant and parabens in sunblock.

4. Regulate & boost your hormones!

- Reduce Insulin through better nutrition
- Sex Hormones are highly affected by diabesity
 - o In women: lower sex drive, facial hair, alopecia, acne, irregular periods & infertility
 - In men: it increases estrogen & decreases testosterone, causing ED, low sex drive, softer skin, belly & breast fat, less muscle, less body hair

5. Decrease inflammation!

- "Hidden"inflammation creates insulin resistance and makes you 17% more likely to get diabetes
- Avoid Bad Food, Stress, Toxins, Food allergens, Overgrowth of bad gut bugs & low-grade infections
- Mild food sensitivities cause inflammation: dairy, wheat, eggs, corn, gluten in wheat/barley/rye/oats!
- 99% of people who are sensitive to gluten are undiagnosed

6. Majorly Detox Your System!

- Environmental toxins make you fat and give you diabetes
- Pesticides interfere with metabolism of cholesterol & blood sugar, leading to obesity and diabetes
- EVERY baby born today has 287 toxic chemicals in their umbilical cord blood
- Since 1980 there has been a 73% increase in obesity in 6 month old babies due to toxins.
- If you are 'toxic' you can gain weight even without eating more calories & working out less.

7. Be A Proactive Patient -

- Have your doctor check your insulin, not just your blood sugar
- Check your cholesterol but not the old test get the new NMR test that measures size of particles
- Food IS the medicine heal with meals!
 - If it has a label, don't eat it.
 - o If it has a label, it should have fewer than 5 ingredients
 - o If it has health claims on the label, avoid it
 - o Avoid the powdered poisons flour and sugar (by any name)
 - o Do NOT consume HFCS in any form liquid or solid
 - o Don't drink your calories they will pour on the pounds
 - Don't eat hydrogenated ANYTHING shortening shortens your life!
 - o Don't use commercial polyunsaturated oils canola, sunflower, safflower, grapeseed, etc.
 - Don't eat anything you cannot pronounce or recognize
 - o Don't eat preservatives, colorings, flavorings, additives or things like MSG
 - Don't eat artificial sweeteners of any kind they make you hungry, give you bad gas, slow your metabolism and make you store extra fat around your waist. Diet Soda News: 2 or more a day will experience waist size increase 500% greater than those that don't.
 - Make the Perfect Plate Have Protein at every meal!
 - ½ plate: Low Glycemic Veggies: broccoli, asparagus, spinach, kale, salad, etc.
 - 1/4 plate: Good Quality Proteins: chicken fish, nuts, beans
 - ¼ plate: Slow-burning Carbs: sweet potatoes, quinoa, or brown rice
 - Eat the right fats 90% of Americans are deficient in good fats like coconut oil, nuts, olives and olive oil and avocado
 - Eat Early and Eat Often
 - Most people who've lost 70+# and kept it off for 5 years eat breakfast
 - People who eat 3 meals a day lose more than 1x day eaters same calories!

- Don't eat before bed that's how sumo wrestlers gain weight
- Gluten & Dairy can be the culprit behind diabesity stop them for a few weeks and monitor what can be dramatic shifts in health/weight

Resistance training and aerobic exercise may help regulate ghrelin levels. In a report published in 2008 in the "American Journal of Physiology," aerobic exercise and resistance training stimulated peptide YY while curbing ghrelin levels. In accordance with these findings, vigorous aerobic exercise and intermittent resistance training can suppress appetite and ghrelin.

Read more:

http://www.livestrong.com/article/441239-how-to-control-ghrelin-with-exercises/#ixzz1vXbbuUJg