

Dear Dr. Oz,

After seeing your show on February 8, 2016 I felt compelled to write to you and provide some feedback and insight. As a fellow physician and Board Certified Obesity Medicine Specialist, I am concerned about the way you portrayed the diets you presented on that particular show. In full disclosure, I am a KE diet provider and based on your show, it appears that you have misunderstood the KE diet and therefore misrepresented it to the public. I also strongly feel that grouping the KE diet with the "Cotton Ball Diet" is misleading and irresponsible. The "Cotton Ball Diet" is not a diet; it is a psychiatric illness and should be grouped with other eating disorders. Conversely, the KE diet is a medically supervised procedure provided by highly trained physicians providing the highest standard of care. In addition, your segment on negative calorie foods has just added to the vast amount of noise in the diet world and perpetuated the myth of calories in, calories out- an outdated and misrepresented premise that has contributed to the obesity epidemic in our country.

The KE diet is a form of a ketogenic diet which has been gaining more attention in the nutrition research arena for some time now. As early as 1958 the scientific community has been aware that nutritional ketosis promotes fat oxidation (the breakdown of fat in the body). But beyond weight loss, there is an abundance of literature and strong evidence that supports the use of ketogenic diets (which lead to nutritional ketosis) in the treatment of cardiovascular disease, type 2 diabetes mellitus, insulin resistance/ metabolic syndrome and epilepsy. There is emerging evidence suggesting that ketogenic diets are helpful in acne, PCOS, neurological diseases including headaches, Alzheimer's, Parkinson's, sleep disorders, brain cancer, autism and multiple sclerosis. The KE diet is another form of a ketogenic diet and isn't only about losing weight. It is about helping a person get started on a path to correcting the metabolic and neuroendocrine disturbances that have caused obesity, chronic inflammation and disease. It is about helping people overcome their carbohydrate intolerance, addiction and cravings, and helping them switch their metabolism from being carbohydrate dependent to fat dependent.

**Given that \$245 billion healthcare dollars go to treating adults with diabetes and pre-diabetes in the United States, I think it is crucial that when you talk about a diet on TV in front of millions of people, 50% of whom likely have insulin resistance and 30% of whom don't even know it, that you take the time to truly understand the diet, how it works, and what benefit it might have for our overweight and sick population.
(National Diabetes Statistics Report 2014)**

The KE diet helps a patient achieve nutritional ketosis within 24-48 hours leading to rapid weight loss of about one pound of fat every 11 hours safely. On average patients can lose 5-10 pounds on a 5 day KE diet and 10-20 pounds on a 10 day KE diet. This helps them jumpstart their efforts, feel successful and highly motivates them to be more committed. But, weight loss is just one of the benefits we see from the KE diet. Once a patient achieves nutritional ketosis they no longer struggle with carbohydrate and sugar cravings, their hunger disappears, and their energy returns so patients find it effortless to continue and

maintain a ketogenic diet after a KE diet cycle. I have also seen dramatic improvements in insulin resistance, diabetes, risk factors for heart disease (as measured by advanced cardiac biomarkers) and depression. All of the KE diet licensees and providers are seeing these amazing results and patient transformations and are proud of the work we are doing to help our patients.

The KE Diet is not a quick fix weight loss program. It is a jumpstart to a long-term medically supervised weight loss program or a way to overcome a plateau, which all too commonly sabotages a patient's efforts. By ridding patients of cravings and hunger they are more able to and motivated to adhere to a diet and lifestyle change that will lead them on a path to a healthier life. My patients do not just come in for a KE diet and then disappear. They are in a long-term medically supervised weight management program and the KE diet is just one of the tools I might recommend when appropriate. I see my patients personally at each visit and provide individualized and personalized care which addresses their medical, psychological, and emotional needs so that they can be successful in achieving their optimal health. For Dr. Drew Pinsky to call this "bad medicine" and for you to say this is "an extreme diet and I don't recommend it" is insulting and offensive to those of us who take Obesity Medicine seriously and work tirelessly every day to help make a dent in this country's most challenging and harmful epidemic. Would you say that cutting off a part of your stomach and re-diverting your intestines is bad medicine? Bariatric surgery has changed the lives of so many people and corrected their metabolic disturbances helping them achieve a healthier life. The KE diet is another tool that can complement bariatric surgery but in most cases replaces bariatric surgery for many of my patients and helps them avoid potential short term and long-term surgical complications that can forever change their lives for the worse. It is retraining their bodies and yes, resetting their brains despite what Dr. Drew believes.

So what is so extreme about the KE diet? Is it the NG tube? NG tubes are used quite often in medicine but they are also used quite often by individuals who are not health care personnel. One example is patients with severe Crohn's Disease who can't eat regular food and will place an NG tube daily, on their own, to feed themselves a formula rich in nutrients to help their gut heal and absorb proper nutrition to help them thrive. These patients as young as 12 years old are placing NG tubes on their own, every single day, several times a day. With the KE diet, the physician places the NG tube, checks placement, and fixes the tube in place. The patient doesn't manipulate the NG tube at all. If NG tubes are so dangerous then why are 12-14 year olds placing them on their own and then video-taping themselves on youtube to instruct others on how to place them? You also mention in your show that the KE diet is a starvation diet but that is not the case. In order to understand this better, you need to understand the physiology of energy balance.

Many people like you, Dr. Oz, and Dr. Drew seem to still believe that Obesity is due to a lack of willpower. We now know through much research and better understanding that it is actually the result of impaired regulation of energy balance that is controlled by our central nervous system. In other words, energy balance and the adipose tissue stores in our body are regulated by our brain which is influenced by hormones released in response to metabolic cues from our environment and our nutrition. When things are working

normally, the insulin released after a carbohydrate and protein meal will direct the glucose and amino acids to cells in the body to be stored for future use in the form of glycogen in muscle or triglycerides in the fat cell, or used in the synthesis of proteins. As the adipocyte fills and reaches its set capacity, it releases Leptin, a hormone that travels to the brain and lets the hypothalamus know that the body has enough energy stored and it can shut off hunger and promote satiety (the anorexigenic pathway). When the hypothalamus sees the Leptin it triggers the anorexigenic pathway and ultimately the sympathetic nervous system telling the body that it has stored enough energy, it can stop eating, and it needs to move to use that energy. If the brain doesn't see Leptin, such as in states of starvation, the default pathway of the hypothalamus is to stimulate the orexigenic pathway to tell the body there isn't enough energy, stop moving, conserve what you have, and EAT! This pathway triggers the vagus nerve, or another way of saying it, the couch potato nerve. The vagus nerve then stimulates the pancreas to release more insulin so as to make sure that whatever fuel might still be circulating in the blood stream is pushed into the fat cell to be stored for future use and it will continuously trigger the orexigenic pathway to try to get the person to eat more.

Now what happens when the system has gone awry, such as in an overweight or obese person. The majority of overweight and obese patients have insulin resistance, large amounts of chronically circulating insulin that blocks Leptin from reaching the hypothalamus thereby keeping these patients in a constant orexigenic state of hunger and lack of energy despite the abundance of stored energy. No amount of willpower can help them overcome this intense drive to eat. In addition, the elevated insulin levels cause any food they are eating to be driven into fat cells for storage and no matter how hard they work at it, the circulating insulin traps the fat and doesn't allow it to leave the fat cell. If people watching your show take your advice, they will likely starve themselves all day trying to keep their calories to a minimum, or even worse, eat only carbohydrates all day (your negative calorie foods lead to both starvation and consumption of carbohydrates all day). The starvation state along with consumption of "negative calorie foods" which are high in carbohydrate and low in protein will keep them in the orexigenic state and continuously increase insulin levels. With insulin levels chronically elevated, insulin resistance predisposes them to diseases like diabetes, high blood pressure, heart disease, stroke, cancer, etc. in their future. These patients will gain weight despite following your advice because whatever they eat will be pushed into the fat cell even if they just eat lettuce all day.

Already 5% of the world population has Diabetes and it is predicted that by 2050, 100 million Americans will have Diabetes.

With 35% of Adults in the USA having Metabolic Syndrome (Insulin Resistance) and 50% of Adults over age 60 having Metabolic Syndrome it is imperative that we educate the scientific community, doctors and the general population about ways to lower insulin levels.

Conversely, the KE diet puts a patient's body into a state of nutritional ketosis, not starvation, which significantly lowers insulin levels and reverses insulin resistance. In this state the body burns its own fat as a fuel and is no longer dependent on an outside source of glucose. Nutritional ketosis aims to restore energy balance in the body by lowering

insulin and allowing the brain to become sensitive to Leptin again. The KE diet formula contains a proprietary mixture of proteins (all the essential amino acids), fats (all the essential fatty acids), vitamins and other elements designed to maintain essential nutrition and health during the 5 or 10-day period, while suppressing hunger without medication. Controlling hunger and cravings is crucial for anyone trying to make a lifestyle change. Your comment on the show about this being a starvation diet is completely inaccurate. The KE diet provides 90-120 grams of protein per day and between 40- 54 g of fat per day, which supplies the muscle with adequate amino acids to maintain muscle synthesis and maintain metabolism and overall supplies the body with a minimum of 800 calories per day. By definition, a starvation diet is less than 500 calories per day. But more importantly than that, the reason the KE diet is not a starvation diet is because it provides the body with every nutrient it needs to function normally. And by not providing the body with glucose it dramatically lowers insulin levels which forces open the doors to the fat cells, begins to reverse insulin resistance, and restores the brain's ability to regulate energy balance again.

The bottom line is that the KE diet is a useful tool in carefully selected patients and should be considered a revolutionary procedure providing patients with an opportunity to pursue a path to optimum health and prevention of future disease. I do hope that now that you understand the science behind the KE diet and ketogenic diets, you can start to learn more about how this approach can really change patient's lives. Should you have any questions, or wish to discuss this with me, I can be reached at inbarkirson@yahoo.com or via cell phone at 773-454-4589.

Sincerely,

Inbar Kirson MD