



Path to Success

PROGRAM DESCRIPTION

The Path to Success is a medically supervised weight loss program that focuses on counting carbohydrates and is designed to provide rapid, safe, and sustainable weight loss. The program offers a 4-stage approach and gives you the flexibility to choose from four low-carb meal plans. This personalization allows you and your healthcare team to choose which plan works best based on your medical history and lifestyle needs. The program focuses on nutrition, physical activity, and behavior modification to change hunger. Some programs may choose to add pharmacotherapy and others may consider bariatric surgical options when deemed medically appropriate.

BENEFITS OF WEIGHT LOSS

According to the Centers for Disease Control and Prevention, if your BMI falls into the range of overweight or obese you are putting yourself at an increased risk for the following diseases: heart disease, stroke, type 2 diabetes mellitus, certain cancers (e.g., endometrial, breast, and colon), high blood pressure, high cholesterol and/or high triglycerides, liver and gallbladder disease, sleep apnea or other breathing problems, osteoarthritis, and/or gynecological problems(1).

In addition to improving health, maintaining weight loss will also improve your life in others ways. One study from the National Weight Control Registry noted that those who maintained a significant weight loss reported improvements in their physical health, but also expressed improvements in energy levels, physical mobility, general mood, and self-confidence (2).

Other Benefits:

- Losing 5-10% of body weight will likely produce improvements in blood pressure.
- Losing 5-10% of body weight will likely produce improvements in blood cholesterol levels.
- Losing 5% of body weight will likely produce improvements in controlling blood glucose levels and possibly reduce the risk of developing type 2 diabetes mellitus.
- Losing 5-10% of body weight may also reduce the risk of developing certain forms of cancer. According to the National Institute of Health, being overweight increases the risk for cancer of the esophagus, kidneys, uterus, breasts and colon (3).
- Losing 5-10% of body weight may also reduce problems with sleep apnea, which ultimately reduces chronic fatigue and risk of heart failure.

Managing Hunger Before Calories

The first step in controlling hunger is defining hunger. Many people define hunger as “the need for caloric intake.” A key problem with this definition is that it implies that any eating not specifically for the purpose of providing actual necessary calories or nutrients the body needs is wrong and those who do lack will power. There are innumerable examples of patients who demonstrate extraordinary will power in other areas of their life (e.g., school, business, family, etc.) who are unable to control their eating behavior. Further invoking the will power card essentially “blames” the patient for having the chronic metabolic disease of obesity.

So how do we define hunger? “Hunger is the desire to eat.” Whether that desire is due to caloric or nutritional need, emotional issues, or habit, it is hunger. This takes the blame away from the patient and places it on the disease. It also sets the stage for treatment. The treatment protocol will focus on changing hunger. As we will see the opposite of hunger is satiety. Satiety is defined for our purposes as “the desire to stop eating.” The fundamental goal of obesity management is to manage hunger and this is done by decreasing hunger and increasing satiety.

This is an extraordinarily complicated process that is just beginning to be understood. Many things impact hunger and satiety, but ultimately both are controlled by hormones. The list of hormones identified as being involved in hunger and satiety control is growing and includes both central nervous system (hypothalamic) hormones and peripheral hormones(4). Growing evidence supports the concept that while all of these hormones are involved in the actual control of the behavior of eating and satiety, insulin is the hormone that plays the most central role in energy management.

The Role of Insulin in Hunger Management

The two most potent actions of insulin are lowering glucose and inhibiting lipolysis or fat breakdown. One can argue from these two actions (and others) that insulin’s primary purpose is to stimulate the storage of calories (referred to as signaling the “fed (full) state”). During the fed state, there are excess calories in the bloodstream that need to be burned or stored. During the “starvation state” there are inadequate calories in the bloodstream. Normal physiology is to store the excess calories during the fed state and access the stored calories during the starvation state. Since insulin plays a central role in signaling the fed state, one can argue that its absence plays a central role in signaling the starvation state. Persistent elevation in insulin results in persistent signaling of the fed state (body needs to store calories), even when inappropriate.

There are two basic mechanisms that cause elevation in insulin levels: excess carbohydrates in the bloodstream and resistance to insulin. Obesity, among other things, is a disease characterized by insulin resistance. Such resistance requires the body to produce excess insulin to control blood glucose which results in persistent signaling of the fed state.

As mentioned above, one of the key actions of insulin is to inhibit lipolysis. Thus, when insulin levels are elevated we do not have access to the fat calories we have stored. Therefore, insulin resistance and obesity can be thought of as a disconnect between the actual fed/starvation cycle.

Options for Reducing Hunger

There are five modalities available to the healthcare provider that help reduce insulin levels and ultimately reduce your patient’s hunger. They include nutrition, physical activity and fitness, behavior modification, and, if deemed appropriate, pharmacology, and/or bariatric surgery.

1. Centers for Disease Control and Prevention. Healthy Weight – it’s not a diet, it’s a lifestyle! About BMI for Adults. Available online at: http://www.cdc.gov/healthyweight/assessing/bmi/adult_bmi/. Accessed May 1, 2015.
2. Centers for Disease Control and Prevention. Healthy Weight - it’s not a diet, it’s a lifestyle. Losing Weight. Available online at: http://www.cdc.gov/HEALTHYWEIGHT/LOSING_WEIGHT/INDEX.HTML. Accessed May 1, 2015.
3. National Cancer Institute. Obesity and Cancer Risk. Available online at: <http://www.cancer.gov/about-cancer/causes-prevention/risk/obesity/obesity-fact-sheet>. Accessed May 1, 2015.
4. Austin J, Marks D. Hormonal Regulators of Appetite. *Int J Pediatr Endocrinol*. 2009; 2009: 141753.