



CLINICAL CORNER

A Step-by-Step Weight-Loss Program for the DC Practice

Jeffrey Tucker, DC, DACRB | DIGITAL EXCLUSIVE

This article is a preamble to my upcoming annual Trends 2022 article. It's an opportunity for me to expand on one of the top trends - inflammation and obesity. I choose what I do in my office and it has evolved into what I consider to be one of the most successful fat-loss programs in any chiropractic office in the country. We can be relevant in solving the obesity epidemic.

Step #1: Understand the Problem From a Biochemical Perspective

Day in and day out, I see patients with multiple body aches and pains related to being overweight. Excess fat cells produce cytokines that continue churning out inflammatory cells, signaling the body to keep going and going and going. For me to successfully treat this "overfat" cycle of inflammation, I use a little psychology, hunger basics, satiety basics, appetite control, and movement basics.



Why do we eat too much? Why do we store too much fat? Two entirely different questions. Obesity has evolved into an eating disorder. We have gotten way out of balance eating and drinking excess sugary foods that create excess calories. The metabolism of fructose (a key carbohydrate component that makes things sweet) in the liver circumvents leptin signaling, leading us to consume beverages and foods and their calories – even when we're not and shouldn't be hungry.

Understanding a little about leptin, hormonal, microbiota and regulatory concepts has helped me focus on the metabolism of fructose in the liver. Leptin related to fructose metabolism can induce insulin resistance, leading in turn to raised insulin levels and trapping fat in fat cells; increasing, in effect, lipophilia.

Step #2: Establish Your Clinical Goals

In my observations, for a patient to experience successful and healthy weight loss, I need to:

Determine the client's baseline measurements for weight, heart rate, blood pressure, sleep scores, and body composition. I perform body composition analysis using a bioelectrical impedance analysis device. This is a simple test that is easy to perform and provides objective biomarkers including body fat percentage, lean muscle mass, hydration levels, and basal metabolic rate.

Once these baselines are measured, it is easy to follow and monitor the patient's progress. I like to track calories they eat, and calories burned through metabolism and exercise. I ask the patient to keep a food journal (lots of these online now), which I need to see as well. Noting what patients eat and knowing that they are being watched by their doctor clearly produces better weight-loss compliance and results.

Discuss a specific food plan for each patient to follow. Around 80 percent of my patients get the ketogenic diet, while others do better with the Mediterranean or Paleo diet. Very few are going to be on an all-out carnivore or vegetarian diet.

I recommend eating lean protein, filling more than half your plate with fresh vegetables; depending on the diet and their goal, I may or may not allow seasonal fruit. I don't allow processed foods (such as frozen meals, deli meats, and refined carbohydrates, including bread, pastry and pasta). However, I do recommend ideal protein and fat foods, which may be powders or easy-to-prepare snacks as an alternative to skipping meals. I know protein and fat shakes look like processed foods, but these shakes are useful to maintain an even blood sugar level.

Design and monitor a targeted meal and supplementation plan for each patient.

Design and monitor a targeted exercise program for each patient.

Step #3: Implement a Visit-by-Visit Protocol

Weight-loss sessions are typically scheduled one per week (in addition to any treatment sessions for hands-on and/or therapy). I have a full-time weight-loss coach in my office (Jim Nicastro) who assists as follows:

1st Session (Week #1): Take patient measurements: health analysis questionnaires; height, weight, blood pressure; body composition analysis; a photo of themselves; and body part measurements (inches). If blood work is required, now is the time to recommend it. I recommend off-the-shelf blood tests and microbiome tests, and I request previous labs.

With fat mass, lean muscle mass, calories burned per day and hydration levels, we can help create and establish realistic time-frame goals. Patients need an overview of the diet plan (e.g., keto, Mediterranean, Paleo). The patient is given a food list (shopping list) and instructed as to what they can eat. If they want something not on the list, it's simply "out of bounds."

Some patients need to be taught how to use online software to count calories. From the body composition test, I've learned their basal metabolic rate (BMR). A repeated message is that they will need to decrease food intake by about 250-500 calories a day. A deficit of 500 calories a day is the amount you typically need to cut in order to lose a pound of fat a week.

Eating proper foods seems to automatically cut calories. For example, Sheldon, a 55-year-old patient, burns approximately 2,500 calories per day when he just sits at his computer all day. Sheldon was instructed to eat 2,000 calories per day of the right fat/protein foods. This was approximately 500 calories below his current basal metabolic rate. We switched him from a Grande Caffe Mocha [Starbucks] with 2 percent milk (200 calories) for a plain brewed coffee (5 calories), and eliminated an afternoon bag of potato chips (more than 150 calories) and a nightly bowl of ice cream (about 200 calories in a half cup). The shopping list of foods makes it easy to know what is OK to eat.

Making sure the patient keeps a food log of everything they eat really enhances the program. Initial weight loss is usually from the body using up its stores of carbohydrates in the muscles. Patients easily experience rapid weight loss due to the loss of these carbohydrates, as they are also rich in water. The more of your carbohydrate stores you use, the more water you lose (through increased urination and sweat losses).

During this office visit, the patient is instructed to start a walking or bike riding session at least five days a week, building up to 30 minutes per session. Obviously the intensity needs to start out slow for the deconditioned person, and the full 30 minutes may not be realistic, so starting with only 5-15 minutes is acceptable.

As soon as possible, the time should increase and the intensity should vary from moderate to vigorous in order to increase cardiac capacity. The patient is told they will be taught bodyweight

exercises, resistance training with bands or weight lifting in the sessions ahead.

2nd Session (Week #2): Review food diary and have patient continue eating a ketogenic food plan. Another body composition analysis is performed. A rough recommendation is eating at least the amount of protein in grams as their lean body mass (If lean mass is 150 pounds, patient should consume 150 grams of protein per day). This may require protein snacks to get the required amount in grams. Decreasing glucose in the diet allows the body to use stored fat and protein as sources of energy.

The message is consistent - Movement/activity is essential at this time to minimize muscle mass loss. Weight loss may be rapid; however, it is primarily due to water, carbohydrate and protein losses. All the while, if the patient needs my kind of chiropractic care, it is offered to them. The patient is also invited to use our special whole-body vibration plate during each session.

3rd Session (Week #3): I keep reinforcing the proper diet and food plan. The patient purchases specially designed food supplements from our office. The body begins to use stored body fat as its main energy source. Weight loss may slow down as muscle begins to grow. When the patient is ready, the new principles of interval training with walking sprints, running sprints or bike sprints are taught. Body composition tests are repeated and the patient looks forward to seeing results. We are primarily getting body-fat loss.

4th Session (Week #4): We start getting to the most gratifying part of this whole process, because the patient starts feeling less joint aches and pain. Their systemic inflammation starts to decrease and everything is less sore. I get to find out what really "hurts" without the symptoms of chronic inflammation present. The patient often says they look and feel more "youthful and energetic."

I continue to tweak and hack the diet, supplements, movement programs, sleep and work on other patient goals. Dropping a dress or pant size, improving chronic health problems, eliminating stiffness that makes them feel "old," lowering cholesterol, increasing energy, reducing risks for diabetes and cardiovascular disease - these are not difficult goals in our day-to-day practices.

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