



GENERAL ACUPUNCTURE

## Continuing the Conversation: Waist Circumference, Weight Loss & Food Choices

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In part [one](#) of this article, I discussed how the utilization of measuring a patient's waist circumference (WC) becomes a valuable anthropometric measurement to gauge health risk. Now I'll discuss the clinical approach to reducing WC and implementation your practice. The primary intervention centers around dietary modification and lifestyle habits aimed to reduce adiposity, improve insulin sensitivity and ultimately, diminish systemic metabolic dysfunction.

### The Carbohydrate Switch

For starters, the patient must be made aware of how many carbohydrates they currently eat and how all that must change in order to positively impact their blood sugar and insulin levels to lose excessive abdominal fat.<sup>1</sup> Why do we start with carbohydrates? Because the constant blood sugar spikes with moderate- to high-processed carbohydrate consumption will lead to not only fat storage via elevated insulin, but also increased cravings for more carbohydrates.<sup>2</sup>

We should not endorse a complete reduction of carbohydrates, but rather a "switch" to resistant starches such as vegetables, nuts and ready-to-use flours such as buckwheat, coconut, soy, mung bean and potato. Low-glycemic starches include buckwheat, raw nuts, lima / kidney beans, lentils, oat flour / oatmeal, sweet potatoes, coconut flour, peas, leafy greens and the majority of vegetables.

It's important for the patient to know that resistant starches are simply starches resistant to digestion. Resistant starches are encouraged for the overweight / obese patient because these foods not only improve insulin sensitivity and lower blood glucose, but also increase satiety and improve bowel transit time.<sup>3</sup> The overweight patient (eating a Westernized diet) has to understand that if they

typically consume 300-400 grams (or more) of carbohydrates a day, their body just cannot utilize that quantity. This means their body effortlessly converts that to fat, mostly around the belly and the organs situated there, such as the liver, pancreas and heart.

Conversely, when the patient eats carbohydrates primarily from resistant starches (they will automatically eat less because they will be far more satiated — the goal is around 100 grams per day), their body will begin the fat oxidation process. They will utilize the glucose (carbohydrates) first and then start to break down the fatty acids (fat) next for fuel to keep their body functioning.



### Healthy Fats

The next modification your patient can make comes from the increased consumption (50-60 percent of total calories) of healthy dietary fat (think avocados, raw nuts and seeds). Remember, the fats consumed do not cause an increase in glucose and insulin, and therefore do not promote fat gain. Again, only when insulin becomes chronically high from consistent high intake of carbohydrates does the body increase fat storage activity.

Patients need to be told repeatedly — eating too many carbohydrates makes you fat, not eating too much fat. High fat consumption accomplishes two things: improves fullness, and reduces cravings and supplies energy to the body without surging insulin.<sup>4</sup> Fat consumption does, however, stimulate leptin (the "satiety hormone") and suppress ghrelin (the "hunger hormone"), making it the ideal macronutrient to enhance human metabolism.<sup>5</sup>

### Protein Power

Protein has many essential functions in our bodies. Although appropriate protein consumption varies with one's size, needs, age, presence of injuries and activity level, enhancing protein intake is most critical due to its ability to facilitate certain hormones that reduce the hunger hormone while increasing satiety.<sup>6</sup> Here is a quick review of some of the gut hormones and enzymes involved with protein intake and fat loss:<sup>7</sup>

- GLP-1 (glucagon-like peptide) is a potent antihyperglycemic hormone that increases insulin sensitivity.
- Peptide YY is a bodily compound that slows gastric emptying and thus promotes fullness.
- Cholecystokinin is another compound that mediates hunger and feeding behaviors.

As you can understand, anyone interested in losing fat mass should increase their dietary protein content due to its unique weight-regulating mechanisms. There is another concept integral to understanding how protein helps augment fat loss: dietary-induced thermogenesis (DIT). There is a specific number of calories required by the body to digest, absorb and metabolize food – this is known as DIT.

On average, 5-10 percent of the calories you consume will be utilized for metabolizing the nutrients you've just eaten. Because protein is the hardest macronutrient to digest, it has the highest thermogenic effect (25 percent as opposed to 3 percent and 7 percent, respectively, for fats and carbohydrates).<sup>8</sup> Therefore, by consuming protein with each meal, you essentially increase the amount of calories burned just for digestive purposes.

### Don't Forget Exercise

The last component to reducing one's health risk and visceral fat is to exercise. This exercise is best achieved with 45 minutes maximum of high-intensity, interval, full-body circuit or compound movement activities. Excellent examples of HIIT include squat jumps, sprints, mountain climbers, burpees and jumping jacks. These types of exercises stimulate multiple muscles at multiple joints, and are intense for short bursts of time, followed by periods of rest.

This type of exercise has been referred to as HIIT (high-intensity interval training) and demonstrated to lower insulin resistance, increased fat oxidation, surge testosterone and growth hormone and enhance glucose uptake by muscles.<sup>9</sup> The clinical data reveal that this type of exercise is not only optimal and sustainable, but also scalable – appropriate for beginners to advanced.

I believe the best overall intervention for reducing a patient's health risk is via decreasing their visceral fat. We can expect to see close to 70 percent of our patients in need of losing excess belly fat — now we have the clinical know-how necessary to guide them on their journey to better health.

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