

GLP-1 Muscle Loss

“Many people on GLP-1 agonists were already in poor health and have lower levels of lean muscle, macronutrients, and micronutrients.”

If we know the most important thing we can do to age gracefully is to preserve, and when possible, increase lean muscle, anything that gets in the way should be addressed. Enter GLP-1 drugs. Experts say they reduce lean muscle mass 25-40%. They come with a host of other potential side effects. We've discussed the value of muscle and the cytokines they secrete called myokines. These amazing signaling molecules not only cross the blood brain barrier and enhance cognitive function but stimulate a plethora of systemic health benefits. You can see link as a refresher.

Sadly, most people who are taking GLP-1 agonists are already lean muscle compromised. Now, we add calorie deprivation, and we have a recipe that spells disaster in the upcoming decades. If that's not bad enough, many people lose healthy fats, collagen, and lean muscle in their facial muscles and look gaunt. People take GLP-1 agonists to look better, but unless they take precautions, they look older. And we all know vanity



sells. Realize, there are really two markets that use these drugs. People who really need to lose weight and the vanity market.

The negative side of the GLP-1 drugs are three-fold: bowel motility, macronutrient deficiency causing lean muscle loss, and a micronutrient deficiency.

We know Motility-Zyme from Biotics helps solve the bowel motility issue. You can see a link to that conversation.

Let's visit the issue of macronutrient deficiency and micronutrient deficiency. Recognize that most people who are

taking GLP-1s are not only deficient in lean muscle, but they are also deficient in macronutrient and micronutrients. Restricting food intake will exacerbate those deficiencies. Healthy weight loss is losing fat. Unhealthy weight loss is losing muscle. Lean muscle is depleted when protein, calories, healthy fats, and even fiber are reduced.

There are a couple of options to support health goals. The first is with Metabolic Biome Fuel, which is a daily high performance macronutrient dense super food shake. 4 scoops provide 20 grams of protein, 9 grams of healthy fats, and 9 grams of fiber.

Metabolic Biome Fuel is also high in polyphenols, which support a healthy biome beyond the macronutrient benefit. The protein can be collagen or pea protein, and it comes in chocolate and vanilla. Metabolic Biome Fuel is really the premier health support drink as it provides digestible protein but also has targeted fiber sources to build a healthy biome. Think of this product as a solid foundation to any program. A side benefit of Metabolic Biome Fuel is that it helps the body make both GLP-1 and GLP-2 naturally.

Knowing patients taking GLP-1 drugs have a reduced appetite, those patients may not want to drink a 4-scoop shake. The dose can be cut to 2 scoops, and one of three other protein powders can be added to increase protein counts. Hydrolyzed Collagen Protein, Whey Protein Isolate, and Pea Protein Isolate each come in a variety of flavors and supply 10 grams of protein per scoop. As a reminder, for those people who are open to dairy, Whey Protein Isolate has a plethora of positive side effects. It is the best protein source to maintain and preserve muscle with or without working out. Whey Protein Isolate can raise glutathione levels, but perhaps the greatest benefit is its mixability. It mixes easily with anything and tastes great.

Something we often forget is that if your macronutrient content is down, your micronutrient content will be down as well. Micronutrients are needed to facilitate enzymes. For example, selenium is needed to help convert T4 to T3. We need zinc for healthy hormone signaling and white blood cells. Manganese supports pituitary health. Chromium is needed to help stabilize blood sugar. Short-term fasting has been known to enhance health, but when

someone is on GLP-1 agonists long term, it creates deficiencies. And it bears repeating that “many people on GLP-1 agonists were already in poor health and have lower levels of lean muscle, macronutrients, and micronutrients.”

In a perfect world then, nutrient support should be initiated when these drugs are employed. Two products that would be a great source of micronutrients would be GlucoResolve or Bio-Multi Plus. If you think about it, the primary purpose of the GLP-1s is to enhance blood sugar regulation. The side effect is weight loss. GlucoResolve was created to enhance insulin sensitivity and balance blood sugar. Nutrients and botanicals were selected to enhance AMPK. The link to the right reviews the advantages of AMPK. But many are not aware of the micronutrients provided. GlucoResolve has all the vitamins, minerals, and cofactors to support healthy blood sugar regulation and cellular energy production. Optimal dose is 3 capsules once or twice a day depending on the weight of the patient.

Bio-Multi Plus doesn't have all the bells and whistles, but DOES contain a premium source of trace minerals and vitamins. This would be a product for the patient who isn't really insulin compromised and has less weight to lose. And as a bonus, it has an attractive price point.

Regardless of our feelings about GLP-1s, they are the hottest trend in medicine. We can use the lifestyle skills we have developed over the years to reduce side effects and help our patients transition to real food and true wellness.

Thanks for watching. I look forward to being with you again next Tuesday.