# **Tirzepatide Program**



Medical Weight-Loss Therapy

Losing weight isn't always as simple as counting calories when your hormones are not at optimal levels. Tirzepatide is a medical solution to help with diabetes and weight loss.

The programs between semaglutide and tirzepatide are similar in that they are weekly subcutaneous injection you can do at the privacy of your home. They will help regulate appetite and blood sugar, optimize your body's glucose levels, and slow down the emptying of your GI tract.

In a recent study, those on tirzepatide lost 11.5% of their body weight, compared to 9.2% on semaglutide. What it doesn't discuss is the insulin resistance of the patients. Meaning if someone has a higher insulin resistance, is one product better than the other?

## What is Tirzepatide?

Tirzepatide has 2 components:

- 1. Glucagon-like peptide (GLP-1) just like semaglutide
- 2. Glucose-dependent insulinotropic polypeptide (GIP).

Both are naturally occurring in the body that stimulate insulin secretion in response to increased blood glucose levels after eating.

Tirzepatide is a synthetic peptide, a dual gastric inhibitory polypeptide (GIP) and glucagon-like peptide 1 (GLP-1) receptor agonist. It is composed of 39 amino acids and is an analog of the gastric inhibitory polypeptide. Functionally, it stimulates insulin release from the pancreas and leads to a reduction of hyperglycemia. In addition, Tirzepatide also increases the levels of adiponectin. Its dual agonism ability leads to a more significant reduction of hyperglycemia than GLP-1 agonist agents alone and lowers the user's appetite.

## How does the program work?

Weekly subcutaneous injections (usually in the abdomen) are administered with a step-up program.



Pharmacy Dosing Guidelines (5mg/0.5ml – 3ml vial(s) of Tirzepatide)

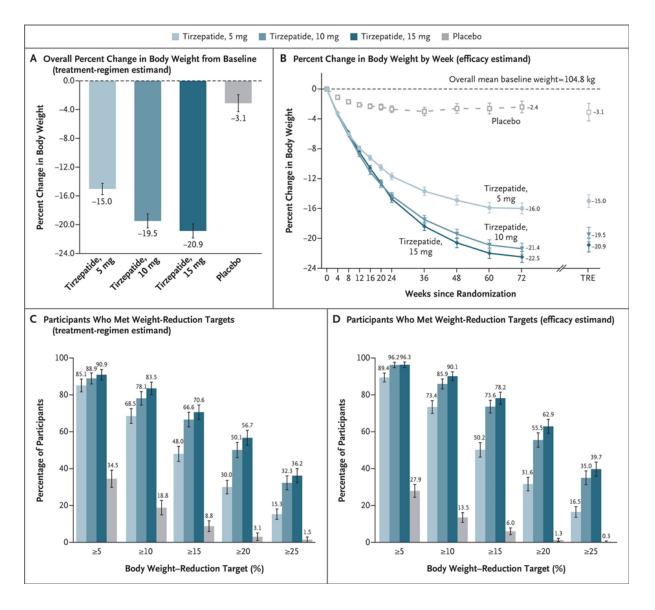
\*\*The vial of Tirzepatide allows flexible dosing. For example: if you have been on that dose for 2 weeks, and you are still hungry and not having any adverse side effects, you may increase to the next dosage level. If you are NOT very hungry, you are losing weight, and not having any adverse side effects, you can remain at that dose until you have reached your desired weight loss goal.

# **Scientific Results for Semaglutide**

An article published in 2022 documented the results of 2539 randomized participants<sup>1</sup>. At baseline, the mean body weight was 104.8 kg, the mean BMI was 38.0, and 94.5% of participants had a BMI of 30 or higher. The mean percentage change in weight at week 72 was -15.0% (95% confidence interval [CI], -15.9 to -14.2) with 5-mg weekly doses of tirzepatide, -19.5% (95% CI, -20.4 to -18.5) with 10-mg doses, and -20.9% (95% CI, -21.8 to -19.9) with 15-mg doses and -3.1% (95% CI, -4.3 to -1.9) with placebo (P<0.001 for all comparisons with placebo).

The percentage of participants who had weight reduction of 5% or more was 85% (95% CI, 82 to 89), 89% (95% CI, 86 to 92), and 91% (95% CI, 88 to 94) with 5 mg, 10 mg, and 15 mg of tirzepatide, respectively, and 35% (95% CI, 30 to 39) with placebo; 50% (95% CI, 46 to 54) and 57% (95% CI, 53 to 61) of participants in the 10-mg and 15-mg groups had a reduction in body weight of 20% or more, as compared with 3% (95% CI, 1 to 5) in the placebo group (P<0.001 for all comparisons with placebo).

How much weight is this really? In this publication the average person lost **27.5 lbs** more on tirzepatide (at 5mg) than the placebo. In addition, those at 10mg lost **37.9** lbs more and those at 15mg lost **41.1 lbs** more than the placebo. The range between 5mg and 10mg seems to have the greatest improvement whereas the 15mg only added a small incremental value over the 10mg.



### What to expect

Some participants will see significant weight loss in weeks; however, the full benefits may take 12-24 weeks. In the first few weeks you should begin to have less cravings, feel full faster, and start to see a reduction in your overall weight. As you continue this program (month – months) you should continue to see a reduction in your overall weight and fullness at an appropriate amount. It is not necessary to achieve the highest dose if you are at a healthy weight loss and at a balanced intake, however, if you hit a plateau then increasing dosage may help.

\*Side effects may occur: upset stomach, heartburn, gas, low blood sugar, bloating, nausea, vomiting, diarrhea, constipation, headache, dizziness, tiredness, and burping. As the dose level increases so do the side effects.

### **Literature Cited:**

<sup>1</sup>N Engl J Med 2022;387:205-16. DOI: 10.1056/NEJMoa2206038