

GUIDE TO TIRZEPATIDE

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NOT INTENDED AS MEDICAL ADVICE.

TABLE OF CONTENTS

Instructions for Reconstituting Tirzepatide	03
Examples of Reconstitution Calculations	05
Selecting an Injection Site	07
Dosing	08
Frequency of Injections	09
Effects and Side Effects of Tirzepatide and GLP-1 Medications	09
Eating Habits with Tirzepatide	10
Food/Diet Tips for Tirzepatide Research	11

DISCLAIMER:

This document is for educational and research purposes only and is not intended as medical advice. The information provided is not a substitute for professional medical guidance. Always consult a healthcare provider before making any changes to your treatment. The author is not a medical professional and assumes no liability for any actions taken based on this content.

INSTRUCTIONS FOR RECONSTITUTING TIRZEPATIDE

1. Preparation:

- Assemble the following supplies:
 - syringe
 - alcohol wipes
 - bacteriostatic water
 - vial of lyophilized powder
- Ensure that the vial of tirzepatide is at room temperature before reconstitution.
- Calculate the correct amount of water you will use to reconstitute (example on the next page)
- Before injecting, wipe the rubber stopper of both vials with an alcohol pad to ensure proper hygiene and maintain sterility. If there is a cap blocking the rubber stopper, be sure to remove it gently and discard it.

2. Reconstitution Process:

- Use a syringe to draw the necessary amount of bacteriostatic water needed for reconstitution.
- Insert the syringe with bacteriostatic water into the peptide vial and slowly inject the water into the vial of tirzepatide.
- Gently swirl the vial (do not shake) to mix the solution until the tirzepatide is fully dissolved.

3. Dosing:

- Follow the prescribed dosage based on your schedule (one example is shown on the next page- it is not meant to influence your research protocol).
- Use an insulin syringe to draw the correct number of units based on your specific dosing protocol.

4. Storage:

- Store the reconstituted tirzepatide in the refrigerator (between 2°C and 8°C).



EXAMPLES OF RECONSTITUTION CALCULATIONS

The table below provides a detailed example on how to reconstitute a 30mg vial of tirzepatide and administer the correct doses. It serves as an educational reference of how to calculate the amount of bacteriostatic water used to reconstitute the lyophilized powder based on one widely used research protocol. Please note that this is a general guide, and specific instructions may vary depending on the research protocol being followed.

Use the table below to determine what amount of bacteriostatic water to add to a 30mg Vial of Tirzepatide:

	Dosage (mg)	Bacteriostatic Water (ml)	Units to Draw
(Weeks 1-4)	2.5 mg	1.2 ml	10 units
(Weeks 5-8)	5 mg	Same vial as weeks 1-4	20 units
(Weeks 9-12)	7.5 mg	1 ml	25 units
(Weeks 13-15)	10 mg	0.9 ml	30 units

In the table above, we can see that adding 1.2 ml of bac water added to a 30mg vial of tirzepatide will allow for 4 injections of 10 units (2.5mg) and 4 injections of 20 units (5mg.) Should you be at a higher dose of 7.5mg (usually beginning at week 9) you would instead inject 1ml of bac water to your 30mg vial, rendering 4 injections of 25 units in the vial. For those on 10mg, by adding 0.9ml of water, you would have 3 injections of 30 units in your vial. It is important to remember that these are examples of how to reconstitute, intended to aid your understanding of reconstitution and not guidance.

For those who need to adjust doses based on different strengths of peptides or require a more tailored reconstitution guide, a peptide dosing calculator is available to assist with precise reconstitution and dosage calculations. You can access the calculator at [Lumin Peptides - Peptides Dosage Calculator](#).

This calculator is helpful for ensuring that you are correctly reconstituting peptides of any strength, not just tirzepatide, according to your individual research needs. It takes into account various vial sizes and concentrations, so you can always be sure of the correct reconstitution method for your specific peptide.

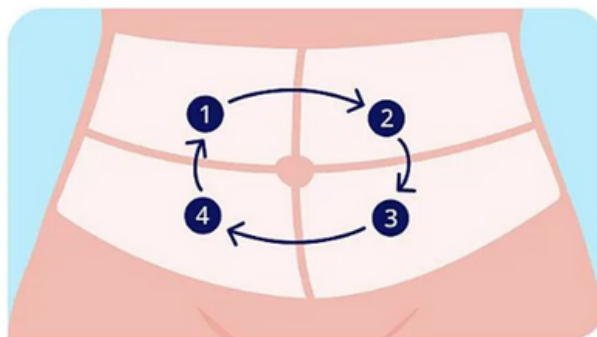
Helpful Tips for Reconstitution and Dosing

- **Hold the vial upside down:** When drawing the bacteriostatic water into the syringe, it can be helpful to hold the vial upside down. This will make it easier to draw the water, as gravity will assist in filling the syringe more smoothly.
- **Use a separate syringe for mixing:** When mixing the tirzepatide with bacteriostatic water, use a separate syringe. After mixing, discard the syringe used for mixing. This is because the blunt tip of the syringe used for mixing may get damaged and could lead to difficulty drawing the medication accurately later.
- **Do not shake:** When mixing the reconstitution solution, always swirl gently instead of shaking. Shaking could damage the medication and create bubbles in the vial.
- **Inject slowly:** Add your bacteriostatic water to the peptide vial slowly. Typically, the pressurized cap will pull the liquid in without you needing to press the syringe.
- **Double-check dosage:** Always ensure that the correct number of units is drawn into the syringe. Check the dosage on the label and cross-check with the units in the syringe before administering.
- **Keep the vial clean:** Be mindful of not contaminating the rubber stopper when drawing up the water or medication. Always wipe the stopper with an alcohol pad before use.

SELECTING AN INJECTION SITE



Choose an area:
abdomen, upper legs or upper arms.



Select an injection site to start injecting.
Switch injection sites weekly

Visual Aid of How to Administer an Injection Subcutaneously

1 Clean top of vial with alcohol wipe	2 Insert syringe needle at 45 degree angle	3 Hold vial tilted upwards, slowly pull back until you have reached your dosage
4 Turn right side up, withdraw syringe and tap to bring air bubble to top of chamber	5 Push plunger up slightly to expel air bubble from syringe until tiny droplet appears	6 Locate and clean injection site, pinch between thumb and index finger
7 Inject at 45 degree angle into pinched area and inject slowly	8 Replace cap on syringe and dispose of needle in a sharps container	9 Place your vial(s) back in the fridge



DOSING

Studies and recommendations for diabetic use typically start with a 2.5 mg dose per week, which is increased to 5 mg after about 4 weeks. If needed, the dose can be further increased in 2.5 mg increments up to a maximum of 15 mg per week. However, the dose should not be increased more rapidly than every 4 weeks to allow the body time to adjust. For weight loss, it's generally advisable to stay on the lowest effective dose to minimize side effects, which are shown to be dose-dependent. Many people have reported success maintaining a dose of 7.5 mg or 10 mg per week for extended periods, beyond 4 weeks, as long as weight loss continues and appetite is controlled.

Starting directly with 5 mg is not recommended, as it may lead to discomfort. The body needs time to adjust, and many individuals find that 2.5 mg is effective for sustained weight loss over several weeks. Excessive hunger suppression can lead to side effects like weakness or hypoglycemia, so it's best to start with a lower dose and adjust gradually as needed.

FREQUENCY OF INJECTIONS

The standard injection cycle for starting Tirzepatide is every 7 days. Once the medication begins to wear off, often around day 6 or 7, some individuals shorten the injection cycle to 5 days, as this adjustment has been commonly used. Instead of increasing the dose when weight loss stalls, reducing the injection interval has also been reported as an effective approach.

While the patient information for brand-name drugs suggests weekly injections, this recommendation is likely based on convenience rather than pharmacokinetics. The actual bioavailability curve shows a peak in drug levels within the first 24 hours after injection, followed by a decrease over the next 96 hours, giving the medication a half-life of about 120 hours. As a result, an injection interval of 5-6 days is often more consistent with the pharmacokinetics of the drug.

Tirzepatide's 120-hour half-life means that about 5 days are needed for half of the substance to be metabolized. Consequently, the medication gradually accumulates in the body when the dose or injection interval is adjusted.

Individuals often notice a decrease in the drug's effectiveness as the injection interval progresses, with increased hunger, larger portion sizes, and a possible dip in mood toward the end of the cycle. This has led many to experiment with intervals of 5 or 6 days to better match their body's response.

EFFECTS AND SIDE EFFECTS OF TIRZEPATIDE AND GLP-1 MEDICATIONS

GLP-1 medications, including Tirzepatide, are generally well-tolerated, with mild side effects like nausea, vomiting, decreased appetite, diarrhea, and abdominal discomfort, which often improve over time. The risk of hypoglycemia is low but may increase when combined with other diabetes medications such as sulfonylureas or insulin. In rare cases, GLP-1 drugs can cause more serious side effects, like kidney or gallbladder issues, or vision changes, requiring immediate medical attention. Additionally, GLP-1 medications may reduce the effectiveness of oral contraceptives, so an alternative form of birth control is recommended.



EATING HABITS WITH TIRZEPATIDE

Tirzepatide significantly reduces the amount of food that can be eaten before feeling full, as digestion slows and the stomach stays fuller longer. Nausea and discomfort are common when individuals eat too quickly or ignore feelings of fullness. To minimize these side effects:

Eat smaller portions: Reducing meal size (e.g., 30-50%) can prevent discomfort.

Eat slowly: Slower eating helps avoid nausea and supports digestion.

Adjust to slower digestion: The stomach empties more slowly, so mindful eating is important.

Although fasting on Tirzepatide may lead to rapid weight loss, it can also result in fatigue and low blood glucose. It is generally advised to eat small amounts 2-3 times per day to maintain energy and prevent issues like weakness or tiredness.

FOOD/DIET TIPS FOR TIRZEPATIDE RESEARCH

GLP-1 medications tend to be most effective when individuals make small but meaningful lifestyle changes, particularly regarding diet. Replacing fast-digesting carbohydrates with foods that provide a more stable source of energy, such as whole foods rich in protein, fiber, and healthy fats, can support the medication's effectiveness.

Changes in dietary habits need not be abrupt; gradual adjustments are often more manageable. For instance, replacing diet soda with seltzer, white bread with sprouted grain bread, or sugary cereals with a homemade frittata can be effective first steps.

Certain comfort foods, while familiar, can lead to digestive discomfort when consumed during GLP-1 treatment. Common issues include altered taste perception, bloating, nausea, reflux, and stomach cramps. These side effects can be mitigated with mindful food choices.

Some helpful food guidelines include:

- Avoid processed, fried, greasy, or sugary foods, as they are harder to digest and may trigger nausea.
- Eat smaller, slower meals that are light, nutrient-dense, and high in fiber.
- Drink clear or ice-cold beverages, such as sparkling water or unsweetened tea, to ease digestion.

Additionally, alcohol consumption may affect the efficacy of GLP-1 medications by influencing blood sugar levels. Reducing alcohol intake or eliminating it altogether may enhance the medication's effectiveness and contribute to improved sleep quality and reduced daytime fatigue.