



GUIDE TO SEMAGLUTIDE

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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 SEMAGLUTIDE

1. Preparation:

- Assemble the following supplies:
 - syringe
 - alcohol wipes
 - bacteriostatic water
 - vial of lyophilized powder (semaglutide)
- Ensure that the vial of semaglutide 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 semaglutide.
- Gently swirl the vial (do not shake) to mix the solution until the semaglutide 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).



EXAMPLE RECONSTITUTION CALCULATIONS

The table below provides a detailed example on how to reconstitute a 10mg vial of semaglutide 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 10mg vial of Semaglutide:

	Dosage (mg)	Bacteriostatic Water (ml)	Units to Draw
(Weeks 1-4)	.25 mg	2 ml	10 units
(Weeks 5-8)	.5 mg	2 ml	20 units
(Weeks 9-12)	1 mg	2 ml	40 units
(Weeks 13-16)	1.5 mg	2 ml	60 units

In the table above, 2 ml of bacteriostatic water is added to a 10mg vial of semaglutide, which results in a simple conversion of 0.1mg per unit. This makes syringe dosing intuitive:

- 10 units = 0.25mg
- 20 units = 0.5mg
- 40 units = 1mg
- 60 units = 1.5mg

This design simplifies both titration and long-term use by standardizing draw volumes and avoiding hard-to-measure units. 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](#).

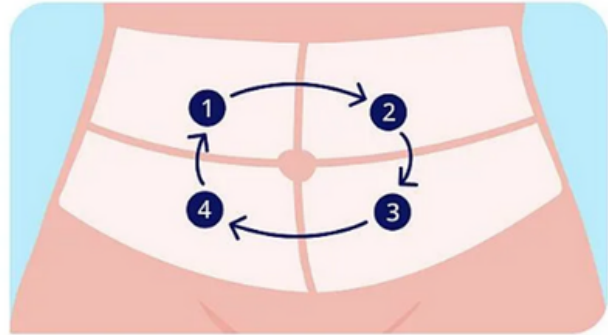
Helpful Tips for Reconstitution and Dosing

- **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 INFORMATION

Clinical use of semaglutide typically begins at 0.25 mg per week, increasing to 0.5 mg after 4 weeks. This low starting dose isn't meant for weight loss efficacy but to improve tolerance. From there, dosing can increase by 0.5 mg every 4 weeks as needed, up to 2.0 mg weekly, or 2.4 mg in weight loss-specific protocols.

For weight loss, many individuals find sustained success on 1.0–1.5 mg per week, especially when appetite remains controlled. Since semaglutide's side effects—like nausea and fatigue—are dose-dependent, it's best to use the lowest effective dose rather than increasing automatically.

Jumping directly to 1.0 mg or more is not recommended, as the body needs time to adjust. Even though 0.25 mg is subtherapeutic for fat loss, it helps avoid early side effects. Starting low and titrating slowly is generally more comfortable and effective over time.

FREQUENCY OF INJECTIONS

The standard injection cycle for starting semaglutide 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 bioavailability curve shows a peak in drug levels within the first 24 hours after injection, followed by a decline over the next few days. With a half-life of roughly 168 hours, semaglutide gradually accumulates in the body as dose or frequency increases.

Many people notice a drop in effectiveness toward the end of the weekly cycle—such as increased hunger, larger portion sizes, or reduced energy. This has led some to experiment with 5–6 day intervals to better match their body’s response and maintain more stable appetite control.

EFFECTS AND SIDE EFFECTS OF SEMAGLUTIDE AND GLP-1 MEDICATIONS

GLP-1 medications like semaglutide are generally well-tolerated, with side effects that are usually mild and temporary, especially during the early titration period. The most common effects include nausea, decreased appetite, early satiety, diarrhea, and mild abdominal discomfort. These symptoms tend to improve as the body adjusts to slower gastric emptying and changes in blood glucose regulation. The risk of hypoglycemia is low when semaglutide is used alone but may increase if taken with other glucose-lowering agents such as insulin or sulfonylureas. Rare but more serious side effects—such as gallbladder issues, pancreatitis, or kidney function changes—have been reported and warrant immediate medical attention if symptoms like persistent abdominal pain or dark urine occur.

Semaglutide may also affect absorption of oral medications, including oral contraceptives, due to delayed gastric emptying. It is generally recommended to use non-oral forms of birth control while on GLP-1 therapy to ensure efficacy.



EATING HABITS WITH SEMAGLUTIDE

Semaglutide significantly alters appetite signaling and gastric motility, leading to earlier fullness and longer digestion times. Many individuals find that even modest meals feel large, and discomfort may occur if they eat too quickly or ignore satiety cues. To reduce side effects and improve tolerance, the following strategies are often helpful:

- Eat smaller portions: Reducing meal volume by 30–50% can help prevent nausea or bloating.
- Eat slowly: Pacing meals over 15–20 minutes allows time for hormonal satiety signals to take effect.
- Adapt to slower digestion: Since the stomach empties more slowly, plan for longer intervals between meals and avoid eating late at night.

While fasting or eating once daily may seem appealing during early weight loss, it can lead to fatigue, dizziness, or low blood sugar, especially in physically active individuals. Most people do best by consuming small, nutrient-dense meals 2–3 times daily to maintain energy levels and minimize side effects like weakness or lightheadedness.

FOOD/DIET TIPS FOR SEMAGLUTIDE RESEARCH

GLP-1 medications like semaglutide tend to be most effective when paired with sustainable dietary changes, particularly those that support stable blood sugar and promote satiety. Replacing fast-digesting carbohydrates with whole foods rich in protein, fiber, and healthy fats can enhance the medication's appetite-regulating effects and minimize side effects.

These changes don't need to happen all at once. Gradual shifts—such as swapping diet soda for seltzer, white rice for quinoa, or sugary snacks for protein-based options—are more manageable and often better tolerated.

Some commonly tolerated comfort foods may become problematic during semaglutide treatment due to slower gastric emptying and altered gut sensitivity. This can lead to bloating, nausea, reflux, or discomfort, particularly with heavier meals.

Some helpful food strategies include:

- **Avoid fried, greasy, heavily processed, or sugary foods, which can be harder to digest and more likely to trigger nausea.**
- **Prioritize small, slow meals that are light but nutrient-dense and fiber-rich.**
- **Drink clear, cold, or carbonated beverages, such as sparkling water or herbal teas, which may ease digestion.**

Additionally, alcohol can blunt semaglutide's effects on blood glucose and satiety, and may worsen side effects like reflux or fatigue. Reducing or avoiding alcohol often leads to better outcomes, including improved sleep and energy throughout the day.