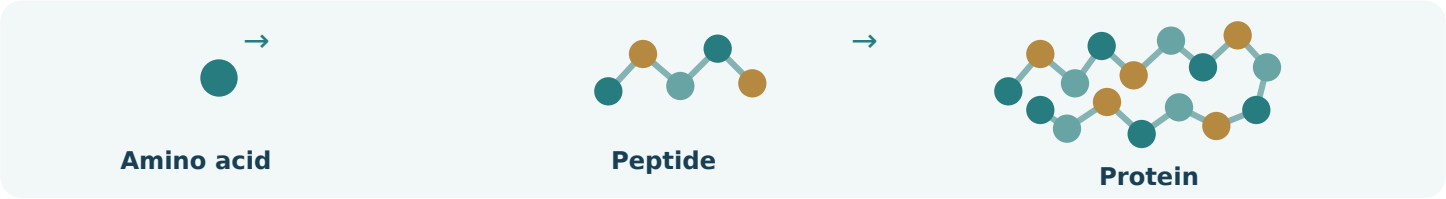
Peptides Explained



What is a peptide?

The term “peptide” describes a particular molecular structure, not a category of products or a particular use. Peptides are short chains of amino acids—the building blocks of proteins. Some are present in foods or form in the body when proteins are broken down. Some occur in nature (in plants or animals), while others are synthetic (created in a lab).



Simplified illustrations—not chemical structures or to scale

Different peptides can perform different functions in the body.

- Most act as chemical messengers.
- Some peptides, like GLP-1, help regulate glucose levels and appetite.
- Others possess antimicrobial properties and help fight off infections.
- Vital hormones like insulin and endorphins are peptides.
- Other peptides help orchestrate wound healing or tissue repair.

So “peptides” encompass a vast range of molecules with a wide array of health effects.

Different chemistry. Different rules.

- Peptides are used in foods, dietary supplements, cosmetics, and drugs. A product’s ingredients, intended use, how it’s administered, claims, and applicable laws determine how it is regulated—not the word “peptide” alone.
- Peptides labeled as drugs should be used under medical supervision of a healthcare provider.
- Some peptides permitted in compounded drugs are not FDA approved and are prepared for particular medical needs.
- Peptides labeled “For research purposes only” or “Research chemicals” are not approved for human use and should not be used without close medical supervision of a healthcare provider.

Foods | **Dietary supplements** | **Cosmetics** | **Drugs**

Peptides Are Found in a Variety of Products

Product type	Example	How it's used	FDA approval
Food	Casein in whey	Swallowed	Not FDA approved; other FDA requirements apply
Dietary supplement	Collagen	Swallowed	Not FDA approved; other FDA requirements apply
Cosmetic	Collagen	Topical	Not FDA approved; other FDA requirements apply
Prescription drug	Semaglutide (Ozempic®); tirzepatide (Zepbound®)	May be applied topically, ingested or injected	FDA approves specific drugs, manufacturing and labeled uses
Compounded drug	—	May be applied topically, ingested or injected	FDA does not approve compounded drugs; compounding is permitted under conditions
Research chemicals	—	Unknown	FDA has not approved for use in humans

Some red flags to look for on a peptide supplement label:

- ✓ Does the label include a Supplement Facts box that clearly identifies the specific peptide, not simply "peptides"?
- ✓ Are the claims reasonable? A supplement is not permitted to treat, cure, prevent or mitigate a disease. Supplements should not compare their effects to those of drugs.
- ✓ Is there clear contact information for the manufacturer or brand?
- ✓ Is the product intended to be swallowed? Supplements must be orally ingested, not injected.

If the answer to any of these questions is "no," you may want to consider avoiding the product.

Nutrition matters during GLP-1 therapy; supplements may help.

Drugs containing GLP-1 peptides and related prescription medications can reduce appetite and food intake. Nutrition supports overall health during treatment. Dietary supplements promoted for "GLP-1 support" are not peptides and are not intended to replace these medications. Rather, they can fill some nutritional gaps during GLP-1 usage.

FOUR NUTRITION PRIORITIES

1 PROTEIN
Support muscle maintenance; supplements may help when intake falls short.

2 FIBER
Help meet fiber needs and support digestive regularity.

3 HYDRATION
Stay attentive to fluids, especially if gastrointestinal symptoms occur.

4 VITAMINS + MINERALS
Consider targeted support for identified dietary gaps.

LEARN MORE

SUPPLEMENTS CAN SUPPORT NUTRITION—BUT THEY DO NOT REPLACE GLP-1 MEDICINES. Talk to your healthcare provider when using a GLP-1 medication to see if dietary supplements are appropriate for your nutrition needs.