

Peptides 101

A plain-language guide to what peptides actually are, how they work in the body, and why this category of science is getting so much attention. Education only — no treatment claims.

#WhatArePeptides

#HowTheyWork

#TheCategories

#SmartQuestions

#KnowBeforeYouGo

What Is A Peptide?

A peptide is a **short chain of amino acids** — the same building blocks that make up proteins, just smaller. Where a protein might be hundreds of amino acids long, a peptide is usually only a handful (roughly 2–50). Your body makes thousands of them naturally; they act as **messengers**, telling cells what to do.

2–50

Amino acids typically make up a peptide chain

Signal

Not a blunt instrument — peptides act like precise messengers

⚠ THE MOST IMPORTANT THING TO UNDERSTAND

"Peptide" is a **category, not a single product** — and the regulatory status varies enormously from one to the next. A few are FDA-approved medications. Some are common in cosmetics. Many are **research compounds only**, meaning they have not been approved for use in people. This sheet explains the science; it does not recommend, prescribe, or endorse any specific use.

HOW PEPTIDES WORK IN THE BODY

MECHANISM Signaling

- Peptides bind to **receptors** on cells
- That binding sends an instruction
- Think "key fitting a lock," not a sledgehammer

MECHANISM Specificity

- Each peptide tends to target **one pathway**
- Narrow focus — the research appeal
- Less "everything everywhere" than some drugs

MECHANISM Fragility

- Stomach enzymes **break them down**
- That's why oral peptides are tricky
- Stability and delivery are major hurdles

MECHANISM Natural Origin

- Insulin is a peptide — so is collagen signaling
- The body produces them constantly
- Synthetic versions **mimic** these signals

THE CATEGORIES YOU'LL HEAR ABOUT

CATEGORY Recovery

- Tissue repair & healing research
- Anti-inflammatory pathways
- Gut-lining and wound-healing studies

CATEGORY Aesthetics

- Collagen & elastin signaling
- Skin barrier and antioxidant research
- Some forms used **topically** in skincare

CATEGORY Metabolic

- Energy & mitochondrial research
- Fat-metabolism pathway studies
- Includes the well-known GLP-1 class*

CATEGORY Longevity

- Cellular-aging research
- Telomere & circadian-rhythm studies
- Mostly **research-stage** compounds

*A NOTE ON GLP-1S

The GLP-1 class (the family behind well-known FDA-approved weight and diabetes medications) is technically peptide-based, which is why you'll sometimes see it grouped here. But FDA-approved GLP-1 medications are an entirely different regulatory world from research peptides, and the two should never be treated as the same thing.

The Smart Questions

If you ever consider anything in this category, these are the questions that protect you. A trustworthy provider will answer all of them clearly and in writing.

#AskFirst

#KnowYourSource

#RegulatoryStatus

#StaySafe

THREE VERY DIFFERENT REGULATORY WORLDS

TIER	WHAT IT MEANS	HOW TO RECOGNIZE IT
FDA-Approved	Reviewed for safety and effectiveness for a specific use. The highest bar.	Has a brand name, a label, and an approved indication. Dispensed by a licensed pharmacy with a prescription.
Cosmetic / Topical	Used on the surface of the skin in regulated skincare. Common and well understood.	Found in serums and creams. Makes appearance-related claims, not internal medical ones.
Research-Use-Only	Made for laboratory study. Not approved for use in people — labels often say exactly that.	Sold to "labs and researchers." Carries a "not for human consumption" disclaimer. No prescription workflow.

QUESTIONS WORTH ASKING

ASK

The Source

- "Where is this **sourced** from?"
- "Is it from a licensed pharmacy?"
- "Can I see the documentation?"

ASK

The Status

- "Is this **FDA-approved** for this use?"
- "Or is it research-only?"
- "What does the label actually say?"

ASK

The Oversight

- "Who is **supervising** this medically?"
- "What's the follow-up plan?"
- "What are the known risks?"

ASK

The Evidence

- "What does the **research** actually show?"
- "In people, or only in labs?"
- "What's still unknown?"

GREEN FLAGS

Licensed pharmacy sourcing, prescription required, clear medical supervision, honest about what's known and unknown, willing to put answers in writing, realistic expectations.

RED FLAGS

"Trust us" instead of documentation, pressure to decide fast, miracle promises, no prescription or supervision, "research-use-only" products offered for personal use, vague sourcing.

THE HELLO GORGEOUS PHILOSOPHY

We'd rather give you honest information than a quick sale. Peptide science is genuinely exciting, and it's also young, and full of products that haven't earned the safety record approved medications have. Knowing the difference is how you stay both hopeful and protected. If you ever have questions, bring them to us. We're still here, still learning, still in your corner.