Peptides Explained: What They Are, Why They're Not New, and How to Avoid the Hype

By Robert Ferguson

Lately, it feels like everywhere I turn, someone is asking me about peptides. One day it's a client during a coaching session. The next, I'm speaking at a seminar—whether in person or online—and someone raises their hand to ask, "What's the deal with peptides?" Then I hop on social media and see a growing wave of people promoting peptide supplements like they're the next miracle cure. Even one of my certified coaches recently joined a company that distributes peptides.

If you've been curious or confused about peptides, you're not alone—and that's exactly why I wrote this article. My goal is to help you understand what peptides are, why they're not new, and how to think critically about whether they make sense for you.

With the explosion of peptide supplements hitting the wellness and fitness markets, it's no surprise that many people are asking, "What are peptides?" And more importantly, "Are they really new, or just newly marketed?"

What Are Peptides?

Peptides are short chains of amino acids—the same basic units that are the building blocks for protein sources like chicken, steak, fish, and eggs. Think of amino acids as the letters of the alphabet. When you link a few letters together, you form a word (a peptide). When you string many words together, you form a sentence (a full protein).

What we call "protein" in food is made up of long chains of amino acids. When we eat protein, our bodies break it down into individual amino acids, which are then used to build, repair, and regulate various bodily processes—including the creation of peptides.

Each amino acid plays a specific role in the body, and when they're joined by peptide bonds, they form peptides that can act as messengers, hormones, or healing agents. Peptides typically consist of 2 to 50 amino acids, which makes them smaller, more specific, and often easier to absorb than full-sized proteins.

Your body naturally produces peptides every day. Some of the most vital hormones and signaling molecules are peptides, including:

- Insulin helps regulate blood sugar
- Glucagon raises blood sugar when it gets too low
- Endorphins natural painkillers and mood enhancers
- **Oxytocin** the "bonding" hormone
- GLP-1 stimulates insulin and reduces appetite

This article is not about naturally occurring peptides like insulin or oxytocin that your body makes on its own. It's about **peptide supplements**—the ones you're seeing promoted in powdered drinks, capsules, injectables, and even liquid forms.

Think of it like supplementing with protein powder. Protein is made up of amino acids, and some supplements take those chains and break them down into smaller, more bioavailable units called peptides. In fact, this is exactly what happens in **hydrolyzed protein**, where proteins are pre-digested or enzymatically broken down into peptides and amino acids before you even consume them. This process is designed to improve absorption and speed up delivery to your tissues.

While many peptides are broken down in the stomach by digestive enzymes, certain peptides do make it through the stomach and into the small intestine, where they can be absorbed into the bloodstream. This is particularly true for well-researched peptides like collagen peptides, which have been shown to survive digestion in fragment form and stimulate physiological responses that benefit skin, joint, and gut health.

Just as drinking a protein shake can support muscle repair and recovery, consuming certain peptide supplements is believed to support specific functions in the body depending on their source, structure, and delivery method.

So, as you read on, know that I'm not completely for or against peptides. Some have legitimate uses. But I also believe many peptide products are marketed with inflated promises, more for profit than for people. The goal here is to give you the facts—so you can make informed decisions, not emotional ones.

The Hype: What's New Isn't the Science

What's *new* isn't the existence of peptides—it's the **marketing of them**. For decades, peptides have been studied and used in medicine. Insulin, for example, has been used to treat diabetes since the 1920s.

Now, supplement companies and wellness influencers are branding peptides like BPC-157, CJC-1295, and collagen peptides as if they're revolutionary. The word "peptides" has become a trendy label slapped onto products to make them sound cutting-edge.

Yes, some peptides have real benefits. But many people are being misled by clever marketing and buzzwords rather than informed by science. The supplement industry is using a *familiar trick*: take an old concept, give it a fresh name, and sell it as a new miracle.

Don't Fall for the Buzzword

The average person sees the word "peptide" and thinks it must be new, advanced, or better. But in truth, it's just a **word you weren't hearing before**. That doesn't make the product new or more effective.

Misinformation and disinformation around peptides are rampant. Some products are promoted with little to no scientific backing, and others exaggerate the effects to seem like miracle cures. As always, context matters—and so does source quality.

Popular Claims in the Supplement World

Many peptide supplements are surrounded by bold health promises—some of which are supported by preliminary research, while others are mostly marketing hype. Below is a breakdown of the most common claims, what's being said, and what the science shows:

Fat Loss & Muscle Growth

- Claims: "Burn fat effortlessly" or "Build lean muscle fast" with peptides like *CJC-1295*, *Ipamorelin*, and *Tesamorelin*.
- Reality: These peptides may influence growth hormone and IGF-1 levels, but most data comes from early-phase or animal studies. Human results are mixed, and long-term effects are unclear.

Anti-Aging & Longevity

- Claims: "Reverse aging" or "Extend your lifespan" using peptides like *Epitalon* or *Thymalin*.
- Reality: These peptides show interesting potential in lab studies, but large, wellcontrolled human trials are lacking. Longevity claims remain unproven.

Skin Health & Beauty

- Claims: "Erase wrinkles" and "Firm your skin naturally" using collagen peptides, *Matrixyl*, or *Argireline*.
- Reality: Some human studies support modest improvements in skin hydration, elasticity, and wrinkle depth, especially with collagen peptides. But results vary by product, dose, and formulation.

Brain Health & Focus

- Claims: "Improve focus, memory, and mood" using peptides like Semax or Selank.
- Reality: These nootropic peptides are largely untested in robust human trials. Much of the buzz is anecdotal or based on animal research.

Healing & Recovery

- Claims: "Accelerate healing of joints, tendons, or gut lining" with BPC-157 and TB-500.
- Reality: Among the most promising in preclinical models. Some real-world users report benefits, but well-designed human trials are limited.

Better Sleep & Hormone Balance

- Claims: "Fix your sleep" or "Naturally balance hormones" with peptides like *DSIP* or growth hormone secretagogues.
- Reality: The science is thin. Some peptides affect hormone pathways, but strong clinical backing for these specific outcomes is lacking.

Bottom line: Some peptides show genuine promise. Others are hyped beyond what the science currently supports. As always, dose, delivery, and data matter. Don't fall for miracle marketing without digging into the facts.

Bioavailability and Delivery: Do Peptides Survive Digestion?

It's important to understand that peptides are likely destroyed in the stomach. It's called digestion—and that's exactly what it's meant to do. Enzymes like **pepsin** in the stomach and **trypsin** in the small intestine are specifically designed to break down proteins and peptides into smaller fragments and individual amino acids.

That's why many people go to the trouble of injecting peptides—because injections bypass the harsh environment of the stomach and intestines, delivering the compound directly into the bloodstream. Without knowing exactly what the peptide is, how large it is, and how it's formulated, there's no way to guarantee that an oral or topical peptide supplement will be effective.

However, not all peptides are created equal.

Some peptides can survive the gastrointestinal (GI) tract or are modified to enhance absorption (e.g., through enteric coatings, liposomal delivery, or pairing with bioenhancers). For instance, collagen peptides have been shown in multiple studies to survive digestion in small fragments and trigger physiological responses related to skin, joint, and gut health.

That said, context matters—without knowing the exact peptide, its size, stability, and how it's delivered, there's no way to guarantee bioavailability or benefit. Injectables bypass digestion for a reason, but that doesn't mean all oral peptides are worthless—it just depends on the science behind them.

The Risks of Injecting Peptides

While injectable peptides bypass the digestive system and offer better bioavailability, they are not without risks—especially when used without medical oversight. Here are some of the most important concerns:

- Infection risk Improper injection technique or unsterile equipment can lead to localized infections or even serious systemic issues like sepsis.
- **Product purity** Many peptides sold online are not FDA-approved and may be contaminated, mislabeled, or inconsistently dosed.

- **Hormonal imbalances** Some peptides influence hormone production (e.g., growth hormone), and misuse can lead to side effects like insulin resistance, enlarged organs, or reproductive issues.
- **Immune response** Injected peptides may trigger allergic or autoimmune reactions in some individuals.
- Legal and ethical concerns Many peptides are not legal for over-the-counter use in some countries, and athletes may face doping violations.

Bottom line: Just because something is injectable doesn't mean it's safe or effective. The body is complex, and manipulating its chemistry should never be done casually.

Forms of Peptides on the Market

Peptides are now available in multiple delivery formats, depending on the intended use and marketing strategy. These include:

- Oral supplements (e.g., collagen peptides, often found in powders or flavored drinks)
- Capsules and tablets (used for general wellness, skin health, or gut repair)
- **Injectables** (such as BPC-157, CJC-1295, and TB-500 for more targeted therapeutic or performance applications)
- Liquid peptides (marketed for easier absorption or convenience)

Peptides aren't new—the hype is.

Let's get educated, not marketed to.

If you're curious about whether peptide supplementation is right for you, let's talk. I offer a <u>free</u> <u>consultation</u> where I can personally review your current supplements, answer your questions, and help you make informed decisions based on science—not hype. Together, we'll evaluate what works, what doesn't, and what's worth your time and money.

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