PEPTIDE IQ™

by Element Health Labs

The Peptide IQ Beginner's Guide

Understanding Peptide Research: What's Approved, What's Investigational, and How to Tell the Difference

A free educational guide · Last reviewed August 2026

Educational information only. Not medical advice. See disclaimer on final page.

Before You Read This Guide

This guide is educational only. It is not medical advice, and nothing in it should be used to diagnose, treat, cure, or prevent any disease, or to guide any personal health decision. If you're considering anything related to your own health, talk to a licensed healthcare provider. Our goal here is simple: help you understand peptide research well enough to ask better questions and evaluate claims critically — nothing more.

Chapter 1: What Is a Peptide?

A peptide is a short chain of amino acids — the same building blocks that make up proteins, just fewer of them strung together. Your body makes and uses peptides constantly: insulin, oxytocin, and glucagon are all peptides your body produces naturally to regulate everything from blood sugar to social bonding.

“Peptide” is a category, not a claim. Saying something “is a peptide” tells you almost nothing about whether it's safe, effective, legal to sell, or backed by evidence — it just tells you its molecular structure. Two peptides can have completely different regulatory status, evidence bases, and risk profiles. That distinction is the single most important idea in this guide.

Chapter 2: The Four Categories Every Peptide Falls Into

When you read about a peptide anywhere — including on this site — it will fall into one (or more) of these categories, and the difference matters enormously:

1. FDA-approved. The compound has gone through the FDA's formal drug review process for a specific approved use, in a specific approved formulation, backed by large randomized controlled trials. Semaglutide (as Ozempic or Wegovy) and tirzepatide (as Mounjaro or Zepbound) are examples — but notice the approval is for a specific brand, formulation, and indication, not a blanket approval of “the peptide” for anything.

2. Investigational. The compound is in active human clinical trials but hasn't completed the approval process yet. It may show promise, but “in trials” is not the same as “proven” or “approved.” Retatrutide is a current example.

3. Preclinical / animal-only. The compound has only been studied in cells or animals — no meaningful human trial data exists yet. This is a much earlier and less certain stage than most marketing suggests. Many peptides discussed in online fitness and biohacking communities (BPC-157, TB-500, and others) are, as of today, in this category or close to it, despite being discussed as if they were established.

4. Not evaluated / unregulated for human use. Some compounds are sold as “research chemicals” or “for research use only.” That label is a legal fiction when the product is actually being marketed or used for human consumption — it does not mean the compound is safe, effective, or legal to use that way.

Peptide IQ will always tell you which of these four categories a compound falls into, every time. If we can't tell you, we'll say so.

Chapter 3: How to Read a Health Claim Like a Skeptical Scientist

You don't need a PhD to evaluate a claim. You need five questions:

1. Is this human data or animal data? A mouse study is real research — but it is not evidence of what happens in people.

2. How many people were in the study, and was there a control group? Ten uncontrolled case reports are a different evidence tier than a 2,000-person randomized trial.

3. Who funded it, and does that change how I should weigh it? Funding doesn't automatically invalidate a study, but it's a fact worth knowing.

4. Has it been replicated? One study is a data point, not a conclusion. Replicated findings across independent labs are much stronger.

5. What does the compound's actual regulatory status say? “Studied” is not “approved.” “Approved for X” is not “approved for Y.”

If a source can't or won't answer these questions about its own claims, be skeptical.

Chapter 4: Ten Peptides People Are Talking About

(and where they actually stand)

Peptide	Category	Status, in one line
Semaglutide	FDA-approved (specific products)	Ozempic, Wegovy, Rybelsus — specific indications
Tirzepatide	FDA-approved (specific products)	Mounjaro, Zepbound — specific indications
Retatrutide	Investigational	In clinical trials, not yet approved
BPC-157	Preclinical-dominant / not approved	Mostly animal research; FDA flagged compounding concerns
GHK-Cu	Cosmetic ingredient	Common in topical skincare; not drug-approved
TB-500	Preclinical-dominant / not approved	Mostly animal research; banned in competitive sports
CJC-1295	Not approved	Limited human data
Ipamorelin	Not approved	Limited human data
Tesamorelin	FDA-approved (specific product)	Egrifta — narrow, specific indication

Peptide	Category	Status, in one line
Epitalon	Not approved (in the US)	Limited, largely non-US, non-replicated research

Full write-ups for each — with mechanism, evidence, and regulatory detail — are in the Peptide IQ Peptide Library.

Chapter 5: What “FDA-Approved” Actually Means (and Doesn't)

FDA approval means a specific drug, in a specific formulation, was reviewed against a specific proposed use, and found to have benefits that outweigh known risks for that use — based on data the manufacturer submitted and the FDA independently evaluated. It does not mean the compound is approved for any other use, dose, population, or route of administration than the one reviewed. It also doesn't mean a compound is risk-free — every approved drug carries some risk, disclosed on its label.

The absence of FDA approval doesn't automatically mean a compound is dangerous or useless, either — it may simply be too early in research, or a category (like cosmetics) that isn't regulated the same way as drugs. What it does mean is that no independent regulatory body has reviewed a full efficacy-and-safety data package for that specific use. That's a meaningfully different claim than either “it's approved” or “it's proven unsafe,” and conflating any of these is where most misinformation in this space comes from.

Chapter 6: Where to Go From Here

Browse the full Peptide Library for compound-by-compound detail, all built to the same evidence-first structure used in this guide.

Read our article on how to read a clinical trial if you want to go one level deeper on evidence evaluation.

If you're weighing anything related to your own health, the next right step is a conversation with a licensed healthcare provider — not a supplement label or a forum post.
