

TEXAS EMBER

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Amino Acids → Peptides → Proteins

Amino acids are the smallest building blocks, like links in a chain. When 2 to about 50 amino acids connect, they form a peptide; beyond that, the chain becomes a protein.



Nature's Messengers

Peptides act as signaling molecules throughout the body. They tell cells and tissues when to repair, release, or respond.



Naturally Harmonious

Your body already makes thousands of peptides naturally. They work by reinforcing the signals your body uses to stay balanced and healthy.

What Is a Peptide?

Why Peptides? The Case Over Conventional Options

Works With Your Body

Conventional drugs often block or replace functions. Peptides signal your body to perform its natural processes more efficiently, leveraging its inherent capabilities.

Targeted & Precise

Unlike broad-acting drugs, peptides bind to specific receptors for focused action. This results in more targeted effects and generally narrower side effect profiles.

Nature's Own Language

Peptides are structurally similar to compounds your body already creates. They act as a natural "nudge," integrating seamlessly with your biology rather than introducing foreign synthetic chemicals.

Preserves Natural Production

Many conventional therapies can suppress your body's own production. Peptides aim to stimulate endogenous systems, helping your body maintain its natural regulatory balance.

Greater Control

Peptides break down quickly, preventing accumulation and offering more control. If adjustments are needed, effects fade faster than with long-acting medications.

Risks, Drawbacks & Considerations

Navigating the Supply Chain

Most peptides are sold for "research use only," which means they fall outside standard FDA pharmaceutical oversight. That said, many reputable suppliers invest heavily in third-party lab testing, COAs, and rigorous quality control — making source selection the key variable.

Limited Long-Term Data

Much of the current evidence relies on animal studies or small human trials. The long-term effects and comprehensive safety profiles of many peptides in humans are still largely unknown.

Injection Risks

Administering injectable compounds carries inherent risks. Improper technique, non-sterile conditions, or contaminated products can lead to serious complications like infection or abscess.

Systemic Interactions

Peptides interact with specific receptor systems, but they're generally well-tolerated even at higher doses — excess dosing tends to simply saturate receptors and yield diminishing returns rather than compounding harm. Side effects do exist and vary by peptide, but the profile is typically mild compared to conventional pharmaceuticals.

Individual Variability

Responses to peptide therapy vary significantly from person to person. What is effective or well-tolerated by one individual may cause adverse effects in another, and standardized dosing is often lacking.

Know What You're Putting In Your Body

Peptides reward the people who do their homework. Understanding the mechanism, the dose, and the specific peptide you're using is your primary safeguard — not a prescription. Read the research, track your response, and own your decisions. Blind use of anything injectable is the real risk.

How Peptide Signaling Works in the Body

01

1. Peptide Enters Bloodstream

Peptides are released from various points in your body, such as glands or specific tissues. They then embark on a journey through your bloodstream, which acts like a vital transportation network.

02

2. Travels to Target Tissue

Like tiny navigators, peptides circulate throughout the body until they arrive at the specific cells or organs they are designed to influence. Some act locally, while others travel long distances.

03

3. Binds to Receptor ("Lock & Key")

Each peptide is a unique "key" looking for its matching "lock"—a specific receptor protein located on the surface of a target cell. This precise "lock and key" mechanism ensures that only the correct messages are received.

04

4. Triggers Cellular Response

When the right peptide (key) fits into its receptor (lock), it initiates a specific signal inside the cell. This signal tells the cell to perform a particular action, such as producing a hormone or initiating a repair process.

05

5. Signal Fades (Half-Life)

Peptides are designed to complete their task and then break down quickly. This breakdown time, known as "half-life," ensures that signals are timely and don't overwhelm the system, maintaining your body's delicate balance.

Why Do Peptides Need to Be Injected?

The Digestion Problem

When you swallow a peptide, your stomach acids and digestive enzymes treat it like food, breaking it down into individual amino acids before it ever reaches your bloodstream.

The Signal Gets Lost

The amino acids arrive, but the peptide's specific signal is destroyed in transit. It's like shredding a letter before delivery — the paper gets there, but the message doesn't.

Bypassing the Breakdown

Injections, particularly subcutaneous or intramuscular, bypass the digestive system entirely. This allows the peptide to enter your tissues intact and absorb into the bloodstream.

Subcutaneous Injection Basics

Most peptide injections use tiny, insulin-style needles and go just under the skin, commonly in the belly or thigh. Many people find the process much easier and less painful than they initially expect.

Oral Claims & Other Routes

While some vendors market "oral peptides," these generally do not work for systemic effects because they are degraded by digestion. Some specific peptides can be effective topically or nasally, but for most, injection remains the primary method.



HANDLING & ADMINISTRATION

Preparation, Storage & Injection

How to reconstitute, store, load, and inject peptides correctly.

Reconstitution — From Powder to Injectable

01

1. Why You Can't Eat Them

Peptides cannot be taken orally. The digestive system breaks them down into individual amino acids, destroying the signal before it ever reaches the bloodstream. Injection bypasses digestion entirely and delivers the peptide intact.

02

2. Storage Before Reconstitution (Dry Powder)

Lyophilized (freeze-dried) peptide powder is stable at room temperature short-term, but should be kept refrigerated and away from UV light. Light and heat degrade the peptide structure. Keep vials in a dark, cool place — a drawer in the fridge is ideal. Do not freeze reconstituted peptides.

03

3. What You Need: Bacteriostatic Water

Bacteriostatic water (BAC water) is sterile water with a small amount of benzyl alcohol, which prevents bacterial growth in multi-use vials. Do not substitute with plain sterile water, tap water, or saline for multi-use vials. Available from peptide suppliers or compounding pharmacies.

04

4. Reconstituting the Vial

Draw the appropriate amount of BAC water (typically 1–2 mL per vial). Insert the needle into the vial and inject slowly down the inside wall — do not shoot directly onto the powder. Do not shake. Gently swirl until fully dissolved.

05

5. Storage After Reconstitution

Reconstituted peptides must be refrigerated. Keep away from light — wrap the vial in foil or store it in a dark container if needed. Most reconstituted peptides are stable for 4–6 weeks refrigerated. UV light and heat are the primary causes of degradation.

06

6. Loading the Syringe

Draw your calculated daily dose from the reconstituted vial using a clean insulin-style syringe. Tap out air bubbles. Wipe the vial stopper with an alcohol swab before each draw. You are now ready to inject.

Needle reuse note: Studies on diabetic insulin users show reusing insulin needles is acceptable for the same person when not contaminated. Replace needle approximately once per week or sooner if it feels dull. Never share needles.

 Bacteriostatic water = BAC water. Available from peptide suppliers or compounding pharmacies. Do not substitute with tap water or plain saline for multi-use vials.

Injection Protocol – Where & How

IM vs. SubQ

- **SubQ (subcutaneous)** = just under the skin, into the fat layer. Slower absorption. Common for insulin-style injections.
- **IM (intramuscular)** = into the muscle. Faster absorption, more direct delivery into circulation.
- **Our preference:** IM. Faster uptake, more consistent delivery into the bloodstream. Especially preferred for daily dosing protocols.
- **Stomach/abdomen:** SubQ (pinch technique) – good for SubQ delivery and easy to self-administer.
- **Glute and thigh:** IM injection sites.

Preferred Injection Sites

- **For beginners:** SubQ in the stomach/abdomen is the recommended starting point. Forgiving, easy to self-administer, hard to mess up unless extremely lean.
- **For IM beginners:** Side delt (lateral deltoid) is the preferred starting IM site – easy to reach, no flexibility required, straightforward to self-inject.
- **Glute (upper outer quadrant):** Good IM site once comfortable, but requires flexibility to reach correctly that not everyone has.
- **Avoid:** joints, thin skin areas (inner wrist, behind knee), areas with visible veins, and the inner thigh.

Quick Handling Rules

- Refrigerate all peptides – reconstituted and dry powder
- Keep away from UV light and direct sunlight – light degrades peptides
- Do not freeze reconstituted vials
- Wipe vial stopper with alcohol swab before every draw
- Rotate injection sites every session
- Replace needle ~once per week (same person only – never share)
- Discard reconstituted vials after 4–6 weeks

⚠ Always inject into the upper outer quadrant of the glute – not the center or lower portion. Avoid the sciatic nerve zone.

ℹ Rotate injection sites to avoid tissue buildup at any single location. Even within the glute, vary the exact spot slightly each time.

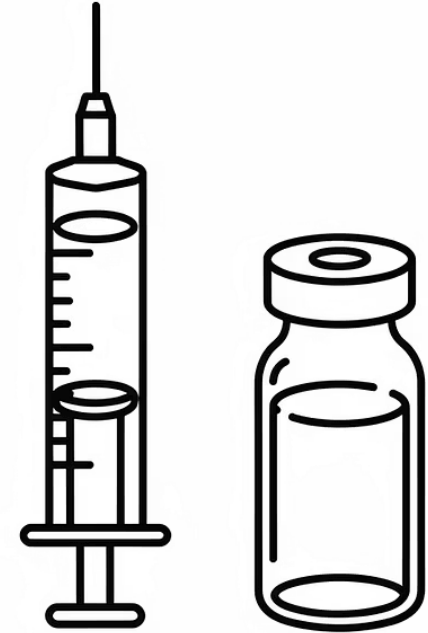
Injection Technique — Step by Step

Glute (IM) — Intramuscular

1. Stand and relax the muscle
2. Use the upper outer quadrant of the buttock only
3. Insert the needle straight in at 90 degrees
4. Inject slowly, withdraw, done

Abdomen (SubQ) — Subcutaneous

1. Pick a spot 2 inches from the belly button
2. Pinch the skin and fat — lift it up
3. Insert the needle at 45 degrees into the pinched fold
4. Inject slowly, withdraw, release skin, done

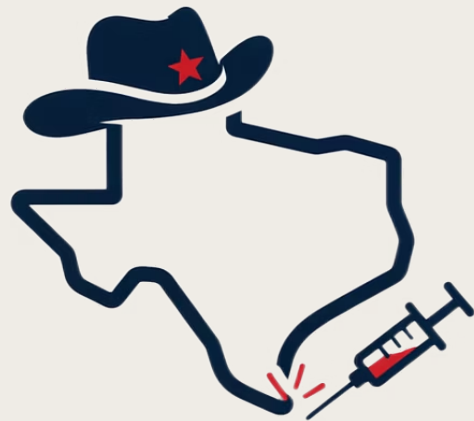


Not Feeling Confident? We Get It.

Some people just don't like pricks.

Turns out the best prick you'll ever meet is a Texas Prick. Check out TexasPrick.org — our non profit affiliate site with a more detailed how-to on peptide reconstitution and injection.

Disclaimer: Not a 501(c)(3). Just has no money.



TexasPrick.org

First poke? Start here.

Regulation, Legality & the Big Pharma Dynamic

The Core Legal Reality

Peptides are chains of amino acids — the same building blocks as food proteins. The FDA regulates based on *intended use*, not the molecule itself. The same peptide can be: a legal prescription drug (if FDA-approved), a legal compounded medication (if on the approved bulk substance list), or a "research use only" product (legal to sell, murky to self-administer). The molecule doesn't change — the legal wrapper around it does.

What the FDA Can and Can't Do

The FDA cannot regulate amino acids as controlled substances — they are naturally occurring compounds. What they *can* regulate is the *drug claim* attached to them. If a vendor says "this treats disease X," that's a drug claim and triggers FDA jurisdiction. This is why most peptide vendors label products "Research Use Only — Not for Human Consumption." It's a legal shield, not a safety guarantee.

The GLP-1 Crackdown (2024–2025)

The most visible recent action: semaglutide (Ozempic/Wegovy) and tirzepatide (Mounjaro/Zepbound) were declared off the FDA shortage list in late 2024 / early 2025. This removed the legal basis for compounding pharmacies to produce essentially identical versions at \$300–600/month vs. \$1,000+ for the branded drug. Novo Nordisk and Eli Lilly — who hold the brand patents — pushed hard for this outcome. An estimated 500,000+ patients had been accessing compounded versions. Ongoing litigation is challenging the FDA's shortage determination.

The Pattern: Brand Names vs. The Molecule

Ozempic, Wegovy, Mounjaro, Zepbound — these are brand names and delivery systems. The underlying molecules (semaglutide, tirzepatide) are peptides. Big pharma's leverage is in the patent on the *formulation and delivery mechanism*, not the amino acid sequence itself. Compounders can legally make versions with meaningful differences (different salts, added ingredients) — the fight is over what counts as "essentially a copy."

Where the Peptides in This Deck Stand

Most peptides in this reference set (BPC-157, TB-500, CJC-1295, Ipamorelin, GHK-Cu, Selank, Semax, Epitalon, Melanotan II) are not FDA-approved drugs and are not on the prohibited compounding list. They exist in the "research use only" gray zone — legal to purchase, legal to possess, but not legal to sell with human-use claims. Retatrutide is a newer compound with active pharmaceutical development — its regulatory status is evolving.

Where to Source Peptides

What to Look For in a Vendor

- **Third-party lab testing (COA — Certificate of Analysis)** — this is the most important quality indicator. A reputable vendor will provide batch-specific purity and identity testing from an independent lab.
- Lyophilized powder in sealed vials — not pre-mixed solutions
- Clear labeling — peptide name, batch number, quantity
- No human-use claims on the product itself (this is a legal requirement — see regulation card)
- Established reputation in the research community — look for vendors with verifiable track records, not fly-by-night operations
- US-based or clearly identified international source with import history

How We Source

- We purchase in bulk directly from vetted suppliers — bulk ordering significantly reduces per-unit cost compared to retail
- Bulk pricing allows us to pass savings along while covering the time and effort involved in sourcing, vetting, and coordinating orders
- If you're interested in sourcing through us or want a recommendation, reach out directly — we're happy to help point you in the right direction
- We do not mark up to retail — our goal is access, not margin

 Always request a COA (Certificate of Analysis) before purchasing from any vendor. This is the only way to verify purity and confirm you're getting what's on the label.

 Avoid vendors who make explicit human-use claims, offer pre-mixed injectable solutions, or cannot provide third-party lab testing. These are red flags.

Lab Testing & Quality — What You're Actually Checking For

Why Lab Testing Is Non-Negotiable

You are injecting this directly into your body — bypassing every digestive filter. Unlike oral supplements where your gut provides some protection, injected compounds go straight into tissue and bloodstream. Purity is not optional. A vendor's word is not enough. Independent, third-party testing is the only way to verify what's actually in the vial.

COA — Certificate of Analysis

The COA is the lab report. It should be batch-specific (matching the lot number on your vial), issued by an independent third-party lab (not the vendor's in-house lab), and show: identity confirmation (is it actually the peptide it claims to be?), purity percentage (how much of the vial is the actual peptide vs. impurities), and ideally HPLC (High-Performance Liquid Chromatography) or MS (Mass Spectrometry) methodology — these are the gold standard testing methods.

Endotoxin Testing — The One Most People Miss

Endotoxins are fragments of bacterial cell walls (lipopolysaccharides / LPS) that can remain even after bacteria are killed during manufacturing. At high levels they can cause fever, chills, or inflammation — but at the trace levels typically found in research-grade peptides, most people won't notice anything. It's still worth knowing about: a purity COA alone doesn't confirm endotoxin levels. If you want to be thorough, ask whether the vendor's COA includes an LAL (endotoxin) test. Not a dealbreaker, but a useful data point when comparing suppliers.

Sterility Testing

Separate from endotoxin — sterility testing confirms no live bacteria, fungi, or other microorganisms are present in the vial. Less commonly provided by research vendors but important for injectable use. Pharmaceutical-grade compounders are required to perform sterility testing. Research vendors often do not.

What "Research Grade" vs. "Pharmaceutical Grade" Actually Means

Research grade: purity tested, may or may not include endotoxin or sterility testing. Manufactured under less stringent conditions. Legal for research, not for human use claims.

Pharmaceutical grade: full GMP manufacturing, endotoxin tested, sterility tested, identity confirmed. Required for compounded prescriptions. Higher cost, harder to access outside of a prescription pathway.

Practical Checklist — What to Ask Every Vendor:

- Is the COA batch-specific and from a third-party lab?
- What testing methodology was used (HPLC, MS)?
- Is endotoxin testing included? What is the endotoxin level (EU/mg)?
- Is sterility testing available?
- What is the stated purity percentage?

 A COA that only shows purity is not enough for injectable use. Always confirm endotoxin testing is included — this is the most commonly skipped test and the most dangerous gap.

Peptide Master Reference

A comprehensive overview of peptides organized by function, mechanism, and application — covering weight loss, healing, longevity, cognition, and more.

COMPILED APRIL 19, 2026



Source Conflicts & Key Caveats

Before diving into individual peptides, several important protocol discrepancies exist across source materials. These conflicts are preserved — not resolved — for accurate downstream use.

CJC-1295 DAC vs. NO DAC

One source uses **CJC-1295 (DAC)** + Ipamorelin as the GH stack. Some prefer CJC-1295 NO DAC, arguing it more closely mimics a single natural pulse. However, DAC does not eliminate pulsatility — it extends the half-life and raises baseline GH amplitude, so your body still releases GH in its natural rhythm, just at a higher level. These are two valid but distinct protocols with different half-life profiles.

Tesamorelin Inclusion Conflict

The uploaded sheet lists CJC + Ipamorelin only. A separate source describes an "ultimate endogenous GH stack" as **Tesamorelin + CJC NO DAC + Ipamorelin**. Treat these as two distinct protocol versions.

Frequency Framing Mismatch

The uploaded sheet is organized around **weekly starting targets**. Transcript sources often describe nightly or daily use patterns. Retatrutide is explicitly framed as 2000 mcg/week in the sheet.

Broad Claims Disclaimer

Transcript materials contain very broad claims and disease-reversal framing. All such claims are preserved here as **source claims only** — not independent medical recommendations or verified facts.

SECTION 01

Weight Loss & Metabolic Reset

Fat mobilization, appetite signaling, and metabolic recalibration.

RETATRUTIDE



Retatrutide — Weight Loss & Metabolic Reset

WEIGHT LOSS

APPETITE CONTROL

METABOLIC FUNCTION

Daily starting dose: ~285 mcg/day (2,000 mcg/week total). Daily dosing is preferred for consistent bloodstream levels. Retatrutide is the primary weight-loss and metabolic-reset compound in this stack, operating through a triple-hormone mechanism.

GLP-1 Action

Glucagon-like peptide-1 signaling increases satiety, slows gastric emptying, reduces caloric intake, and supports glucose control.

GIP Action

Glucose-dependent insulinitropic polypeptide supports insulin signaling and nutrient handling — improving fuel partitioning between storage and use.

Glucagon Action

Increases energy expenditure, supports fat mobilization (lipolysis), and promotes fat oxidation — burning stored fatty acids as fuel.

Source framing positions Retatrutide as the high-impact intervention for severe metabolic dysfunction: obesity, insulin resistance, type 2 diabetes context, fatty liver, and high HbA1c. It is contrasted against older GLP-style agents (metformin, semaglutide, tirzepatide) with claims of stronger weight-loss and metabolic-reset effect. The "blank slate" concept: Retatrutide rapidly clears metabolic pathology, after which more targeted repair and maintenance compounds can be layered.

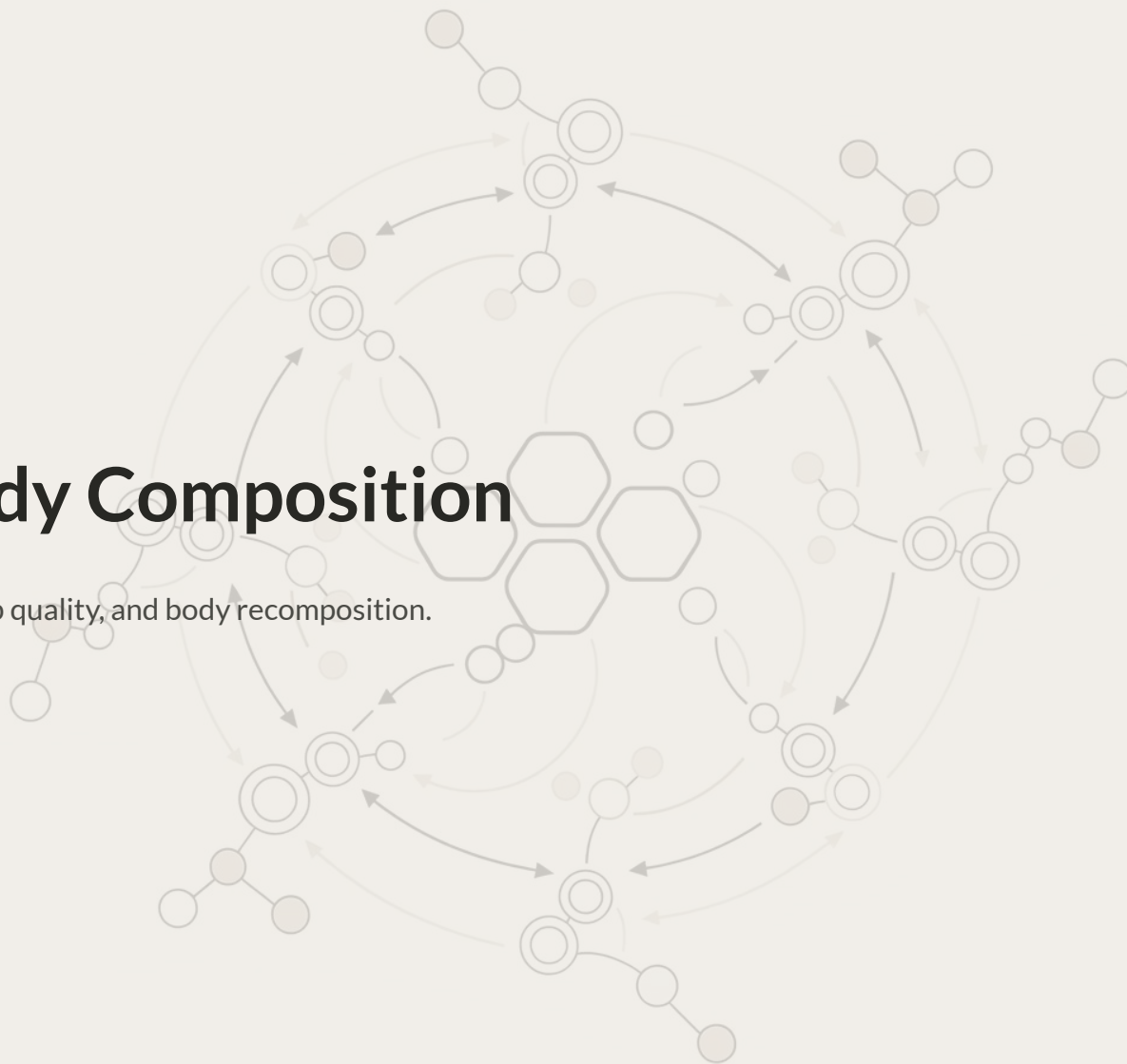
SECTION 02

GH Axis & Body Composition

Growth hormone stimulation, sleep quality, and body recomposition.

CJC-1295 (DAC)

IPAMORELIN



GH Axis Stack — CJC-1295 (DAC) + Ipamorelin

SLEEP & RECOVERY

BODY COMPOSITION

GH/IGF-1 SIGNALING

Growth hormone (GH) is one of the most important signaling molecules your body produces. It's made in the pituitary gland — a small gland at the base of your brain — and it helps control how you build and repair tissue, how you burn fat vs. store it, how deeply you sleep, how fast you recover from injury, and how your body ages. When you're young, GH levels are high. As you age, production drops significantly — and with it, recovery slows, body fat increases, sleep quality declines, and tissue repair becomes less efficient. The GH axis stack is designed to stimulate your body to produce more of its own growth hormone — not replace it with synthetic HGH, but nudge your own pituitary to release more, naturally.

CJC-1295 (DAC)

~285 mcg/day (2,000 mcg/week)

CJC-1295 is a synthetic version of GHRH — Growth Hormone Releasing Hormone. Your hypothalamus naturally produces GHRH to tell your pituitary “it's time to release GH.” CJC-1295 mimics that signal. The DAC (Drug Affinity Complex) version has a longer half-life — it stays active in your system longer, providing a sustained stimulatory signal rather than a quick spike. Think of it as keeping the “release GH” message running in the background.

Ipamorelin

~100–150 mcg/day (700–1,050 mcg/week)

Ipamorelin works through a completely different pathway — it mimics ghrelin, a hormone that also triggers GH release but through a separate receptor. It also inhibits somatostatin — the hormone that tells your pituitary to STOP releasing GH. So Ipamorelin is doing two things at once: pressing the gas AND releasing the brake. Together with CJC-1295, you get a stronger, more complete GH release signal than either compound alone.

When GH is released, it travels to the liver and triggers production of IGF-1 (Insulin-like Growth Factor 1) — the molecule that actually carries out most of GH's effects at the tissue level. Together, GH and IGF-1 drive deeper sleep and overnight recovery, fat mobilization (lipolysis), muscle repair and protein synthesis, connective tissue and joint support, and improved body composition over time.

Protocol focus: sleep quality, recovery, body composition, nutrient partitioning, and GH pathway support.

Daily dosing is preferred for more consistent bloodstream levels.

GH Stack — Mechanism Deep Dive (DAC Protocol)

Each component in the GH axis stack plays a distinct mechanistic role. Together they amplify endogenous GH production rather than replacing it with exogenous HGH.



CJC-1295 (DAC)

Synthetic GHRH analog with a long half-life via Drug Affinity Complex (DAC), providing sustained pituitary stimulation for GH release. Supports sleep, recovery, and body composition.



Ipamorelin

Ghrelin-receptor agonist / ghrelin mimetic. Inhibits somatostatin (the GH "off switch") and amplifies the GH pulse created by the other compound. Highly selective with minimal cortisol or prolactin side effects.

Shared downstream effects across both protocol versions: recovery and tissue repair signaling, lipolysis support and fat mobilization, improved body composition, nutrient partitioning (driving nutrients toward muscle repair and glycogen rather than fat storage), sleep quality, and GH/IGF-1 axis support.

SECTION 03

Repair, Recovery & Healing

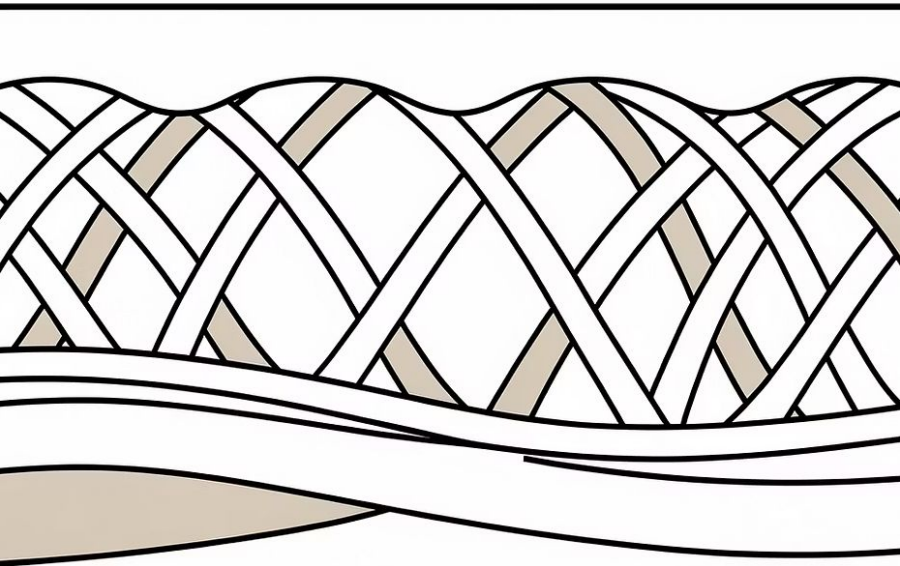
Tissue regeneration, collagen support, and systemic repair signaling.

BPC-157

TB-500

GHK-CU





The Glow & Klow Stack — Healing & Recovery

HEALING

RECOVERY

SKIN & COLLAGEN

1

BPC-157

~250–1,000 mcg/day (1,750–7,000 mcg/week). Core repair and resolution signal. Gut/gastric-associated repair peptide. Supports angiogenesis at injury sites, nitric oxide / blood-flow signaling, and gut-lining resilience. Transcript elevates it to a daily foundational compound.

2

TB-500

~570–1,140 mcg/day (4,000–8,000 mcg/week). Supports tissue remodeling, cell migration, and regeneration signaling. Positioned as a soft-tissue support and repair amplifier — works synergistically with BPC-157.

3

GHK-Cu

~715 mcg/day (5,000 mcg/week). Copper peptide supporting collagen and extracellular matrix remodeling. Primary targets: skin quality, hair support, and connective tissue repair. The aesthetic and structural component of the blend.

BPC-157 — Body Protection Compound

DAILY MAINTENANCE

SYSTEMS REPAIR

LONG-TERM USE

BPC-157 stands for **Body Protection Compound 157**. It's a peptide originally derived from a protein found in human gastric juice — your stomach. Your gut naturally produces it as part of its own repair and protection system. What makes BPC-157 remarkable is its range: it doesn't just fix one thing. It activates a cascade of repair and signaling processes across multiple body systems simultaneously. Its range is broad: it activates repair and signaling processes across multiple body systems simultaneously. It heals tendons, ligaments, gut lining, nerves, muscle, even bone. It's the closest thing in this stack to a full-body repair signal.

How It Works (Plain English)

BPC-157 works primarily by activating the nitric oxide (NO) system and stimulating growth factor signaling — specifically VEGF (vascular endothelial growth factor) and FGF (fibroblast growth factor). In plain terms:

- **Nitric oxide / blood flow:** BPC-157 increases blood flow to injury sites by expanding blood vessels. More blood = more oxygen and nutrients delivered to damaged tissue = faster repair.
- **Angiogenesis:** It triggers the formation of new blood vessels at injury sites — essentially building new supply lines to areas that need healing.
- **Fibroblast activation:** Fibroblasts are the cells that build connective tissue — collagen, tendons, ligaments. BPC-157 activates them directly.
- **Gut barrier repair:** It strengthens the tight junctions between gut lining cells — the "seal" that keeps gut contents from leaking into the bloodstream. This is why it's used for leaky gut, IBD, and GI damage.
- **Vagal tone / HPA axis:** It calms the stress response system and supports the gut-brain connection — which is why users often report mood and anxiety improvements alongside physical healing.

 Transcript strongly claims oral BPC-157 does not work. Subcutaneous or IM injection only.

What It Acts On

- **Tendons & ligaments** — direct fibroblast activation
- **Gut lining** — tight junction repair, mucosal protection
- **Muscle tissue** — repair signaling, reduced inflammation
- **Nerves** — BDNF support, CNS recovery
- **Joints & cartilage** — collagen matrix support
- **Cardiovascular** — endothelial / nitric oxide signaling
- **Immune system** — resolution signaling (not suppression)
- **Mitochondria** — ATP production, cellular energy
- **Brain** — neuroplasticity, mood, stress regulation

Low-dose daily is the preferred model: 100–500 mcg/day. Consistency over time matters more than high-dose pulsing. Acute injuries may warrant higher doses short-term, but the long-term maintenance model is low and steady.

The background features a minimalist line-art illustration. A human brain is depicted in profile, with a clock face superimposed over its right hemisphere. The clock has simple tick marks and two hands. A thin, curved line resembling a waveform or a signal trace extends from the bottom left towards the right side of the image, passing behind the brain and clock.

SECTION 04

Longevity, Sleep & Cognition

Circadian regulation, stress resilience, and cognitive performance.

EPITALON

DSIP

SELANK

SEMAX

Longevity, Sleep, Stress & Cognition Stack

LONGEVITY

SLEEP

COGNITION

STRESS RESILIENCE

Epitalon

~5,000–10,000 mcg/day (35,000–70,000 mcg/week)

Circadian signaling support, cellular maintenance and repair pathways.

Primary framing: sleep quality, circadian rhythm regulation, and longevity support.

DSIP

~100–300 mcg/day (700–2,100 mcg/week)

Delta sleep-inducing peptide. Associated with sleep regulation signaling, sleep architecture, quality, and depth. Targeted specifically at sleep structure.

Selank

~300–900 mcg/day (2,100–6,300 mcg/week)

Regulatory neuropeptide. Modulates neurotransmitter and stress-response signaling. Primary framing: calm focus and stress resilience without sedation.

Semax

~300–600 mcg/day (2,100–4,200 mcg/week)

Regulatory neuropeptide supporting neuromodulatory and neurotrophic signaling. Primary framing: focus, cognition, attention, learning, and mental energy.

Retatrutide also carries a longevity positioning in source materials — framed as removing the metabolic burden that accelerates aging, making it a healthspan lever beyond just weight loss. BPC-157 holds the strongest explicit "forever peptide" claim, framed as daily maintenance of healing capacity, immune resolution, tissue quality, mitochondrial support, and stress regulation.



SECTION 05

Tanning & Melanocortin System

Pigmentation, melanocortin signaling, and broader systemic effects.

MELANOTAN II

Melanotan II – Tanning & Melanocortin System

TANNING

MELANOCORTIN SIGNALING

BROAD SYSTEM EFFECTS

Daily starting dose: ~250–500 mcg/day (1,750–3,500 mcg/week total). Melanotan II activates melanocortin signaling involved in pigment biology, increasing melanin production in melanocytes. However, transcript sources frame it as far more than a tanning peptide.

Primary Use – Tanning / Pigmentation

Synthetic analog of alpha-MSH. Activates melanocortin receptors involved in pigment biology. Increases melanin production. This is the clearest, most consistent use across both the uploaded sheet and transcript sources.

Secondary Source Claims – Broader Effects

- Appetite suppression / hypothalamic signaling
- Fat metabolism / AMPK / metabolic rate
- Insulin sensitivity improvement
- Mitochondrial function / ATP support
- Endothelial / nitric oxide / vascular function
- Libido / sexual arousal / erectile function (central arousal via dopamine / oxytocin)
- Anti-inflammatory via melanocortin pathway
- Neuroinflammation suppression / cognitive function
- Blood-brain-barrier crossing language
- Improved brain energy / insulin sensitivity in neurons

Starting Dose Reference — Daily Protocol

All figures divided into daily doses for consistent bloodstream levels. Weekly totals are the original sheet reference — daily figures are derived by dividing by 7 and rounding to practical amounts.

Stack Name	Peptide	Weekly Total	Daily Dose	Primary Purpose
Stack 1 — Weight Loss & Metabolic Reset	Retatrutide	2,000 mcg/week	~285 mcg/day	Weight loss, appetite control, metabolic reset
Stack 2 — GH Axis (CJC + IPAM)	CJC-1295 (DAC)	2,000 mcg/week	~285 mcg/day	GH stimulation, sleep, recovery
Ipamorelin	700–1,050 mcg/week	~100–150 mcg/day	GH pulse amplification	
Stack 3 — Glow & Klow (Healing & Recovery)	BPC-157	1,750–7,000 mcg/week	~250–1,000 mcg/day	Core repair, gut healing, daily maintenance
TB-500	4,000–8,000 mcg/week	~570–1,140 mcg/day	Tissue remodeling, regeneration	
GHK-Cu	17.5–70 mg/week	~2.5–10 mg/day	Collagen, skin, hair, connective tissue	
Stack 4 — Longevity, Sleep & Cognition	Epitalon	35,000–70,000 mcg/week	~5,000–10,000 mcg/day	Circadian support, longevity, sleep
DSIP	700–2,100 mcg/week	~100–300 mcg/day	Sleep architecture, sleep depth	
Selank	2,100–6,300 mcg/week	~300–900 mcg/day	Calm focus, stress resilience	
Semax	2,100–4,200 mcg/week	~300–600 mcg/day	Focus, cognition, mental performance	
Stack 5 — Melanotan II	Melanotan II	1,750–3,500 mcg/week	~250–500 mcg/day	Tanning / pigmentation + broader melanocortin effects

⚠ Daily dosing is preferred for consistent bloodstream levels and to avoid peaks and troughs associated with less frequent, larger doses. These are starting reference points — adjust based on individual response.

Master Functional Buckets – At a Glance



Weight Loss & Metabolic Reset

Fat mobilization, appetite signaling, metabolic recalibration.

Retatrutide



GH Axis & Body Composition

Growth hormone stimulation, sleep quality, body recomposition.

CJC-1295 (DAC), Ipamorelin



Repair, Recovery & Healing (Glow & Klow)

Tissue regeneration, collagen support, systemic repair.

BPC-157, TB-500, GHK-Cu



Longevity, Sleep & Cognition

Circadian regulation, stress resilience, cognitive performance.

Epitalon, DSIP, Selank, Semax



Tanning & Melanocortin

Pigmentation, melanocortin signaling, broader systemic effects.

Melanotan II

Key Definitions

Lipolysis: releasing stored fat into fatty acids. **Fat oxidation:** burning fatty acids as fuel. **Nutrient partitioning:** where nutrients tend to go — toward muscle repair and glycogen vs. fat storage (context-dependent).

What We're Building

Texas Ember exists to help people take full stewardship of their health — making wise, discerning decisions for themselves through access to real knowledge, applied training, and honest guidance.

"Where there is no guidance, a people falls, but in an abundance of counselors there is safety." — Proverbs 11:14 (ESV)



Our Mission

Build a self-sufficient organization that equips people for full stewardship — helping them take genuine ownership of their health instead of outsourcing it.



Who We Are

Teachers, coaches, and guides helping people become wise, discerning stewards of their own bodies.



How We Think

Wisdom lives in a multitude of counselors. Traditional medicine, peptides, nutrition, fitness, and lifestyle all have a role. We help you find your path.



Our Boundaries

We don't prescribe. We don't diagnose. The responsibility and ownership of your health stays with you — where it belongs. We just make sure you're equipped to carry it.

Other Resources & Questions

This deck covers peptides — but that's just one piece. Texas Ember works across a broader range of health and performance topics. Questions, comments, or looking to go deeper? Reach out.



General Fitness & Training

Strength programming, movement quality, progressive overload, and building a sustainable training practice.



Nutrition

Whole food foundations, macronutrient strategy, metabolic flexibility, and eating for performance and longevity.



Hormone Optimization

TRT, thyroid, cortisol, estrogen balance, and working with or without a provider to understand your hormonal landscape.



Muscle Building & Body Composition

Hypertrophy principles, nutrient timing, recovery optimization, and body recomposition strategies.



Self-Directed Labs

Understanding your own bloodwork — what to order, how to read it, and what to do with the results.



Longevity & Optimization

Healthspan over lifespan — sleep, stress, cognitive performance, and building a life that compounds.

Have a question not covered here? Reach out at Howdy@TexasEmber.com or visit TexasEmber.com

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