

EDITION 2027 — UPDATED 2026

PREMIUM EDITION

THE DEFINITIVE REFERENCE

# The Peptide Manual

Master Your Biology. Control the Signal.

The most comprehensive peptide guide ever written — covering 51+ deep peptide profiles, 50+ Khavinson bioregulators, 50+ goal-matched protocols, female-specific dosing, 2025–2026 regulatory updates, and lifestyle synergies no other book touches.

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**51+**

PEPTIDE  
PROFILES

**50+**

BIOREGULATORS

**50+**

PROTOCOLS

**200**

REFERENCE  
CARDS

**Jawid Amirzada**

16+ YEARS FIELD EXPERIENCE · WELLNESSRADAR.CA



# Medical Disclaimer

READ THIS BEFORE USING ANY INFORMATION IN THIS GUIDE

This eBook is for **EDUCATIONAL AND INFORMATIONAL PURPOSES ONLY**. It does not constitute medical advice, diagnosis, or treatment of any kind. The author is not a licensed physician. Nothing in this guide should replace consultation with a qualified, licensed healthcare professional.

- ! Compounds discussed here may be regulated, restricted, or unapproved for human use in your jurisdiction. Research your local laws before obtaining any compound.
- ! NEVER begin any peptide or pharmacological protocol without consulting a qualified, licensed healthcare professional. Individual responses vary significantly.
- ! All dosing information is strictly general and educational — NOT a prescription or clinical recommendation. The author accepts zero liability for decisions made based on this content.
- ! Peptides and research chemicals carry real risks including hormonal disruption, injection-site reactions, allergic responses, anaphylaxis, and unknown long-term effects.
- ! Evidence quality varies enormously across compounds. Some have FDA approval and robust human trial data. Others have only preclinical or animal data. This guide marks evidence tiers clearly — read them.

# How to Read This Complete Edition

The Peptide Manual 2027 is also published as three independently bound paperbacks — Volume I, II, and III. **You are reading the Complete Edition**, which combines all three volumes plus the companion-card library and the Adjacent Compounds appendix into a single reference. This page tells you how the material is organized and how to read it.

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## What's inside

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- **Volume I — Foundations & Recovery.** The science of signaling, the three-category framework, delivery, reconstitution, the grey-market chapter, evidence hierarchy, female-specific considerations, and Part II — the growth-hormone-axis and healing peptides (profiles 1–13). Companion cards 1–50 (beginner tier).
- **Volume II — Brain, Metabolic & Longevity.** Part III cognitive peptides, Part IV the GLP-1 receptor-agonist class and body-composition compounds, Part V longevity peptides (profiles 14–35 plus 47). Companion cards 51–150 (intermediate tier).
- **Volume III — Specialized, Bioregulators & Practice.** Part VI immune, sexual, skin and specialized peptides (profiles 36–45), Part VII the Khavinson bioregulators, Part VIII the protocol architecture, Parts IX–XIII female protocols, lifestyle synergies, the frontier, safety, and the lessons-from-16-years distillation. Companion cards 151–200 (advanced tier).

— P A R T —

# PART II — CORE PEPTIDE PROFILES

# CJC-1295 (No-DAC and DAC)

**Modified GHRH analog · 30 amino acids · Synthetic growth hormone-releasing hormone**

|                           |                                                                                         |
|---------------------------|-----------------------------------------------------------------------------------------|
|                           |                                                                                         |
|                           |                                                                                         |
| <b>Class</b>              | GH Secretagogue — GHRH analog                                                           |
| <b>Half-life (No-DAC)</b> | ~30 minutes                                                                             |
| <b>Half-life (DAC)</b>    | ≈5.8–8.1 days (Teichman 2006)                                                           |
| <b>Schedule (US)</b>      | Research chemical · not FDA-approved                                                    |
| <b>Evidence Tier</b>      | ★★★★☆ — Multiple human PK trials, large user base, no long-term safety data past 1 year |
| <b>Typical Course</b>     | 8–16 weeks                                                                              |
| <b>Routes</b>             | Subcutaneous                                                                            |

#### IN 30 SECONDS

Long-acting GHRH analog that triggers your pituitary's growth hormone pulses. Most-used GH peptide stack base. Pairs with Ipamorelin for synergistic effect; DAC version dosed once-weekly.

#### CHOOSE IF

- Want pulsatile GH for sleep and recovery (No-DAC, evening dose)
- Building a beginner GH stack — pairs with Ipamorelin
- Willing to do daily subcut injections for cleaner physiology

#### SKIP IF

- Needle-averse or want once-weekly convenience without trade-offs
- Already running exogenous HGH (redundant signal)
- Active cancer history or unresolved nodule workup

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## Name & Discovery

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**What "CJC-1295" actually means:** - **CJC** = **ConjuChem JSC** — initials of **ConjuChem Biotechnologies**, the Canadian biotech that developed the molecule - **1295** = the company's internal compound catalog number (no clinical or chemical meaning) - **DAC** = **Drug Affinity Complex** — a chemical "tail" added to the peptide that lets it bind to albumin (a blood protein), dramatically extending half-life from minutes to days - **No-DAC** = the version without that tail; short half-life, used like Sermorelin - Older literature also calls it "**modified GRF (1-29)**" — meaning a modified version of the first 29 amino acids of growth hormone-releasing factor

**Key terms used in this profile:** - **GHRH** = **Growth Hormone-Releasing Hormone** — the natural hormone your hypothalamus (a small region at the base of your brain) sends down to your pituitary gland to trigger growth

hormone release - **DPP-IV** = **D**i-peptidyl **P**eptidase **IV** — an enzyme in your blood that rapidly chops up many natural peptides; the same enzyme GLP-1 drugs are designed to resist - **GH** = **G**rowth **H**ormone — the master hormone of growth, repair, and metabolism, made by your pituitary gland

**Discovered:** Developed in the early 2000s by **ConjuChem**

**Biotechnologies**, a biotech company based in **Montreal, Canada**. The molecule was created by chemically modifying the natural GHRH(1-29) sequence (the same fragment as Sermorelin) and adding the DAC albumin-binding tail. ConjuChem's clinical development of CJC-1295 stopped in 2007 after one Phase 2 patient experienced an unexplained cardiac death, though the death was never causally linked to the drug. The compound was never FDA-approved. It then leaked into the research-peptide market and became one of the most popular GH peptides in the unregulated space.

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## What It Is

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CJC-1295 is a modified version of GHRH — the natural hormone your hypothalamus uses to tell your pituitary to release growth hormone. The modification is small but clever: a few amino acid substitutions stop the body's enzymes (DPP-IV) from chewing it apart in two minutes, which is what happens to natural GHRH.

There are two versions and people confuse them constantly:

- **CJC-1295 No-DAC** (also called Mod GRF 1-29): half-life ~30 minutes. Mimics a natural GH pulse. You inject, GH releases for 30 min, then it's gone. This is what most experienced users actually run.

- **CJC-1295 DAC:** same molecule with a "Drug Affinity Complex" tail that binds to albumin. Half-life jumps to roughly 5.8–8.1 days (Teichman 2006). Constant low-grade GHRH signal 24/7.

These are not interchangeable. They produce very different physiology.

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## How It Works

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CJC-1295 is a modified GHRH analog. For the GH axis, GHRH vs GHRP receptors, and why the No-DAC/DAC distinction matters, see How GH Peptides Work (Part I). The key thing about CJC specifically: No-DAC produces a cleaner pulse pattern, DAC produces sustained elevation that some users prefer for convenience but loses the pulsatile benefit.

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### CJC-1295 GHRH SIGNAL RESTORATION

Modified GHRH analog. DPP-IV resistant. Restores the pituitary GH pulse.

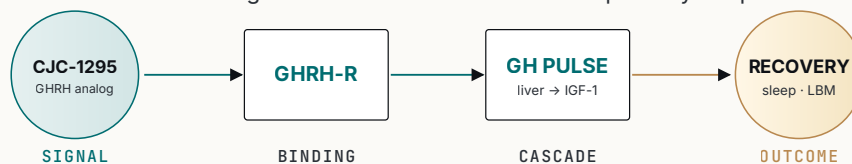


FIG — CJC-1295 mimics natural GHRH but resists the enzyme that normally degrades it within minutes. The pituitary receives a longer GHRH signal and releases its own GH — synergistic with GHRPs that hit the parallel ghrelin receptor.

**?** **Dose & Cycle Planner** — Multi-peptide stacks, cycle timing, washout windows.

[wellnessradar.ca/tools/dose-planner](https://wellnessradar.ca/tools/dose-planner)

## What It's Actually Good For

**Proven (human PK + clinical data):** - IGF-1 elevation (DAC raises IGF-1 ~1.5–3×; No-DAC raises modestly with pulsatile pattern) - Sleep depth and quality - Body composition shifts when paired with training and protein

**Likely (mechanism + reasonable evidence):** - Recovery between training sessions - Connective tissue health (when paired with BPC-157 / TB-500) - Skin quality over 12+ weeks

**Anecdotal — interesting but not proven:** - Mood and cognitive effects (probably downstream of better sleep) - Lipolysis on its own (real driver is the GHRP pair, not CJC)

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## What the Trials Missed

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**The "GH peptide stack" hype problem.** Marketing for CJC-1295 + Ipamorelin throws around big multiples — "several-fold more GH release than either alone" — like a magic statistic. The GHRH + GHRP synergy is real and well-documented (combining the two pathways releases more GH than either alone). But the often-quoted "300–500%" figure isn't traceable to a clean source: Teichman 2006 studied CJC-1295-DAC on its own (dose-dependent 2- to 10-fold rises in mean GH over baseline), not the CJC + Ipamorelin combination. What gets glossed over either way: the absolute amounts of GH released by these peptides are still small compared to physiologic exogenous HGH. CJC + Ipamorelin will not turn an average user into a 1990s bodybuilder. The effect is meaningful but moderate.

**The DAC long-term unknown.** Studies on CJC-1295 DAC are short-term — most are 7-day to 6-month PK trials. Marketing implies the molecule has been "extensively studied for safety." That's true for short-term safety. Long-term safety (multi-year continuous use) has zero formal data. The community's been running it for ~15 years now and serious adverse events are rare in user reports — that's reassuring but it isn't the same as a 5-year RCT.

**The IGF-1 obsession problem.** Users obsess over peak IGF-1 numbers instead of focusing on the actual goals — sleep quality, recovery, body composition. Chasing "elite" ranges often produces worse results than moderate doses, because chronically elevated IGF-1 drives insulin resistance and downregulates repair signaling. Optimize for outcomes, not numbers on a blood panel.

**The community pattern.** In community use, CJC-1295 + Ipamorelin is the most-used peptide stack in the world by a wide margin. The most consistent reports: improved sleep depth (immediate, often within 3–5 days), recovery acceleration (week 2–3), body comp shifts (week 6+ if diet

and training are dialed in). The most common complaints: water retention faces in week 1–2, vivid dreams that some find intense, and tingling/numbness from fluid pressing on nerves.

# Dosing

## CJC-1295 NO-DAC

| LEVEL           | DOSE        | FREQUENCY            | NOTES                                  |
|-----------------|-------------|----------------------|----------------------------------------|
| <b>Beginner</b> | 100 mcg     | 1× pre-sleep, fasted | Pair with Ipamorelin same injection    |
| <b>Standard</b> | 100–200 mcg | 1–2× daily           | Morning fasted + pre-sleep             |
| <b>Advanced</b> | 200–300 mcg | 2–3× daily           | Pre-workout + post-workout + pre-sleep |

## CJC-1295 DAC

| LEVEL           | DOSE            | FREQUENCY                   | NOTES                     |
|-----------------|-----------------|-----------------------------|---------------------------|
| <b>Beginner</b> | 1 mg (1000 mcg) | 1× per week                 | Sets baseline GH bleed    |
| <b>Standard</b> | 2 mg            | 1× per week                 | Sustained IGF-1 elevation |
| <b>Advanced</b> | 2 mg            | 1× per week + No-DAC pulses |                           |

| LEVEL | DOSE | FREQUENCY | NOTES                                              |
|-------|------|-----------|----------------------------------------------------|
|       |      |           | Layered signaling — controversial, monitor closely |

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## ★ Author's Note

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If you only ever run one version, run No-DAC. The pulsatile pattern is what your body actually wants, and you keep your own GH axis honest. DAC is convenient — one shot a week — but you're flooding the system, IGF-1 stays high constantly, and you're betting your long-term endocrine health on a compound with no decade-long human data. That bet might pay off. It might not.

Always inject CJC-1295 fasted. This is non-negotiable. Insulin suppresses GH release — when blood sugar is up, your pituitary pulse gets blunted no matter how much GHRH analog you push. Pre-sleep on an empty stomach (3+ hours after your last meal) is the highest-leverage timing window. People who inject after dinner and wonder why they're not seeing IGF-1 movement — this is why.

Don't pair CJC with food in the same hour. Don't pair it with whey or carbs immediately pre-workout if GH elevation is your goal. The compound works fine on its own — what blocks it is your blood sugar.

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## Female-Specific

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Women are more sensitive to GH secretagogues than men — estrogen amplifies GH pulse amplitude. Start at half the male dose (50 mcg No-DAC) and titrate up. Perimenopausal and postmenopausal women see the biggest relative response because their endogenous GH has dropped further from baseline.

Avoid mid-cycle dose changes if you're tracking response — hormonal phase will confound the signal.

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## Side Effects & Red Flags

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Generally clean at standard doses. What you'll see:

- **Tingling/numbness** in hands and feet, especially first 1–2 weeks (water retention pressing on nerves — usually resolves)
- **Vivid dreams or sleep disturbance** (GH-driven, often welcome, sometimes excessive)
- **Mild water retention** in face and hands
- **Injection-site redness** (site rotation fixes this)

▲ **Stop if:** - Persistent numbness past 4 weeks - Carpal tunnel symptoms - Blood glucose creeping up (GH is anti-insulin — chronic high doses can push you toward insulin resistance) - Any new lump or growth (theoretical concern with chronic IGF-1 elevation; not documented but mechanism-plausible)

**Do not run CJC-1295 if:** active cancer, untreated retinopathy, or pregnancy.

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## Top Stack Synergies

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1. **+ Ipamorelin** — gold-standard pair. Different pathways, additive GH release, clean side-effect profile.
2. **+ BPC-157** — recovery and repair amplification.
3. **+ MOTS-c** — GH for the system, mitochondrial signal underneath.

**Avoid stacking with:** MK-677 (already a GHS — redundant + side-effect stacking), exogenous HGH (replaces what CJC tries to release endogenously).

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## Sourcing & Storage

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For sourcing, regulatory, and quality-verification details that apply across all peptides in this manual, see **Chapter 5 — Sourcing, Quality Verification, and the Regulatory Landscape** in Part I.

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## Key Studies

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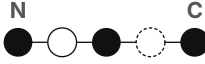
- Teichman SL, et al. Prolonged stimulation of growth hormone (GH) and insulin-like growth factor I secretion by CJC-1295. J Clin Endocrinol Metab. PMID: 16352683
- Ionescu M, Frohman LA. Pulsatile secretion of growth hormone (GH) persists during continuous stimulation by CJC-1295. PMID: 17047016
- Sackmann-Sala L, et al. Growth hormone-releasing hormone analogs and tumor growth. PMID: 22974897
- Walker RF. Sermorelin: a better approach to management of adult-onset GH insufficiency? PMID: 16410052

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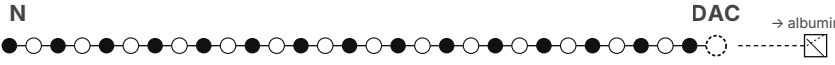
## Quick-Card Summary (for companion deck)

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|                      |                                                 |
|----------------------|-------------------------------------------------|
|                      |                                                 |
| <b>Use for</b>       | GH/IGF-1 elevation, sleep, recovery, body comp  |
| <b>Beginner dose</b> | 100 mcg No-DAC pre-sleep, fasted                |
| <b>Course</b>        | 8–16 weeks                                      |
| <b>Pairs with</b>    | Ipamorelin, BPC-157, MOTS-c                     |
| <b>Don't run if</b>  | Active cancer, retinopathy, pregnancy           |
| <b>Tier</b>          | Beginner-friendly (No-DAC) / Intermediate (DAC) |

|                                     |                                                            |                                                                                     |
|-------------------------------------|------------------------------------------------------------|-------------------------------------------------------------------------------------|
| <b>DISCOVERY</b><br><br><b>2005</b> | <b>LAB / INSTITUTION</b><br><b>ConjuChem Inc.</b>          |  |
|                                     | <b>LEAD · COUNTRY</b><br>Various (ConjuChem team) · Canada |                                                                                     |
|                                     | Key paper: Teichman et al., J Clin Endocrinol Metab, 2006  |                                                                                     |

Discovery panel · year, lab, country, lead researcher, key paper

|                                                                                          |                                                                                    |
|------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------|
| <b>MOLECULE · CJC-1295</b><br><b>30-mer GHRH analog · DAC linker for albumin binding</b> |  |
| Dashed tail = DAC linker · binds albumin · half-life ≈5.8–8.1 days.                      |                                                                                    |

Molecule schematic · backbone and key modifications

# BPC-157

Body Protection Compound · 15 amino acids · Synthetic gastric peptide

|                       |                                                                                                                                                                                      |
|-----------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|                       |                                                                                                                                                                                      |
| <b>Class</b>          | Healing & Regenerative                                                                                                                                                               |
| <b>Half-life</b>      | Very short — minutes in animal PK (elimination $t_{1/2}$ <30 min in rat & dog, He et al. 2022). Durable effects are attributed to downstream signaling, not sustained plasma levels. |
| <b>Schedule (US)</b>  | Research chemical · not FDA-approved                                                                                                                                                 |
| <b>Evidence Tier</b>  | ★★★★☆ — Strong animal data · limited human trials · massive anecdotal record                                                                                                         |
| <b>Typical Course</b> | 4–8 weeks                                                                                                                                                                            |
| <b>Routes</b>         | Subcutaneous · Oral capsule · Local injection                                                                                                                                        |

#### IN 30 SECONDS

A 15-amino-acid fragment of a protein your stomach already makes. Best for tendon, ligament, and gut healing. Multi-pathway: VEGF, nitric oxide, growth factor receptors. The cleanest side-effect profile of any healing peptide.

 **Peptide Blend Calculator** — Multi-compound vial math for stacked reconstitutions.

[wellnessradar.ca/tools/peptide-blend](https://wellnessradar.ca/tools/peptide-blend)

#### CHOOSE IF

- Stubborn tendon or ligament injury 6+ months unresolved by PT
- Chronic gut inflammation, leaky gut, or NSAID damage
- Want the cleanest side-effect profile in the healing class

#### SKIP IF

- Active cancer diagnosis or strong family history (VEGF mechanism)
- Pregnant or breastfeeding
- Expecting overnight results — 8-week course minimum

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## Name & Discovery

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**What "BPC-157" actually means:** - **BPC** = **B**ody **P**rotection **C**ompound — the protective peptide family the molecule belongs to - **157** = the 157th sequence isolated and tested from that family during early characterization

**Discovered — the "your stomach already makes it" story:** Early 1990s in **Zagreb, Croatia**, by **Dr. Predrag Sikiric** and colleagues at the **University of Zagreb School of Medicine**. The team was studying the protective

compounds your stomach naturally produces to defend its own lining from acid and digestive enzymes — chemicals your body makes that are basically built-in armor for the gut.

The interesting angle: BPC-157 isn't a drug invented from scratch. It's a fragment of a protein **already living in your gastric juice right now** — the slimy fluid your stomach secretes when you eat. Sikiric's team isolated the larger parent protein, identified a 15-amino-acid stretch as the active healing region, and synthesized it. The fact that the molecule is essentially a concentrated dose of something you already produce is widely cited as the reason the side-effect profile is unusually clean — your body recognizes it.

Hundreds of animal studies — most still coming from Sikiric's group and collaborators — have characterized its tissue-repair effects since. Notably, the research has stayed concentrated in Croatia and Eastern Europe; major Western pharmaceutical companies have not pursued it for FDA approval, which is one reason it remains a "research chemical" in the US despite the substantial animal evidence.

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## What It Is

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BPC-157 is a 15-amino-acid fragment of a protein your stomach already makes. Russian and Croatian researchers identified it in human gastric juice in the 1990s and synthesized the active sequence. The body uses it to repair the gut lining you destroy daily with food, acid, alcohol, NSAIDs, and stress.

You're not introducing a foreign drug. You're handing your body more of a signal it already runs.

That distinction matters — it's why the side-effect profile is unusually clean compared to most research peptides.

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## How It Works

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BPC-157 doesn't bind one specific receptor like most peptides. It works through several pathways at once, which is why it does so many things:

- **Upregulates VEGF** — drives new blood vessel formation into damaged tissue. No blood supply = no healing. This is why tendons (poor blood flow) respond so well.
- **Modulates the nitric oxide system** — improves microcirculation at the injury site.
- **Boosts growth hormone receptor expression** — your existing GH works harder where it's needed.
- **Stabilizes the gut barrier** — tightens leaky junctions, reduces inflammation, protects against NSAID damage.
- **Crosses the blood-brain barrier** — partial neuroprotective effects, though this is where the evidence gets thinner.

Translation: more blood to the damaged area, better cellular signaling once it gets there, faster repair.

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Gastric-stable 15-aa peptide. A multi-system repair signal.

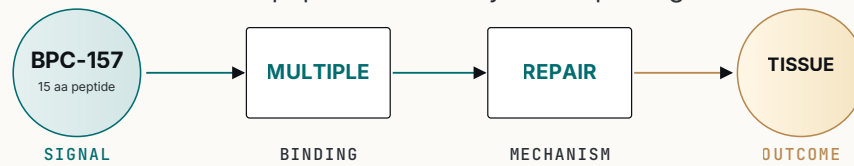


FIG — BPC-157 does not bind a single receptor. It activates several repair pathways simultaneously, which is why the same molecule helps tendons, gut tissue, and connective tissue.

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## What It's Actually Good For

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**Promising — strong animal data; human use anecdotal, no completed human RCTs:** - Tendon and ligament injuries - Muscle tears and strains - Gut inflammation, IBS, IBD support - Post-surgical recovery - NSAID-induced gut damage

**Likely (mechanism + reasonable evidence):** - Joint pain, especially when injected near the joint - Wound healing - Liver protection (esp. after alcohol, acetaminophen)

**Anecdotal — interesting but not proven:** - Brain fog, anxiety, mood - Erectile function - Skin healing (better topical alternatives exist — see GHK-Cu)

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## Reading Between the Trial Lines

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**The animal-data problem.** Almost every claim about BPC-157 — tendon healing, gut repair, neuroprotection — comes from rat and mouse studies, often from a single research group (Sikiric et al., Croatia). The animal data is unusually consistent and the mechanism makes biological sense. But human RCTs at standard user doses don't exist yet. When marketing material says "BPC-157 is proven to repair tendons," what's actually proven is that it repairs rat tendons. The translation to human tendons is mechanism-plausible, supported by enormous anecdotal evidence, but not formally established in peer-reviewed clinical trials.

**The "miracle peptide" hype problem.** BPC-157 gets sold as a cure-all. Community reports are full of users claiming it fixed everything from anxiety to ED. The actual mechanism is angiogenesis + GH-receptor upregulation + gut barrier stabilization. That covers a lot of conditions through "more healing" downstream — but if a user is feeling "amazing on BPC-157" for things unrelated to tissue repair, it's probably placebo or general gut-improvement effects, not the peptide doing magic.

**The dose-response problem in the literature.** Many of the rodent studies use doses that, scaled by body weight, would translate to enormous human doses. The standard 250–500 mcg human protocol works in practice but is well below the equivalent of what produced dramatic effects in rats. Translation: human results take longer and are more modest than the headline-grabbing animal data suggests.

**The community pattern that doesn't get headlined.** The biggest BPC-157 win across user reports is gut healing — leaky gut, NSAID damage, IBS-type symptoms. Tendon healing is real but slower. The "BPC-157 fixed my anxiety" reports are inconsistent and often correlate with users also addressing inflammation or sleep simultaneously.

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## Dosing

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| LEVEL                   | DOSE        | FREQUENCY                  | NOTES                                      |
|-------------------------|-------------|----------------------------|--------------------------------------------|
| <b>Beginner</b>         | 250 mcg     | 1× daily, subcut           | Start here. Most people respond.           |
| <b>Standard</b>         | 250 mcg     | 2× daily, subcut (AM + PM) | Acute injuries. 4–6 weeks.                 |
| <b>Advanced / acute</b> | 500 mcg     | 2× daily                   | Major repair, post-surgery, severe injury. |
| <b>Oral (gut only)</b>  | 500 mcg     | 1–2× daily                 | Capsule. Won't reach systemic tissues.     |
| <b>Local injection</b>  | 200–250 mcg | Direct near injury site    | Pin-point repair. Small needle.            |

**Course length:** 4–8 weeks on, then off. Diminishing returns past 8 weeks for most goals.

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## ★ Author's Note

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Inject as close to the injury as the anatomy lets you. Subcut near the elbow tendon for tennis elbow. Subcut near the knee for patellar tendinopathy. Belly injection works systemically but you give up local concentration. This is one of the most reliable peptides on the market when you place it right and stop expecting magic.

Don't waste BPC-157 on things it isn't built for. It is not a fat-loss compound. It is not a GH replacement. It is a repair signal. Run it during a healing window — injured, post-surgery, after a hard training block — then come off.

**Case in practice:** A 42-year-old recreational lifter, eight months into a stalled rotator cuff recovery despite physical therapy, presents with night pain and a 30% strength deficit on the affected side. Imaging shows a partial supraspinatus tear that's not surgical. He runs BPC-157 250 mcg twice daily subcut — one injection placed just inferior to the shoulder, one in the abdomen — for six weeks alongside continued progressive loading and adequate protein intake. By week four, night pain resolves; by week eight, strength symmetry returns. This is the canonical Category 2 (acute-action) use case: an active repair process, an evidence-tier reasonable for the indication, a defined exit when healing is complete.

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## Female-Specific

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Women generally respond at the lower end of the dose range — 200–300 mcg/day is enough for most healing protocols. No documented hormonal disruption. Safer profile than most peptides for female use.

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## Side Effects & Red Flags

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Cleanest side-effect profile of any healing peptide. Most users report nothing. When issues happen:

- Mild head pressure or fatigue first 3–5 days (usually resolves)
- Injection-site soreness (rotate sites)
- Rarely: GI upset with oral form

**Stop immediately if:** unexplained skin changes, persistent headaches, lymph node swelling, or any new mole/lesion that wasn't there before.

For the general angiogenesis–cancer concern that applies to all healing peptides, see Angiogenesis & Cancer Concerns (Part I). BPC-157 specifically: no human cancer signal in 15+ years of community use, but the theoretical concern applies.

**⚠ Don't run BPC-157 if you have an active or untreated cancer history.**  
No exceptions.

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## Top Stack Synergies

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1. + **TB-500** — different healing pathway, additive results. Standard "Wolverine Stack."
2. + **GHK-Cu (topical)** — for surface wounds and skin
3. + **CJC-1295/Ipamorelin** — GH amplifies BPC-157's repair signal

Avoid stacking with anything immunosuppressive without guidance.

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## Sourcing & Storage

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For sourcing, regulatory, and quality-verification details that apply across all peptides in this manual, see **Chapter 5 — Sourcing, Quality Verification, and the Regulatory Landscape** in Part I.

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## Key Studies

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- Sikiric P, et al. BPC-157 protects against NSAID-induced gut damage. PMID: 16308439
- Chang CH, et al. BPC-157 accelerates Achilles tendon healing — rat model. PMID: 21030672
- Huang T, et al. BPC-157 improves angiogenesis and tissue repair via VEGFR2 pathway. PMID: 26581799
- Krivic A, et al. Achilles-tendon-to-bone healing with BPC-157. PMID: 16574061
- Vukojević J, et al. BPC-157 and the central nervous system. PMID: 30098550

Note: Human RCT data is limited. The animal evidence is unusually strong and mechanistically consistent — but clinical evidence is still catching up.

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## Quick-Card Summary (for companion deck)

|                      |                                       |
|----------------------|---------------------------------------|
| <b>Use for</b>       | Tendons, ligaments, gut, post-surgery |
| <b>Beginner dose</b> | 250 mcg/day subcut                    |
| <b>Course</b>        | 4–8 weeks                             |
| <b>Pairs with</b>    | TB-500, GHK-Cu                        |
| <b>Don't run if</b>  | Active cancer history                 |
| <b>Tier</b>          | Beginner-friendly                     |

|                                     |                                                                     |  |
|-------------------------------------|---------------------------------------------------------------------|--|
| <b>DISCOVERY</b><br><br><b>1991</b> | <b>LAB / INSTITUTION</b><br>University of Zagreb School of Medicine |  |
|                                     | <b>LEAD · COUNTRY</b><br>Predrag Sikiric · Croatia                  |  |
|                                     | Key paper: Sikiric et al., J Physiol Paris, 1993                    |  |

Discovery panel · year, lab, country, lead researcher, key paper

|                                                                    |                |
|--------------------------------------------------------------------|----------------|
| <b>MOLECULE · BPC-157</b>                                          |                |
| <b>15-mer · derived from gastric juice protective protein</b>      |                |
| <b>N · Gly</b>                                                     | <b>C · Val</b> |
|                                                                    |                |
| GEPPPGKPADDAGLV — 15-residue fragment of body protection compound. |                |

Molecule schematic · backbone and key modifications