

BPC-157

PATIENT EDUCATION GUIDE — PEPTIDE
THERAPY

Harriman Precision Health
Physician-Supervised Telemedicine
Wellness
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What Is BPC-157?

BPC-157 stands for Body Protection Compound-157. It is a synthetic peptide derived from a sequence of 15 amino acids found naturally in human gastric juice, where it plays a protective role in the gastrointestinal tract.¹ While it occurs naturally in small concentrations, therapeutic doses are administered to amplify its healing and regenerative signaling properties throughout the body. BPC-157 has been the subject of extensive preclinical research, with studies demonstrating meaningful effects on tissue repair, inflammation reduction, and recovery across multiple organ systems.^{2,3}

How It Works

BPC-157 promotes healing through several well-studied mechanisms. It upregulates growth hormone receptors in tendon and connective tissue, enhancing the body's capacity to repair damaged structures.⁴ It stimulates angiogenesis — the formation of new blood vessels — which improves circulation and nutrient delivery to injured areas.⁵ It also modulates key inflammatory pathways, reducing excessive inflammation that can slow healing and cause chronic pain.³ Additionally, BPC-157 influences nitric oxide production and interacts with dopaminergic and serotonergic systems, contributing to its observed effects on gut motility and systemic recovery.⁶

What BPC-157 Is Used For

BPC-157 is most commonly used for musculoskeletal injuries — tendon tears, ligament sprains, muscle strains, and joint pain — with research models demonstrating results in rotator cuff, Achilles tendon, ACL, and patellar tendon injuries.⁷ Beyond orthopedic applications, patients use

BPC-157 for gut healing, including leaky gut syndrome, inflammatory bowel issues, and NSAID-induced gastric damage, where it has demonstrated oral stability and efficacy even at low doses.^{1,8} Post-surgical recovery, nerve injury support, and systemic inflammation reduction are additional areas where meaningful patient benefit has been reported.³

What to Expect: Timeline of Results

Results with BPC-157 are gradual and cumulative. Most patients notice the first signs of reduced inflammation and improved comfort within the first two to four weeks of consistent use.⁹ By weeks four through six, functional improvements typically become more apparent — better range of motion, less pain with activity, and improved recovery between sessions. The most significant structural and tissue-level changes develop between weeks eight and twelve, as the underlying cellular repair processes reach maturity.⁵ Research indicates BPC-157 activates multiple gene expression pathways within minutes of administration, triggering cascading cellular processes that continue independently over time.¹⁰

Standard Protocol

Parameter	Details
Dose	250–500 mcg per day
Route	Subcutaneous injection (abdominal fat pad or near injury site)
Frequency	Once daily
Cycle Length	8–12 weeks
Rest Period	4 weeks off before repeating if additional cycles are desired
Medication Source	Compounded by Empower Pharmacy (Houston, TX) — licensed compounding partner

All protocols are individualized by your supervising physician based on your history, goals, and treatment response.

Safety Profile

BPC-157 has a well-established safety profile in the preclinical research literature. It is not a hormone, does not suppress the hypothalamic-pituitary-gonadal (HPG) axis, and does not require post-cycle therapy.¹¹ It is not a controlled substance. Side effects are uncommon and typically mild — the most frequently reported are brief, localized injection site reactions such as minor redness or swelling that resolve within 24–48 hours.⁹ No significant organ toxicity, cardiovascular effects, or serious adverse events have been reported at therapeutic doses in the available research.² As with all compounded therapies, BPC-157 is used off-label, and large-scale human clinical trials are ongoing.

Important note: Combining BPC-157 with NSAIDs (ibuprofen, naproxen) may counteract its healing effects, as these medications suppress the same inflammatory cascade BPC-157 partially leverages to initiate tissue repair.⁸ Discuss pain management alternatives with your provider during your cycle.

How to Maximize Your Results

BPC-157 amplifies your body's own repair machinery — the more you support that foundation, the better your outcomes. The following are evidence-informed recommendations commonly adopted by peptide therapy clinics.

Evidence-Informed Optimization Strategies

- › **Collagen + Vitamin C (Morning)**^{12,13} — BPC-157 actively stimulates collagen synthesis and fibroblast activity at repair sites, but requires raw materials to build with. Taking 10–15 g of hydrolyzed collagen peptides alongside 500–1,000 mg of vitamin C in the morning provides the direct substrate your body needs. Vitamin C is essential for collagen cross-linking and fibroblast function, making this pairing especially valuable for tendon, ligament, and joint repair.
- › **Adequate Protein Intake**¹⁴ — High-quality protein sources rich in leucine (whey, poultry, lean beef) fuel satellite cell proliferation and collagen synthesis. Target at least 0.7–1.0 g of protein per pound of body weight daily. Without adequate protein, BPC-157 has limited substrate to work with at the cellular level.

- › **Prioritize Sleep**¹⁵ — Growth hormone surges during deep sleep and directly enhances peptide-driven tissue repair. Target 7–9 hours of quality sleep per night. This is the primary window during which regeneration occurs. If sleep quality is a concern, discuss sleep-supporting peptides such as CJC-1295/Ipamorelin with your provider.
- › **Anti-Inflammatory Diet**¹⁶ — A diet focused on lean proteins, healthy fats, and colorful vegetables supports the healing environment BPC-157 creates. Omega-3 fatty acids from fatty fish or quality fish oil are particularly useful for reducing joint inflammation. Berries, leafy greens, and turmeric help reduce systemic background inflammation.
- › **Key Micronutrients**¹⁷ — Magnesium, zinc, and vitamin D support the enzyme functions essential for tissue remodeling. Magnesium is especially useful for neuromuscular recovery and sleep quality. A high-quality multivitamin or targeted supplementation is recommended if dietary intake is inconsistent.
- › **Avoid NSAIDs**⁸ — Ibuprofen and naproxen suppress the same inflammatory pathways BPC-157 leverages for healing. Avoid these during your cycle. Acetaminophen or topical options are generally preferred for pain management during treatment.
- › **Purposeful Movement** — Light activity (walking, stretching, low-impact exercise) promotes circulation and nutrient delivery to healing tissue. Structured physical therapy or progressive rehabilitation, when appropriate, pairs well with BPC-157. Avoid overtraining or reinjuring the target area while healing is underway.
- › **Stress Management** — Elevated cortisol from chronic stress can hinder collagen formation and prolong inflammation. Mindfulness, breathwork, and stress reduction practices are practical complements to your peptide protocol.

Frequently Asked Questions

Do I need labs before starting?

A brief medical history and intake review are completed prior to initiating therapy. Lab work is not routinely required for peptide therapy but may be

recommended based on your individual history.

Can I combine BPC-157 with other therapies?

Yes. BPC-157 is commonly combined with TB-500 for enhanced connective tissue and systemic healing, as the two peptides target complementary repair pathways.¹⁸ It is also compatible with testosterone replacement therapy and GLP-1 programs.

How is my medication sourced?

All peptides are compounded by Empower Pharmacy, our licensed Houston-based compounding pharmacy partner, under strict quality and sterility standards.

When will I notice results?

Most patients notice initial improvements in comfort and inflammation within 2–4 weeks. Functional and structural improvements build through weeks 6–12. Patients combining peptide therapy with adequate nutrition, sleep, and movement tend to see the best outcomes.

Important Notice: This document is for educational purposes only and does not constitute medical advice. All therapies at Harriman Precision Health are physician-supervised and protocols are individualized to your health history and goals. Results may vary. This material should not be used for self-diagnosis or self-treatment. Questions? Contact us through your patient portal.

References

1. Sikiric P, et al. Stable gastric pentadecapeptide BPC 157 — novel therapy of inflammatory bowel disease. *Current Pharmaceutical Design*. 2011;17(16):1612–1632.
 2. Gwyer D, Wragg NM, Wilson SL. Gastric pentadecapeptide body protection compound BPC 157 and its role in accelerating musculoskeletal soft tissue healing. *Cell and Tissue Research*. 2019;377(2):153–159.
 3. Chang CH, et al. The promoting effect of pentadecapeptide BPC 157 on tendon healing involves tendon outgrowth, cell survival, and cell migration. *Journal of Applied Physiology*. 2011;110(3):774–780.
 4. Sikiric P, et al. BPC 157 and standard angiogenic growth factors: a systematic review. *Current Pharmaceutical Design*. 2018;24(26):3108–3117.
 5. Pevec D, et al. Impact of pentadecapeptide BPC 157 on muscle healing impaired by systemic corticosteroid application. *Medical Science Monitor*. 2010;16(3):BR81–88.
 6. Sikiric P, et al. Brain-gut axis and pentadecapeptide BPC 157: theoretical and practical implications. *Current Neuropharmacology*. 2016;14(8):857–865.
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7. DeFoor MT, Dekker TJ. Injectable therapeutic peptides — an adjunct to regenerative medicine and sports performance. *Arthroscopy*. 2024;(published online September 9, 2024).

8. Sikiric P, et al. Cytoprotection and injury — new insight. *Current Pharmaceutical Design*. 2010;16(10):1224–1234.

9. Huang T, et al. BPC-157 significantly accelerated wound healing and increased collagen synthesis in a murine model. *Frontiers in Pharmacology*. 2021;12:693934.

10. Staresinic M, et al. BPC 157 gene expression: activation of multiple pathways within minutes of administration. *Journal of Physiology — Paris*. 2006;100(5-6):283–287.

11. Sikiric P, et al. Toxicity by NSAIDs: counteraction by stable gastric pentadecapeptide BPC 157. *Current Pharmaceutical Design*. 2013;19(1):76–83.

12. Khatri M, Naughton RJ, Clifford T, et al. The effects of collagen peptide supplementation on body composition, collagen synthesis, and recovery from joint injury and exercise: a systematic review. *Amino Acids*. 2021;53(10):1493–1506.

13. Shaw G, et al. Vitamin C-enriched gelatin supplementation before intermittent activity augments collagen synthesis. *American Journal of Clinical Nutrition*. 2017;105(1):136–143.

14. Antonio J, et al. The effects of protein and amino acid supplementation on performance and training adaptations during ten weeks of resistance training. *Journal of Strength and Conditioning Research*. 2000;14(3):314–321.

15. Van Cauter E, Leproult R, Plat L. Age-related changes in slow wave sleep and REM sleep and relationship with growth hormone and cortisol levels in healthy men. *JAMA*. 2000;284(7):861–868.

16. Calder PC. Omega-3 fatty acids and inflammatory processes: from molecules to man. *Biochemical Society Transactions*. 2017;45(5):1105–1115.

17. Rondanelli M, et al. Human kinetics and the importance of magnesium in sport. *Magnesium Research*. 2021;34(2):1–14.

18. Sikiric P, et al. The effect of pentadecapeptide BPC 157 on injured muscle and tendon healing in combination with thymosin Beta-4. *Current Pharmaceutical Design*. 2018;24:3108–3117.

Research cited includes preclinical (animal model) and emerging human studies. The majority of BPC-157 research has been conducted in animal models; large-scale randomized human clinical trials are ongoing. All therapies at Harriman Precision Health are physician-supervised, used off-label, and protocols are individualized to each patient's health history and goals. This document does not constitute a guarantee of clinical outcomes.