

Peptides & Emerging Therapies

Informational answers to common patient questions about injury healing

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The information provided here in no way constitutes a recommendation, endorsement, or prescription from Dr. Mulvaney for the use of any peptides. This page is provided for information only, because patients frequently ask about these compounds. We do not currently prescribe, administer, or recommend peptide therapies such as BPC-157, TB-500, or injectable GHK-Cu for fracture or injury healing. If you have questions about any of these, please raise them at your visit so we can discuss the current evidence and regulatory status together.

Established Adjuncts — Clear Indications

Hyperbaric Oxygen Therapy (HBOT)

- Strong evidence specifically for impaired or hypoxic healing: diabetic foot ulcers, irradiated tissue, compromised skin grafts/flaps — HBOT meaningfully reduces amputation risk and improves graft take in these settings.
- Evidence for routine fracture or soft-tissue healing in otherwise healthy, well-perfused patients is much thinner (mostly animal data) — most beneficial when healing is already compromised, not as a general accelerant.

Pulsed Electromagnetic Field (PEMF) therapy

- FDA-cleared specifically as an adjunct for established nonunion fractures. Evidence outside that specific indication is more heterogeneous and less conclusive.

Note: creatine monohydrate is also well-supported for preserving muscle during recovery — see the Nutrition for Healing handout for details.

Peptides — What Patients Are Asking About Injury Healing

Several peptide compounds are widely discussed online as potential aids to fracture and injury healing. The summaries below describe what has and has not been studied, in neutral terms, so you can have an informed conversation with us. They are not instructions for use.

BPC-157

- Reported animal research (100+ published studies) has examined BPC-157 for tendon, ligament, muscle, and bone healing, with proposed mechanisms including new blood vessel formation.
- A 2025 orthopedic literature review screened 544 articles on BPC-157 and identified one human clinical study meeting inclusion criteria; the remainder were animal studies. There is currently no FDA-approved BPC-157 drug product for any indication.
- In July 2026, an FDA advisory committee (the Pharmacy Compounding Advisory Committee) voted to recommend BPC-157 for consideration on a compounding "bulks list." This was an advisory recommendation only — it is not FDA drug approval and does not establish safety or effectiveness. BPC-157 is listed as a prohibited substance under World Anti-Doping Agency rules for competitive athletes.

TB-500

- TB-500 is a synthetic fragment of a naturally occurring protein, Thymosin Beta-4. Some marketing materials cite research on the parent protein — including a human ophthalmic trial — but TB-500 itself has no published controlled human trials for injury or fracture healing, and FDA reviewers have noted a lack of adequate human exposure data specific to this compound.

GHK-Cu (copper peptide)

- Human research on GHK-Cu is comparatively more developed, but is specific to topical/cosmetic skin applications (e.g., collagen remodeling in skin). There is essentially no human data on injectable or systemic use for musculoskeletal or fracture healing, and injectable compounding of this peptide has faced FDA restriction since 2023.

General considerations patients raise

- Research-grade and compounded peptide products are not FDA-approved drugs; purity, sterility, and labeled dosing are not independently verified in the way approved medications are.
- Human dosing, injection-site safety, and long-term safety data specific to fracture or soft-tissue healing have not been established for any of the compounds above.

Where to Focus Instead

- The strategies covered in our Nutrition for Healing and Optimizing Recovery handouts — protein, vitamin C, sleep, activity, and avoiding tobacco/alcohol — have substantially more consistent human evidence behind them, and are the areas most likely to meaningfully affect your healing timeline.

General education only — not medical advice, and not a recommendation to use any product discussed above. Evidence and regulatory status for these compounds change quickly; please ask us for the current status at your visit.

References

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