HERITAGE HAVENS

NUTRITION & PEPTIDE WELLNESS COHORT

BPC-157 Research Summary

An evidence-based overview of Body Protection Compound — mechanisms, applications, and safety

Nutrition & Peptide Wellness Cohort · Month 3

Educational Reference Only

All content is for educational purposes. BPC-157 is not FDA-approved for human use. This document summarizes published preclinical and limited clinical research. Any protocol must be supervised by a licensed healthcare provider.

OVERVIEW

What Is BPC-157?

BPC-157 (Body Protection Compound-157) is a synthetic pentadecapeptide — a chain of 15 amino acids — derived from a protein found naturally in human gastric juice. Its full sequence is: Gly-Glu-Pro-Pro-Pro-Gly-Lys-Pro-Ala-Asp-Asp-Ala-Gly-Leu-Val.

It was first isolated and characterized by Dr. Predrag Sikiric and colleagues at the University of Zagreb, Croatia, where it has been studied for over 30 years. The majority of published research is in animal models (primarily rat); human clinical data remains limited but is growing.

MECHANISM

How BPC-157 Works — Primary Mechanisms

Angiogenesis Promotion

BPC-157 upregulates VEGFR2 (vascular endothelial growth factor receptor 2), promoting the formation of new blood vessels at injury and repair sites. This is critical for delivering oxygen and nutrients to healing tissue — including the gut lining.

Nitric Oxide (NO) Modulation

BPC-157 modulates the nitric oxide system — both upregulating NO in ischemic/healing tissue (promoting vasodilation and healing) and reducing excessive NO in inflammatory states. This dual action is one reason it is effective across such diverse conditions.

Growth Factor Upregulation

BPC-157 upregulates expression of multiple growth factor receptors including EGF-R (epidermal growth factor receptor) and FGFR (fibroblast growth factor receptor), both critical for tissue regeneration and gut epithelial repair.

Tight Junction Support

Research demonstrates BPC-157 helps maintain and restore intestinal tight junction integrity — the primary mechanism behind its effectiveness for leaky gut and inflammatory bowel conditions.

Tendon & Musculoskeletal Repair

BPC-157 upregulates tendon fibroblast gene expression and accelerates collagen synthesis at injury sites. This is mediated through the FAK-paxillin pathway and is responsible for its well-documented tendon healing effects.

Neurotrophic Effects

BPC-157 modulates dopaminergic and serotonergic neurotransmission, and has shown neuroprotective effects in animal models of stroke and neurological injury. This may partly explain reported mood-stabilizing effects.

RESEARCH SUMMARY

Key Research Findings by Application

Application	Model	Key Findings	Primary References
Gut & IBD	Rat / in vitro	BPC-157 accelerated healing of colon anastomosis, protected against NSAID-induced gastric lesions, and reduced colonic inflammation in IBD models. Restored gut motility in bowel obstruction models.	*Sikiric et al. 1997–2018 (multiple)*
Tendon Repair	Rat	4x faster tendon-to-bone healing vs. controls. Restored biomechanical properties to near-normal within 4 weeks. Upregulated tendon fibroblast growth factors.	*Chang et al. 2011; Cerovecki et al. 2010*
Ligament Healing	Rat	Accelerated medial collateral ligament healing. Improved tensile strength and collagen organization at repair sites compared to saline controls.	*Krivic et al. 2006*
Bone Healing	Rat	Accelerated bone healing following femoral fracture. Enhanced callus formation and mineralization vs. controls.	*Gjurasin et al. 2010*
Muscle Repair	Rat	Significant acceleration of muscle crush injury recovery. Reduced fibrosis, improved functional recovery, and enhanced angiogenesis at injury sites.	*Novinscak et al. 2008*
Neuroprotection	Rat	Protective effects in dopaminergic neuron damage models. Reduced brain lesion volume after stroke in rat models. Modulates GABA-A receptor function.	*Sikiric et al. 2016*
Anti-inflammatory	Multiple	Reduced systemic and local inflammatory markers (TNF-alpha, IL-6) across multiple tissue types and injury models. Effects present without immune suppression.	*Multiple authors, 2005–2020*
Wound Healing	Rat / in vitro	Accelerated wound closure, enhanced angiogenesis, improved dermal collagen organization. Effective topically and systemically.	*Huang et al. 2015*

Note: The vast majority of BPC-157 research is in animal (rodent) models. This is a significant limitation. While mechanisms are biologically plausible and results consistently positive in preclinical work, human RCT data is limited. This does not mean the research is irrelevant — it means interpretations require appropriate caution.

DOSING CONTEXT

Commonly Studied Protocols (Educational Reference Only)

The following reflects protocols discussed in published literature and clinical practice reports. This is not a prescription. All use requires physician authorization and compounding pharmacy sourcing.

Parameter	Subcutaneous	Oral (if indicated)
Typical dose range	200–500 mcg per dose	400–800 mcg per dose
Frequency	Once or twice daily	Once or twice daily (with food)
Timing	AM + PM; away from meals	With or without food — varies
Cycle	3 months on / 1 month off	3 months on / 1 month off
Reconstitution	Bacteriostatic water	Capsule or liquid — from pharmacy
Storage	Refrigerate after reconstitution	Per pharmacy instructions

SAFETY PROFILE

Safety & Tolerability — What the Research Shows

Reported Favorable Safety Markers

- No significant toxicity in subacute or chronic animal studies
- No effects on blood pressure, heart rate, or cardiac function in most models
- No hormonal disruption or IGF-1 elevation (unlike HGH)
- No hepatotoxicity or nephrotoxicity reported
- Well-tolerated at therapeutic dose ranges in animal studies
- One human case series (Sikiric group) with no serious adverse events reported

Limitations & Unknowns

- No large-scale human RCTs published as of 2024
- Long-term human safety data does not yet exist
- Individual responses will vary — monitoring is essential
- Quality varies dramatically between compounding sources
- Not FDA-approved — regulatory oversight is limited
- Theoretical concern (unproven): angiogenic properties and theoretical cancer growth promotion in susceptible individuals

Key Takeaways for Session 3

• BPC-157 is one of the most studied healing peptides in the preclinical literature with 30+ years of research

• Its mechanisms — angiogenesis, NO modulation, growth factor upregulation, tight junction support — are well-characterized

• Human clinical data is the current gap; the research community is actively working to fill it

• It works best in a well-nourished body — the gut-healing nutrition in Month 3 is synergistic, not optional

• Source only from licensed compounding pharmacies; never from unverified online sources