LIPOSOMAL

BPC-157

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Liposomal BPC-157 is an oral, multi-purpose, high absorption peptide formula, deriving from the BPC protein naturally found in the human digestive tract. Comprised of 15 amino acids, this versatile compound is well known for its healing and reparative qualities beyond the gut.

Using Quicksilver Scientific's advanced liposomal delivery for rapid and comprehensive absorption, this peptide has been shown to support broad tissue repair, vascular growth, neuroprotection, and a healthy inflammatory response.

Supplement Facts

Serving Size: 0.5mL (1 pump) Servings Per Container: 60

	Amount Per Serving	% Daily Value
BPC-157	500mcg	**

**Daily Value Not Established

Other Ingredients: Water, glycerin, ethanol, highly purified phospholipids, tocofersolan, natural mixed tocopherols

EDUCATION

BPC-157 or Body Protection Compound 157 is a derivative of the BPC protein naturally found in the human digestive tract. It plays a significant role in protecting the lining of the gastrointestinal tract from damage, promoting healing, and encouraging blood vessel growth.[1]

Synthetic BPC-157 is comprised of 15 amino acids isolated from the much larger BPC protein, retaining many of the healing properties of its parent molecule. It was first described in the Journal of Physiology-Paris by Sikirić and colleagues in 1993.[2]

The potential therapeutic uses of BPC-157 are still under investigation with many preliminary and animal studies showing promising potential in supporting healing, recovery, and having a beneficial impact on the body's inflammatory response.[1]

TISSUE HEALING & REGENERATION

The peptide BPC-157 is primarily known for its ability to accelerate tissue repair and recovery, particularly in tendons, ligaments, and muscles.[2] It may achieve this through the following pathways:

- **Growth Factor Modulation** – The peptide has been shown to upregulate the expression of growth hormone receptors (GHR) in tendon fibroblasts. In vitro studies demonstrate that treatment with the peptide BPC-157 increases GHR mRNA and protein levels in a dose- and time-dependent manner, enhancing the fibroblasts' responsiveness to growth hormone and promoting cell proliferation essential for tendon healing.[3]
- **Collagen Synthesis Support** – This peptide has been observed to stimulate fibroblast activity, leading to increased collagen production. This has been shown to contribute to tissue regeneration in tendons, ligaments, and even dermal remodeling.[4,5]
    - Tendon and ligament injuries, which typically suffer from slow healing due to limited blood supply, may particularly benefit from this peptide's ability to enhance fibroblast activity and collateral blood vessel formation. Research suggests that it outperforms traditional growth factors like bFGF, EGF, and VGF in promoting tissue repair.[6]

Animal studies have demonstrated accelerated healing in various injury models. In one model, systemic administration of the peptide BPC-157 significantly promoted muscle healing, suggesting its potential to enhance recovery outcomes following muscle injuries.[1]

VASCULAR GROWTH & BLOOD VESSEL STIMULATION

The peptide BPC-157 may play a role in promoting vascular health and repairing blood vessels through:

- **Enhanced Nitric Oxide (NO) Production** – It has been shown to activate endothelial nitric oxide synthase (eNOS), improving vascular function and integrity. Animal models show this peptide induces concentration-dependent vasodilation, an effect that was diminished when NO synthesis was inhibited.[7,8]
- **New Blood Vessel Stimulation** – This peptide has been shown to encourage new blood vessel formation via pathways like VEGFR2-Akt-eNOS, supporting tissue repair.[9,10] In models of hind limb ischemia, it accelerated blood flow recovery and increased vessel density, highlighting its pro-angiogenic properties.
- **Endothelial Protection** – The peptide BPC-157 exhibits endothelial protective properties. It may mitigate oxidative stress, preserving vascular integrity and function. The peptide's activation of eNOS and subsequent NO release may play a crucial role in maintaining endothelial health and facilitating tissue repair.[1,8]

ANTIOXIDANT PROPERTIES

Research has demonstrated that the peptide BPC 157, exhibits significant antioxidant properties:

- **Neutralization of Oxidative Stress Markers:** Studies show that it may reduce elevated levels of the oxidative stress marker malondialdehyde (MDA) and normalize NO tissue values.[4]
- **Reduction of Reactive Oxygen Species (ROS):** This peptide has been shown to prevent and treat gastrointestinal inflammation by decreasing the production of reactive oxygen species, thereby protecting the GI tract from oxidative damage.[10]

NEUROPROTECTIVE POTENTIAL

Emerging research highlights the potential neuroprotective effects of the peptide BPC-157.[12]

- **Nerve Regeneration** – Studies have demonstrated that it can enhance recovery following spinal cord injuries in animal models. Notably, research indicates that peptide BPC-157 therapy might be consistently effective in spinal cord injuries, leading to functional improvements.[13]
- **Neurotransmitter Modulation** – This peptide appears to influence neurotransmitter systems, particularly dopamine and serotonin pathways. Administration of this peptide has been associated with the release of serotonin in specific brain regions, notably the nigrostriatal areas, and has beneficial effects on dopaminergic systems.[14]
- **Cognitive & Motor Function Support** – In rodent models of stroke, peptide BPC-157 administration has led to improvements in memory, locomotion, and coordination. These enhancements correlate with specific gene expression changes in hippocampal tissues, highlighting it's potential in supporting cognitive and motor functions post-injury.[17]
- **Gut-Brain Axis Support** – It may influence neurochemical pathways, enhancing communication between the gut and central nervous system.[15] The peptide's administration has been linked to the release of serotonin in brain regions associated with mood and motor control, suggesting a bidirectional communication pathway between the gut and the brain.

Quicksilver Delivery Systems® improve upon liposomal and emulsification technology with smaller, more stable particles made from the highest-grade ingredients available. In addition to exceptional absorption rates, these tiny liposomal and nanoemulsified particles increase diffusion across mucus membranes, enhance lymphatic circulation of nutrients and support cellular delivery.