ActivPower IRX

HUMAN KNOWLEDGE BASE • INGREDIENT SCIENCE

Sea Cucumber for Human Joint, Skin & Connective-Tissue Wellness

A marine source of collagen, glycosaminoglycans, and sulfated polysaccharides studied to support mobility, skin, and healthy aging.

IRx-ZEUS® | Holothurian Marine | Marine Collagen · GAGs

What Is Sea Cucumber?

Sea cucumbers are marine invertebrates (class Holothuroidea) consumed for centuries as both food and a traditional wellness ingredient. Modern research has generated interest in sea cucumber powders and extracts because they contain marine collagen, glycosaminoglycans (GAGs), sulfated polysaccharides, peptides, minerals, and omega-rich lipids. It is included in **IRx-ZEUS® for humans** to support mobility, connective-tissue wellness, and active lifestyles.

A Source of Marine Collagen & Connective-Tissue Nutrients

Sea cucumber naturally contains marine collagen, sulfated GAGs, chondroitin-sulfate–like compounds, fucosylated chondroitin sulfate, and structural peptides — compounds found throughout the connective tissues of joints, skin, tendons, and the extracellular matrix (Bordbar et al., 2011; Khotimchenko, 2018).

Joint Health & Mobility

The strongest scientific rationale for sea cucumber relates to connective-tissue support and musculoskeletal wellness. Its sulfated polysaccharides and GAGs share structural similarities with compounds found within cartilage. Preclinical studies have demonstrated biological activities involving:

- Connective-tissue metabolism
- Cartilage-supportive pathways
- Joint-tissue structure
- Normal inflammatory balance

Compared with ingredients such as glucosamine or Boswellia, large-scale human clinical studies of sea cucumber remain limited (Bordbar et al., 2011).

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Skin Health & Appearance

Marine collagen has become a major area of interest for skin wellness. Sea cucumber's collagen-rich structural proteins and sulfated GAGs may contribute to extracellular-matrix structure and hydration, supporting healthy skin appearance and connective-tissue wellness — though direct clinical studies using sea cucumber powder remain limited.

Tissue Health & Healthy Aging

Sea cucumbers' natural regenerative abilities have inspired study of their compounds in tissue-remodeling and collagen-metabolism models, but human evidence for wound-healing claims is insufficient. The strongest healthy-aging rationale remains support of mobility, connective-tissue wellness, skin health, and antioxidant defenses; there is no evidence it extends lifespan.

Safety Profile

Sea cucumber has a long history of dietary consumption, and published research generally reports good tolerability. Individuals with seafood allergies, medical conditions, or taking medications should consult a healthcare professional before use.

The ActivPower Perspective

ActivPower includes sea cucumber powder in IRx-ZEUS® for humans as part of comprehensive formulations intended to support mobility, connective-tissue function, skin wellness, and overall quality of life.

FEATURED IN

IRx-ZEUS® for Humans

Power Your Possible™

Selected References — Human & Scientific Literature

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4. Ru X, Wang Y, Li L, et al. Bioactive compounds from sea cucumbers and their potential health benefits: a review. *Mar Drugs.* 2022;20(8):489.
5. Zhong Y, Khan MA, Shahidi F. Compositional characteristics and antioxidant properties of sea cucumber processing byproducts. *J Agric Food Chem.* 2007;55(4):1188–1194.

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DISCLAIMER

This article is provided solely for educational and informational purposes and summarizes selected scientific literature concerning sea cucumber (Holothurian species) as a nutritional ingredient in humans. Nothing herein is intended to diagnose, treat, cure, mitigate, or prevent any disease, injury, arthritis, inflammatory disorder, or medical condition in humans.

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