

Increased protein intake isn't always enough to support wound healing



Patients recovering from wounds, ulcers, burns, surgeries, or other traumatic conditions that impact lean body mass (LBM) may experience:¹

Hypermetabolism



Increased metabolic activity and energy demands lead to:

- Arginine and Glutamine deficiencies²

Catabolism



To fuel the increased energy demands the body:

- Breaks down LBM¹

Reduced Immune Function



LBM loss as a result of catabolism leads to impaired immune function:

- 10% LBM loss impairs immunity and increases infection risk¹
- 20% LBM loss leads to impaired wound healing¹

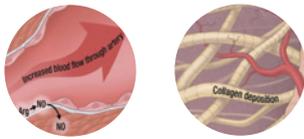
These issues can lead to

Impaired Wound Healing¹

For optimal wound healing, hypermetabolism, catabolism, and impaired immunity should be addressed¹

Juven is a therapeutic nutrition drink mix with a unique blend of key ingredients to support wound healing in as little as two weeks:^{2†}

ARGININE & GLUTAMINE

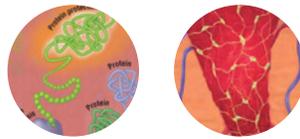


Juven contains 7g of Arginine and Glutamine per serving to replenish essential amino acids lost during hypermetabolism³

Hypermetabolism



HMB & COLLAGEN PROTEIN



Juven has 2.5g collagen protein and 1.5 g caHMB per serving which slows muscle breakdown and enhances protein synthesis^{4,5}

Catabolism



MICRONUTRIENTS



Juven provides zinc, vitamin C, vitamin E, and vitamin B12 which are important in the wound healing process³

Reduced Immune Function



When your patients need more than just protein, Juven can help

To get the same amount of specialized ingredients that Juven provides in just

2 PACKETS/DAY

your patients would need to eat:

- 4 RIBEYE STEAKS (8OZ)*** for an equivalent amount of arginine
- 20 EGGS*** for an equivalent amount of glutamine
- 6,000 AVOCADOS^{5,6,7}** for an equivalent amount of HMB
- A MULTIVITAMIN** for an equivalent amount of zinc, vitamins C, E, and B12



For more information, visit www.Juven.com

*Equivalent nutrient amounts supplied by USDA

† Studied in healthy elderly adults in a wound healing model, taking two servings per day

References: 1. Demling RH: Nutrition, anabolism, and the wound healing process: an overview. *Eplasty*. 2009;9:e9. 2. Williams et al. Effects of a specialized amino acid mixture on human collagen deposition. *Ann Surg* 2002;236:369-375. 3. Joseph Molnar: *Nutrition and Wound Healing*. CRC Press. 2006. 4. Wilson GJ, Wilson JM, Manninen AH. Effects beta-hydroxy-beta-methylbutyrate (HMB) on exercise performance and body composition across varying levels of age, sex, and training experience: a review. *Nutr Metab (Lond)*. 2008;5:1. 5. Nissen SL, Abumrad NN. Nutritional role of the leucine metabolite beta-hydroxy-beta-methylbutyrate (HMB). *J Nutr Biochem*. 1997;8(6):300-311. 6. Kuriyan R, et al. *Exp Gerontol* 2016;81:13-8. 7. Walker DK, et al. *J Chromatogr B Analyt Technol Biomed Life Sci* 2017;1040:233-8.

Use under medical supervision in addition to a complete, balanced diet.

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