



Healing From the Inside Out: Hydroxymethylbutyrate

WHAT IS HYDROXYMETHYL BUTYRATE (HMB)?

HMB, also known as beta-hydroxy-beta-methylbutyrate, is needed by the body to protect and repair muscle tissue.

It is thought that HMB:

- Slows muscle protein breakdown
- Speeds protein synthesis
- Preserves the structure of your muscle cells

STAYING STRONG

Loss of muscle through the life span is a common problem. When you lose muscle, you are less active and less independent. Staying strong can help you heal a wound by keeping you moving.



Studies done with HMB show it minimizes muscle loss in the legs during prolonged bed rest. HMB also may help support muscle strength and physical performance in older adults.

FUNCTIONS OF MUSCLES

- Mobility
- Skin quality
- Stability of body position
- Generation of heat
- Pool for protein to help the body:
 - Maintain immune function
 - Heal
 - Repair
 - Digest foods



THE LEUCINE CONNECTION

Your body makes HMB by breaking down the amino acid leucine found in the protein you eat. Only about 5% of leucine is turned into HMB.

SOURCES OF HMB

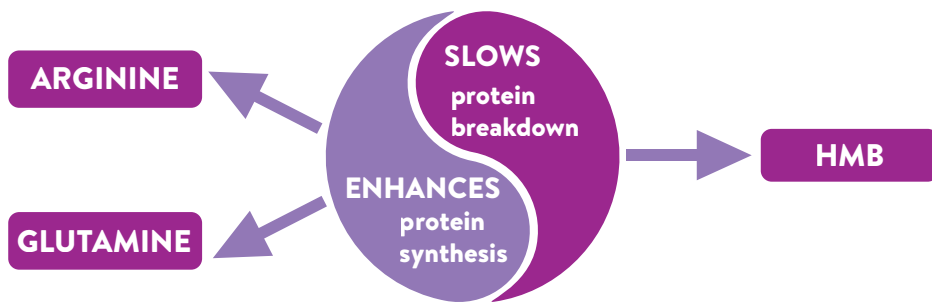
HMB is found in small amounts in many foods, such as avocados, grapefruit, and catfish. A supplement is a more practical way to get the recommended amount of 3 grams/day.

HAVE A CHAT

Ask your healthcare team if HMB supplementation is the right choice for you. HMB often is found in combination with the amino acids arginine and glutamine as a powdered drink mix. This combination is shown to improve wound healing.

NUTRITIONAL SYNERGY

HMB helps produce new tissue by slowing muscle breakdown and enhancing protein synthesis. The combination of arginine, glutamine, and HMB helps rejuvenate muscle. This helps you heal more quickly.



FAST FACT



HMB is bound to calcium to keep it stable as a powder and more soluble in water. Calcium is also good for bone health.

Based on information from:

Deutz NE, Pereira SL, Hays NP, et al. Effect of β -hydroxy- β -methylbutyrate (HMB) on lean body mass during 10 days of bed rest in older adults. *Clin Nutr.* 2013;32(5):704-712. doi:10.1016/j.clnu.2013.02.011.

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