

# MUSCLE BUILDING FOR CATS & DOGS US Pat. No. 9,770,424

#### What is AminAmend?

AminAmend provides a patented bioavailable orally provided HMB supplement (B-hydroxy B-methylbutyrate) to help maintain muscle health and lean body mass. Most commercial diets don't contain HMB, but rather the precurser leucine, and during times of stress and aging the pet's body doesn't synthesize needed levels. HMB has been used for over 2 decades by humans to enjoy a higher quality of life by maintaining muscle health throughout the aging process. Studies have shown that the combination of HMB and Vitamin D3 is more effective at improving muscle mass and strength than HMB alone.

Like in humans, HMB can improve the quality of our pets' lives by improving health and mobility as they age, by decreasing muscle protein breakdown and supporting muscle protein synthesis.

## HMB Efficacy is Supported by Decades of Research The primary ingredient in AminAmend, HMB, has been clinically tested for decades. Human studies have shown that supplementing a

The primary ingredient in AminAmend, HMB, has been clinically tested for decades. Human studies have shown that supplementing a diet with HMB is able to increase muscle protein synthesis while decreasing muscle protein breakdown.

It has also been shown that the endogenous production of HMB within the body decreases throughout one's lifetime, with lower levels of HMB present in the body having an inverse relationship with frailty<sup>2</sup>. Thus, HMB supplementation can play a protective role against frailty later in life.

When HMB is combined with Vitamin D3, studies have shown that muscle strength and functionality improve, even for study participants who have not engaged in a regular training program. And, a study conducted over a one-year period revealed no adverse effects or side effects reported<sup>3</sup>. AminAmend was designed for use in a veterinary setting to appropriately dose both cat and dog clients.

Animal studies have also shown that HMB is effective at enhancing muscle function. In dogs, HMB has been shown to reduce the

levels of muscle damage indicators like creatine phosphokinase and lactate dehydrogenase, while increasing red blood cell count. In horses, HMB has been shown to increase aerobic performance indicators, improve recovery and conditioning times, and decrease muscle damage.













## **FREQUENTLY ASKED QUESTIONS:**

#### Q - How long should my dog or cat take AminAmend?

**A** - AminAmend is a supplement designed to be taken daily to support the long-term muscle health and function of your dog or cat. It can be taken for life.



#### Q - Is AminAmend safe?

**A** - Yes! AminAmend contains HMB, a naturally occurring molecule within the body. Humans have taken HMB safely for decades. No negative effects have been recorded in individuals taking HMB daily.

#### Q - Can my pet take AminAmend if taking other supplements or medications?

**A -** We are unaware of any contraindications or interactions with any other dietary supplements or medications.

#### **Q - How can I administer AminAmend?**

A - AminAmend is easy to use and the capsules can be simply broken open and used as a powder. Can be given during mealtime.

- AminAmend is a nutritional supplement designed to support healthy muscle mass and function as pets age.
- AminAmend is a safe, clinically tested supplement to be taken daily to improve muscle synthesis, decrease muscle protein breakdown, and improve muscle recovery.

### RESEARCH SUPPORTING THE EFFECTIVENESS OF HMB IN MAMMALS:

Wilkinson DJ, Hossain T, Limb MC, Phillips BE, Lund J, Williams JP, Brook MS, Cegielski J, Philp A, Ashcroft S, Rathmacher JA, Szewczyk NJ, Smith K, Atherton PJ. Impact of the calcium form of β-hydroxy-β-methylbutyrate upon human skeletal muscle protein metabolism. Clin Nutr. 2018 Dec;37(6 Pt A):2068-2075. doi: 10.1016/j.clnu.2017.09.024. Epub 2017 Oct 6. PMID: 29097038; PMCID: PMC6295980.

<sup>2</sup> Molina-Baena B, Carnicero JA, Pereira SL, García-García FJ, Santos-Fandila A, Cabrera RR, Rodríguez-Mañas L. Association between endogenous plasma beta-hydroxy-beta-methylbutyrate levels and frailty in community-dwelling older people. J Cachexia Sarcopenia Muscle. 2024 Feb;15(1):231-239. doi: 10.1002/jcsm.13394. Epub 2023 Dec 13. PMID: 38087937; PMCID: PMC10834356.

<sup>3</sup> Rathmacher JA, Pitchford LM, Khoo P, Angus H, Lang J, Lowry K, Ruby C, Krajek AC, Fuller JC, Sharp RL. Long-term Effects of Calcium β-Hydroxy-β-Methylbutyrate and Vitamin D3 Supplementation on Muscular Function in Older Adults With and Without Resistance Training: A Randomized, Double-blind, Controlled Study. J Gerontol A Biol Sci Med Sci. 2020 Oct 15;75(11):2089-2097. doi: 10.1093/gerona/glaa218. PMID: 32857128; PMCID: PMC7566440.

Peter P. Nghiem I, Alexis M. Rutledge I, Kyle Tehas I, Corine Kaderli I, Meredith Poling I, Sidney Arnim I, Vitaliy Dernov I, Celine van Sas 2, Macie L. Mackey I, Gabriella A. M. ten Have 2, Mariëlle P. K. J. Engelen 2 & Nicolaas E. P. Deutz 2, Scientific Reports, (2025) 15:4026



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