

DRIVE BUSINESS FORWARD WITH

## PRONEX™ MBP (MUNG BEAN PROTEIN)

Nexus Foods provides that unique combination of scientific rigor, proven quality processes and deep knowledge of the food supply chain. ProNex™ Mung Bean Protein is one of the healthiest plant protein with exceptional application functionality — thanks to a rigorous R&D process with the experience to deliver them consistency, reliably, quickly, and cost-competitively. See how our solution will satisfy your needs!



### PRONEX™ MBP

#### A Safe Food Ingredient with a Long History

- Raw mung beans are native to India and have been a staple for humans for over 4,500 years;
- ProNex™ MBP is isolated from mung beans using a series of mechanical processes using few FDA permitted process aids.
- ProNex™ MBP is hypoallergenic, GMO and gluten-free, and Kosher;
- Mung Bean Protein isolate is recognized as GRAS in U.S. [GRN 684];
- Light yellow color;
- Complete amino acid profile
  - Higher arginine and glutamine levels than similar plant proteins;
  - key dietary components for enhanced blood flow for endurance, and healthy brain development and protection, respectively.

### PRONEX™ MBP

#### A Healthy Ingredient

- Excellent source of protein ( $\geq 80\%$  d.s.);
- Possess angiotensin-converting [ACE] inhibitory activity<sup>1</sup> that may have benefits with blood pressure by relaxing veins and arteries<sup>2,3</sup>;
- Have trypsin inhibitory activity<sup>1</sup>; a key element of satiety<sup>4</sup>
- Possess anti-fungal and/or antibacterial activities<sup>1</sup>

### PRONEX™ MBP

#### Excellent Functional Properties

- Has a clean taste & silky mouthfeel;
- Good solubility, except at pH 4.6 [its isoelectric point];
- Moderate gelling;
- High viscosity & water retention;
- Good emulsion and thermal stability properties;
- Moderate foaming;

### PRONEX™ MBP

#### Exceptional Application Functionality

- Meat analogs: Excellent binding and emulsion properties;
- RTD beverages: Excellent dispersion and suspension to mix product systems;
- Smoothie: Provides thickening & mouthfeel
- Snacks: Provides an excellent alternative to gluten, as a product stabilizer in extrusion, adding structure for expansion, to maintain proper texture and shape;
- Dressing & Sandwich spread: Provides a non-GMO hypoallergenic egg alternative for vegan products: provides thickening and stability;
- Bakery and nutrition bars: Provides a non-GMO hypoallergenic egg alternative for vegan, vegetarian and gluten-free food with a balanced amino acid profile: provides excellent emulsion and moistness;
- Dairy-free food systems: ProNex™ MBP gives yogurts, ice cream, whipped toppings and cheeses texture equal to dairy-based protein systems;
- High protein pastas: Improved firmness & texture, even after cooking, compared with egg pastas.

#### References:

<sup>1</sup>Hou, D., Yousaf, L., Xue, Y. et al. 2019. Mung Bean (*Vigna radiata* L.): Bioactive polyphenols, polysaccharides, peptides, and health benefits. *Nutrients* 11(6):1238.

<sup>2</sup>Shahrajabian, M.H., Sun, W., and Cheng, Q. 2019. A short review of health benefits and nutritional values of mung bean in sustainable agriculture. *Polish J Agron* 37:31-36.

<sup>3</sup>Raman, R. 2022. 10 impressive health benefits of mung bean. *Healthline*. [www.healthline.com/nutrition/mung-beans](https://www.healthline.com/nutrition/mung-beans). Retrieved 4.26.2022.