

Barley Protein

A Premium Plant Protein from Barley to Upgrade Your Ingredient Portfolio

ClonBio's Barley protein concentrate is a unique ingredient extracted directly from the barley grain to offer a nutritious and functional alternative for the fast growing food industry protein demand. It is rich in essential amino acids, including the desirable branch-chain amino acids which are important for muscle growth and recovery.

Compared to other protein sources, it particularly has a mild and natural taste. With 65% protein, this natural, non-GMO protein concentrate is made from locally sourced Hungarian barley by applying a gentle separation process to obtain a sustainable food ingredient with low carbon footprint and high water efficiency.

Its mild taste and ease of formulation make this barley protein concentrate an ideal ingredient for food and supplements formulations. Barley protein concentrate is part of the range of barley ingredients produced by ClonBio Foods.

Protein quality

The amino acid composition of Barley protein (Table 1) is relatively similar to that of other cereal grains. It contains significant amounts of dietary indispensable amino acids such as valine, leucine, and isoleucine, which are important for muscle growth and repair.

It is also a good source of the essential amino acids, threonine, methionine, and tryptophan.

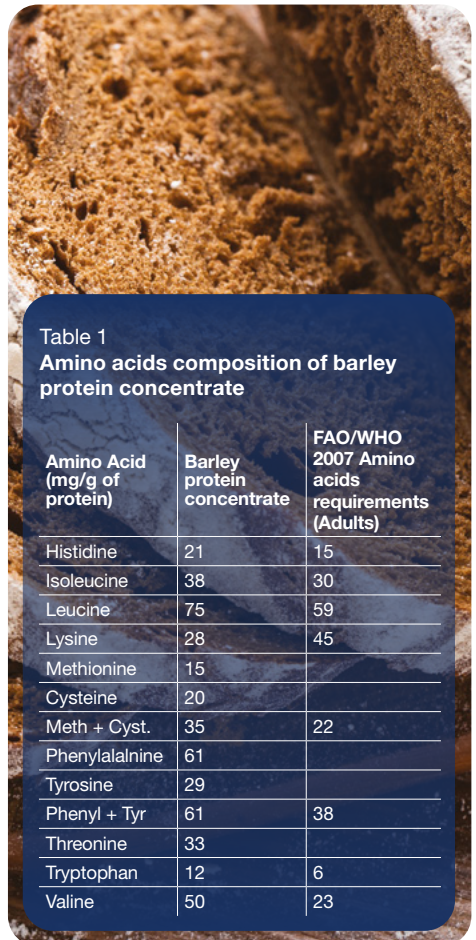


Table 1
Amino acids composition of barley protein concentrate

Amino Acid (mg/g of protein)	Barley protein concentrate	FAO/WHO 2007 Amino acids requirements (Adults)
Histidine	21	15
Isoleucine	38	30
Leucine	75	59
Lysine	28	45
Methionine	15	
Cysteine	20	
Meth + Cyst.	35	22
Phenylalanine	61	
Tyrosine	29	
Phenyl + Tyr	61	38
Threonine	33	
Tryptophan	12	6
Valine	50	23

Beyond protein



65%

protein

10%

naturally occurring oil

6%

naturally occurring dietary fiber

4%

minerals

15%

carbohydrates

0%

cholesterol



APPLICATIONS

- Bakery – Bread, cakes, and biscuits
- Cereals and snack bars
- Nutritional supplements
- Pasta and noodles
- Sports Nutrition
- Meal replacement
- Meat alternative



FUNCTIONAL FEATURES

- Light brownish powder
- Fine, free-flowing powder
- Easy to incorporate
- Good water and oil holding capacity
- Emulsification capacity comparable to commercially available protein isolates
- Mild taste and odor

For more
information visit
our website



ATTRACTIVE LABELLING

The incorporation of barley protein can boost your products' protein content, to easily achieve front-of-pack claims for protein nutrition: "High protein" or "Source of protein" claims.

Textured Barley Protein Standing on Their Own as Meat Alternative

Textured vegetable proteins are gaining lot of traction in creating healthy and environment-friendly substitute to animal products. Vegetarian, vegan and flexitarian are boosting the growth of this market for health, environmental and ethical merits. The global textured vegetable protein market was valued at USD 1.1 billion in 2020 and is projected to reach USD 2.1 billion by 2027, recording a CAGR of 9.2%.

ClonBio Foods's textured barley protein is made from barley protein and soy protein and contains a minimum of 65% proteins on dry matter basis. Besides being an outstanding source of protein, it has a neutral flavour profile and a unique structure that replicates the appearance and texture of ground meat. Its stable hydrated texture makes it suitable for a wide range of applications such as meat analogues, snacks and bakery. It hydrates easily and forms a fibrous and sponge-like matrix, very similar to that of ground meat in terms of chewability.

Functional features

Neutral taste and meaty mouthfeel

Textured barley protein has a nice neutral taste and a good bite after hydration which makes it suitable for a wide range of applications such as meat alternatives, snacks and soups. For meat alternatives, textured barley protein improves viscoelasticity, color stability, moisture retention, firmness, and juiciness.

High functionality

Textured barley protein absorbs up to 3 times its weight in water and keeps its texture even after prolonged hydration time. Upon hydration, the texture become chewy and juicy to mimic meat texture.





APPLICATIONS

- Meat alternatives (vegetarian or hybrid)
- Protein snacks & bars
- Ready-to-eat meals
- Fillings (in baked pasta)
- Emulsified meat

ATTRACTIVE LABELLING

- Non-GMO
- Sustainable
- Source of plant protein
- Suitable for vegetarians and vegans



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