

## Technical Takeaways:

# ALMOND PROTEIN POWDER



Almond protein powder (also known as defatted almond flour) is a finely milled powder made by pressing natural or blanched almonds to remove most of the oil, then grinding the remaining almond cake into a dry, nutrient-dense flour. This process concentrates the protein content per serving while maintaining a clean, mild flavor and excellent functional properties, making it a versatile ingredient for health-forward formulations.

### Why Use Almond Protein Powder?

Almond protein powder's greatest value for product developers lies in its ability to significantly boost protein content in formulations, delivering a robust plant-based protein source that meets consumer demand for high-protein, clean-label and nutrient-dense products. While healthy unsaturated fats are now widely accepted and even sought after by consumers, almond protein powder also offers a lower-fat option for developers who need to reduce fat for specific applications, making it a versatile ingredient for a range of product goals. In addition to its nutritional benefits, almond protein powder provides functional advantages such as water-binding capacity and emulsification properties, which help improve texture, stability and mouthfeel in diverse formulations.

### Supplier/Brand Nutrient Averages<sup>1</sup> for Almond Protein Powder Versus Regular Almond Flour



#### Almond Protein Powder/Defatted Almond Flour (per 100g)

	MINIMUM	MAXIMUM	AVERAGE
Energy (kcal)	343	409	379
Protein (g)	41	54	50
Total lipid/fat (g)	9	11	10
Carbohydrate, by difference (g)	23	33	28
Fiber, total dietary (g)	14	22	17



#### Almond Flour (per 100g)

	MINIMUM	MAXIMUM	AVERAGE
Energy (kcal)	571	633	602
Protein (g)	20	28	23
Total lipid/fat (g)	36	54	49
Carbohydrate, by difference (g)	18	36	23
Fiber, total dietary (g)	7	11	9

### On-Pack Claims and Certifications to Consider

*\*\*Manufacturers should confirm eligibility with suppliers and review all claims with legal and regulatory counsel.*



- Gluten-free, dairy-free
- Vegan/Plant-Based
- Clean Label
- Keto-friendly
- Paleo/Whole 30
- USDA Organic
- Non-GMO Project Verified
- Kosher Certified
- Fair Trade Certified
- Peanut-Free
- Bee-Friendly Certified
- Halal Certified.

<sup>1</sup> Data accessed via USDA Food Data Central. November 2024. Minimum, maximum and average of supplier/brand provided nutrient data.

Please note that almond protein powder and almond flour nutrition facts will vary per supplier. We recommend reviewing your ingredient suppliers' specifications to ensure you select the right almond flour that meets your product development needs.

## Innovation Opportunities



### BAKERY

Muffins, cookies, and high-protein breads.



### BEVERAGES

Smoothies, shakes, and plant-based milks.



### PASTA

High-protein, low-carb formulations.



### SNACKS

Crackers, chips, and extruded products.



### BATTERS & COATINGS

Gluten-free and protein-rich options.



### SPORTS NUTRITION

Protein bars, powders, and meal replacements.

## Formulation Tips & Tricks

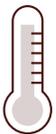


Use almond protein powder as a partial replacement for conventional flour or other protein powders. It integrates smoothly into dry blends and contributes to structure, nutrition, and mouthfeel. Pair with other plant proteins (pea, rice) for a complete amino acid profile.



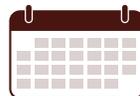
"Almond protein powder is a clean, concentrated and versatile ingredient. It's a powerhouse for formulators looking to increase protein content while maintaining flavor and texture." – **Rachel Zemser**, Food Scientist & Culinologist, A La Carte Connections

## Shelf Life and Storage



### Storage Recommendations:

- Store almond protein powder in a cool, dry place in airtight packaging and out of direct sunlight.



### Shelf Life:

- Almond protein powder typically has a longer shelf life than conventional almond flour due to its reduced oil content. Some suppliers report almond protein powder can last up to 24 months under optimal conditions.

## Functional and Sensory Properties

- **Protein Boost:** Elevates protein content in finished goods, ideal for plant-based, high-protein or sports nutrition applications.
- **Water Binding:** Enhances moisture retention in baked goods and snacks.
- **Emulsification:** Supports stable textures in batters and beverages.
- **Fine, Dry Texture:** Offers excellent dispersibility and smooth mouthfeel. Adds body and structure without heaviness.
- **Neutral Taste Profile:** Compared to other plant-based protein powders it offers a mild, neutral flavor that integrates well into formulations without overpowering other ingredients.

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For more information about almond protein powder, contact us:



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