Technical Takeaways:

ALMOND FLOUR



Almond flour is a versatile ingredient that's used in gluten-free and low-carb snacks and provides more protein, healthy fats and dietary fiber compared to traditional wheat flour. With almonds being the #1 nut in the bakery category globally, 1 utilizing a versatile ingredient like almond flour makes cooking and baking innovative, easy, healthy, and delicious.

Find Your Fit: Almond Flour Types

- Blanched or Natural? Natural almond flours leave the almond skin on before grinding.
 Blanched almond flours remove almonds' outer skins. Generally, leaving the skins on
 results in a light brown and rustic color, a larger grain size, a coarser texture and a
 slightly more bitter taste. Removing the almond skins gives the flour an ivory, finer or
 powdery texture, and neutral taste.
- Almond Flour: Finer consistency with a smaller grain size. Most often available blanched.
- Almond Meal: Coarser consistency and larger grain size. Most often available natural.
- Almond Protein Powder/Defatted Almond Flour: Very finely ground almond flour, with a percentage of the oil pressed out. Lower in calories and fat compared to regular almond flours. This form has an extra-fine texture and clean taste—so no need for flavor or texture masking.



For more information on almond forms, please review our most recent technical toolkit.



Innovation Opportunities

Technical Properties: Coating, Breading, Moisture barrier/Absorbent layer, Binders, Thickening Agent, Batters, Gluten-Free Base

| Food Category | Sample Ideas |
|----------------------------|--|
| Snack Mixes | Baked or puffed inclusions |
| Bakery | Crackers, cakes, pastries, crusts Baking mixes |
| Confectionery | Baked or puffed inclusions and toppings Dairy-free chocolate blends |
| Sauces and Dips | Thickening agent or base |
| Desserts and Ice Cream | Inclusions and toppings |
| Alternative Meat | Plant-based blends |
| Ready Meals + Frozen Foods | Coating for fried and baked foods Dough (pasta, pizza) |

On-Pack Claims and Certifications to Consider**

- Gluten-free
- Dairy-free
- Vegan/Plant-based
- Clean Label

- Keto
- Paleo and Whole30 Approved
- USDA Organic

- Fair Trade Certified
- Non-GMO Project Verified
- Kosher Certified
- Halal Certified

- Peanut-Free
- Bee-Friendly Certified

^{**}Manufacturers should confirm eligibility with suppliers and review all claims with legal and regulatory counsel.



Supplier/Brand Nutrient Averages² for Almond Flour Types

| | 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 | |

| Almond Meal (per 100g) | | | | |
|---------------------------------|---------|---------|---------|--|
| | MINIMUM | MAXIMUM | AVERAGE | |
| Energy (kcal) | 545 | 643 | 600 | |
| Protein (g) | 21 | 23 | 22 | |
| Total lipid/fat (g) | 45 | 54 | 51 | |
| Carbohydrate, by difference (g) | 18 | 27 | 21 | |
| Fiber, total dietary (g) | 11 | 14 | 12 | |

| | Almond Protein Powder/Defatted Almond Flour (per 100g) | | | |
|-----------------------------|--|---------|---------|---------|
| ALMOND PROTEIN POWDER | | MINIMUM | MAXIMUM | AVERAGE |
| | Energy (kcal) | 343 | 409 | 379 |
| | Protein (g) | 41 | 54 | 50 |
| | Total lipid/fat (g) | 9 | 11 | 10 |
| Was and | Carbohydrate, by difference (g) | 23 | 33 | 28 |
| And the second | Fiber, total dietary (g) | 14 | 22 | 17 |

^{*}Please note that 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.

Substitution Tips & Tricks

Substituting traditional flour for almond flour cannot always be done cup to cup, depending on the recipe.

Use a Binder for Texture and Structure:

In batters and doughs with almond flour, consider incorporating egg whites, flaxseed meal, xanthan gum, agar or other binding agents in lieu of gluten.

Moisture Retention:

Almond flour generally holds and absorbs moisture well due to its fiber. It also contains oil by nature, which can add richness. Cook times may need to be increased because of the extra moisture.

Other Considerations:

Since almond flour has a higher fat content than traditional flour, fats and oils may be reduced by ~25% when baking with almond flour. Sugar may also be reduced by ~25% since almonds have a naturally sweet flavor.

For more information about almond flours, please contact the Almond Board of California:



foodprofessionals@almondboard.com



Almonds.com



Find a Supplier



² Data accessed via USDA Food Data Central. November 2024. Minimum, maximum and average of supplier/brand provided nutrient data.