



Lupin Flour Use in Aged Care



Malnutrition impacts up to 50% of residents living in Aged Care Facilities across Australia.

This can lead to:

- Increased risk of falls,
- Pressure injuries,
- Hospital admission,
- Poor quality of life
- Increased healthcare costs

One way to manage malnutrition is to increase the calorie and protein content of food. This is called food fortification.

One way to fortify food is by using lupin flour in bakery products, and thickening food as it is a **better source of protein, fibre and vitamins and minerals** when compared to wheat flour.



Lupin flour

- High in protein.
- High in soluble fibre.
- Has a complete amino acid profile.
- Grown sustainably in Australia.
- Lowers blood pressure
- Good for gut health.



How much protein?



Protein per 100g



**Chicken
Breast**

31g



**Steamed
Fish**

25g



**Beef
Steak**

21g



**Wheat
Flour**

11g



**Chickpea
Flour**

22g



**Lupin
Flour**

41 grams
of protein per 100g



How much Fibre?



Fibre per 100g



Oats

10g



Barley

17g



Kidney Beans

8g



Lupin Flour

29 grams
of fibre per 100g

Lupin is high in soluble fibre which helps to control blood sugar levels, decreases risk of heart disease and decreases cholesterol levels.



Lupin is also high in anti-oxidants, and contains a variety of minerals like iron, magnesium and Potassium



Where to utilise lupin flour

Lupin has a light nutty taste with a texture similar to whole wheat flour and is a great substitute for baking as it has a unique taste and texture.



Lupin flour can be used in favourite bakery cakes and biscuit recipes. Simply substitute anywhere from 25% - 100% wheat flour for lupin flour.



Utilising Lupin as a thickener in soups is a great way to boost nutritional content.



It can be used to thicken casseroles when mixed with water and adding during cooking.



Lupin flour works particularly well in recipes containing high fats.



Great way to add more protein and fibre to those on modified diets.





Lupin Cooking Tips & Tricks for Aged Care

While lupin is easy to incorporate at a low percentage, a higher percentage can have an effect on the flavour and texture.



If you are finding the lupin flavour too strong, incorporate other seasonings such as:

- Spices such as cinnamon, nutmeg, allspice or ginger.
- Fruity flavours such as lemon/orange zest, brandy, vanilla, coconut, berries, apple, banana, cherries, apricots or peaches.
- finely blitzed nuts like hazelnut, walnuts, almond or macadamia.
- Deeper flavours like caramel, treacle or coffee.
- Works very well with chocolate.



Combining several flavours can often better utilise the lupin flavour, where it might not work front and centre.

Make sure to ice cakes where appropriate:

- Chocolate ganache
- Orange/lemon icing
- Buttercream
- Chantilly cream
- Cream cheese icing



Lupin is naturally gluten free, so when combined with other gluten free flours it is easy to provide a gluten free option.





Tools to help make baking easier.

If your kitchen isn't setup for regular baking, it can make incorporating lupin more difficult.

- ✓ 10 - 15kg scales so that you are able to place your mixing bowl on the scales.

- ✓ An extra large sieve that can hold a sufficient volume of ingredients.



- ✓ Extra gastronorm baking trays, bowls and spatulas as there is nothing worse than running out mid-way through a bake!

- ✓ Several small/large cranked spatula for icing cakes.

- ✓ Bowl scrapers, a collection of piping nozzles and large piping bags.



- ✓ Small clear swirl bowls or decorative bowls for presenting pureed meals.



Tools to utilise

Lupin has a neutral nutty taste with a texture similar to wheat flour and is a great substitute for baking as it is airy, fluffy and less dense.



Lupin flour can be used in favourite bakery cakes and biscuit recipes. Simply substitute 50% wheat flour for lupin flour.



It is a great thickener for soups when used in a roux.



It can be used to thicken casseroles when mixed with water and adding during cooking.



Add small increments of extra milk to the batter when baking to achieve the desired texture.



Lupin flour is a plain flour and will require baking powder and bi-carb soda. Note: adding too much bi-carb soda will give a bitter or metallic taste.



Lupin flour works well in recipes containing dairy. The use of butter provides a better consistency, flavour and increases calories.



Do not add lupin to pre-mix cake mixes.