



**Gluten-Free Pita Bread
Formulated with Whole Yellow
Pea Flour**

Yellow Pea Flour in Gluten-Free Pita Bread

Many gluten-free bakery formulations utilize flours and starches that contain little to no nutritional value. Yellow pea flour contains dietary fibre, protein, vitamins and minerals. Incorporating yellow pea flour into gluten-free pita bread formulations creates the opportunity to provide nutritional benefits to consumers. Understanding how yellow pea flour can change product formulations and processing requirements is necessary for successfully incorporating yellow pea flour as a gluten-free ingredient.

Pita Bread Formulation and Lab Scale Processing

Gluten-free pita bread was made using whole yellow pea flour according to the formulation listed in Table 1.

Dry ingredients were mixed using a paddle attachment on a Hobart stand mixer on the lowest speed for 30 seconds. Wet ingredients were added and mixed on speed 1. After mixing, the bowl was scraped and then mixed for 1 minute on speed 2. The dough was placed in a stainless steel bowl, covered and allowed to rest for 1 hour and 30 minutes at room temperature. After resting the dough was rolled out and cut into discs with a diameter of 16.5-18 cm. Pitas were baked in a Pavallier tunnel oven set to 500°C for 45 seconds. The pitas were allowed to cool for 20 minutes before being packaged.

Table 1. Formulation for Gluten-Free Yellow Pea Flour Pita Bread

Ingredient	Quantity (g)
Yellow pea flour	79.2
Tapioca starch	70.4
Brown rice flour	30.8
White rice flour	30.8
Sugar	5
Instant dry yeast	3.5
Xanthan gum	3.5
Table salt	3
Water	139
Olive oil	11.5

Stages of Pita Bread Baking



Dough enters tunnel oven



Dough begins to puff and cook



Cooked and puffed pita exits tunnel oven

Summary

Using yellow pea flour in gluten-free pita bread formulations can be done successfully although some processing adjustments may need to be made. Issues surrounding dough stickiness can be addressed by reducing mixing times and adjusting the amount of water used in the formulation. The addition of yellow pea flour in gluten-free product formulations is an excellent way to improve the nutritional profile of prepared gluten-free bakery products which are often low in nutrients such as protein, dietary fibre, vitamins and minerals.

Nutrition Facts for Gluten-Free Pita Bread Formulated with Yellow Pea Flour

Nutrition Facts Valeur nutritive	
Serving Size (36 g) / Portion (36 g)	
Servings Per Container Portions par contenant	
Amount Teneur	% Daily Value % valeur quotidienne
Calories / Calories 150	
Fat / Lipides 4.5g	7%
Saturated / saturés 0.3g + Trans / trans 0g	2%
Cholesterol / Cholestérol 0mg	
Sodium / Sodium 150mg	6%
Carbohydrate / Glucides 24g	8%
Fibre / Fibres 3g	12%
Sugars / Sucres 0g	
Protein / Protéines 3g	
Vitamin A / Vitamine A	0%
Vitamin C / Vitamine C	0%
Calcium / Calcium	2%
Iron / Fer	4%

CONTACT US

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