EUPPA
European Potato Processors' Association

Nutrition and Health Benefits of Processed Potato Products

Potatoes as a starchy staple

Raw potatoes are widely used strachy staples, with starch making up most of their carbohydrate content. They also contain fibre, potassium and varying amountsof vitamins. Their composition before cooking provides a starting point for understanding how preparation influences the nutritional profile of foods we eat.

The table below distinguishes the nutritional composition of a 100g of raw versus boiled potato[5].

Nutritional composition of potatoes

Raw and boiled potatoes per 100 g

Nutrient	Raw potato Flesh only	Boiled potatoes Peeled, unsalted
Energy	82 kcal	74 kcal
Carbohydrate	19.6 g	17.5 g
Protein	1.9 g	1.8 g
Fat	0.1 g	0.1 g
Dietary fibre (AOAC)	2.0 g	1.6 g
Potassium	443 mg	365 mg
Vitamin C	14 mg	9 mg
Vitamin B6	0.14 mg	0.06 mg
Sodium	2 mg	1 mg

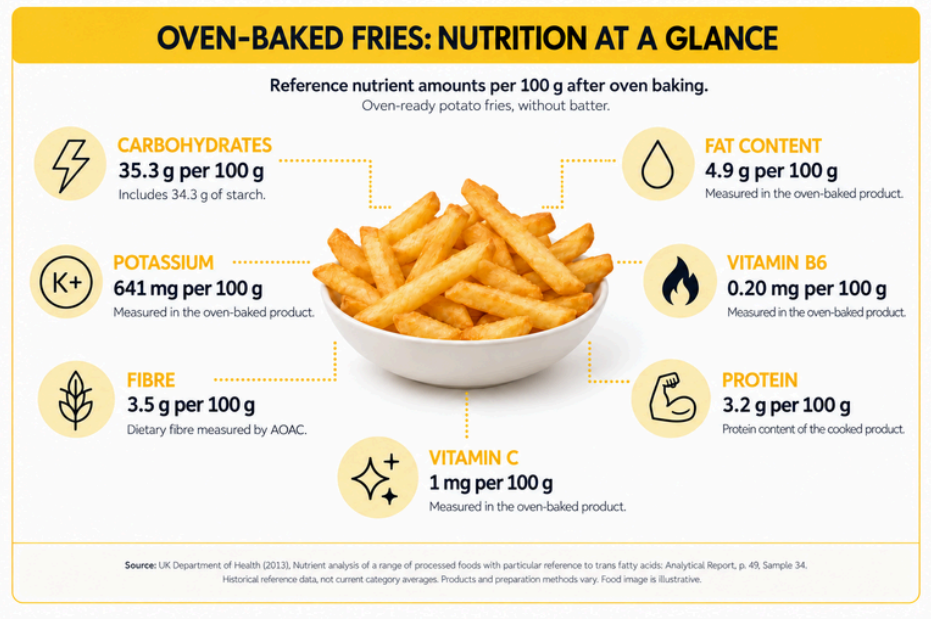
Source: McCance and Widdowson's Composition of Foods Integrated Dataset (CoFID), 2021, food codes 13-489 and 13-490.
Values are database averages per 100 g of edible food. Differences reflect preparation and water content; they are not direct measures of nutrient retention.

Processed potato products and their nutritional composition

Many processed potato formats continue to provide key potato nutrients, although levels vary depending on the product format, formulation and preparation method[6]. As a result processed potato products can contribute meaninfully to nutrient intake when consumed as part of balanced meals.

Processed potato products are starchy foods that can form part of the carbohydrate component of balanced meals. The category includes different formats, such as fries, wedges and mashed potato products, with nutritional profiles influenced by ingredients, formulation and final preparation.

Many processed potato products contain potassium and fibre, although amounts vary between products. Processing and cooking can also affect micronutrient levels, particularly heat-sensitive vitamin C[6]. Nutritional information should therefore reflect the cooking method used, as boiling, baking and frying can result in different nutritional profiles.



Retention of micronutrients and fibre

Processed potato products retain several nutrients of public health importance, contributing to overall dietary adequacy. Potassium remains relatively stable through most processing methods. Raw potatoes are a source of potassium, which contributes to the maintainance of normal blood pressure and muscle function, as part of a healthy and balanced diet.

Evidence shows that potatoes contribute meaningfully to fibre and micronutrient intake in population diets[2]. Vitamin B6, which supports normal energy metabolism, is also well retained in many formats, while vitamin C content may vary depending on cooking and processing conditions but still contributes to overall intake.
Importantly, population-based analyses show that individuals who consume potatoes have higher overall nutrient intake and better nutrient adequacy compared to non-consumers[3].

> **Processing does not remove nutritional value—many key nutrients remain present in commonly consumed formats**

AT A GLANCE
PROCESSED POTATO PRODUCTS

	Retain key nutrients including potassium , Vitamin B6 and fibre (see above graphics)
	Contribute to satiety and meal satisfaction
	Benefit from ongoing reformulation and innovation
	Vary in nutritional profile depending on preparation and portion size
	Fit within balanced diets when considered in overall dietary context

Reformulation and portion control in practice

The processed potato sector has advanced in product composition to align with public health priorities, featuring:

- Reduced salt content
- Enhanced fat quality with unsaturated oils
- Lower saturated fat where applicable
- Innovations for oven-baking and air-frying

Additionally, portion-controlled formats aid in balanced consumption and energy management, showcasing the impact of both product composition and consumption patterns on dietary quality.

> **Small improvements in formulation and portioning can support meaningful changes in dietary balance.**

Understanding diversity and moving beyond misconceptions

Processed potato products are often generalised as nutritionally poor; however, this overlooks the diversity within the category.

- Nutritional profiles vary significantly by product type and formulation
- Preparation methods such as oven-baking or air-frying reduce added fat
- Health outcomes are influenced by overall dietary patterns, not individual foods in isolation

Scientific evidence reinforces that potatoes themselves are nutrient-rich, and that differences in health outcomes are largely explained by preparation methods and dietary context rather than the food category alone[5].
Processed potato products can contribute to nutrient intake and balanced diets when consumed in appropriate portions and prepared using suitable cooking methods.

> **The nutritional value of processed potato products is shaped by formulation, preparation, and portion size—not by the category alone[7].**

References

1. Drewnowski, A. (2013) 'New metrics of affordable nutrition: which vegetables provide most nutrients for least cost?', Journal of the Academy of Nutrition and Dietetics, 113(9), pp. 1182–1187.
2. Camire, M.E., Kubow, S. and Donnelly, D.J. (2009) 'Potatoes and human health', Critical Reviews in Food Science and Nutrition, 49(10), pp. 823–840.
3. Agarwal, S. and Fulgoni, V.L. (2021) 'Intake of potatoes is associated with higher diet quality, and improved nutrient intake and adequacy among US adolescents', Nutrients, 13(8), p. 2614.
4. Holt, S.H.A., Brand Miller, J.C., Petocz, P. and Farmakalidis, E. (1995) 'A satiety index of common foods', European Journal of Clinical Nutrition, 49(9), pp. 675–690.
5. Public Health England (2021). McCance and Widdowson's Composition of Foods Integrated Dataset. Food codes 13-489, 13-491 and 13-487. https://www.gov.uk/government/publications/composition-of-foods-integrated-dataset-cofid
6. Decker EA and Ferruzzi MG (2013). Innovations in food chemistry and processing to enhance the nutrient profile of the white potato in all forms. Advances in Nutrition, 4(3), 345S–350S. https://doi.org/10.3945/an.112.003574
7. Scientific Advisory Committee on Nutrition (SACN). SACN statement on processed foods and health. Office for Health Improvement and Disparities; 2023. Published 11 July 2023.