

## Potato Processing and its Nutritional Value

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### INTRODUCTION

Potato is known as king of vegetables. It ranks 4<sup>th</sup> position in the world after wheat, rice and maize as non cereal food crop. Potato is perhaps the foremost popular food item within the Indian diet and India is one among the most important producers of potato. Potato is consumed in many ways like vegetables, potato wafers/chips, powder, finger chips etc. By this article I am going to explain about the different type of processed food items prepared after value addition in potato and what are the nutritional value present in potato or why we should include potato in our daily diet.

#### **Botanical Description-**

Kingdom: Plantae

Order: Solanales

Family: Solanaceae

Genus: Solanum

Species: *S. tuberosum*

Binomial name: *Solanum tuberosum*

#### **Processing of potato-**

It is likely that less than 50 % of potatoes grown worldwide are consumed fresh. The rest are processed into a variety of foodstuff as products including French fries, dehydrated potato flakes, food ingredients, animal feed, potato starch etc. Here we will see different processed products of potato.

**Potato Flakes-** Prepared by drying of potato slurry used for stuffing purpose.

**Potato Flour-** It is used as a thickener - flavouring agent which imparts a distinctive pleasing flavor. It is used in combination of cereal and pulses for product like biscuit, cake, bread etc.

**Potato starch-** To extract the starch, the potatoes are crushed and therefore the starch grains are released from the destroyed cell. The starch is then washed out and dried to powder it has a high swelling capacity.

**Canned Potatoes-** These are simply small baby potatoes dug from the sector and peeled before canned.

**Nutritional facts-**

Cooked potato with skin are a good source of many vitamins and minerals such as potassium and vitamin C. potato are primarily composed of carbohydrate and contain moderate amount of protein and fiber but almost no fat.

**Carbohydrate-** Potatoes are mainly composed of carbohydrate, primarily in the form of starch. The carbohydrate content ranges from 66-90% of dry weight. Simple sugar- like sucrose, glucose and fructose also are present in bit.

**Fiber-** Level of fiber is highest in the skin which makes up 1-2% of the potato. Potato fiber such as pectin, cellulose and hemicelluloses are mainly insoluble.

**Protein-** Potatoes are low in protein starting from 1-1.5% when fresh and 8-9% by dry weight. The small protein in potato is called Potanin, which may cause allergic reactions in some people.

**Vitamins and minerals-** Potatoes are good source of several vitamins and minerals, particularly K and vitamin C. while folate concentrated in the peel, folate is mostly found in potato with colored flesh.

**Plant compounds-** Potato are rich in bioactive plant compound, which are mostly concentrated in the skin. Varieties with purple or red skin and flesh contain the highest amount of polyphenols, a type of antioxidant.

**Catechin-** it is highest in purple potato.

**Lutein-** found in potato with yellow flesh. It is a caretenoid antioxidant that may boost eye health.

**Glycoalkaloid-** A toxic phytonutrient produced by potato as a natural defense against insect and other threats.

**Health benefits of Raw Potato**

1. It reduces inflammation.
2. Support heart health
3. Promotes digestion
4. Relieves Premenstrual symptoms
5. Good for skin
6. Regulates blood pressure
7. Helps in maintaining healthy bones
8. Improves brain health
9. Calm your nerves

**CONCLUSIONS**

From above we conclude that potato is a staple food that contributes to the energy and nutritional need of more than billion peoples worldwide. Potato cultivation and its harvest activities constitute an important source of employment and income in rural areas. The processed food stuffs prepared from potato plays a unique role in food processing industries. So, Cultivation of potato is very much advantageous to the farmer both economically as well as from the health prospective and hence we should encourage the farmers for potato cultivation.

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