

# Introduction to Microwave Puffed Pigskin

Microwave puffed pigskin is a specially treated pigskin product that is puffed by microwave heating technology. Here are some introductions about microwave puffed pigskin:

Production process: The production process of microwave puffed pigskin involves steps such as cooking, melting and puffing the pigskin. The pigskin is first scraped and cleaned, then pre-treated including soaking and hair removal, and then the pigskin is divided into small pieces and microwaved to make it expand.



Features: Microwave puffed pork skin has a light, crispy taste, bulging appearance and golden color. It can be used as a stand-alone snack, or as a food additive, added to other dishes to enhance taste and texture.

Nutritional value: Microwave puffed pork skin is rich in collagen, which is an important ingredient for maintaining skin health. It is also rich in protein, fat and minerals, which can provide certain nutrients for the body.



**Advantages of microwave puffing**

Rapid processing	Microwave puffing technology can complete the heating and puffing process in a short time, which is faster than traditional methods and saves time and labor costs.
Uniform heating	Microwave puffing uses microwave energy to heat food materials in a short time, which can evenly heat the entire sample and avoid local overheating or uneven heating.
Preserve nutrients	The heating speed of microwave puffing is fast, which can minimize the exposure time of ingredients at high temperature, so as to maximize the retention of nutrients and flavors in ingredients.
Further development of food materials	Microwave puffing can change the apparent structure of food materials to form a unique taste and eating characteristics, further expanding the use and application fields of food materials.
Energy saving	Compared with traditional cooking methods, microwave puffing technology can complete the heating process in a shorter time, so it can save a lot of energy.

To sum up, microwave puffing technology has the advantages of fast processing, uniform heating, nutrition retention, food development and energy saving, which makes it have a broad application prospect in the field of food processing.



## How microwaves work

Microwaves are electromagnetic waves with wavelengths

typically between 1 mm and 1 meter and frequencies between 300 MHz and 300 GHz. Microwave ovens and other microwave appliances use the properties of microwaves to heat and cook food.

At the heart of a microwave oven is a device called a "magnetron." Here's how a microwave oven works:

Microwave generation	Inside a microwave is a device called a "magnetron," which houses an electron gun that produces a beam of high-speed electrons. After these electrons are accelerated, they hit the opposite "anode", generating a beam of electromagnetic waves, which is the microwave we want to use.
Microwave propagation	The generated microwaves travel along a special waveguide and pass through a device called a "standing waveguide". In the standing waveguide, the microwaves will reflect and interfere with each other, forming a stable standing wave pattern that radiates the microwaves into the microwave oven.
Interaction with food	When microwaves are fired into food, it interacts with water molecules in the food. Microwaves cause water molecules to vibrate, which in turn generates heat. This vibration and the heat generated is gradually transferred to other parts of the food, achieving overall heating.
Heating process	The heating process of microwave ovens is carried out by frequent reflection and absorption of microwaves. Microwaves can heat food quickly and evenly in a short time, maintaining the moisture and flavor of food.

