The Value of Onion and Its Processing Products



Chien, also known as onion, onion, onion, etc., belongs to the Liliaceae onion is a biennial herbal plant, with fat fleshy bulbs as products. Onion is widely planted in China, mainly from Xinjiang, Gansu, Shandong and other places. With the rapid development of onion market, the planting area is still expanding. Onion has become one of the main vegetables in China, and the output of onion ranks first in the world. In this paper, the nutritional value, medicinal value and product development of onion were summarized, and its development prospects were forecasted.

Microwave drying machinery and equipment

Dried onion slices

The dehydrated onion slices were prepared by using onion as raw material in the <u>dehydrated onion machine</u>. When the onion slices were dried at 60 C for about 7 hours and the moisture content was controlled below 5%, the dehydrated onion slices with better quality could be obtained.

Production technology of dehydrated onion slices: onion - peeling and cleaning - water shaking - drying - moisture content determination - Packaging - finished products.

The value of onion

Nutritional value of onion

Onion is rich in nutritional value and contains more protein, sugar, vitamins, phosphorus, iron, sulfur and other minerals. According to the analysis, about 88g of water, 1-1.8g of protein and 0.3-1 of fat are found in every 100g fresh onion.

0.5g, carbohydrate 5-8g, crude fiber 0.5g, heat 130kJ, calcium 12mg, phosphorus 46mg, iron 0.6mg, vitamin C14mg, nicotinic acid 0.5mg, riboflavin 0.05mg, thiamine 0.08mg, carotene 0.2mg, cinnamic acid, sinapic acid, caffeic acid, citrate, polysaccharide and a variety of amino acids are also volatilized. The oil is rich in allicin, mercaptan, trisulfide, etc. The flower bud, pollen and anther all contain carotene.

The tear-inducing component of onion is cyclic alliin. The S-propyl-L-semidirty acid thiohydride contained in onion is the precursor of cyclic alliin. Cyclic alliin can be synthesized under alkaline conditions. Onions contain a spicy substance called allicin, which promotes appetite and appetite. Onion taste sweet and mild, warm sex, so it also has the function of liver and intestine moistening.

2. Medical value of onion

Prevention of cancer

Onion's anti-cancer effect comes from its rich selenium and quercetin.

Selenium has strong antioxidant activity. It can inhibit the division and growth of cancer cells and reduce the toxicity of carcinogens by stimulating human immune response. The anti-cancer effect of quercetin is achieved by inhibiting the activity of carcinogenic cells and preventing the growth of cancer cells. In addition, the flavonoids in onions also have antioxidant effects and play an indispensable role in anti-cancer.

Maintaining cardiovascular health

Prostaglandin A is a peculiar substance of onion in vegetables at present. It is a strong vasodilator, which can relax blood vessels, reduce blood viscosity, increase blood flow of coronary artery, and can resist the pressor effect of catecholamine in vivo, so as to reduce and prevent thrombosis and stabilize blood pressure. Onion contains onion and flavonoids can also play a better role in anti-thrombosis and reducing blood lipids.

Stimulate appetite and help digestion

Studies have shown that onions can be an appetizer. This is mainly due to allicin in onions, which has a strong fragrance. It is this odor that stimulates gastric secretion, helps digestion and promotes appetite. Therefore, onions can be used to treat gastric insufficiency, dyspepsia, atrophic gastritis and other diseases.

Other medicinal value

Onion contains a substance called flavuric acid, which can stimulate the synthesis and release of insulin and play a role in the treatment of diabetes. Onions are almost fat-free, so you can lose weight by eating more onions. Allicin in onion is a plant bactericide, which has strong bactericidal ability and can prevent colds. In addition, the antioxidant activity of flavonoids in onion can resist free radicals, so that onion also has anti-aging, longevity effect.