

# Characteristics of corn germ oil

Corn germ oil is also called corn oil and corn oil. It is an oil extracted from corn germ. In general, the fat content of corn embryo is between 17% and 45%, accounting for more than 80% of the total fat content of corn. Generally speaking, 700,000 corn germ can extract a bottle of 5L corn germ oil, which can be called "golden liquid".

The advantages of [microwave drying machinery](#) and equipment in corn germ oil refining process are:

1. The impurity content after refining must be less than 0.2%.
2. Recycling system saves energy and money.
3. low fuel consumption

The characteristics of [corn germ oil processing technology](#) are as follows:

1. Continuous alkali refining reduces the contact time of oil and alkali, reduces the saponification of oil, reduces the cost of refining, and improves the refining effect.
- 2, decolorization decolorization by mixing cooking technology, improving the efficiency of decolorization and saving the consumption of clay. The operation is simple and the negative pressure state avoids the direct contact between the oxygen in the air and the hot oil, thus guaranteeing the quality of the oil, avoiding the increase of the acid value and reducing the peroxide value.
3. deodorization adopts new continuous deodorizing equipment, which is suitable for deodorizing and

deacidification of high acid value oil. The actual production process has proved that its obvious advantages are strong deacidification effect, good thermal decolorization effect, high refining efficiency, good oil.

This process has multiple heat exchangers, which make full use of the thermal energy system to effectively reduce the steam loss.



Corn germ oil is a kind of healthy edible oil with rich nutrition. Its color is golden, transparent, fragrant and unsaturated fatty acid content is as high as 80%-85%. Mainly oleic acid and linoleic acid, of which linoleic acid content of 56%, linoleic acid is a component of human cells, human body can not synthesize the essential

fatty acids, in addition to linoleic acid, corn oil vitamin E, vitamin A, phytosterols, lecithin, coenzyme, etc.

Other functional nutrients are also relatively high, and are praised as "liquid gold" by western countries.

The fatty acids of corn oil are arranged regularly in triglycerides, and the structure is relatively stable. Under the condition of light, the chlorophyll fertilizers in the general oil can accelerate the oxidation of oil. The chlorophyll fertilizers in corn oil are free and the vitamin E content is high and stable. Even if the corn oil is fried for a long time, the structure is relatively stable. The shelf life of oil is long.

Based on the structural and physicochemical characteristics of corn oil, corn oil has good nutritional value and stability. It is one of 16 edible oils approved by FAO and WHO for food safety.

Corn oil is easy to be absorbed by the human body, and the absorption rate is as high as 97%. It is an ideal edible oil and health care oil. Long-term consumption of corn oil has a positive effect on the prevention and treatment of elderly diseases, coronary heart disease, diabetes, hypertension, hyperlipidemia and other patients. Therefore, corn germ oil has been widely used in food, medical and other industries.

(1) In food: because of the light yellow and transparent color of corn oil, fragrant smell, low ignition point, and unsaturated fatty acids, vitamin E content are very high, so its natural antioxidant and thermal stability is very good, with a long shelf life, especially suitable for fast cooking and frying food, corn oil is used. The fried food is golden in color and crisp in taste. The cooked dishes have all kinds of colors and fragrances, which can

keep the nutritional value of the original dishes. Corn can also make adult creams, shortening, mayonnaise and so on.

(2) Maize germ oil is easy to be absorbed by human body and enjoys the reputation of "health care oil" in the international market. It has become an indispensable common edible oil in the daily life of residents in developed countries in Europe and America.

(3) Medical aspects: because corn germ contains a large number of linoleic acid, vitamin E, phytosterol and lecithin. Linoleic acid has a good dissolution effect on the accumulation of cholesterol in human blood. Linoleic acid can combine with the cholesterol in human serum, effectively prevent the absorption and synthesis of cholesterol, so that cholesterol does not deposit in the arterial wall. Effective prevention of atherosclerosis. Phytosterols, also known as sterols, are the main constituents of non saponified substances in corn oil. Corn oil contains 441mg/100g sterol (higher than 436mg/100g soybean oil and 496mg/100g sunflower seed oil).

4. Sterol is the main raw material of steroid drugs, which can effectively prevent and treat coronary heart disease, reduce blood lipids, and clear the serum cholesterol. Corn oil is also rich in vitamin E, has a good antioxidant effect, can effectively eliminate free radicals in the body, soften blood vessels, improve blood circulation, improve the body's resistance. Therefore, corn oil is conducive to the prevention and mitigation of arteriosclerosis, coronary heart disease, hypertension and so on, is the pharmaceutical industry to manufacture Maitong, Yishouning and other drugs raw materials.