

## peanut oil squeezed by the oil press has too much impurities

The main component of the peanut oil after pressing by the oil press is a mixture of triglyceride fatty acids (commonly known as neutral oil); it also contains non-glycerol substances, collectively referred to as impurities, which can be roughly classified into four according to the dispersion state of impurities in the oil. Big class.

1. Suspended impurities: including sediment, billet, powder and other solid impurities. The presence of these impurities is beneficial to microbial activity, making the oil highly susceptible to hydrolysis and rancidity, but not edible;
- 2, peptized impurities: including phospholipids, proteins, sugars, etc., the most important of which are phospholipids. The presence of these impurities not only makes the oil hydrolyzed rancid, the appearance is turbid, and it produces a lot of foam and produces a black precipitate during cooking; It seriously affects the color and flavor of the fried and fried foods, and also loses the nutritional value of the oil itself, and also has certain toxicity;
- 3, oil-soluble impurities: including free fatty acids, pigments, hydrocarbon waxes, aldehydes, ketones, etc., as well as trace metals and organic phosphorus, mercury, polycyclic aromatic hydrocarbons, aflatoxin and so on due to environmental pollution. The presence of these impurities is very harmful to the human body, and some impurities are also carcinogenic to the human body.
4. Moisture: The moisture content in the hair oil is high, and the presence of water is easy to cause the oil to hydrolyze and deteriorate.

Due to the presence of certain mildew oils, the moldy toxins in the machine oil can be greatly exceeded. For example, peanut oil is highly susceptible to aflatoxin contamination, and its aflatoxin is sometimes as high as 1000-10000 ug/kg.

Aflatoxin is a highly toxic substance with higher toxicity than potassium cyanide. It is the strongest chemical carcinogen found at present. The carcinogenicity is 900 times that of cream yellow, which is 75 times greater than that of dimethyl nitrite. Aflatoxin can accumulate in adipose tissue to a very high level and exhibits strong toxicity. Aflatoxin can inhibit the coupling of respiration and oxidative phosphorylation, and has a toxic effect on mitochondrial cells, which is a common cause of common aflatoxin poisoning and biochemical damage. When poultry consumes aflatoxin-contaminated feed, its hydroxylated metabolites may appear in its edible parts and in milk, with acute, subacute or chronic toxicity.

After human consumption of food contaminated with aflatoxin, the incidence of liver cancer is increased, and many aflatoxins can synergize with hepatitis B virus to induce liver cancer. Aflatoxin is heat-resistant and is not easily destroyed at normal cooking temperatures. Cracking

occurs above 280 degrees Celsius. It has low solubility in water and is easily soluble in oils and some organic solvents. Under alkaline conditions, the lactone ring is destroyed to form a sodium salt and is soluble in water, but under acidic conditions, a reverse reaction occurs to restore its toxicity. Aflatoxin can be adsorbed by saponin, activated clay, activated carbon, etc., and is degraded by ultraviolet light of a certain wavelength. It can also be destroyed in high temperature treatment such as deodorization. Therefore, the oil can be removed by refining. In China, the content of aflatoxin in general edible oil is less than 10ug/kg, and that in peanut oil is less than 20ug/kg.

In summary, the peanut oil squeezed by the oil press has too much impurities, which affects the texture of the food. Therefore, it must be refined by the refiner to remove the impurities in the peanut oil, and the grease after the refiner treatment is transparent. Long-term placement without precipitation, no pot under the pot, no fumes, reaching the national edible oil standard.