

## Functional rice bran oil

Rice bran oil is a kind of edible oil with high nutritional value. The fatty acid composition of rice bran oil is reasonable, and the content of unsaturated fatty acid is about 80%, of which oleic acid accounts for 42% and linoleic acid accounts for 38%, which basically accords with the best ratio of oleic acid and linoleic acid recommended by WHO. Besides, rice bran oil also contains many active substances which are beneficial to human health, such as oryzanol, Vitamin E, sterol and so on.

The existing research results show that rice bran oil may have the function of regulating blood lipids because it contains the active components of [microwave heating machinery](#) and equipment. Therefore, rice bran oil, as a potential health nutrient oil for regulating blood lipid, has attracted more and more attention and become one of the most valuable functional oils.



[In rice bran oil mill](#), magnetic separation is needed to remove small iron, which is rich in oil, protein, cellulose, vitamins and nutrients needed by human body. Rice bran is regarded as a "natural nutrient source" abroad. The United Nations Industrial Development Organization calls rice bran and rice embryo an underutilized resource, which has very high value of health development. The annual output of rice in China is 190 million.

Around t, the annual rice bran yield is about 10 million T, and the market potential is huge. The extraction of rice bran oil can be made by pressing, supercritical extraction and extraction. The traditional crushing method has the advantages of good oil quality, light color and pure flavor, but the residual oil in the cake residue after crushing is high, the oil yield is relatively low, and the energy consumption is high. Although the crude oil leached by the extraction method contains more non-oily substances and has a deeper color, it can greatly improve the oil yield and easy to realize large-scale production. Supercritical extraction and enzymatic leaching can

completely solve solvent residues, but the operation technology is strict and the equipment is expensive. In view of the current situation of rice bran oil research in China and China's national conditions, the extraction and refining technology of rice bran oil was systematically studied by single factor test and orthogonal test in order to provide a basis for the production, development and utilization of rice bran oil.