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# Potential Uses of Rice Bran Oil for Overall Health

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Rice bran oil is the oil extracted from the hard outer brown layer of rice called bran. It is known for its high smoke point of 232 °C (450 °F) and mild flavour, making it suitable for high-temperature cooking methods such as stir frying and deep frying. Rice bran oil is a vegetable oil and a by-product of rice bran. It has been



gaining popularity as premium edible oil in Asian countries like India, China, Japan, Thailand and Taiwan. This wonder

**Structure of Rice** 

oil might become a boon for better cooking due to its unique properties like prolonged shelf life, high smoke (burning) point, less greasy and less oily, along with enhancing the flavour of food. In Japan, it is called 'Heart Oil' whereas, in western countries, it is a 'Functional Food' or 'Health Food'. It contains a heart-friendly phytochemicals, oryzanol, making it ideal cooking oil.



Rice Bran Oil

# **Properties of Rice Bran Oil**

Rice bran oil has gained a status as 'heart-healthy oil'. It has been categorised as healthy edible oil, possibly due to its following health-benefitting properties.<sup>2</sup>

- It may act as an antioxidant.
- It may reduce inflammation.
- It may lower blood glucose levels.
- It may boost immunity.
- It may lower bad cholesterol levels.
- It may be hypoallergenic (unlikely to cause allergic reactions).
- It may reduce blood pressure.

### **Uses of Rice Bran Oil for Overall Health**

1. Potential uses of rice bran oil for cholesterol: Rice bran oil may have cholesterol-lowering properties due to its unique components, such as  $\gamma$ -oryzanol, tocotrienols, and mono

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and poly-unsaturated fatty acids. These bioactive components may be responsible for reducing bad cholesterol levels by increasing bile excretion. Rice bran oil bioactive may also reduce fats and lipids and increase good cholesterol levels (high-density lipoproteins).

- **2. Potential uses of rice bran oil for diabetes :** Rice bran oil may have blood sugar-lowering properties. Rice bran oil, combined with sesame oil used as cooking oil, might reduce the preand post-meal plasma glucose levels in type 2 diabetic patients. These anti-diabetic properties of rice bran oil might be due to the high amount of  $\gamma$ -oryzanol. It might stimulate insulin production in the body and regulate blood glucose levels by activating liver enzymes, lowering blood glucose levels.
- **3. Potential uses of rice bran oil for skin:** The skin benefits of rice bran oil may be associated with squealing and tocotrienols. These antioxidants may be similar to the skin's natural oils, which may be easily absorbed into the skin, retaining its moisture. Rice bran oil may also have anti-inflammatory action, which might help skin repair against the harmful effects of UV rays. Hence, rice bran oil might be used in sunscreens, however, take medical consultations and do not self-medicate.
- **4. Potential use of rice bran oil as an antioxidant:** Rice bran oil may have antioxidant properties due to the phytochemicals  $\gamma$ -oryzanol. Antioxidants may help enhance body immunity and combat various diseases. These antioxidants may also fight cancer-causing free radicals in the body, thus, reducing cancer risk. Besides, rice bran oil may be effective for weight loss as it contains oleic acid and linolenic acid, which may help lose weight and manage obesity. In addition, vitamin E of rice bran oil may help enhance brain functioning and balance the endocrine hormones. However, further research is needed to study the antioxidant nature of rice bran oil.

## 5. Other potential uses of rice bran oil

- Rice bran oil may be used in sports supplements for muscle development and bodybuilding. However, take proper consultation from a nutritionist before using it. Do not self-medicate.
- The blend of sesame oil and rice bran oil might significantly reduce high blood pressure by lowering triglycerides, fats, lipids and bad cholesterol levels.

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