

# Anti-diabetic property of purple rice

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Purple rice is a colored variety of rice (*Oryza sativa* L.) that is cultivated widely in South-East Asia. It contains purple black pigments (anthocyanins) and is used as a food colorant in bread, ice cream and liquor. It is entirely non-allergenic and gluten free. Its purple colour is from antioxidant anthocyanins. Several health benefits are attributed to purple rice. Some of which are explained. The antioxidant activity in purple rice may also have anti-inflammatory and anti-carcinogenic properties. A powerful antioxidant, anthocyanins has been linked to reduce cases of diabetes, obesity, and heart disease. The present article will collect health benefit of purple rice, beneficial effect against diabetes mellitus, dietary anthocyanins and insulin sensitivity/resistance, antidiabetic activity. *In vivo* and *in vitro* and few clinical studies data to suggest that dietary anthocyanins could ameliorate insulin resistance and offer health benefits in diabetic conditions. One of the key features of their pharmacological effects appear to be linked to multiple mechanisms ranging from inhibiting carbohydrate digestion in the gut, pancreatic  $\beta$ -cell protection and insulin secretion to enhancing sensitivity in vital organ.

**Key Words :** Anti-diabetic, Anthocyanins, Insulin resistance/sensitivity

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