

NUTRITIONAL BENEFITS OF BLACK RICE

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Rice is a staple food in the Indian subcontinent. But there are also many healthier alternatives to the classic white rice — brown rice, red rice and certain ‘black rice’.

Black rice, also known as the ‘forbidden rice’, has its roots in ancient China, where, it is believed, a black variant of rice was consumed by the royalty and kept away from the general public. Every last grain was reserved for the elite class, given that it made their kidneys, stomach and liver function better. The rice earned itself a reputation, gradually, when the common folk were prohibited from even growing it. As of today, the black rice is no longer forbidden. It is packed with great health benefits, and is found in numerous cuisines all around the world. The rice has many nutrients; one-fourth of a cup provides protein, fats, carbohydrates, natural fiber, iron and calories.

Several varieties of black rice are available today. These include Indonesian black rice, Philippine *balatinaw rice* and Thai jasmine black rice. Black rice is also known as *chak-hao* in Manipur, where desserts made from black rice are served at major feasts. In Bangladesh it is known as *kalo dhaner chaal* (black paddy rice) and used to make polao or rice-based desserts. The bran hull (outermost layer) of black rice contains one of the highest levels of anthocyanins found in food. The grain has a similar amount of fiber to brown rice and like brown rice, has a mild, nutty taste. Black rice has a deep black color and usually turns deep purple when cooked. Its dark purple color is primarily due to its anthocyanin content, which is higher by weight than that of other colored grains. It is suitable for creating porridge, dessert, traditional Chinese black rice cake, bread, and noodles.

IS BLACK RICE GENETICALLY MODIFIED?

Researchers from two institutions in Japan collaborated to meticulously examine the genetic basis for the black color in rice grains. They discovered that the trait arose due to a rearrangement in a gene called *Kala4*, which activates the production of anthocyanins.

USDA Nutrition Value per 100 g		
Name	Amount	Unit
Energy	356	kcl
Protein	8.89	g
Total lipid (fat)	3.33	g
Cholesterol	0	mg
Carbohydrate, by difference	75.56	g
Fiber, total dietary	2.2	g
Sugars, total including NLEA	0	g
Calcium	0	mg
Iron, Fe	2.4	mg
Sodium, Na	0	mg
Vitamin C, total ascorbic acid,	0	mg
Vitamin A, IU	0	IU
Fatty acids, total saturated	0	g
Fatty acids, total trans	0	g

BENEFITS

Black Rice Gluten Free

Black rice ranks higher, health wise, than numerous other sources of fibre and protein owing to its gluten free properties. Gluten is a protein found in many types of foods such as wheat and rye. About 15 per cent of the world’s population is sensitive to gluten, but many don’t know they are.

While some people are simply sensitive to gluten, others may have a serious gluten allergy called Celiac disease.

Heals Inflammation

Black rice plays a pivotal role in reducing inflammation of the skin.

Rich in Antioxidants

Antioxidants protect our cells from free radicals and oxidative damage, which leads to signs of aging and disease. Black rice contains a high proportion of anthocyanins, which are vital antioxidants that improve the overall immunity of the body and fights various infections effectively. Also it contains the highest amounts of phenolics, flavonoids and anthocyanins when compared to other type of rice.

Keeps the Heart Healthy

Black rice regulates the level of cholesterol, especially “bad” LDL cholesterol, which in excess is the most prominent cause of cardiovascular problems. They also regulate total triglyceride levels to prevent atherosclerosis.

Atherosclerosis is a condition in which fatty deposits (atherosclerotic plaque) develop in the walls of



medium-sized and large arteries. This leads to reduced blood flow. It can cause serious complications like angina, myocardial infarction and sudden death. It can also lead to cerebrovascular diseases such as stroke, peripheral artery diseases and erectile dysfunction in men.

Anti-Cancer Properties

Black rice has the potential to not only prevent cancer but reduce the growth of existing cancer.

Detoxifies The Liver

The antioxidants found in black rice have delivered great results in reducing the risk of a fatty liver. It has high concentration of antioxidants. Black rice cleanses your liver and removes the build-up of harmful toxins.

In animals, the antioxidants levels in the blood, liver and arteries of rabbits increased when they were fed black rice regularly. The rabbits showed less free radical damage, cleaner blood and detoxified livers.

Optimizing the Functioning of the Brain

The anthocyanin content of black rice extract assisted in enhancing the brain's ability to grasp new information, learn and memorize.

Reduces the Risk of Diabetes

It helps in keeping the level of blood sugar normalized. Consuming whole grains is healthier than consuming refined carbohydrates, since whole grain decrease the risks of type 2 diabetes and obesity.

Prevents The Buildup of Arterial Plaque

Antioxidant contents of black rice can absorb cholesterol effectively, prevent the plaque layers from forming on the arterial walls and thus maintain optimal blood flow.

Improves Digestion

Black rice is rich in fibre, with 3 gms per half cup serving which translates into the regulation of metabolism and a clear digestive system. This helps in treating illnesses like hemorrhoids, duodenal ulcers, gastroesophageal reflux disorder and similar digestive problems.

CONCLUSION

Black rice is an excellent alternative to white and brown rice, due to its nutrient density, high fibre content and rich antioxidant content. Currently black rice is regarded as a nutraceutical and functional food because beyond supply of nutrients it involves in the prevention and control of diseases. Several researches suggested that black rice may have the capacity to reduce the likelihood of developing a number of diseases and illnesses, suggesting that black rice consumption may promote heart and liver health, weight loss, control on blood glucose level and lipid profile, prevention and control of inflammation and cancer.

