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Health Benefits of Black Wheat: A Review

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Abstract: ***Black wheat, instead of a whole grain, is a type of seed that is consumed as food. Their specialty is that they do not grow on grass like other cereals. These are included in the group of other common pseudocellular grains quinoa and amaranth. Even though people often do not like the color of chapati made from black wheat flour due to being dark brown in appearance, but it is much more nutritious than ordinary wheat and it is kept equal to the fruit called Blueberries. Black wheat is very beneficial for diabetes, blood pressure and heart patients. Compared to normal wheat, where it has more anti-glucose elements, due to which it is beneficial for sugar patients, while it also maintains normal blood circulation, which also keeps the heart healthy. Black wheat has a high amount of anthocyanin pigment, due to which it appears black. The amount of anthocyanin in white wheat is 5 to 15 ppm while in black wheat its amount is 40 to 140 ppm. Anthocyanin (a natural anti-oxidant and antibiotic) is found in abundance in black wheat, which proves to be very effective in diseases like heart attack, cancer, diabetes, mental stress, knee pain, anemia. Black wheat contains more antioxidants than regular wheat which keep up the immune system and is also effective in protecting eyes from vision loss and any damage due to free radicals.***
Keywords: Black wheat, Anthocyanin, Antioxidants

I. INTRODUCTION

Wheat plays a very important role in the human diet. It belongs to Gramineae (wild grass) family, native to parts of western Asia. The genus *Triticum* has fetched special interest among 600 genera of grasses. According to FAO (2019) the wheat production per year amounts to 765.7 million tons, which makes it the second most produced cereal globally (FAOSTAT). While in 2018/2019 season, the global consumption of this cereal was 734.72 million tons. Wheat supersedes rice or maize as source of protein in low and middle income countries while it is only 2nd to rice as a source of calories. Even though wheat grain has many botanical or taxonomical classification, plant breeders and cultivars classified wheat based on different intrinsic attributes such as (1) growing season (spring -and winter-wheat), (2) protein content (soft wheat and hard wheat with protein content 10% and 15% respectively), (3) gluten quality (strong elastic gluten and strong non-elastic gluten) and (4) grain color (red, yellow, white, blue, purple and black). Based on these attributes, it was found that soft wheat is suitable for making muffins, cakes, pastry, and piecrusts, while hard wheat is used for making bread. Durum wheat is an exception to protein content-based wheat and is used for making pasta (Beta et al., 2019). Plant breeders and cultivars classified wheat grain based on different intrinsic attributes such as (1) growing season (spring -and winter-wheat), (2) protein content (soft wheat and hard wheat with protein content 10% and 15% respectively), (3) gluten quality (strong elastic gluten and strong non-elastic gluten) and (4) grain color (red, yellow, white, blue, purple and black). On the basis of these attributes, it was found that soft wheat is suitable for making muffins, cakes, pastry, and piecrusts, and hard wheat is used for making bread. Durum wheat is an exception to protein content-based wheat and is used for making pasta (Beta et al., 2019).

A. Use

Black wheat is used in buckwheat tea or is used as flour and noodles. Whereas in many European and Asian countries used as rice as the main ingredient in traditional dishes.

B. Nutrients Found in Black Wheat

The nutritional value in whole grains is much higher than in many cooked grains. Nutrition facts in 3.5 ounces (100 grams) of raw cereals.
Calories: 343
Water: 10%
Protein: 13.3 grams
Carbs: 71.5 grams

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Sugar: 0 grams
Fiber: 10 grams
Fat: 3.4 grams

II. BENEFITS OF BLACK WHEAT

A. Helpful in Curing Heart Diseases

Consuming black wheat reduces the risk of heart diseases, because triglyceride elements are present in black wheat, besides magnesium present in black wheat is found in high amounts, which helps to maintain normal cholesterol levels in the body. helps in.

B. Aids in Constipation

Regular consumption of black wheat provides the right amount of fiber to the body, which provides benefits in stomach diseases especially constipation.

C. Helpful in Colon Cancer

The fiber present in black wheat strengthens the digestive system and prevents stomach cancer apart from digestive problems.

D. Helpful in Diabetes

Its regular consumption is most useful for people with diabetes because its consumption helps in reducing blood sugar i.e. blood sugar.

E. Aids in Healing Intestinal Infections

Consuming black wheat in different forms daily improves the level of fiber in the body and helps in curing intestinal infections.

F. Efficient in Making New Tissues

Phosphorus is also one of the essential nutrients present in black wheat, which plays an important role in building new tissues in the body as well as in their maintenance so that the body can function smoothly.

G. Helpful in Treating Anemia

Apart from protein, magnesium, iron is also found in abundance in black wheat. In such a situation, if you consume black wheat daily, then anemia disease can be overcome in the body. Due to this the level of oxygen in the body remains correct.

H. Help in Body Development

Manganese is found in high amounts in black wheat, a whole grain, manganese plays an essential role for healthy metabolism, growth and the body's antioxidant defenses.

I. Aids in Lowering Cholesterol

Unsaturated fatty acids and fiber are found in high amounts in black wheat. Consuming such black wheat on a regular basis is useful when they are present at high levels of cholesterol and triglycerides in the blood. Proven to be effective in lowering LDL cholesterol and triglycerides.

J. There is Demand in the Market

The corona pandemic has made people habit of healthy eating. So there has been a change in the eating habits. Black wheat is also the size of normal wheat, but it has many medicinal properties, due to which it is in great demand in the market. The benefits of black wheat are more than normal wheat. Black wheat is black or purple in appearance, but its properties are more than normal wheat.

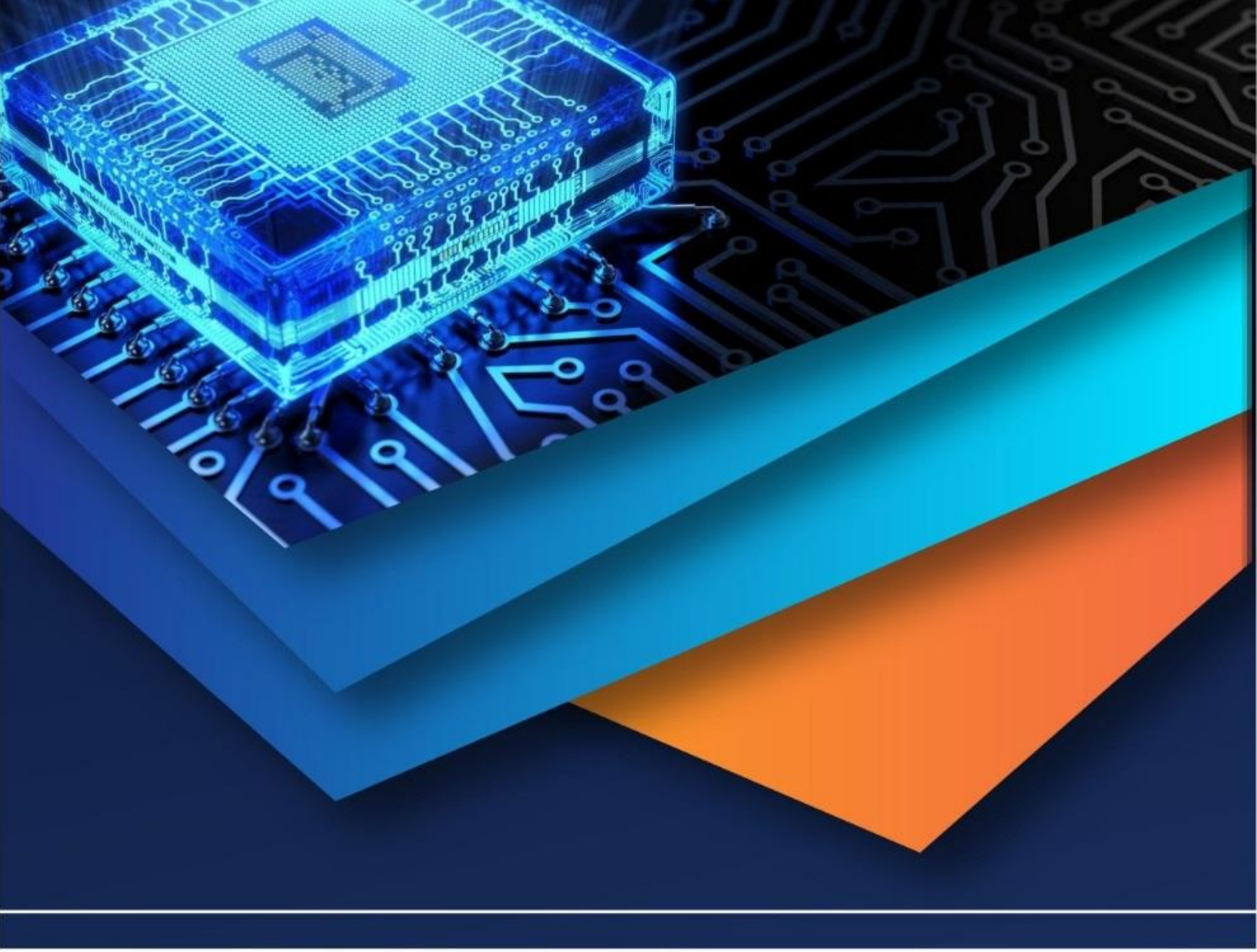
Agricultural scientists are also encouraging to grow black wheat, which will increase the immunity of the body and increase the income of the farmers. Black wheat variety (Nabi MG) contains more iron, zinc, protein and anti-oxidants than normal wheat variety. Its seed is six to nine thousand rupees per quintal.

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REFERENCES

[1] Biswal, S., Jyotirmayee, B., & Mahalik, G., (2022) A Review on Usefulness and Nutritional Benefits of Black wheat on Health System. Indian Journal of Natural Sciences, Vol. 12 (72), pp 42579-42585.
[2] Kishore, K., 2021. Black Wheat Farming. Just Agriculture. C T Group if Institutions. pp 66.
[3] Shewry. P.R. Wheat. Journal of experimental Botany, Vol. 60, No. 6, pp 1537-1553, 2009
[4] Kumari and Tzudir, 2021. Black Wheat: Next Big thing in India's Agricultural Landscape. Biotica Research Today 3(4): 240-242.
[5] Dhua, S., Kumar K., Kumar, Y., Singh , L., & Sharanagat, V. S. (2021). Composition characteristics and health Promising prospects of black wheat: a review. Trends in Food Science & Technology, 112, 780-794.

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