

## USEFUL AND HARMFUL PROPERTIES OF CORN

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**Abstract:** This article is about the biological classification of corn (zea mays) plant, its origin, distribution of varieties on earth, it is one of the products that has been noticed since ancient times with its many useful properties and has an important place in the eating habits of different peoples. the benefits, composition, health effects, medical use and the need for careful consumption of corn are mentioned.

**Key words:** Corn, medicine, relevance.

**Introduction.** Corn is an annual plant belonging to the corn family. It is an annual plant that grows in different regions of the world and has a history of about 7,000 years. This plant prefers mainly hot and dry climates and its grain is consumed in many forms [5].

Corn can be white, yellow, red, or black. In the early times, this grain was consumed as a staple food by the ancient peoples of Central and South America. Corn is distinguished by its rich composition. It has the following main components: Carbohydrates - 70-75% carbohydrates are present in oat grain, which makes it very useful as an energy source [4].

Proteins - corn also contains proteins, which are necessary for the renewal and growth of the body. Vitamins - this grain contains vitamins A, B (B1, B2, B3, B6, B9), E, and K. They are beneficial for the immune system and nervous system. Minerals - Oatmeal is rich in important minerals such as potassium, magnesium, phosphorus, iron, zinc and copper. Complete fiber - this product is rich in fiber and supports the normal functioning of the gastrointestinal system. provides [5].

Oats have a high level of carbohydrates, which quickly provide the body with energy. This product is one of the best sources of energy, especially for people involved in physical activity or sports [3].

**Table 1: Major Nutrients in Maize**

Substance	Quantity (for 100 g of grain)	Effects on health
Carbohydrates	70-75 g	Energy source, quick energy supply during physical activity.
Proteins	8-10 g	It is necessary for the muscular system, provides growth and renewal of the body.
Vitamin A	0,5 mg	Improves vision and promotes proper skin growth.

Substance	Quantity (for 100 g of grain)	Effects on health
Vitamin B	B1, B2, B3, B6, B9	Energy production, immune system and proper functioning of the nervous system.
Vitamin S	5 mg	It helps to strengthen immunity and fight against diseases.
Vitamin E	0,6 mg	As an antioxidant, it slows down the aging process and improves skin health.
Minerals (Potassium, Magnesium, Phosphorus, Iron)	Potassium: 300 mg, Magnesium: 100 mg	Normalizes blood pressure, ensures normal functioning of the nervous system, regulates fluid balance.
Complete Fibers	7-10 g	Improves the gastrointestinal system, eliminates constipation, cleanses the intestines.

Strengthening the immune system Corn contains vitamins and minerals that help strengthen the immune system. Especially vitamins A and C are necessary to strengthen immunity and protect against infections [2].

Improving the functioning of the stomach and intestines. Oatmeal is rich in fiber and regulates the functioning of the gastrointestinal system. Fiber helps to cleanse the intestines, relieves constipation and keeps the intestines in a healthy state. Control blood pressure, magnesium and potassium in corn help to normalize blood pressure. It is especially beneficial for patients suffering from hypertension [1].

Skin Health Vitamins and minerals in oats ensure proper skin growth, moisturize it and slow down the aging process. Vitamin A and E help to keep the skin looking healthy and young [4].

Benefit	Description
Strengthening the immune system	Helps with vitamins and minerals
Stomach and intestinal activity	Improves gastrointestinal function with the help of fiber
Blood pressure control	Magniy va kaliy yordamida bosimni normallashtiradi
Lower cholesterol levels	Normalizes blood pressure with the help of magnesium and potassium
Blood sugar control	Useful against diabetes, stabilizes insulin levels

Corn is rich in potassium, which plays an important role in regulating fluid balance in the body. It is especially beneficial against heatstroke in the summer months. Lowering Cholesterol Corn can help lower cholesterol. Complete fiber is important in removing harmful cholesterol from the body. Blood Sugar Control Oats may be beneficial for diabetics as they help control blood sugar and stabilize insulin levels [5].

Substances contained in oats help to reduce inflammation. Calms the nervous system: Magnesium and B vitamins calm the nervous system, reduce stress and relieve insomnia. Oat fiber soothes the intestines and is useful during gastrointestinal diseases. However, corn can also have negative effects in some cases. For example, oatmeal can increase constipation, so it is recommended to use with caution for those with problems with the esophagus, stomach or intestines. People with thrombosis, blood clotting problems, or diseases related to excess weight should also consume oats after consulting a doctor [3].

Component	Amount (%)
Carbohydrates	70-75%
Proteins	7-10%
Vitamins	A, B (B1, B2, B3, B6, B9), E, K
Minerals	Potassium, Magnesium, Phosphorus, Iron, Zinc, Copper
Fibers	Full

In Uzbekistan, corn is one of the most important crops in agriculture. Maize varieties are distinguished by their different agrotechnical characteristics, and each variety is adapted to its own climatic conditions and soil conditions. Below is information about maize varieties common in Uzbekistan and their characteristics India" (Tall plant varieties) Description: This variety is adapted to hot climate conditions in Uzbekistan and is preferred for high yield. "India " the grain of the variety is large and oily, which allows it to be used for nutritional and industrial purposes. Yield: 6-7 tons of corn are obtained per hectare. Growing conditions: This variety is hot and dry. it grows well in the regions, soil fertility should be average

"Tashkent-120" (Mid-early varieties) Description: It is one of the varieties of corn that is widespread in the Tashkent region and ripens moderately early. The grain size of this variety is average, but the yield is high. 6 tons can be obtained Growing conditions: This variety is suitable for medium climate, but it can also be planted in hot countries

Bukhara-12" (recommended variety for agriculture) Description: This variety produced in the Bukhara region is distinguished by its high yield. The grains of the "Bukhara-12" variety are round and yellow in color, with a high oil content. Yield: Yields 6-7 tons per hectare, but requires effective fertilization and good irrigation. the level of acidity in the soil should be normal.

"Zafar" (High-yielding variety) Description: "Zafar" variety's high yield has made this variety widespread in Uzbekistan. Its grains are large and strong, and due to its high oil content, it is used in industry and food production. Yield: 7-8 tons per hectare can be obtained. It grows well in warm climates, but is resistant to winter frosts

Khorezm-10" (Fast ripening varieties) Description: This variety, grown in the Khorezm region, ripens quickly and allows harvesting in a short season. The grains of this variety are medium-sized, but the yield indicators are high. Yield: 5-6 tons of harvest per hectare Growing conditions: Khorezm-10 variety is suitable for moderately hot and dry climates. Soil moisture and fertility should be moderate.

"Samarkand-90" (Average ripening variety) Description: This variety is widespread in Samarkand region and is known as an average ripening variety. Samarkand-90 has a high yield index, it needs separate fertilization and irrigation. Yield: 6-7 tons of harvest per hectare. Growing conditions: This variety is suitable for medium climate and requires good watering.

"Navoi-23" (water-resistant varieties) Description: This variety is widely distributed in the Navoi region and is characterized by its water resistance. It is suitable for planting in arid regions and has high yield. Yield: 5-6 tons per hectare.

"Fergana-75" (High-yielding variety) Description: widespread in Fergana region. International information on traditional medicine and the health effects of plants from around the world.

Varietal Name	Description	Yield (per hectare)	Growing Conditions
India	High-yielding, adapted to hot climate conditions	6-7 tons	Grows well in hot and dry areas, average soil fertility.
Tashkent-120	Medium-early maturing, medium-yielding variety	5-6 tons	Suitable for medium climate, can be planted in hot regions.
Bukhara-12	It has a high yield and fat content	6-7 tons	It grows well in warm and moderately moist soils, fertilization and watering are necessary.
Zafar	Large grains have a high fat content	7-8 tons	It grows well in fertile soils and prefers a warm climate.
Khorezm 10paper size	Fast maturing, short season yield potential	5-6 tons	Moderately hot and dry climatic conditions are suitable.
Samarkand-90	Medium ripening, high yield	6-7 tons	It grows well in a moderate climate, requires high watering.
Navai-23	Medium ripening, high yield	5-6 tons	It grows well in hot and dry areas with little irrigation.
Ferghana-75	High-yielding, used in	6-7 tons	It thrives in well-watered, fertile soils,

Varietal Name	Description	Yield (per hectare)	Growing Conditions
	traditional medicine		likes a warm climate.

**Conclusion:** Corn is a very useful and versatile product. It has many health benefits and helps with various health conditions. However, like any product, it should be consumed with caution and in accordance with your health. Although oats are used as a high energy source, it is important to know their limits to avoid harm to health.

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