

THE MAIN FISH SPECIES CONSUMED IN UZBEKISTAN

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Abstract: *This article discusses the main fish species consumed by the population in Uzbekistan, their biological characteristics, nutritional value, and economic importance. It provides an overview of the distribution of naturally occurring and artificially cultivated fish species in the country's water bodies, their dietary composition, health benefits, and role in aquaculture. In addition, the prospects for the development of the fisheries sector are considered.*

Keywords: *fish, consumption, Uzbekistan, aquaculture, food, health, economy.*

INTRODUCTION

In recent years, fisheries have become one of the fastest-growing branches of agriculture in Uzbekistan. Fish meat has high biological value, being rich in proteins, fats, vitamins, and minerals. Statistical data indicate that demand for fish products has been steadily increasing among the population. Consequently, fish farms are expanding their activities and introducing new intensive technologies. This paper analyzes the main fish species consumed in Uzbekistan, their biological and nutritional characteristics, and their significance.

Main Part

1. Fisheries and Fish Consumption in Uzbekistan

Uzbekistan's water bodies, including the Amu Darya, Syr Darya, the Arnasay lake system, the Charvak Reservoir, Tuyamo'yin Reservoir, and others, are rich in natural fish species. In addition, more than 400 fish farms are currently operating across the country. The following species are among the most widely consumed by the population:



Grass Carp (*Ctenopharyngodon idella*)

- Diet: Primarily herbivorous, feeding on aquatic plants, but in cases of food shortage,

it may consume insects, small fish, and worms.

- Habitat: Inhabits rivers, lakes, and various freshwater ecosystems.

- Distribution: Native to China and East Asia, also introduced to many countries, including European Russia.

- Economic significance: Cultivated in fish farms as an important commercial species.

Grass carp are also used to control aquatic vegetation in lakes and reservoirs.

- Nutritional value: Its meat is considered tasty, oily, and nutritionally valuable.



Silver Carp (*Hypophthalmichthys molitrix*)

- Distribution: Native to freshwater ecosystems of East Asia.

- Characteristics: Known for its laterally compressed, silvery body; feeds mainly on phytoplankton and small organisms.

- Behavior: Notable for its tendency to leap from the water when disturbed by noise, leading to its nickname “flying fish” in some regions.

- Ecological role: Introduced to control excessive algae growth, though it has become invasive in some areas due to its rapid reproduction and competition with native species.



Pikeperch (*Sander lucioperca*)

- Appearance: Gray-green back with 8–12 dark stripes on its sides; dorsal and caudal fins with black spots, other fins yellowish.

- Size: May reach up to 130 cm in length and 20 kg in weight.

- Distribution: Found across Europe, North America, and Asia.

- Diet: Predatory, feeding on smaller fish and aquatic animals.

- Reproduction: Males build nests on the riverbed and protect the eggs.

- Economic value: A highly prized predatory fish with tasty, nutritious meat.



Common Carp (*Cyprinus carpio*)

- Description: One of the oldest domesticated fish species, widely consumed in Uzbekistan. Belongs to the Cyprinidae family. Body length typically 50–60 cm (sometimes up to 1 m); weight ranges from 1.8–4.5 kg (sometimes up to 16 kg).
- Features: Possesses reddish fins, pharyngeal teeth, and two pairs of barbels.



Wels Catfish (*Silurus glanis*)

- Description: A large, scaleless freshwater fish with a massive head, wide mouth, and long anal fin.
- Habitat: Found in rivers, canals, lakes, and reservoirs.
- Diet: A predatory and opportunistic species, also consuming organic remains.
- Size: Can reach over 2 meters and weigh more than 70 kg.
- Reproduction: Spawns in late June when water temperature reaches 20–23°C; matures at 3–4 years (45–55 cm length).
- Current status: Once widespread in the Aral Sea region but has declined due to ecological crisis. Now found in the Amu Darya, Syr Darya, and Zarafshan river basins. It remains a valuable commercial species.

2. Nutritional Value of Fish Meat

Fish meat is an excellent source of high-quality protein. Per 100 g of fish meat:

- Protein: 15–20 g
- Fat: 1–15 g (depending on species)
- Vitamins: A, D, B group- Minerals: calcium, phosphorus, iodine, magnesium

Fish is easily digestible and plays an important role in the prevention of cardiovascular diseases, as well as in the diets of children and pregnant women.

3. Importance of Fish Farms

To increase fish consumption, the Government of Uzbekistan has introduced special resolutions since 2017, establishing fishery clusters. Intensive aquaculture methods such as pond farming, cage culture, and oxygen-enriched water systems are widely implemented.

4. Challenges and Prospects

- Fish consumption in Uzbekistan remains below global standards (5–6 kg per capita per year, compared to more than 20 kg globally).
- Inefficient use of water resources.
- In the future, further development of modern aquaculture can improve public health and enhance economic efficiency.

CONCLUSION

The main fish species consumed in Uzbekistan include grass carp, common carp, pikeperch, silver carp, catfish, and other commercially important species. These fish are not only a significant source of food for the population but also play a vital role in the country's economy. Rich in proteins, vitamins, and minerals, fish products are essential in dietary nutrition. The introduction of modern technologies and sustainable management of water resources will allow Uzbekistan to fully meet the population's growing demand for fish products.

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