

## Characteristics and Advantages of Soybean Benefits in Every way

Aminjonova Charosxon Akmalovna  
Assistant at Bukhara State Medical Institute

### Abstract

This article discusses the properties and benefits of soybean, which is beneficial in all respects, and the fact that soybean is one of the most important sources in solving protein deficiency. The main goal of the topic is to develop soybeans as the most valuable raw material in the food industry, technology and cattle foraging, and to increase the number of quality varieties.

**Keywords:** protein, amino acid, silkworm, soybean seed, breeder, soybean varieties, herbicides and pesticides, soy isolate, calorie.

### Introduction

Adequate protein plays an important role in human consumption. According to scientists, a person should consume 12% of the calories in a day, or 90-100 grams of protein. In developed countries, the figure is 90-95 grams, and in developing countries - 20-25 grams. There are two types of protein according to their chemical structure: plant protein and animal protein.

The following plants are superior to other plants in that they store large amounts of protein:

- 13-16 percent in wheat
- 25 percent on the soybean
- 29 percent in groundnuts
- 30 percent in lentils
- 40-42 percent in soybeans
- Some high-yielding soybean varieties contain up to 55% protein.

The human body is always in great need of meat, milk, yogurt, butter, eggs and other products. In our daily activities we try to consume animal products. A single soybean contains 10 amino acids in its protein and amino acids, which are found in animal protein. No other plant has this feature.

Soy is one of the most important sources in solving the main problem today - protein deficiency. Because soy protein is chemically similar to animal protein, soybeans are grown in all developed countries. In Japan, soybean lands are the third largest after rice and vegetables. Japan also buys a lot of soybean products from abroad. These grains are used for various purposes. Nowadays, soybean protein is used to catch silkworms. 67% of artificial foods prepared by Japanese experts contain soy protein, 2% soybean oil, citric acid, B vitamins and various other supplements. In Japan, silkworms are fed five times a year, and soybean feed plays an important role. Soybeans are also used to make quality food. Soybeans grown in Japan are high in protein and differ from soybeans grown in other countries.

Soybeans contain 14 times more protein than chicken, 4 times more than eggs and 3.5 times more than beef. Therefore, soy should play a key role in solving the problem of plant protein deficiency

in our country. When oil is extracted from soybeans by heating, the protein content reaches 75%. This superhero product is called soybean insulation. Used in the preparation of various sausages in soy isolate. The cost of soy protein is 25 times cheaper than milk protein and 50 times cheaper than beef protein. If 800,000 tons of soybeans are grown, that means 320,000 tons of protein. To get that much protein, you have to grow 4.2 million tons of meat.

When soy flour is added to bread, sweet cakes, pasta and whole wheat products, they increase the protein content.



Soy is now grown on 14 percent of the land in the United States. Today, more than 100 varieties of soybeans are grown in the United States. These varieties are highly productive, including those that contain 55% protein. Breeders are working to create varieties that are drought-resistant, able to grow in a variety of soil conditions, adapted to herbicides and pesticides, fast-ripening and chemically high in protein and fat. Now, U.S. scientists have developed a new recipe for baking bread. They suggested baking bread with 7-8% soy, which increases the

protein content of the bread and makes it very soft. This type of bread does not harden quickly, the dough rises quickly and the porosity increases. Because wheat flour contains 14% protein, soy flour contains 50% protein. Soy flour is much higher in calories than other flours. If 100 grams of wheat flour contains 360 calories, pea flour 320 calories, oatmeal 385 calories, buckwheat flour 345 calories, soy flour has 450 calories.

Our motherland was founded by the first scientists of soybean cultivation in the Republic of Uzbekistan M.M. Saltas, M.T. Kogay, V.F. There were experts like Shupakovsky. In 1929-1933, they were the first to study the biology and cultivation technology of soybeans. Recently, the technology of extracting oil from soy flour in oil refineries of the country has been well studied. A new oil refinery has been launched in Kasan district of Kashkadarya region. In recent years, the Samarkand region's Kattakurgan oil refinery has also been producing soybean oil.

Soy contains two to three times more protein than regular beef. Meat contains 18-25% of protein, while soy protein is 80%. Currently, 10-15% of soy sausages are added to the sausages produced in the sausage production shops of meat factories in the country. Today in our country the soybean is called "Abundance", "Victory", "Genetic-1", "Grace", "Friendship", "Elegant", "Dream", "Golden Crown", "Oyjamol", "Sochilmas", Ustoz", "Parvoz", "Favorit" are included in the state register of agricultural crops recommended for planting. In addition, the soybean plays an important role in the development of industry, technology, cattle foraging. It is widely used in soap, paints, plastics, films, chemicals and textiles.

## References

1. B.O.Beknazarov "O'simliklar fiziologiyasi" T, 2009
2. Aminjonova, C. (2021). Problems and methods of teaching the subject "Biology". *Центр научных публикаций (buxdu. uz)*, 1(1).
3. Akmalovna, A. C., & Olimovna, A. G. (2020). Methodology and problems of teaching the subject "Biology" in medical universities and secondary educational schools. *Eurasian Medical Journal*, (2), 6-8.

4. Аминжонова, Ч. А., & Мустафаева, М. И. (2017). Биологическая Характеристика Водорослей Биологических Прудов г. Бухары. In *Экологические проблемы промышленных городов* (pp. 387-389).
5. Aminjonova, C. A. (2021). Methodology and problems of teaching the subject “Biology” in medical universities. *Смоленский медицинский альманах*, (1), 15-18.
6. Аминжонова, Ч. А., & Мавлянова, Д. А. (2020). Методика преподавания предмета “биология” в системе высшего медицинского образования. In *методологические и организационные подходы в психологии и педагогике* (pp. 8-11).
7. Асроров, А. А., Ярикулов, Ш. Ш., & Турдиев, М. Р. (2017). Особенности встречаемости и повышение эффективности лечения семейного хронического тонзиллита у детей. *Вестник Совета молодых учёных и специалистов Челябинской области*, 3(2 (17)).
8. Худайкулова, Н. И., & Жумаева, Ш. Б. (2020). О стимуляции иммунитета на гиалуронидазу-фактор патогенности паразитов. In *Университетская наука: взгляд в будущее* (pp. 106-108).
9. Nazarova, F. (2021). The use of phonological observations in the determination of the main phases of the development of thin-fiber goose varieties in the conditions of Bukhara region. *Theoretical & applied science Учредители: Теоретическая и прикладная наука*, (9), 523-526.
10. Асроров, А. А., Гафарова, С. У., & Мухамеджанова, М. Х. (2016). Формирование хронического тонзиллита у детей в зависимости от клинико-иммуногенетических факторов. *Педиатрический вестник Южного Урала*, (2).
11. Aminjonovich, A. A., & Akmalovna, A. C. (2021, March). Methods of teaching the subject “Biology” in medical universities. In *Euro-Asia Conferences* (Vol. 3, No. 1, pp. 38-40).
12. Асроров, А. А., & Аминжонова, Ч. А. (2021). Оилавий шифокор амалиётида инсульт ўтказган беморларда когнитив бузилишлар ҳолатини баҳолаш. *Журнал Неврологии и нейрохирургических исследований*, (Special 1).
13. Асроров, А. А., & Аминжонова, Ч. А. (2021). Оценка Состояния Когнитивных Нарушений У Пациентов Перенесших Инсульт В Практике Семейного Врача. *Central Asian journal of medical and natural sciences*, 397-401.
14. Nazarova, F., & Hudaikulova, N. (2019). Healthy generation-the basis of a healthy family. *Scientific Bulletin of Namangan State University*, 1(7), 69-73.
15. Худойкулова, Н. И. (2018). Пути воспитания толерантности у молодежи. *Наука, техника и образование*, (11 (52)).