

The soybean plant has it all. It represents a true triumph like no other cultivated plant in human history. This is because it has a high amount of protein and it binds nitrogen. Soy is now used as a meat substitute around the world. Tofu and soy milk are popular and are now as much a part of a balanced and healthy diet as bread and butter. However, soy is mainly used as animal feed.

# Soy – the miracle plant

## Usable Protein per Acre of Farmland

Source: <http://www.soyfoods.org/good-for-the-planet/soy-and-sustainability>



## An efficient crop

Soy is not only ecological, it is also one of the most efficient agricultural crops around. If we wanted to meet our protein needs with a different crop, we would have to plant a much larger area. And soy is very easy for farm animals to consume and digest.

## Soy is environmentally valuable

Soy can meet about two-thirds of its nitrogen needs on its own. So it needs less fertilizer. It's also ideally suited for crop rotation. Unlike corn, which results in a loss of topsoil, soy contributes to the enrichment of topsoil. So fields remain fertile, are better aerated and are easier to work.

## Soy can be used in many different ways

The unique composition of and substances in the soy plant make it one of the most versatile agricultural crops in the world. It has a number of uses. Soy is used for food (about 5% of global production), for cosmetics and in the chemical industry (20%), and for animal feed (75%).

### Use of soy oil

#### Chemical Industry

Ink  
Paint  
Grease  
Technical Oils  
...

#### Food Industry

Margarine  
Cooking Fat  
Mayonnaise  
Biscuits  
Coffee Cream  
...

#### Cosmetic Industry

Soap  
Washing Powder  
Cosmetics  
...

### Use of soy meal/beans

#### Chemical Industry

Plastics  
Cosmetics  
Ink  
Paint  
...

#### Food Industry

Soya "Milk"  
Soya "Yoghurt"  
Soya Sauce  
Tofu  
Pasta/Noodles  
Baby Food  
Bakeries  
Muesli  
Snacks  
...

#### Feed Industry

Compound feed  
Meat feed  
Meat-Products  
...

Source: Danube Soya

## Swiss soy cultivation

With the exception of fodder, agricultural crops in Switzerland can only make a very limited contribution to domestic production of sources of protein. About 1,500 hectares of soy were planted in 2014. This resulted in a yield of 3,882 tons of soybeans. Of this, 2,000 tons (i.e., 0.8% of annual demand) was used for fodder.

### Average grams of soy used per kilo of product

Source: WWF Magazine 3 / 2014, p. 13



Chicken  
575g



Eggs  
307g



Porc  
263g



Beef  
173g

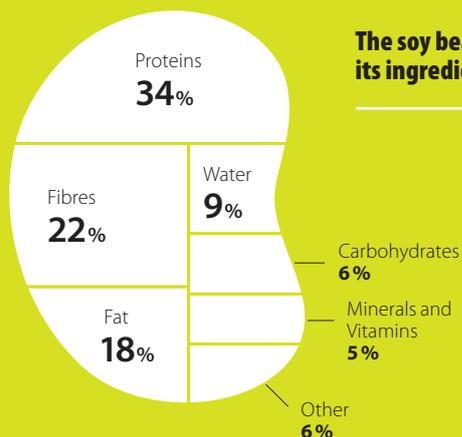
## Use as food

Some 75% of soy is used for animal feed. Because of its high protein content and favorable composition of essential amino acids soy is ideal for feeding pigs and poultry. The production of chickens and eggs requires the most soy. Chickens need a lot of protein. By nature, they like to eat worms and bugs. Cows, by contrast, prefer to eat mainly grass.

## The soybean is unique

Like peas, beans and lentils, soybeans are legumes and they have the highest protein content in this group. Soy has a good fatty acid composition. It contains little saturated fat and a high proportion of polyunsaturated fat. Like other plant-based oils, soy oil contains no cholesterol. These two factors combined have a positive impact on fat metabolism. Soy beans are a good source of fiber. Consuming 50 grams of soybeans will provide you with a third of your daily fiber requirement. Soybeans also contain numerous other vitamins, such as vitamin B1, vitamin B2, folic acid and vitamin E. Soy is also rich in calcium and magnesium.

### The soy bean and its ingredients



Source: Souci, Fachmann, Kraut