

Soybean as the superfood



History of soybeans

The humble yet fabulously loaded soybeans originated in China. In 2853 BC, Emperor Sheng-Nung of China named five sacred plants – soybeans, rice, wheat, barley, and millet. Soybean plants were domesticated between 17th and 11th century BC in the eastern half of China where they were cultivated into a food crop. From about the first century AC to the Age of Discovery (15-16th century), soybeans were introduced into several countries such as Japan, Indonesia, the Philippines, Vietnam, Thailand, Malaysia, Burma, Nepal and India.

The first soybeans arrived in America in the early 1800's as ballast aboard a ship! It wasn't until 1879 that a few brave farmers began to plant soybeans as forage for their livestock. The plants flourished in the hot, humid summer weather characteristic of the northeastern North Carolina.

Soybeans are one of the crops that are being genetically modified. Since 1997 GMO soybeans are being used in an increasing number of products. There's a lot of controversy around GMO soybeans. However, GMO soybeans have never caused any harm to people. The possible negative aspects of GMO are more of environmental and economic nature: dependence of farmers on a few multinationals and contamination of wild plants.

What are soybeans?

Soybeans belong to the legume family and are native to East Asia. They have been an important protein source for over five thousand years. Soybeans grow on a variety of soils and a wide range of climates, ranging from tropical Brazil to the snowy island Hokkaido in the north of Japan. As soybeans mature in the pod, they ripen into hard, dry beans. Although most soybeans are yellow, there are also rare varieties which are black, brown or green coloured. All of these are beneficial to mankind.

Benefits of soy

There is no denying that soy has many health benefits. These health benefits are mainly originating from the quality of the soy proteins. These are the main health benefits of soy:

Soy improves bone health

Soy products, such as soy milk, do not contain a lot of calcium but the soy isoflavones may help to reduce the risk of osteoporosis. Several studies have suggested that soy isoflavones may be a factor in helping to prevent bone loss. Soy can also indirectly improve bone health. Diets which are high in animal protein cause more calcium to be excreted in the urine. Replacing animal protein with soy protein can help to prevent calcium loss from the bones.

Soy relieves menopausal symptoms

Epidemiological data show that Asian women suffer less from hot flushes and night sweats compared to Western women. These symptoms of menopause are caused by low estrogen levels. Estrogens play a role in the body temperature control. Soy isoflavones can, through their estrogen-like effect, control these menopausal symptoms.

Soy reduces risk for heart diseases

In countries where soy products are ingested regularly, the rates of cardiovascular diseases is low. Research suggests that soy may help to prevent heart disease by reducing total cholesterol, low density lipoprotein cholesterol and preventing plaque build-up in the arteries, which could lead to stroke or heart attack. These health benefits are also mainly attributes to the soy isoflavones. The soy isoflavone genistein may also increase the flexibility of blood vessels.

Soy helps to prevent certain cancers

Several studies have indicated that a regular intake of soy foods may help to prevent hormone related cancers such as breast cancer, prostate cancer and colon cancer.

Soy is very nutritive

Soy products such as tofu, tempeh and soy milk are very rich in protein. This protein is of very high quality because it contains all essential amino acids. The amino acids of soy combine very well with the amino acids of cereals. The soy protein is therefore very important for vegans.

Soy is a good source of lecithin and vitamin E. These natural antioxidants prevent oxidation of LDL cholesterol. Soy is rich in magnesium, which plays an important function for the bones, heart and arteries.



Cooking soybeans - Soybeans are most often transformed in other foods such as tempeh, tofu, miso, shoyu, soy milk or other food ingredients. However, cooked soybeans can also be used as an ingredient in soups, sauces and stews. To prepare two cups of soybeans for cooking, soak them in about six cups of water for about eight hours. This soaking shortens the cooking time, improves the texture and appearance of the beans and removes some of the indigestible sugars. Drain, rinse and cook the soaked soybeans in about six cups of fresh water. Do not add salt at this point or it will delay the softening of the soybeans. Pressure-cook the soaked soybeans for about 40 min. When you cook soybeans, make it worth your while by cooking two or three times what you need and freezing the rest for later use.

Storing soybeans - Fresh soybeans, or edamame, should be refrigerated and used within two days. Frozen edamame can be stored in the freezer for several months. Dried soybeans can be kept in an airtight container for a very long period.

Nutritional values of soybeans

Protein source - Whole soybeans are an excellent source of protein and dietary fibre. Soy protein is the only vegetable with a complete protein. Therefore proves to be a great supplement for vegetarian and vegan diets. Soy protein has recently attracted a lot of attention because of its ability to lower LDL (bad cholesterol) levels.

Soybeans are very rich in nutritive components. Besides the very high protein content, soybeans contains a lot of fibre and are rich in calcium, magnesium . The soy protein has a high biological value and contains all the essential amino acids.

Soybeans are rich in unsaturated fatty acids and low in saturated fatty acids, which need to be avoided.

Edamame

Edamame are fresh soybeans, also called green soybeans and literally mean "beans on twigs". Edamame is harvested when the soybeans are ripe but before they start to harden. Prepared edamame has a surprisingly nice taste. Edamame is used as snack or in vegetable meals and soups. In Japan and other Asian countries, it is very popular to eat cold salted edamame with beer. The pods are slightly boiled in salted water and the seeds are then directly squeezed from the pods into the mouth.

As a vegetarian dish edamame is boiled in salted and spiced water and then served on a separate dish hot or cold. The beans without the pods can also be served.

In Asian countries, fresh edamame can be found in vegetable shops nearly the whole year round. In countries where soybeans are not grown edamame can only be found in frozen form, but even then they will be hard to find in normal supermarkets.

Most of us choose to consume the Soy bean in disguised or extracted forms such as in milk, yoghurt and meat substitutes. But why not try adding them in whole form to stews and soups, or as an accompaniment to a meal?

Recipe for Edamame appetizer

Ingredients:
250 g unshelled edamame
1 liter water
salt to taste

Wash 250 g unshelled edamame in 1 liter water containing 1 tablespoon salt. Boil for about 5 minutes. Drain the edamame, sprinkle with salt and cool.



Soy bean and Pasta Medley

Ingredients

- 300g rice pasta
- 250g frozen soy beans
- 250g pack green beans , trimmed and halved
- 1 tsp sesame oil
- 1 tbsp soy sauce
- small knob fresh root_ginger_, grated
- juice 1 lime
- 50g alfalfa
- 2 carrots , grated
- small bunch coriander , roughly chopped

Method

1. Boil the pasta, adding the soy beans and green beans 3 mins before the end of cooking. Drain, tip into a colander, then cool quickly under running water.
2. Whisk together the oil, soy sauce, ginger and lime juice in a large bowl, then tip in the pasta, cooked beans, sprouts, carrots and coriander. Toss together, then serve.

Soy Bean and Herb Risotto

This simple, creamy risotto is bursting full of flavours.

Ingredients

- 30ml/2tbsp olive oil
- 1 large onion, finely chopped
- 275g/9½ oz dried soy beans
- 2tbsp fresh sage leaves, chopped and extra for garnish
- 1 unwaxed lemon, zest only
- 350g/12oz risotto rice
- 1 litre/1¾ pints hot vegetable stock
- 55g/2oz cheddar cheese, grated



1. Heat the oil in a large pan. Add the onion and fry over a medium heat for 8-10 minutes until softened and lightly golden.
2. Stir in the soy beans, sage, lemon zest and rice, then gently fry for another 2-3 minutes.
3. Simmer over a gentle heat, stirring until it has all been absorbed.
4. Add the hot stock, a ladleful at a time, letting it be absorbed before adding more. Keep stirring and continue adding the stock until rice is just cooked and all the stock has been used. This will take about 18-20 minutes.
5. Stir the Cheese into the risotto and season to taste.
6. Pile the risotto into 4 warm bowls and top with a few small sage leaves.

Sticky Sesame Bean Chicken

Very tasty and simple to make. Serve as a light, healthy lunch or for supper with warm, crusty granary bread to mop up all the flavoursome juices.

Ingredients

- 2 large skinless, boneless chicken breast fillets
- 250g/9oz soy beans
- 30ml/2tbsp runny honey
- 30ml/2tbsp light soy sauce
- 2tbsp sesame seeds
- ½ tbsp sunflower oil
- 1 large ripe avocado, halved, stoned, peeled and sliced
- 2 baby gem lettuce, trimmed, washed
- 5ml/1tsp sesame oil
- ½ lemon

1. Cut the chicken breasts into thin finger-sized strips and place in a bowl with the soy beans. Season with black pepper and add the honey, soy sauce and sesame seeds. Toss the soy beans and chicken to mix well. Set aside to marinate for 20 minutes if possible.
2. Heat the sunflower oil in a non-stick wok or large frying pan until very hot. Add the soy bean and chicken mixture and stir-fry for 5-6 minutes or until golden and cooked (you may want to cook this in two batches).
3. Meanwhile, toss the avocado slices with the baby gem leaves, drizzle over the sesame oil and a squeeze of lemon juice. Toss well and pile onto 4 serving plates.
4. Spoon the hot sesame soy beans and chicken on top of the salad leaves and serve straight away.

Hot Mustard Beans

Simple to prepare, these beans are even tastier with a hit of mustard. Let each guest squeeze over a just a little lemon juice.

Ingredients

- 30ml/2tbsp wholegrain mustard
- 30ml/2tbsp olive oil
- 150g/5½ oz French beans, trimmed
- 150g/5½ oz soy beans
- 125g/4½ oz mange tout, trimmed
- 124g/4½ oz sugar snaps
- 1 lemon, cut into wedges

1. Mix together the mustard, olive oil and 10ml/2tsp water. Season to taste and set to one side.
2. Bring a large pan of water up to the boil. Add the French beans and cook for 3 minutes.
3. Add the soy beans, mange tout and sugar snaps to the pan, bring back to the boil and simmer for 3 minutes.
4. Drain well and tip back into the pan. Pour over the mustard dressing and toss well.
5. Pile onto individual serving plates or warm bowl and serve with wedges of lemon.

Easy Lentil Dal with Soy beans

2 tablespoons of oil
1 large onion, finely chopped
100g fresh ginger, grated
2 garlic cloves, finely chopped
1 tsp ground turmeric
1 tsp fresh ground black pepper
1 pinch asofoetida
1 litre water
200g red lentils, rinsed well
100g soy beans
Salt to taste
Indian curry leaves
Lemon juice to taste



Method

1. Cook the onion and ginger gently in the olive oil for 5 minutes without coloring.
2. Add garlic and ground spices. Cook for 1 minute while stirring. Add water, lentils and soy beans and simmer for 20-30 minutes.
3. You can leave the lid off the pan towards the end if you find you need to lose some liquid.
4. Warm up some olive oil in a pan with a lid and add the mustard seeds in along with curry leaves and let pop until fragrant.
5. Pour this mixture onto the boiled daal mixture and leave covered for a few minutes.
6. Add the lemon juice just before serving.
7. Perfect served with brown basmati rice.

Soybean Salad

Ingredients

- 250 g fusilli
- 200 g green beans, cut in small pieces
- 300 g soybeans
- 1 avocado, cut in small squares
- 1 red bell pepper, seeded, chopped
- 1 tsp paprika powder
- 6 Tbs low fat soy yoghurt
- 1 Tbs vinegar



Recipe directions

Boil the fusilli in water according to instructions on package. Drain and cool.

Boil the green beans for about 6 minutes in water. Drain and cool.

To make the dressing mix the yoghurt and paprika powder. Add dressing to beans and fusilli and toss gentle. Bring to taste with salt and pepper.

Serve the soybean salad cold.

Soy Smoothies

When soy yogurt or soymilk is used as an ingredient in smoothie recipes then additional health benefits are experienced. A smoothie with soy milk is also a good source of healthy protein because it can lower your cholesterol. Smoothie recipes with very high protein content however bottled smoothies may contain very little fruit and lots of additives and flavours. A homemade smoothie is always healthy as long as you use no sugar.

Get creative

You can make smoothies from any fruit and the number of combinations of fruits and other ingredients have no limit. The aspect of a smoothie can also vary, it can be very liquid or recipes with a lot of banana or other pulpy fruit will give a thick smoothie. Adding soymilk to the smoothie will also increase the smoothness because the high acidity of the fruits will thicken the soy milk. Get creative and get drinking!!