



Health benefits of soymilk

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The soybean is a species of legume native to East Asia, widely grown for its edible bean which has numerous uses. The plant is classed as an oilseed rather than a pulse by the UN Food Agricultural Organization. Soybeans produce significantly more protein per acre than most other use of land. The beans also contains significant amount of phytic acid, α -linolenic acid and is flavones. Traditional non-fermented food uses of soybeans include soymilk and tofu. Fermented foods include soy sauce, fermented bean paste, natto and tempeh. The oil is used in many industrial applications. The main producers of soy are the USA (35%), Brazil (27%), Argentina (19%), China (6%) and India (4%).

Soymilk is very healthy addition to anyone's refrigerator. It is filled with nutrients and a great beverage for work, school or anytime. Store-bought soymilk can get pretty expensive especially compared to regular cow's milk. Soybeans, on the other hand can be found for a much better price. Soymilk is very simple and easy to make and can be used in many other yummy healthy desserts too. This milk is having higher nutritive value yet this is not very common in daily diet. A soy bean is cheap and easily available in the market throughout the years. This milk can be prepared at home very easily. The products, available in the market are very costly and it is impossible to add this in daily diet. Hence, the aim of the selection of this topic for dissertation is to make people aware about the importance of soymilk.

Health benefits of soymilk: Soymilk, which is prepared from soaking, grinding and boiling soybeans with water, is very nutritious drink. Soy is naturally high in essential fatty acids, proteins, fibres, vitamins and minerals. These nutrients provide energy and keep the body functioning at its optimum level. Important health benefits of soymilk are-

Improve lipid profile: Most important attribute of soymilk is its ability to improved blood lipid profile. Unlike dairy milk, which is high insaturated fat and cholesterol, soymilk fat is mostly unsaturated with zero cholesterol. The MUFA and PUFA is soy can inhibit

the transport of cholesterol into blood stream. The studies have shown that regular intake of soy can significantly lower blood concentrations of tri-glyceride and low density lipoprotein (LDL) and raise the level of high density lipoproteins (HDL). This combined effect makes soymilk an ideal drink if anyone has high cholesterol or some family history of coronary heart disease.

Strengthen blood vessel integrity: The omega-3 and omega-6 fatty acids as well as the powerful phyto-antioxidants in soy can effectively protect blood vessels from lesions and hemorrhage. These compounds bind to the blood vessels lining and defend lining cells from free radical attacks and cholesterol deposits. The binding of these nutrients also improve the fluidity and flexibility of blood vessels so that they are much resilient to blood pressure changes.

Promote weight loss: Soymilk is naturally lower in sugar content than regular milk. Cow's milk has about 12g of sugar per cup as opposed to only 7g in soymilk. This is why a cup of whole soymilk has only 80 calories, which is the equivalent of skimmed milk. In addition the MUFA in soymilk can inhibit intestinal absorption of fat, which is another great advantage for weight loss. Drinking soymilk also gives an extra dose of fibre, keeping up feeling fuller for longer time.

Prevent prostate cancer: Soymilk is a rich source of phytoestrogen, a unique plant hormone that can inhibit the production of testosterone in men. Reduced testosterone levels can significantly cut the risk of prostate cancer. Studies have shown that men who eat a soy rich diet are less likely to develop prostate hypertrophy or prostate cancer.

Prevent post-menopausal syndromes: During menopause, a woman's natural production of estrogen drops to a minimum. The sudden reduction of estrogen creates a number of health problems for post-menopausal women. Post-menopausal women have higher risks of heart diseases, diabetes and obesity. They are also more vulnerable depression, mood swings, insomnia and other psychological disorders. The phyto-

estrogen in soy is an effective estrogen replacement. Regular intake of soy is a great way to prevent and alleviate these post-menopausal syndromes.

Prevent osteoporosis: Osteoporosis is another age and hormone related disease. The phyto-estrogen in soy can help accelerate calcium absorption by the body and prevent the loss of bone mass. For the maximum benefit, make sure to buy the soymilk that is fortified with calcium and vitamin D.

Good substitute for animal products: Soymilk products can be good substitutes for animal products because unlike some other beans, soy offers a complete protein profile. Soymilk based products can replace animal based food products, which also have complete proteins but tend to contain more fat, especially saturated fat without requiring major adjustments elsewhere in the diet.

Preparation of soymilk :

The steps to prepare soymilk:

Step I: Ingredients :

- 1 cup of soybean
- 11 total cups of water (This will be added two to three cups at a time)
- ¼ cup of sugar (This will be adjusted according to taste)

Some equipment is also needed-

- A blender
- A pot (Should be fairly big and be able to hold at least 11 cups)
- Multiple bowls and spoons
- Muslin cloth (for straining)
- A spatula for stirring
- A container for holding the finished soymilk/

groundnut milk.

Step II: Preparation : Pour the soybeans and two of the eleven cups of water into one of the bowls. Make sure there is enough room for the soybeans and one cup of water and water covers the top of beans. Soak soybeans for at least 8 hours. Be sure to add more water if water level falls below the level of soybeans.

Step III: Blending : Pour water and soaked soybeans into the blender. Blend until smooth.

Step IV: Straining : Pour the soybean mixture into the muslin cloth and hold over the pot. Squeeze out as much liquid as possible. Then pour the leftover soybean pulp/groundnut pulp back into the blender and add more water and blend until smooth. Repeat straining the mixture through muslin cloth.

Step V: Boiling : Put the pot on stove top and turn the heat to high. Stir the mixture until it comes to a boil. Make sure to prevent soymilk from sticking to the bottom of the pot. Skim top to get some of the foam off. Boil the mixture for 2-3 minutes.

Step VI: Flavouring and finish :

- Add about 1 teaspoon sugar per cup of milk to taste.
- Flavours used to flavour soymilk are-
 - Vanilla
 - Colour is added to milk for visual effects are-
 - Orange

Soymilk can be enjoyed either hot or cold. It can also be used for baking.

Hence; Soymilk has numerous health benefits. One should include it in their daily diet to get a healthy life.

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