Uses of soybeans





Who are you?

If you were an ice cream flavor, what flavor would it be and why?



What does ice cream have to do with soybeans?

Ingredients:

vanilla sandwich [skim milk, wafer (bleached wheat flour, sugar, caramel color, dextrose, palm oil, corn flour, high fructose corn syrup, corn syrup, baking soda, modified corn starch, salt, mono and diglycerides, soy lecithin, cocoa), sugar, corn syrup, polydextrose, whey protein, cream, calcium carbonate, Inulin (Dietary Fiber), natural flavor, propylene glycol monostearate, microcrystalline cellulose, Sodium Carboxymethylcellulose, guar gum, monoglycerides, sorbitol, carob bean gum, citric acid, vitamin A palmitate, carrageenan, salt], chocolate sandwich [skim milk, wafer (bleached wheat flour, sugar, caramel color, dextrose, palm oil, corn flour, high fructose corn syrup, corn syrup, baking soda, modified corn starch, salt, mono and diglycerides, soy lecithin, cocoa), sugar, core syrup, polydextrose, cocoa processed with alkali, whey protein, calcium carbonate, cream, Inulin (Dietary Fiber), natural flavor, propylene glycol monostearate, microcrystalline cellulose, Sodium Carboxymethylcellulose, guar gum, monoglycerides, carob bean gum, sorbitol, citric acid, vitamin A palmitate, carrageenan, salt]

Vitamin A 0%	•	Vitamin C 0%
Calcium 2%	•	Iron 0%

INGREDIENTS:

STRAWBERRY: PURIFIED WATER, WHEY PROTEIN CONCENTRATE, ORGANIC CANE SUGAR, CHICORY ROOT, GUAR GUM, XANTHAN GUM, NATURAL FLAVORS, BEET JUICE FOR COLOR, CITRIC ACID, SEA SALT, MONK FRUIT CONCENTRATE.

ORANGE CREAM: PURIFIED WATER, WHEY PROTEIN CONCENTRATE, ORGANIC CANE SUGAR, CHICORY ROOT, GUAR GUM, XANTHAN GUM, NATURAL FLAVORS, CITRIC ACID, ANNATTO FOR COLOR, SEA SALT, MONK FRUIT CONCENTRATE. CHOCOLATE COATING: ORGANIC PALM KERNEL OIL, CHOCOLATE LIQUOR PROCESSED WITH ALKALI, SUGAR, COCONUT OIL, SOYBEAN OIL, SOY LECITHIN (AN EMULSIFIER), PURE VANILLA EXTRACT. OUR NATUBAL FLAVORS DO NOT CONTAIN MSG OR HVP. ALLERGY INFORMATION: CONTAINS SOY. THIS PRODUCT HAS BEEN PROCESSED ON EQUIPMENT THAT ALSO PROFESSES NUTS, WHEAT, EGGS, AND MILK. THIS PRODUCT CONTAINS WHEY PROTEIN CONCENTRATE, WHICH IS A DAIRY DERIVATIVE.

Arctic Zero, Inc., Escondido, CA 92025

Skinny Cow Chocolate/Vanilla Ice Cream Sandwich ingredients

Taken from cleaneatingsurvivalguide.com/blog/2013/12/25/skinny-desserts-the-low-down



Have you eaten a soybean today?

Raise your hand if you have eaten:

- chocolate candy
- a granola bar
- a slice of bread

What other foods have soybeans as an ingredient?



Food products from soybeans

- Bread
- Candy
- Doughnuts
- Frozen dessert
- Pancake flour
- Pie crust
- Cookies
- Crackers
- Vegetable oil
- Margarine
- Mayonnaise
- Salad dressing

- Chocolate bars
- Cereal
- Diet foods
- Noodles

Traditional ones

- Soy sauce
- Tofu
- Natto
- Soymilk
- Tempeh
- Miso







Natto on rice



Have you used a soybean today?

Raise your hand if you:

- took an antibiotic
- used a cleaning product
- walked on carpet
- used shampoo

What other products have soybeans as an ingredient?



Consumer/industrial products from soybeans

- anti-corrosive agents
- caulking compounds
- core oils
- diesel fuel
- disinfectants
- dust control agents
- electrical insulation
- epoxies
- fungicides
- herbicides
- inks
- insecticides
- linoleum backing
- paints
- plasticizers
- protective coatings
- putty
- soaps

- shampoos
- detergents
- wallboard
- pigments for paint
- rubber manufacture
- adhesives
- antibiotics
- asphalt emulsifiers
- binders for wood products
- cleaning fluids
- cosmetics
- films for packaging
- leather substitutes
- particle board
- plywood
- polyesters
- textiles
- foam cushions in cars





Agricultural soybean products



Animal feed

- Poultry
- Pigs
- Beef and dairy cattle
- Fish
- Goats
- Bees
- Calves (milk replacement)
- Pets
- Minks

Other ag uses

- Herbicides
- Insecticides
- Fungicides
- Fuel



Do you know what nutrients make up a soybean?





Why are these nutrients important?

The nutrients in soybeans provide clues about how they can be used...

For example:

- Protein is great for animal feed
- Oil is used in both food applications and industrial uses



Activity

Make a soybean poster and divide it into the categories and percentages below. Label each section of your poster with the proper percentages.





How many did you get correct?

What do you know now that you didn't know before we started?



Related careers

- Food Scientists use soy products in many foods.
- Chemists make polymers for cleaners and plastics.
- Product Researchers develop new products from soy.
- Animal Nutritionists create feed mixes for specific animal feed.
- Careers in drug development using soy products include pharmacokinetics and pharmacodynamics.

