



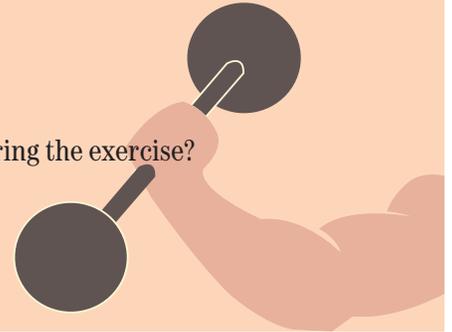
## Soybeans = STRONGER MUSCLES

There are over 630 muscles in your body. Muscles move you! Without muscles, you wouldn't be able to open your mouth, speak, walk, or run.

### EXPERIMENT

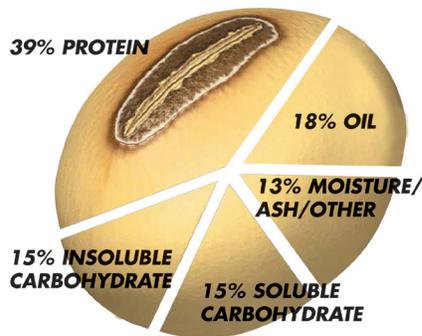
Do a sit-up and feel your stomach as you do it. Lift a hand weight. What happens to your upper arm when you lift it?

What are you feeling when you do these exercises? What happens to the muscle during the exercise?



Your muscles are made of many cells. Your muscles need energy to work. Muscles get this energy from food, especially protein. Without food, particularly protein, your muscles wouldn't have the energy to move! Protein is one of the most important fuels for our body. Protein is the building block for bones, muscles, skin, and blood.

Soybeans are often called the miracle crop and are one of the world's best providers of protein and oil. Soybeans are high in protein.



Soybeans contain all three of the main nutrients needed for good nutrition: complete protein, carbohydrates and fat, as well as vitamins and minerals. Soybeans are the only vegetable that contains complete protein.



# Export



GRADES  
3  
4

## Soybeans = STRONGER MUSCLES

### CLASS DISCUSSION QUESTION

What do you think would happen to your muscles and body if you did not eat enough protein?

We are lucky that here in the United States we have many available forms of protein from both animals and plants to keep us healthy. There are many countries around the world that are not as fortunate. Afghanistan is one of those countries. The people of Afghanistan have some of the poorest nutrition in the world. According to UNICEF, more than half of all children under age 5 suffer from moderate or severe slowed growth rates. Twenty-five percent of children die before reaching their fifth birthday. That is, 1 in 4 kids die due to lack of good nutrition like protein!

Several U.S. state soybean groups created the World Initiative for Soy in Human Health (WISHH) Program in 2000. Their goal is to create long-lasting solutions for the protein needs of people in poor countries like Afghanistan by making U.S. soy products available. Nutrition scientist Dr. Steven Kwon has seen the impact of adding soy to the diet in his 28 trips to Afghanistan. “After one month, the children’s faces go from looking sick to normal,” Kwon says. “In three months, we see healthy and happy looking children — all because of soy.”

Exporting soybeans to countries like Afghanistan obviously helps them in so many nutritional ways. How can the increasing demand for soybean use through groups like WISHH help the American farmer?

### ENDING ACTIVITY

Create Strawberry Banana Soy Fruit Smoothies (Protein Smoothie):

3 cups plain or vanilla soymilk

1 cup of frozen strawberries

1 ripe banana

Mix in a blender until smooth. Makes 4 cups.

IL Learning Standards Science Late Elementary 11A2b, 11A2d, 13B2c, 13B2f



Funded by the soybean checkoff.  
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