



EVERYBODY LOVES CHOCOLATE

What you need

Labels from various chocolate and chocolate-flavoured products.

What to do

1. Examine the list of ingredients on a chocolate or chocolate-flavoured product.
2. What is the first ingredient listed? This ingredient makes up the largest amount of the product.
3. What is the last ingredient listed? There is very little of this ingredient in the product compared to the other ingredients.
4. Does your product contain vegetable oils like coconut, soybean and palm oil? If it does, it is not really chocolate. It is a chocolate-flavoured product.
5. Based on the ingredients listed, separate the chocolate from the chocolate-flavoured products.

Observation

Which did you find more of – chocolate or chocolate-flavoured products? Did this result surprise you?

Why?

Government standards describe chocolate as containing the following ingredients: cocoa solids, cocoa butter, sugar, milk solids, lecithin, vanilla, vanillin and salt. As long as a product contains cocoa solids and no ingredients other than those listed above, then it is considered chocolate. Much of the “chocolate” sold is made using cheaper fats than cocoa butter. The vegetable oils in chocolate-flavoured products make a coating. Coatings are shinier than chocolate and easier to make into shapes.

TASTE TEST

What you need

Many samples of different types of chocolate

What to do

1. Place your different chocolate samples on a plate. Examine them. Which ones look the darkest and smoothest?
2. Smell each sample of chocolate. Which ones smell the best?
3. Break each piece of chocolate. Which ones break the cleanest?
4. Taste each piece of chocolate. Does the taste stay on your tongue even after you swallow? Does the chocolate melt smoothly and not become grainy?

Observation

Can you taste the difference between chocolate and chocolate-flavoured products?

Did you know?

Chocolate is produced from the cacao tree in tropical climates. The water from chocolate beans is removed by roasting the beans in an oven for two hours. The dried seed is ground, made into a liquid and poured into shapes and molds. The pure chocolate this makes is it bitter.

Chocolate is made sweet by mixing the pure chocolate with cocoa butter and sugar. By changing the amount of each, the taste and texture can be changed.

The Mayans and Aztecs were the first people to cultivate and consume chocolate. The Aztecs thought chocolate would give the person more energy and wisdom. Approximately 1000 years ago the beans that were used to make chocolate were also used as money because they were so valuable.

Pure white chocolate is hard to find. It contains cocoa butter, sugar and milk solids. It does not have any cocoa solids. So, according to government standards, it isn't real chocolate.

Web sites

All about chocolate – with no added calories. http://www.exploratorium.edu/exploring/exploring_chocolate/

More history and chemistry of chocolate. <http://faculty.washington.edu/chudler/choco.html>

