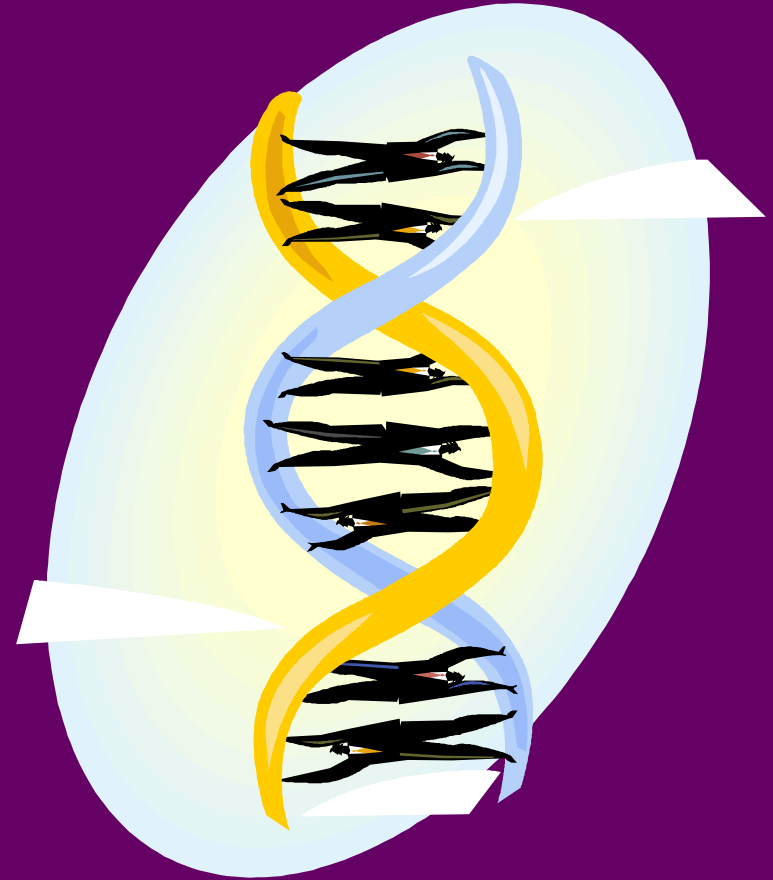


What does chocolate
have to do with
genetics?



Click the mouse to start

Chocolate comes from the beans of the cacao tree, *Theobroma cacao*.

Just like humans, and every other living organism, the cacao tree has DNA.



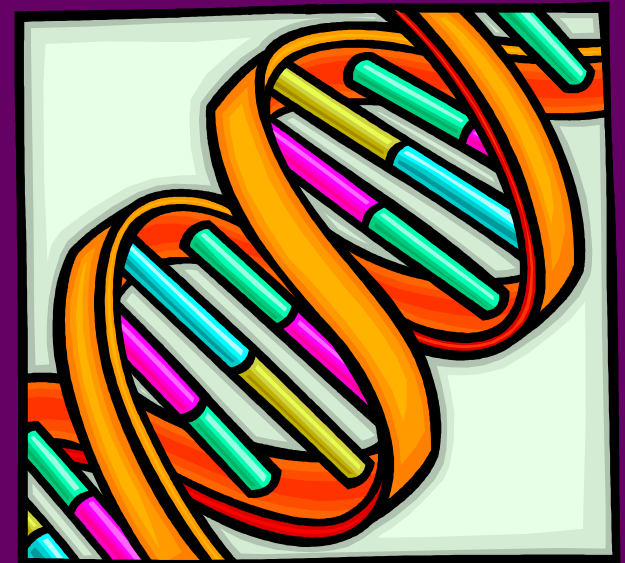
[Click the mouse to learn more](#)

Humans vs. Chocolate

Cacao has only 10 chromosomes, compared to your 23. Chromosomes are the structures of DNA and protein found in cells.

Our genome, the full set of DNA in a cell or organism, is seven and a half times larger than the cacao tree's.

However, scientist's think that cacao may have 30,000 genes. That is more genes than they think humans have!



[Click the mouse to learn more](#)

Are you a genetic chocoholic?

You can inherit a 'sweet tooth' from your parents. Recent research suggests there is a genetic reason why some people crave sugary foods.



Scientists bred strains of mice according to whether they preferred sweetened or unsweetened water.

They found a gene that was different in the two groups of mice and then searched for a similar gene in humans.

[Click the mouse to learn more](#)

Why do we crave sweetness?

In our past, it would have been important to be able to identify, sweet and fatty energy rich food.

A genetic trait making us seek such food out would have helped us survive.



[Click the mouse to learn more](#)

In today's sugar rich world, a craving for sweetness and fat may not be such an advantage.

We can easily get much more than the fat and sugar we need to survive.

Because of this, our population getting fatter, and need to be careful about how much we eat.



Click the mouse to start again