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The Story of Chocolate

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Educational Objectives

1. Explore the origins and history of chocolate.
2. Learn about West Virginia chocolatiers.
3. Highlight festivals that celebrate the wonders of chocolate.

The origins of chocolate

The story of chocolate – its origins, the farmers who grow and harvest the cacao bean, the chocolatiers who make and sell it, and those who celebrate this sweet confection through annual festivals – is not well documented. The origin of the word "chocolate" can be traced back to the Aztec word "xocoatl," which was the name of a bitter drink brewed from cacao beans. Both the Mayans and Aztecs believed the cacao bean had magical properties, and it was saved for sacred rituals, such as birth, marriage, and death. In pre-modern Latin America, cacao beans were considered so valuable that they were used as money.

The Spanish brought chocolate to Europe, as well as the American colonies in the 1600s. By 1773, the demand for chocolate in the colonies was so high that over 320 tons of cacao beans were imported. Drinking chocolate was an activity open to all classes of people, because it was very affordable.

During the Revolutionary War, chocolate was used as a ration by the military, because it could be transported in solid blocks without spoiling. Since both armies consumed chocolate, in 1777 the Continental Congress imposed price controls for chocolate and cocoa. This was to decrease war profiteering and guarantee a supply of affordable chocolate for the military.

The Dutch are credited with the first step in creating solid chocolate. In 1828, a Dutch chemist, with the goal to cut the bitter taste, made

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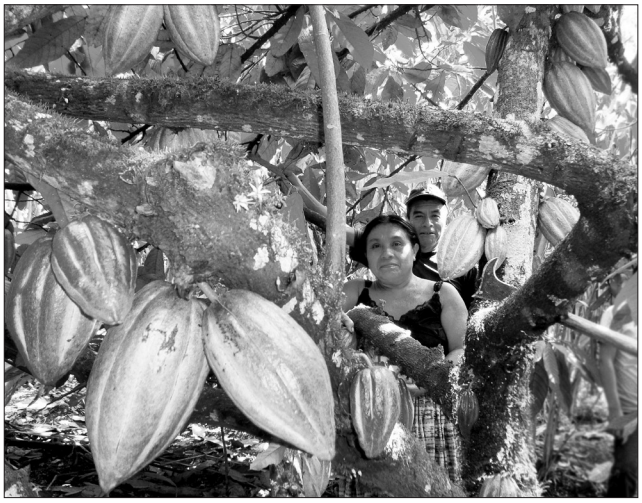
a product known as Dutch cocoa. In 1847, Joseph Fry finished the first modern chocolate bar when he mixed melted cacao butter into Dutch cocoa to make a moldable chocolate paste. This led to a company, Cadbury, selling boxes of chocolate candies in England in the late 1860s. Milk chocolate arrived on the market shortly thereafter, produced by Nestle.

Up to the 1870s, chocolate was dark. In 1872, a Swiss man named Daniel Peter invented a way to combine chocolate, a fat-based product, with milk, which is water-based. Daniel Peter is generally credited with being the inventor of milk chocolate. Adding milk greatly reduced the cost of producing chocolate, so it became even more accessible to people of all socio-economic statuses. This process was a closely guarded secret, until 1892 when an American named Milton Hershey figured out how to do this in his garage in Pennsylvania. The Hershey Chocolate Company still operates as a worldwide leader in chocolate production to this day.

The cacao bean

All chocolate comes from the cacao (pronounced Kah Kow) tree. The scientific name is *Theobroma* cacoa. *Theobroma* means "food of the gods." Wild cacao trees grow up to 30 feet tall. Under good conditions, a single mature cacao tree produces an average of 30 to 40 pods in a year. Ten pods yield about 1 pound of dried cacao beans, and an acre of trees yields about one ton of beans. Two West African countries, Ghana and the Ivory Coast, supply 75 percent of the world's cacao market.



Canopy trees protect cacao from the intense tropical sun, wind damage, and moisture-loss. Cacao requires specific conditions to thrive, which is why it grows within 20 degrees to the north or south of the Equator.

The cacao tree's flowers grow directly on the lower trunk and branches, which increases the flower's chances of being pollinated by midges, tiny flies that live and breed in the rainforest debris surrounding the tree. Midges play a crucial role in cacao pollination. The cacao flower, which is about the diameter of a nickel, is complicated in design, and the midge is the only insect that can work its way through the flower to pollinate it.

Animals also have an important interdependent relationship with cacao. Monkeys, rodents, birds, and other animals live near cacao trees. The animal's teeth, bills, and claws are used to break into the cacao pods to eat the sweet pulp inside. Cacao seeds grow inside tough-skinned pods, surrounded by fruit pulp. Unlike the fruit of most trees, mature pods do not fall from the cacao tree – and the seeds cannot germinate unless freed from the pod. Cacao seeds have a bitter taste, which discourages animals from eating them and causes them to spit out the seeds.

Cacao farming remains a labor intensive profession. Because the pods grow directly off the trunk and branches of the tree, machines cannot be used to harvest the pods. Farmers must harvest cacao pods and prune the trees by hand. Often children are used in the harvest of cacao beans, which keeps prices competitive

for giant chocolate companies and families in West Africa are often desperate for any source of income. Pods are cut from the tree and split open, so the pulp covered seeds can be piled up and fermented. The pulp heats up and disintegrates during the chemical process of fermentation. Fermentation is critical to developing the chocolate flavor. After fermentation, the seeds are put in the sun on tables, rooftops, or large mats to dry. After drying, the cacao seeds are packed and shipped to brokers, markets, and factories that will turn the seeds into cocoa powder, cocoa butter, and chocolate.

Chocolatiers

Chocolates are not just for special occasions like Valentine's Day or Easter. Since U.S. consumption averages 12 pounds per person each year, people have discovered a variety

of ways to indulge in this sweet confection. The diversity of products has grown from the original preparations as drinks, to molded bars, to a staggering number of niche flavors and custom treats. Many companies are touting the health benefits of chocolate. It's true that chocolate contains flavanols, which are antioxidants that have been linked to cardiovascular benefits. Remember to stay away from products high in fat and sugar, so a healthier choice is dark chocolate with more than 70 percent cacao.

Is there a chocolate shop near you? Try buying from independent retail outlets in your county and region, so you can discuss products personally with the owner. You might be surprised at what you will find. The West Virginia Department of Agriculture organizes a "Food and Things: Producer Guide and Directory." Believe it or not, the directory averages about 30 producers for chocolates, candy, and confections around the state. Two examples of West Virginia chocolatiers are DeFluri's Fine Chocolates in Martinsburg and Holl's Chocolate in Vienna.

Local chocolate shops have advantages, such as fresh products, custom orders, and special designs. For instance, covered and dipped fruits, like strawberries, apples, and bananas, taste and look better when made daily. For custom recipes made to order for diets, allergies, or unusual flavor profiles, working with a small producer is much more viable. Finally, almost any design can be custom molded. Is your daughter a tennis player or does your husband like to fish? A chocolate racquet or tackle box would make for a unique gift!

Chocolate festivals

The table below notes festivals in West Virginia, throughout the United States, and internationally that celebrate chocolate through taste tests, baking demonstrations, and much more. Many of the festivals held in the United States give all or a portion of the proceeds raised to local charities. The largest festival is the EuroChocolate held in Italy with 900,000 visitors annually. One of the more eccentric festivals is the one in Paris that features a chocolate fashion show and everyday items for sale (lamps, iPad covers) that look like chocolate.

Activities for a group

- Organize a chocolate taste test with homemade or store bought chocolates.
- Visit a chocolate festival in West Virginia or a neighboring state.
- Try this recipe.

"West Virginia Wild Girl Cocoa"

1½ Tablespoons cocoa powder
1½ Tablespoons honey
3 Tablespoons warm water
Sprinkle of salt
1 cup milk
⅛ teaspoon lavender buds
Dash of vanilla extract

Combine cocoa powder, honey, warm water, and salt in a pan over low heat. Quickly whisk into a paste and gradually add milk and lavender buds. When thoroughly dissolved, add a dash of vanilla and enjoy!

	Festival	Location	Time of Year
West Virginia	**Annual West Virginia Chocolate Festival**	Ripley, W.Va.	March
	Martinsburg Chocolate Festival	Martinsburg, W.Va.	April
	Chocolate Festival	Lewisburg, W.Va.	April
Other U.S. Locations	**Chocolate Lovers Festival**	Fairfax, Va.	February
	Chocolate Lovers Affair	Prince Frederick, Md.	February
	Carolina Chocolate Festival	Moorehead, N.C.	February
	Festival of Chocolate	Fort Lauderdale, Fla.	October
	Ghirardelli Festival	San Francisco, Calif.	September
International Locations	**Chocolate Fest**	St. Stephen, New Brunswick, Canada	August
	Salón Chocolate	Mexico City, Mexico	September
	EuroChocolate	Perugia, Italy	October
	Le Salon du Chocolat (Chocolate Festival)	Paris, France	October
	Choco-Late Festival	Brugge, Belgium	November
	chocolART	Tübingen, Germany	December

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