



Eastern Woodland
Indians living in the
northeastern United
States were the first
known people to have
used the sap of
maple trees.

1



Maple syrup is made from the xylem sap of maple trees and is now a common food all around the country.



Native Americans from many regions chewed the sap from trees to freshen their breath, promote dental health, and address a variety of other health issues.

2



The sap of the sapodilla tree, known as chicle, was chewed by native peoples in Central America. It was used as the base for the first mass-produced chewing gum and is still used by some manufacturers today.



Inuits, indigenous peoples of the Arctic, carved goggles out of wood, bone, or shell to protect their eyes from the blinding reflection of the sun on the snow.

3



Goggles made from wood, bone, or shell were a precursor to modern sunglasses and snow goggles, which protect the eyes from ultraviolet rays.



Aztecs and Mayans living in Mesoamerica harvested sap from what we call the “rubber tree” and made an important contribution to team sports.

4



The Olmec, Maya, and Aztec peoples of Mesoamerica used the sap from certain trees to make rubber balls. The Maya still make them today! These balls are considered a precursor to the bouncing ball used in modern games.



Native peoples in Mesoamerica developed a method of cooking ground corn with alkaline substances. This method produces a chemical reaction that releases niacin. Niacin softens the corn, increases its protein content, and prevents against a skin disease called pellagra.

5



This alkali treatment process (called “nixtamalization”) is used in the production of several foods that are eaten across the Americas, such as grits, corn tortillas, and tamales.



A wide variety of grain plants were domesticated by indigenous peoples across the world over thousands of years.

6



Cereal is a food made from processed grains such as barley that Americans often eat as the first meal of the day. A wide variety of grain plants were domesticated by indigenous peoples across the world over thousands of years.



Native Mesoamericans were the first to cultivate the vanilla plant and perfected the complex curing, heating, and drying process that brings out the plant's flavor.

7



Not only is vanillin (the compound that creates the flavor and smell of vanilla) a popular flavoring for sweet foods, it is also commonly used in the manufacture of perfume.



Native Americans and other indigenous cultures throughout the northern hemisphere used parts of the willow plant for pain relief.

8

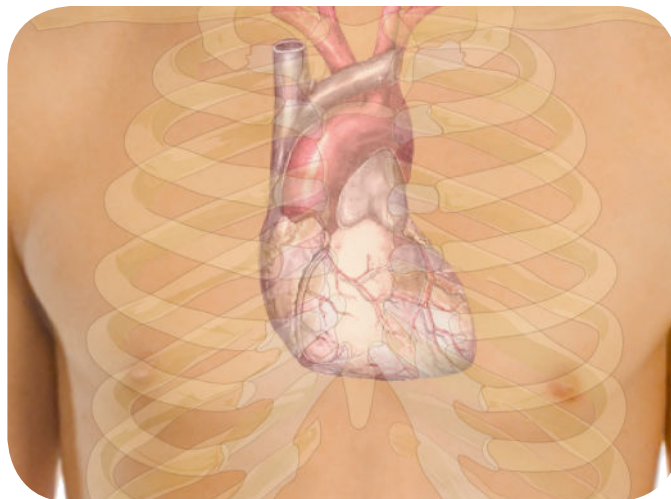


Aspirin contains acetylsalicylic acid extracted from willow and other salicylate-rich plants. Although Aspirin has only been manufactured since 1897, the medical use of this main ingredient has been used for thousands of years.



Native peoples in northeastern North America carefully administered small doses from the toxic foxglove plant to treat heart problems.

9



Today, chemicals from the foxglove plant are used to treat a variety of heart problems, including heart rate regulation.

Freeze-drying removes water from food and makes it last longer by slowing down decomposition. Many of the foods that astronauts take into space are freeze-dried so they can last a long time and rehydrate quickly.



This crop is native to the Andes Mountains of Bolivia, Chile, and Peru. It is a high-energy grain that has been eaten for over 5,000 years.

11



Quinoa has been an important food in indigenous cultures for thousands of years. The Inca thought the crop was sacred and referred to it as “the mother of all grains.”



This grain is composed of tall grasses that grow in marshes or open water. Its dark-colored seeds have been traditionally gathered for food by indigenous peoples of the northern United States and Canada.

12



Native Americans traditionally harvest wild rice by canoeing into the plants, bending stalks over a canoe with wooden sticks, and knocking off rice kernels into the canoe.



The cultivated peanut was eaten over 4,000 years ago by the people of the Ñanchoc Valley in Peru. It is now grown throughout warm regions of the world.

13



Peanut oil can now be used to power biodiesel motors. It is also commonly used to fry foods.



Beans are one of the oldest cultivated plants in human history. Native peoples across the Americas grew beans for food and in combination with other plants (often squash and corn) to promote soil fertility.

14



A variety of beans native to North America are now used around the world as cover crops—plants that are used to naturally increase nutrients in soils for food production.



The Yagua, indigenous to the Amazon, painted a poison gum (derived from vines) on the tips of their arrows and darts. This poison produced a paralytic effect.

15



The poison, known as curare, was found to be an effective muscle relaxant and numbing agent when used in small doses. Today, more stable, synthesized drugs are more commonly used.



The Menominee people, native to Wisconsin, used the leaves, bark, or twigs of the witch hazel plant to treat skin conditions, soothe muscles, and treat coughs and colds.

16



Witch hazel extract can be used to constrict body tissues. It is a common ingredient in products used to treat skin irritations like bites, burns, and inflammation.



Native peoples in the Andes region of South America were the first to cultivate the potato plant, which became an essential crop in many parts of the world.

17



Potato starch is valued for its binding qualities. Scientists working in the bioplastics industry have created biodegradable trash bags, food packaging, and even golf tees using potato starch.



The Quechua people, native to South America, used the bark of the cinchona tree to create a medicinal drink.

18

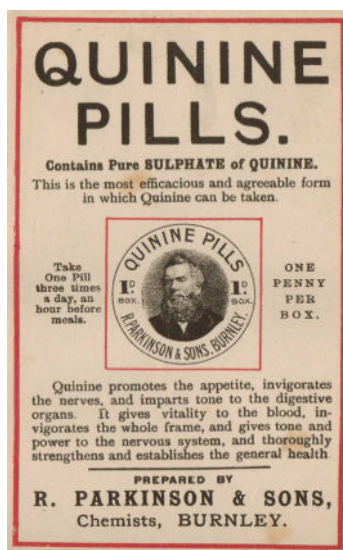


photo by ParkinsonsLtdBurnley

Quinine, a chemical compound derived from the bark of the cinchona tree, was used as early as the 1600s to combat malaria and is still considered an effective treatment for malaria today.