## **INDIAN CONTRIBUTIONS TO AMERICAN MEDICINE**



In a fascinating book called *American Indian Medicine*, author Virgil Vogel begins his first chapter with the story of French explorer Jacques Cartier:

During the bitter cold winter of 1535-36, the three ships of Jacques Cartier were frozen fast in the fathom-deep ice of the St. Lawerence River...Isolated by four feet of snow, the company of 110 men subsisted on the fare stored in the holds of their ship. Soon scurvy was so rampant among them that by mid-march, 25 men had died and the others...were so ill that hope for their recovery was abandoned. As the crisis deepened, Cartier had the good fortune to encounter once again the local Indian chief, Domagaia, who had cured himself of the same disease with 'the juice and sappe of a certain Tree.' The Indian women gathered branches of the magical tree, "boiling the bark and leaves for a decoction. And placing the dregs upon the legs.' All those so treated, rapidly recovered their health, and the Frenchmen marveled at the curative skill of the native (5).

According to Jack Weatherford, author of *Indian Givers*, Cartier later noted in his journal that "no amount of drugs from Europe or Africa could have done what the Huron drugs did in a week" (183).

These Indians, as Vogel points out, knew nothing about Vitamin C, but through trial and error, they had ingeniously discovered that there was something in hemlock braches that cured a debilitating disease known then as scurvy, "which most Europeans believed to be caused by bad air" (4). But medical science at the time was not willing to accept the idea that such primitive and uncivilized people as the Indians could possibly have anything to teach them about medicine, so Europeans continued to die of scurvy for the next 200 years before a British Naval surgeon in 1884 finally came across the incident in his reading and began researching the possibility that scurvy was indeed caused by a vitamin deficiency. In assessing Native American influence on American medicine, Vogel also notes the large number of Indian drugs and treatments listed in *The Pharmacopoeia of the United States* (Vogel 4-6).

Today the attitude toward the medicinal value of herbs has changed completely, with vendors making huge profits selling herbal remedies. Some of these herbal medicines, of course, have no real curative properties nor did all of the Indians' herbal remedies, but it is interesting to see the number of valid medical treatments that the Indians discovered long before the medical science of the white man. Vogel's *American Indian Medicine* will provide you with the most comprehensive analysis of Indian medicine, but in Chapter 10 of Weatherford's *Indian Givers*, you will also find numerous examples of Indian contributions to American medicine.

## Finding Examples of Indian Medicine at Home



Share some of the information from Vogel and Weatherford with your students and show them a few specific examples of Indian contributions to American medicine. A number of these medicines and ointments are probably sitting in your medicine cabinet right now e.g. aspirin, syrup of ipecac, laxatives, and wintergreen or witchazel ointment. The Indians ground the bark of willow and poplar trees into a powder, then used it to alleviate their aches and pains. Later, it was discovered that the main ingredient in aspirin, salicin, was found in the bark of these trees (Weatherford 185). You could also bring in a bottle of tonic water and explain the importance of quinine, the main ingredient in tonic water. Millions of people died of malaria before the introduction of quinine, a medicine that evolved from the Peruvian Indians' use of the bark of a tree which grew at very high elevations (Weatherford 177). You might also find or purchase some sphagnum moss that Indian mothers used as a kind of diaper for their babies. (It absorbs moisture). If you have a sassafras tree handy, you could take in some bark and explain that the Indians boiled this in water and then used it to reduce fevers. And you might want to take in a can of coke to show your students that these "modern" articles that are so much a part of their own immediate environment actually evolved from early Indian medicines (Weatherford, Chapter 10).

## **Team-Teaching Session with Science Teacher**



You could also use the topic of American Indian medicine as an opportunity to show your students the interdisciplinary nature of learning. Invite the biology teacher or science teacher from your school to help you team-teach your class. You could use the first part of class to talk about Eastern Indian

Woodland culture e.g. the Delawares' closeness to nature, their attitude toward the forest, the way they looked at trees and plants from a different mindset than most European settlers. Your colleague from the sciences could then explain the medicinal properties of the various plants and tree barks used by Pennsylvania Indians to treat illnesses and answer any questions the students might have.

Another good source of information is Gladys Tantaquidgeon's *Folk Medicine of the Delaware and Related Algonkian Indians*. The author, a Mohegan Indian from Connecticut, sat down in 1930 with a Delaware Indian from Oklahoma named "Wi-tapanoxwe" (Walks with Daylight) and recorded Wi-tapanoxwe's direct knowledge of Delaware Indian practices. In the first section of the book, "Delaware Medicine Practice and Folk Beliefs," you will find a list of plants and trees used by the Delawares that can still be easily found in Pennsylvania e.g. cattails, pokeweed, dandelion, bittersweet, blackberry, holly, black walnut, wild cherry, red oak, dogwood. With these visual aids that you have collected from Mother Nature, you could provide your students with an interesting, informative lesson on how the Delaware treated common ailments and what today's herbal industry owes to the knowledge of the Eastern Woodland Indian.