



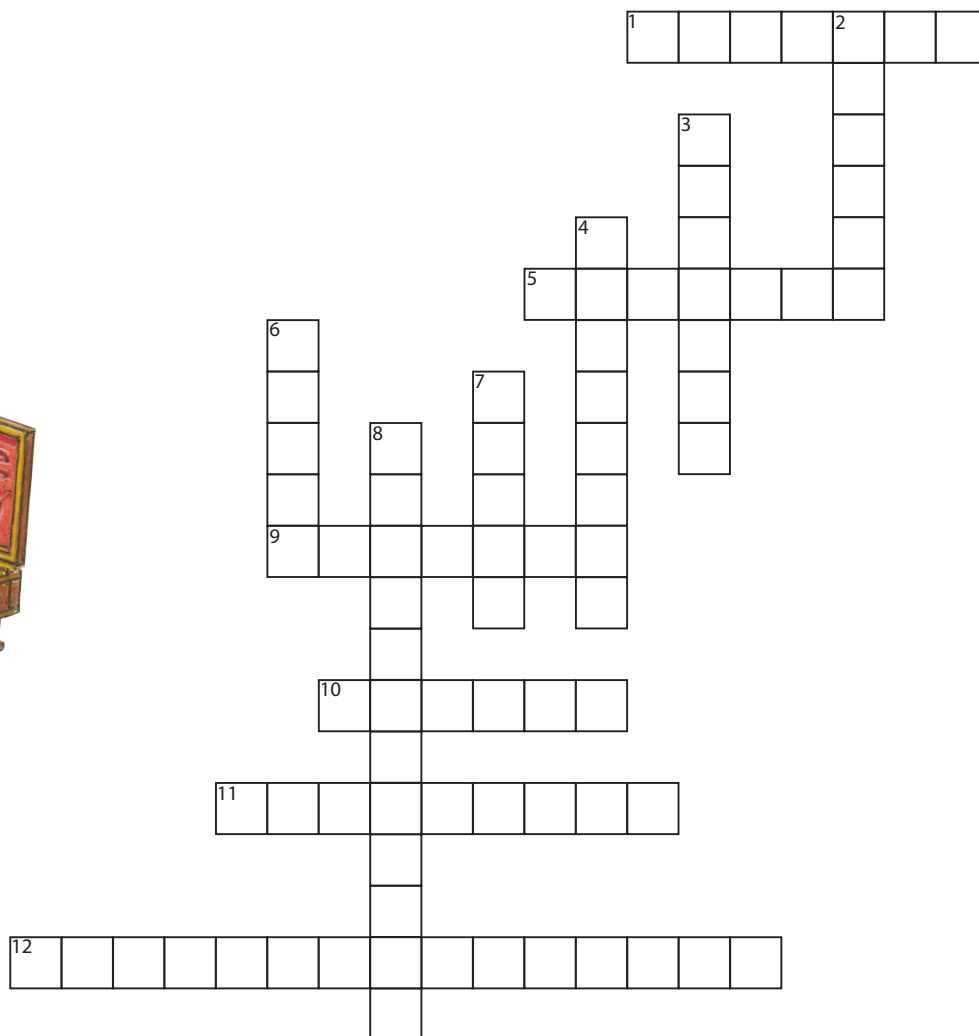
ACTIVITY

Crossword Puzzle: All Guts and Glory

Use this crossword puzzle to learn vocabulary related to naval medicine in the 19th century.

Crossword Puzzle: All Guts and Glory

Naval Medicine in the 19th Century



Across

1. Amputation instrument
5. A naval ship's infirmary
9. Responsible for the health of the sailors on a naval ship
10. _____ & pestle used to prepare medicines.
11. Name of USS *Constitution's* surgeon in the War of 1812
12. Nickname is *Old Ironsides*

Down

2. Skin pale? Teeth falling out? You might have this!
3. You could be in serious trouble if you're brought here during battle
4. Found in fruits and vegetables
6. 19th century doctors knew nothing about these organisms
7. Common symptom of many illnesses
8. Help's the ship's surgeon

Naval Medicine during the War of 1812

Physicians and surgeons during the War of 1812 possessed an exquisite knowledge of anatomy, yet their medical worldview severely hampered their ability to successfully cure and prevent diseases. The idea that certain microbes caused and spread disease was still many years in the future. Surgeon Amos Evans on board *Constitution* could not know that the multiple cases of dysentery in the crew were probably caused by drinking the Potomac River's fresh, but filthy, water that had been stored in barrels on board ship.

For Evans and his contemporaries, physiological imbalances caused disease. Only by restoring equilibrium to the system could disease be eliminated. The millennia-old "humoral" theory formed the basis of all medical thought. Articulated most famously by the Greek physician Galen in the first century, the humoral theory assumed that the human body contained four essential "humors:" blood, phlegm, black bile, and yellow bile. Each of these humors reacted to different atmospheric and environmental conditions. When one or more of the humors increased or decreased, the resulting imbalance produced the symptoms of disease. The body's inputs and outputs were equally important. The amount a person perspired or vomited told a doctor that the patient's system was in a state of disequilibrium. At the same time, they also monitored the activity (or inactivity) of a patient's nervous and vascular systems.

Medical treatments were intended to restore the lost equilibrium. By releasing bodily fluids through perspiration, urination, defecation and bloodletting, the doctor hoped to restore the body's balance and return it to health.

How did naval surgeons put these theories into practice? The course of treatment for catarrh, what doctors would now call a severe cold or the flu, a frequent affliction of seamen living in damp, close-packed conditions, vividly illustrates accepted practice during the time of the War of 1812. First, the doctor drew blood from the patient. Next, he might administer "tartar emetic," antimony potassium tartrate to induce vomiting. A cathartic, perhaps antimony salt in wine to evacuate "bad humors" with the stool followed. A dose of barley tea soothed the system. Finally Jalap root (*Exogonium purga*) a powerful cathartic, purged the body of all lingering imbalance.ⁱ

Doctors and their patients thought these treatments worked because they produced noticeable effects. If the medicine did not "operate freely" (produce visible results), then they were thought ineffective. Luckily, the human body is capable of bearing all sorts of abuse, and patients frequently improved even after experiencing these harsh treatments. In fact, under Evans' tenure, only five seamen died of disease or "natural causes."

ⁱJ. Worth Estes, "A Naval Surgeon in the Barbary Wars: Dr. Peter St. Medard on New York 1802-3," In *New Aspects of Naval History: Selected Papers From the Fifth Naval History Symposium*, edited by Department of History, U.S. Naval Academy, 81-92. Baltimore: Nautical & Aviation Pub. Co., 1985.