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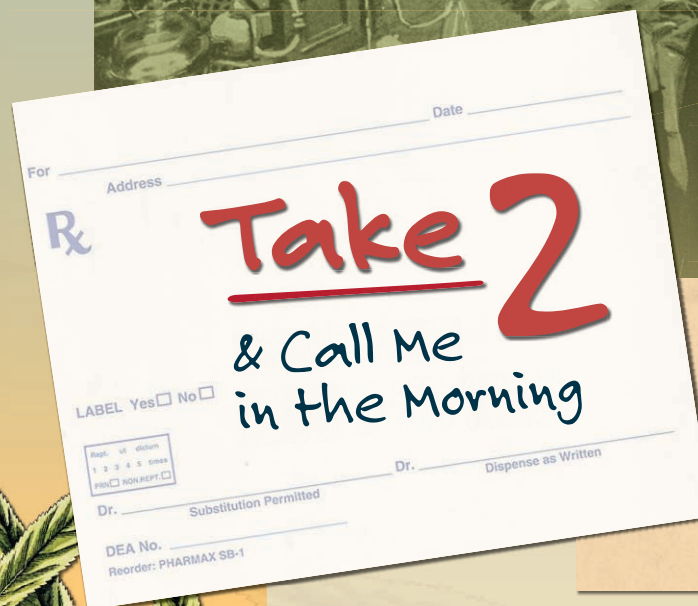
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Chemists in Leeds
University Laboratories, 1908
Courtesy National Library of Medicine



The Story of Aspirin Revisited

www.nlm.nih.gov/the-story-of-aspirin

 National Library of Medicine

The National Library of Medicine produced this exhibition. All images are courtesy of the National Library of Medicine.
Guest curator: Anne Rothfeld, PhD
Designer: HealyKohler Design

For centuries, people used willow bark to relieve pain and treat fevers. However, it wasn't until the late 1800s that scientists developed an analog of the active ingredient in willow bark, creating the essential drug that's now part of everyday life, aspirin.

Modern organic chemistry and technology isolated, then synthesized the properties of willow bark into a medication now common worldwide.

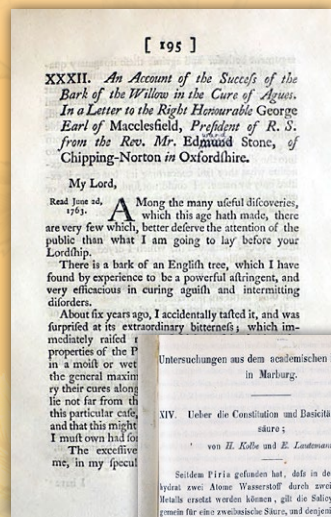
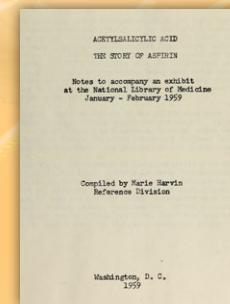


The Origins of The Story of Aspirin

In 1959, Marie Harvin, reference librarian, developed a display, *Acetylsalicylic Acid: The Story of Aspirin*. *Take Two and Call Me in the Morning* revisits this earlier show as the NLM continues to evolve.

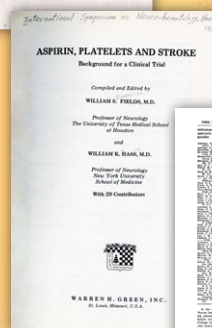
Botanists call the white willow tree by its Latin name, "Salix alba." Early physicians and healers used the bark to ease childbirth pains and treat colic, gout, and ear pains.

Herbarius (Herbalist), Arnaldus de Villanova, 1499



Reverend Edward Stone (1702-1768) is recognized as the first person to show willow bark's effectiveness at relieving symptoms associated with ague and rheumatic fever. In 1763, he reported his discoveries to the Royal Society of London.

"An Account of the Success of the Bark of the Willow in the Cure of Agues..." *Philosophical Transactions of the Royal Society of London*, Edward Stone, 1763

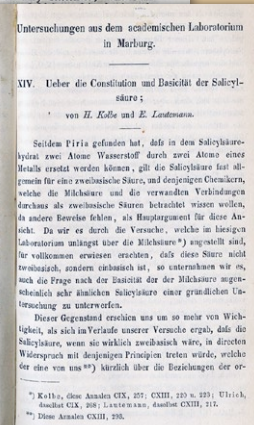


In the latter half of the 20th century, scientists began examining aspirin for benefits beyond pain relief and fever reduction.

Aspirin, Platelets, and Stroke: Background for a Clinical Trial, William S. Fields, MD, and William K. Hass, MD, 1970

"Long-Term Results in Early Cases of Rheumatoid Arthritis Treated with Either Cortisone or Aspirin," *British Medical Journal*, Joint Committee of the Medical Research Council and Nuffield Foundation on Clinical Trials of Cortisone, 1957

Aspirin in Modern Therapy: A Review, Maurice L. Tainter, MD, and Alice J. Ferris, MD, 1969



In 1860, Hermann Kolbe, a German scientist, created a method to synthesize salicylic acid, the building block of aspirin, from smaller molecules instead of willow bark. Kolbe's synthesis made the bulk industrial production of salicylic acid and aspirin possible.

"Ueber die Constitution und Basicität der Salicylsäure," *Annalen der Chemie und Pharmacie* ("On the constitution and basicity of salicylic acid," *Annals of Chemistry and Pharmacy*), Hermann Kolbe and E. Lautemann, 1860



The value of aspirin as a therapeutic increased during World War I. The French manufacturer Usines du Rhône used the visual trope of the hospital nurse to assure customers of aspirin's effectiveness.

Postcard from Laboratoire des Produits Usines du Rhône, c. 1900s