



Asprin
Bryce Gates
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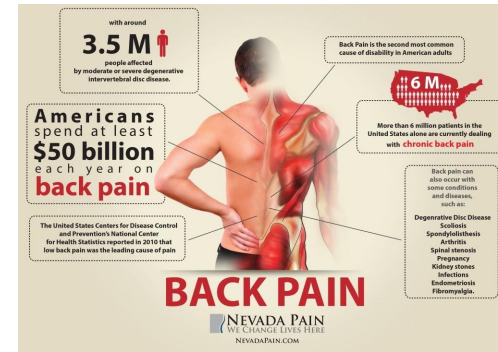
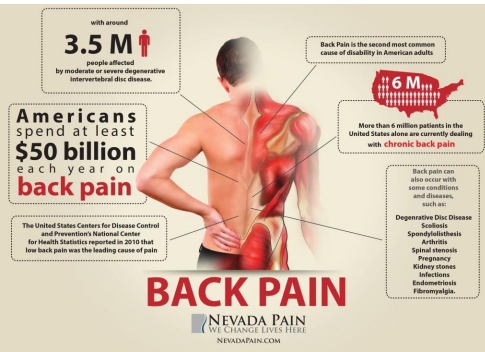
Who discovered aspirins?

The discovery of aspirin is customarily said to have resulted from Felix Hoffmann's rheumatic father encouraging his son to produce a medicine devoid of the unpleasant effects of sodium salicylate. Hoffmann, a chemist in the pharmaceutical laboratory of the German dye manufacturer Friedrich Bayer & Co in Elberfeld, consulted the chemical literature and came across the synthesis of acetylsalicylic acid and then prepared the first sample of pure acetylsalicylic acid on 10 August 1897. This was marketed in 1899 under the registered trademark of Aspirin. This account of the discovery first appeared in 1934 as a footnote in a history of chemical engineering written by Albrecht Schmidt, a chemist who had recently retired from IG Farbenindustrie—the organisation into which F Bayer & Co had been incorporated in 1925.¹



Which disease does Aspirin treats

Aspirin is used to reduce fever and relieve mild to moderate pain from conditions such as muscle aches, toothaches, common cold, and headaches. It may be also used to reduce pain and swelling in conditions such as arthritis.

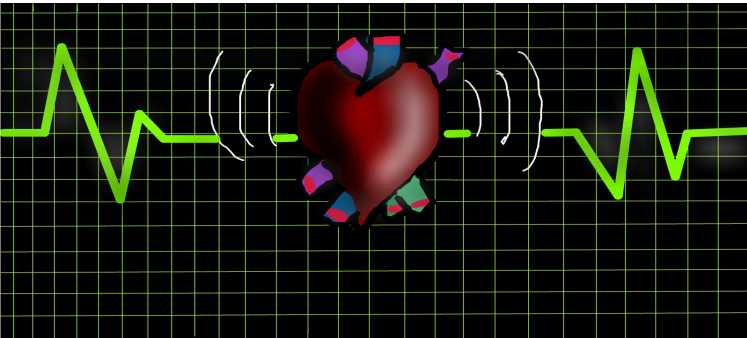


What causes this disease in the body

Daily aspirin therapy may lower your risk of heart attack, but daily aspirin therapy isn't for everyone. Is it right for you?

If you've had a heart attack or stroke, your doctor will likely recommend you take a daily aspirin unless you have a serious allergy or history of bleeding. If you have a high risk of having a first heart attack, your doctor will likely recommend aspirin after weighing the risks and benefits.

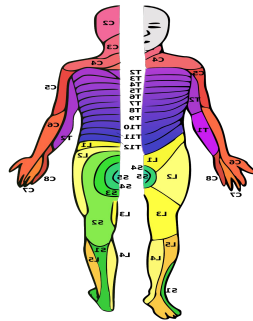
You shouldn't start daily aspirin therapy on your own, however. While taking an occasional aspirin or two is safe for most adults to use for headaches, body aches or fever, daily use of aspirin can have serious side effects, including internal bleeding.



How does the drug work in the body?

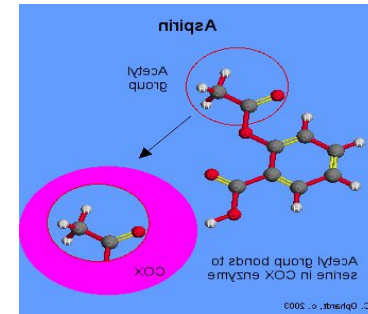
Pain sensation results when your nerves send an electrical signal to your brain. When you get injured, the damaged tissue releases chemicals called prostaglandins, which are like hormones and cause the tissue to swell. They also intensify the electrical signal coming from the nerves, which increases the pain you feel.

Aspirin is part of a class of drugs called NSAIDs (Non-Steroidal Anti-Inflammatory Drugs). Aspirin and other NSAIDs are widely used to address these nerve signals chemically by blocking the effects of certain enzymes that create prostaglandins. This means less pain and less swelling. Aspirin works to reduce this pain and swelling because it is an analgesic (pain reliever), an antipyretic (fever reducer) and an anti-inflammatory (fights swelling and inflammation).



The name of enzyme

Acetylsalicylic acid (ASA) is the most widely use analgesic, antipyretic, and anti-inflammatory agent in the world and remains the standard for which all other NSAIDs are compared. Aspirin is comprised of the active compounds acetic acid and salicylic acid, forming acetylsalicylic acid. Aspirin inhibits the biosynthesis of prostaglandins by means of an irreversible acetylation and consequent inactivation of COX; thus, aspirin inactivates COX permanently. This is an important distinction among the NSAIDs because aspirin's duration action is related to the turnover rate of cyclooxygenases in various target tissues. The duration of action of other NSAIDs, which competitively inhibit the active sites of the COX enzymes, relates more directly to the time course of drug disposition.²⁷ Because platelets are devoid of the ability to produce additional cyclooxygenase, thromboxane synthesis is arrested.



Aspirin having effective treatment

Aspirin, or acetylsalicylic acid (ASA), is commonly used as a pain reliever for minor aches and pains and to reduce fever. It is also an anti-inflammatory drug and can be used as a blood thinner

People with a high risk of blood clots, [stroke](#), and [heart attack](#) can [use aspirin](#) long-term in low doses.

Aspirin contains salicylate, which derives from willow bark. Its use was [first recorded](#) around 400 BCE, in the time of Hippocrates, when people chewed willow bark to relieve [inflammation](#) and [fever](#).

It is often given to patients immediately after a heart attack to prevent further clot formation and cardiac tissue death.

How does the drug cause undesired side effects

Bayer Aspirin (aspirin) is a nonsteroidal anti-inflammatory drug ([NSAID](#)) prescribed for treating fever, pain, inflammation in the body, prevention of [blood clots](#), and reduction of the risk of strokes and heart attacks. Bayer Aspirin is available as a [generic drug](#). Common side effects of Bayer Aspirin include rash, [gastrointestinal](#) ulcerations, abdominal pain, upset stomach, [heartburn](#), drowsiness, headache, cramping, nausea, [gastritis](#), and bleeding.

our Bayer Aspirin Side Effects Drug Center provides a comprehensive view of available drug information on the potential side effects when taking this medication.

This is not a complete list of side effects and others may occur. Call your doctor for medical advice about side effects.



Is the drug expensive

This aspirin price guide is based on using the [Drugs.com discount card](#) which is accepted at most U.S. pharmacies. The cost for aspirin oral delayed release tablet 81 mg is around \$8 for a supply of 36 tablets, depending on the pharmacy you visit. Prices are for cash paying customers only and are not valid with insurance plans.

EXPENSIVE



EXPENSIVE



Millions of dollars aspirins are sold yearly

Aspirin, one of the first drugs to come into common usage, is still the mostly widely used in the world - approximately 35,000 metric tonnes are produced and consumed annually, enough to make over 100 billion standard aspirin tablets every year.

Find out how aspirin is made in “The Chemistry of Aspirin”

Aspirin is an ingredient in a large number of propriety analgesic and cold/flu preparations. Doctors now also often prescribe it as a valuable medicine to prevent heart attacks and it is under investigation in a number of other medical conditions such as cancer and diabetes.

