Acetylsalicylic acid, the active ingredient in Aspirin™, is a versatile drug:

Relieving cold-related symptoms and fever

The common cold and influenza are the most common infectious diseases in human beings.¹ As an example, about three to five million people contract influenza during fall and winter seasons each year.² Despite the often benign nature of such illnesses, they still are a significant economic burden on society. Many patients rely on products such as Aspirin™ to relieve cold- and flu-related symptoms that include headaches and body aches, among others. Acetylsalicylic acid, the active ingredient in Aspirin™, however, is not only effective against pain; it also possesses anti-pyretic, or fever-reducing, properties.³

Fever is a method the body uses to protect itself from viruses or bacteria. By raising the body temperature to over 37 degrees Celsius (98.6 degrees Fahrenheit), the body fights off infections. Many pathogens are not able to withstand such temperatures. Experts regard a temperature of over 38.5 degrees (101.4 degrees Fahrenheit) Celsius as fever. If the temperature rises to over 39 degrees Celsius (102.2 degrees Fahrenheit), the fever is considered potentially serious; a temperature beyond 41 degrees Celsius (105.8 degrees Fahrenheit) is seen as life-threatening. This is because the body’s own enzymes start to malfunction at high temperatures.

In ancient times, physicians tried to lower fever by administering to their patients a special brew created by boiling the bark of willow trees in water. Today, we know that the bark contains salicin, a derivative of salicylic acid and related to acetylsalicylic acid. Both substances lower fever, while not influencing normal body temperature or suppressing the body’s immune reaction.

The effectiveness of acetylsalicylic acid, the active ingredient in Aspirin™, is supported by health authorities worldwide. Scientific evidence includes most recently a clinical study that compared acetylsalicylic acid with acetaminophen. A total of 392 adults with a fever of at least 38.5 degrees Celsius (101.3 degrees Fahrenheit) were included for the study. The patients received the same dose of either acetylsalicylic acid or acetaminophen/paracetamol. The study results did not demonstrate any significant difference between the two active ingredients. Half an hour after administration, the fever of the participants was lower and did not rise for at least four hours.

By inhibiting prostaglandin synthesis, acetylsalicylic acid not only lowers fever, but also relieves typical flu symptoms such as headache, sore throat, and body aches. Combining acetylsalicylic acid with vitamin C intake (as found in Bayer’s Aspirin™ plus C, marketed in more than 25 countries, including Germany, Italy, and Poland) may also support the body’s immune system during a cold or flu. In a 2005 study, the substances demonstrated a synergistic effect; they improved function and survival of white blood cells, i.e. macrophages. In that study, acetylsalicylic acid activated enzymes with anti-oxidative features, which in turn protected macrophages and cell tissue from damage. The authors concluded that acetylsalicylic acid supports the antioxidative effect already seen with vitamin C and that the combination acts synergistically.

Many viruses are extremely versatile, making it difficult to develop an effective cold vaccine. This is why symptomatic relief plays an important role in the treatment of the common cold. Since several symptoms such as nasal congestion and pain arise at the same time, Bayer developed Aspirin™ Complex, currently approved for use in Germany and 15 other countries. It contains 500 milligrams of acetylsalicylic acid to relieve pain and fever as well as 30 milligrams of pseudoephedrine to reduce nasal congestion. In an observational study involving 1,053 patients surveyed in pharmacies, more than 90 percent considered efficacy and tolerability of Aspirin™ Complex to be good or very good. Just 30 minutes after first administration with one or two sachets, patients experienced alleviation of their cold symptoms.

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Forward-Looking Statements
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