

# ASPIRIN

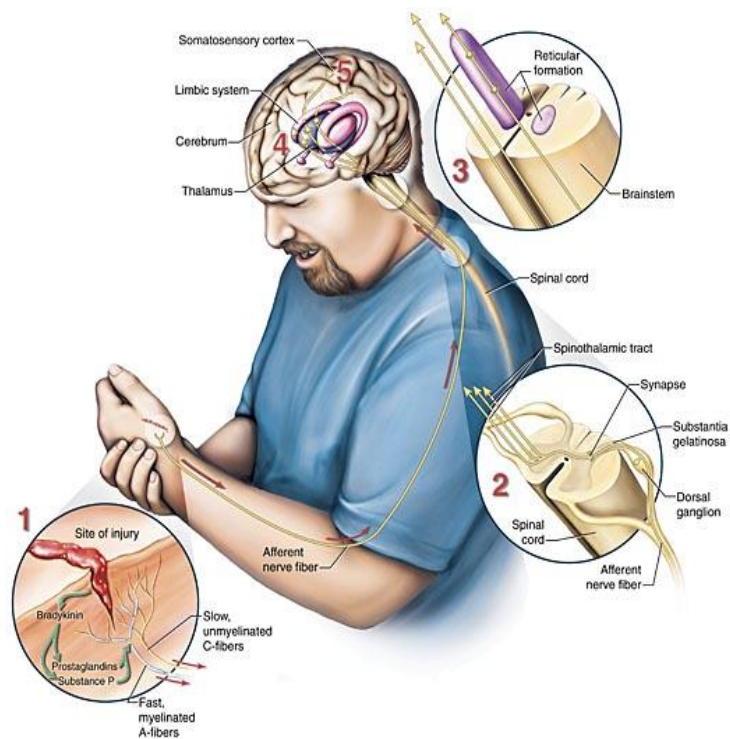
Helpful or Hazardous?



By Keith Wassung

**A**spirin, one of the first drugs to come into common usage, is probably the most widely used drug in the world. Approximately 35,000 metric tons are produced and consumed each year, enough to make over 100 billion standard aspirin tablets. It is estimated that over one trillion aspirin tablets have been consumed in the past 100 years. Each year over 60 billion aspirin tablets are taken worldwide with Americans consuming 34 billion of those tablets. Presently, aspirin is most frequently prescribed for the prevention of heart disease. According to the Center for Disease Control, over 50 million Americans take aspirin for the prevention of heart disease. This accounts for about 350 million dollars in annual sales. It is estimated that in the next ten years, medical doctors will recommend that an additional ten million Americans should begin taking aspirin on a daily basis.

## WHAT IS ASPIRIN



Aspirin, known chemically as acetylsalicylic acid, with a chemical formula of  $C_9H_8O_4$ , is made from the bark of the willow tree. First introduced in 1899, it is probably the most widely used drug in the world. It is found in such products as *Ascription*, *Ecotrin*, *Bufferin*, *Aspergum*, *Alka-Seltzer*, and many others.

When a cell is damaged, it releases a substance called a prostaglandin, which carries a chemical message to the central nervous system that the cell is in need of repair. The central nervous system responds by initiating the healing process that is needed to repair the damage. Aspirin destroys the prostaglandins so that communication is broken between the damaged cells and the nervous system and the healing process is interrupted.

“Symptoms represent the body’s best efforts to heal itself. By treating symptoms, you are suppressing the body’s natural response and inhibiting the healing process. Instead of treating symptoms, doctors should stimulate the body’s defenses to allow for completion of the healing process.”<sup>1</sup>

### Dr. Stephen Cummings

In a review of several studies, flu sufferers who took an anti-fever medication were sick an average of 3.5 days longer than people who did not take drugs. The drugs may make the flu more bearable by relieving aches and pains, but they may make it last longer. On average, flu symptoms lasted 5.3 days in participants who did not take aspirin or acetaminophen, compared with 8.8 days in people who took the anti-fever drugs. One possibility is that reducing fever may interfere with the immune system's response to an infection, the authors note. Dr. Karen Plaisance, lead author and professor of pharmacy at the University of Maryland, noted that similar findings have been reported in studies of chickenpox.<sup>2</sup>

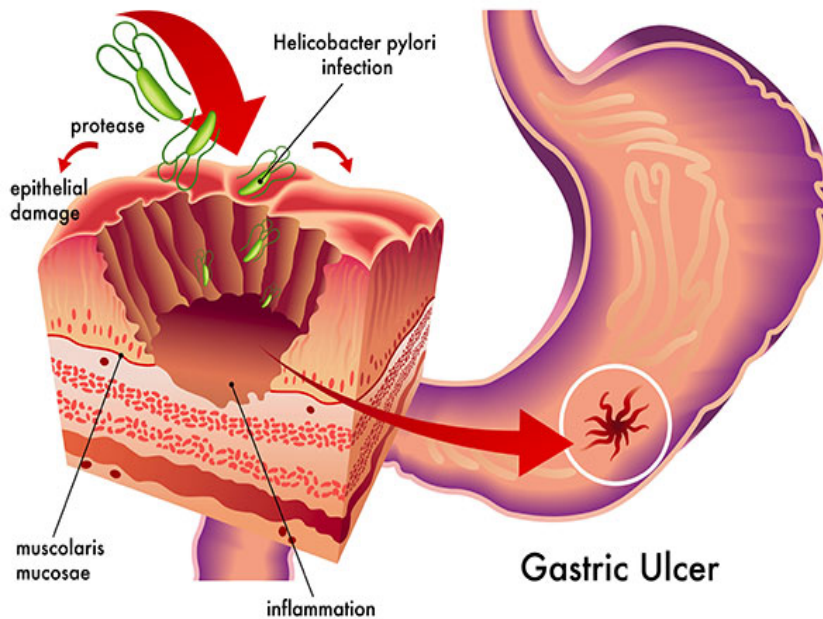
Aspirin temporarily relieves the discomfort of the symptoms, but by doing so, it slows down the healing process, which prolongs the problem rather than correcting it. Additionally, aspirin causes many adverse reactions and side effects.



## ASPIRIN'S SIDE EFFECTS

Besides carrying a chemical message, prostaglandins also maintain a protective lining in the stomach. Destruction of prostaglandins by aspirin destroys the stomach lining and inhibits replacement of the mucous lining.

The FDA estimates that NSAID's, (which includes aspirin, ibuprofen and acetaminophen) account for a reported 200,000 cases of gastrointestinal bleeding, 107,000 hospitalizations and as many as 20,000 deaths each year.<sup>3</sup>



Reye's syndrome is a deadly disease that strikes quickly and can attack any child or adult without warning. All organs are affected with the liver and the brain suffering the most damage. While the cause and cure remain unknown, epidemiologist research has established a link between Reye's syndrome and the use of aspirin and products that contain aspirin for flu-like symptoms. The United Kingdom, in 1986 had banned the giving of aspirin products to children under the age of 12, and has recently hardened that advice to include children under the age of 16. Though it is not widely publicized, the Surgeon General, FDA and the CDC recommend that aspirin products not be given to children under the age of 19 during episodes of illness that include fever.<sup>4</sup>

An extensive study published in the *New England Journal of Medicine* reported the following



Regular use of either acetaminophen or aspirin or of both was associated in a dose-dependent manner with an increased risk of chronic kidney failure.

The regular use of acetaminophen was associated with a 2.5 times greater risk of chronic kidney failure than that for nonusers of acetaminophen. For those who took >500g of acetaminophen per year, the risk was 5.3 times greater than for nonusers.

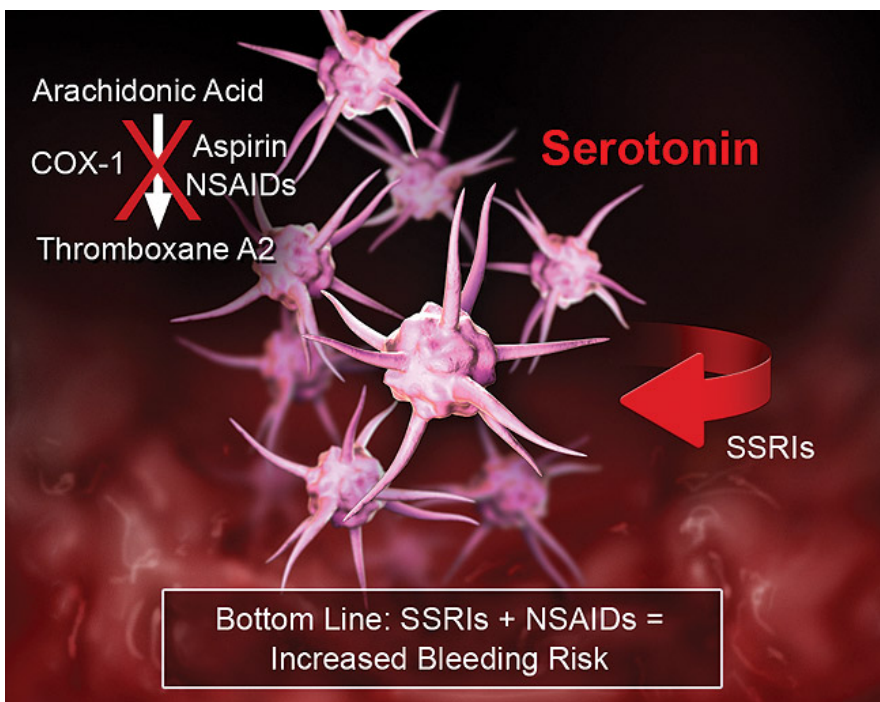
The regular use of aspirin was associated with a 2.5 times greater risk of chronic kidney failure than as that for nonusers of aspirin. For those who took 500g or more of aspirin per year (over 4 aspirin tablets every day), the risk was 3.3 times greater than for nonusers.<sup>5</sup>

## ASPIRIN AND BLEEDING



Every aspirin that is taken causes a small amount of bleeding. A microscope will show that the bowel movement of someone who takes one aspirin a day will contain blood. This is because aspirin thins the blood by destroying the platelets in the blood. These platelets are responsible for blood clotting that is an important part of the body's natural healing process. In fact, patients who are scheduled for any type of surgery are warned not to take aspirin for several days prior to their surgery because the bleeding is almost uncontrollable.

Recent research has also demonstrated that when NSAIDs are combined with selective serotonin reuptake inhibitors (SSRIs), the most widely used antidepressants in the world; it dramatically increased the risk of bleeding.



### UNITED STATES PHARMACOPEIAL CONVENTION

Use of aspirin during the last two weeks of pregnancy may cause bleeding problems in the fetus before or during delivery or in the newborn infant. Also, too much use of aspirin during the last three months of pregnancy may increase the length of pregnancy, prolong labor, cause other problems during delivery, or cause severe bleeding in the mother before, during or after the delivery. <sup>6</sup>

**IN NORMAL INDIVIDUALS: 1 DOSE OF 2 REGULAR STRENGTH ASPIRIN AFFECTS NORMAL CLOTTING FOR AS LONG AS 7 DAYS**



## ASPIRIN AND HEART ATTACKS

**A** study by the Physicians Health Group concluded that an aspirin a day was an effective preventative treatment against heart attacks. The study was published and carried by leading magazines and newspapers all over the world. The drug industry launched an extensive media campaign promoting this important health discovery.

What the study failed to mention was that it was conducted with buffered aspirin, which contains magnesium. Magnesium is a valuable mineral which has long been associated with the prevention of heart attacks. Follow-up studies revealed that aspirin alone did nothing to prevent heart attacks. Sadly, the results of the follow-up studies received little media attention.

A study in the *International Journal of Epidemiology* reported that serum magnesium levels are inversely related to the risk of death from ischemic heart disease. Serum magnesium concentration, independent of other risk factors, was inversely associated with death from all causes and from heart disease.<sup>7</sup>

A study in the *Lancet* reported that magnesium deficiency may also be implicated in coronary heart disease when it was revealed that injections of magnesium sulfate brought about **dramatic clinical improvement** in patients suffering from heart disease and in many cases the lipoprotein levels were brought back to normal levels.”<sup>8</sup>

### Should You Take Aspirin to Prevent Heart Attack?

The majority of physicians in the USA recommend aspirin for prevention of first heart attacks to almost everyone over the age of 50, even though women have not been included in the clinical trials of aspirin. While aspirin does prevent about 1/3 of first heart attacks, its side-effects are so severe as to cause a higher death rate overall than placebo. Non-fatal side-effects, such as internal bleeding and cataracts, are significant after years of aspirin use. The major study on which most recommendations are based did not utilize aspirin alone; therefore, the calcium and magnesium present in the buffered aspirin actually taken may have been responsible for some of the beneficial effects. Supplemental magnesium and vitamin E have been shown to be more effective than aspirin in lowering heart attack rates as well as overall death rates. Aspirin does reduce the incident of second heart attacks by about 1/5 when taken for a few weeks. Supplemental magnesium and coenzyme Q10 have been shown to be more effective than aspirin in treatment of cardiovascular disease.<sup>9</sup>

“Some physicians contend that the evidence of aspirin's efficacy for prevention is overstated and that its risks are underestimated. One vocal critic, John Cleland, MD, said that his interpretation of the data shows that the therapy reduces only the number of diagnosed heart attacks, not attacks overall. In an editorial in the Jan. 12, 2002, British Medical Journal (BMJ), he explained that aspirin merely masks heart attacks, producing a "cosmetic" blip in epidemiological statistics. How could aspirin hide a heart attack? Dr. Cleland, professor of cardiology at the University of Hull in Great Britain, said that 25% of people who have what later turn out to be a heart attack don't recognize the signs anyway. Because aspirin can be an analgesic, it may further mask those symptoms. In addition, he said, some of the symptoms patients think are dyspepsia caused by aspirin may actually be due to a heart attack.”<sup>10</sup>

## NON-ASPIRIN PAIN KILLERS

Ibuprofen, which includes products such as Advil, Motrin and Nuprin, has been a leading cause of kidney damage. As many as 20% of the 125, 000 cases of end stage kidney damage are the direct result of Ibuprofen.<sup>11</sup>

Chronic renal failure (CRF) also called chronic kidney failure, chronic renal insufficiency, or uremia is the gradual loss of the kidneys' ability to filter waste and fluids from the blood. Chronic renal failure can range from mild dysfunction to severe kidney failure. The kidneys serve as the body's natural filtration system, removing waste products and fluids from the bloodstream and excreting them in the urine. The kidneys maintain the body's salt and water balance, which is important for regulating blood pressure. When the kidneys are damaged by disease or inherited disorders, they no longer function properly, and lose their ability to remove fluids and waste from the bloodstream. Fluid and waste products building up in the body can cause many complications. Renal failure can exist without symptoms for many years and often progresses so gradually that CRF may not be detected until the kidneys are functioning at less than 25% of their normal capacity. Several drugs cause damage to the kidneys, including ibuprofen (*Motrin, Nuprin, Advil*) acetaminophen (*Tylenol*). If taken regularly over long periods, these medications act like poisons to the kidneys.<sup>12</sup>



### MERCK MEDICUS

**“An estimated 19.2 million Americans have stage 1, 2, 3 or 4 stage kidney disease.”**

**New England Journal of Medicine**

**A**cetaminophen, sold under brand names such as Tylenol and Anacin 3, is used to relieve pain and fever. It's use has been associated with digestive disorders & liver disease.

### FDA probes new worry about acetaminophen overdose

WASHINGTON (AP) Evidence that many Americans may poison their livers by unwittingly taking toxic doses of acetaminophen has the government considering if consumers need stiffer warnings about the popular over-the-counter painkiller. Because acetaminophen is non-prescription, people think “it must be safe and they take it like M&M’s” says Dr. William Lee of the University of Texas Medical Center in Dallas. He tracked more than 300 acute liver failure cases at 22 hospitals and linked 38% to acetaminophen, versus 18% caused by other medications. In a second database tracking 307 adults suffering severe liver injury—not full-fledged liver failure—at six hospitals, Lee linked acetaminophen to 35% of cases of liver failure.<sup>14</sup>



## CONCLUSION

**E**ffective Marketing has given consumers the perception that aspirin and other over-the-counter pain relievers are harmless drugs, but there is much evidence to suggest just the opposite. Medical research nearly always supports drug usage, which is not surprising, since the vast majority of medical research is funded by the drug industry. Many safe and natural alternatives that have proven to be effective, rarely receive positive media exposure and are often downplayed by an industry that has no financial interest in a drug-less health care system

## REFERENCES

1. Cummings, S. "Everyone's Guide to Homeopathic Medicine" 1997, Putnam Publishing, NY
2. Plaisance K. "*Anti-fever drugs may prolong flu*" Pharmacotherapy, Dec, 2000, 2: 1417-1422
3. Bystriany, R. Health Sentinel, Oct 30, 2002
4. MacDonald, S. "*Aspirin use to be banned in under 16 year olds*" British Medical Journal, Nov.2, 2002; 325:998
5. Ford, C.M. "*Acetaminophen, aspirin, and chronic renal failure*. New England Journal of Medicine. Dec 20, 2001 Vol 345, 1801-1808.
6. Drug Information for the consumer. P.1037
7. Ford, E.S. "Serum magnesium and ischemic heart disease: findings from a national sample of U.S. adults. International Journal of Epidemiology, Vol. 28 645-651
8. Williams, R. "Nutrition against disease" 1971, Pitman Publishing Co.
9. Kaufman, J. "Should you take aspirin to prevent heart attacks" Scientific Exploration Vol. 14, #4 2002
10. Gensenway, D. "*Do your patients need aspirin therapy*" ACP-ASIM Annals of Internal Medicine, March 2002
11. Bennet, W. National Kidney Foundation
12. Kihar, A. "Chronic renal failure" Merck Medicus, May 2001
13. Levey, A. "Non-diabetic kidney disease" New England Journal of Medicine, Nov. 7, 2002
14. CNN, "FDA probes new worry about acetaminophen overdose" March 27, 2001





# THE EDUCATION AND TRAINING OF A DOCTOR OF CHIROPRACTIC

Educational requirements for doctors of chiropractic are among the most stringent of any of the health care professions. The typical applicant at a chiropractic college has already acquired nearly four years of pre-medical undergraduate college education, including courses in biology, inorganic and organic chemistry, physics, psychology and related lab work. Once accepted into an accredited chiropractic college, the requirements become even more demanding — four to five academic years of professional study are the standard. Because of the hands-on nature of chiropractic, and the intricate adjusting techniques, a significant portion of time is spent in clinical training.

Doctors of chiropractic — who are licensed to practice in all 50 states, the District of Columbia, and in many nations around the world — undergo a rigorous education in the healing sciences, similar to that of medical doctors. In some areas, such as anatomy, physiology, rehabilitation, nutrition and public health, they receive more intensive education than their MD counterparts.

Like other primary health care doctors, chiropractic students spend a significant portion of their curriculum studying clinical subjects related to evaluating and caring for patients. Typically, as part of their professional training, they must complete a minimum of a one-year clinical-based program dealing with actual patient care. In total, the curriculum includes a minimum of 4,200 hours of classroom, laboratory and clinical experience. The course of study is approved by an accrediting agency which is fully recognized by the U.S. Department of Education. This has been the case for more than three decades.

Records from insurance and court cases have constantly shown that chiropractic is the safest portal of entry health care available to the public today. Although no healthcare procedures are 100% safe, chiropractic stands on its record of safety and effectiveness unmatched in healthcare.

The chiropractic adjustment is a safe, efficient procedure which is performed nearly one million times every working day in the United States.

There is a singular lack of actuarial data that would justify concluding that chiropractic care is in any way harmful or dangerous. Chiropractic care is non-invasive, therefore, the body's response to chiropractic care is far more predictable than its reactions to drug treatments or surgical procedures. Of the nearly one million adjustments given every day in this country, complications are exceedingly rare.

COMPLIMENTS OF

**ALIGN**  
**CHIROPRACTIC**

**Dr. Nicole Orozco & Dr. Hugo Orozco**

8850 Goodby's Executive Dr., Ste. B

Jacksonville, FL 32217

**(904) 425-8070**

[www.alignchiropracticjax.com](http://www.alignchiropracticjax.com)