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Could Aspirin Have Cut COVID Deaths in Half?

Analysis by Dr. Joseph Mercola ✔ Fact Checked | May 15, 2023

STORY AT-A-GLANCE

- There was a massive discrediting propaganda campaign hurled at aspirin by Big Pharma fifty years ago when it came out with expensive and dangerous non-steroidal anti-inflammatories (NSAIDs)
- Aspirin is a staple medicine that is frequently recommended as a remedy to control inflammation and prevent blood clots. It could have helped limit the pandemic death toll, had it not been downplayed and ignored
- According to research published in April 2021, aspirin reduced COVID-19 patients' need for mechanical ventilation by 44%, ICU admission by 43% and mortality by 47%
- Proteolytic enzymes like lumbrokinase, serrapeptase and nattokinase are safer and perhaps even superior choices to aspirin for its anticlot properties. These enzymes, when taken on an empty stomach, act as natural anticoagulants by breaking down fibrin
- Proteolytic enzymes may also be helpful for long-COVID. Researchers have found that people who die from COVID have extensive lung damage caused by persistent virus-infected cells that cause scar formation. Proteolytic enzymes can help dissolve this scar tissue, as fibrin is a primary component

Aspirin (acetylsalicylic acid) was introduced in 1899 as an alternative to sodium salicylate,[1] a pain reliever and anti-inflammatory known for its unpleasant side effects such as stomach cramps, heartburn, nausea and vomiting. It's been a staple medicine in most households ever since and is frequently recommended as a remedy to control inflammation and prevent blood clots that can lead to stroke and heart attack.

Aspirin also has other health benefits. It helps increase the oxidation of glucose as fuel for your body while inhibiting the release of fatty acids from your fat cells, specifically linoleic acid (LA), an omega-6 fat which I suspect is a primary driver of chronic disease.

This is important because nearly everyone in the U.S. has excessive LA in their tissues, as it takes seven years of a low LA diet to get it down to healthy levels. So, the last thing you want to do is increase the release of LA into your body from fat stores. It is far better to release LA slowly and allow your liver to process it. It is water soluble, so you can urinate it out without it being metabolized into inflammatory prostaglandins.

Importantly, aspirin will also lower your baseline cortisol — indirectly by lowering inflammation, and directly by inhibiting the enzyme 11-beta-hydroxysteroid dehydrogenase Type 1. This enzyme synthesizes active cortisol from the inactive precursor cortisone.

Aspirin lowers the production of stressed induced aldosterone, which can help to lower blood pressure. Aspirin increases your levels of carbon dioxide and progesterone while inhibiting the major inflammatory pathway, NF kappa-B, which will help your body naturally increase the synthesis of two powerfully important hormones that your body needs, testosterone and progesterone.

Aspirin also uncouples mitochondria. Uncoupling of mitochondrial oxidative metabolism from ATP production can help to increase your metabolic rate and help you lose weight. Dinitrophenol (DNP) is a drug that, like aspirin, uncouples mitochondrial metabolism and produces incredible weight loss. Sadly, it has a very low therapeutic index, so its effective dose is close to its toxic dose and is widely considered too dangerous for clinical use and is no longer available in the U.S.

Aspirin Reduced COVID-Related Hospital Deaths by 47%

Aspirin could also have helped limit the pandemic death toll, had it not been downplayed and overlooked. Many news outlets and COVID-specific websites warned against the use of aspirin for COVID infection, saying it could cause serious bleeding.

While bleeding is a potential side effect, aspirin is no riskier than other anticoagulants, such as heparin,[2,3,4] which was recommended by the National Institutes of Health.[5]

According to research[6] published in April 2021, aspirin significantly reduced COVID-19 patients' need for mechanical ventilation, ICU admission and subsequent mortality. The retrospective, observational cohort study included patients admitted for COVID infection at multiple hospitals across the U.S. between March and July 2020. As reported by General Surgery News:[7]

> *"The study's principal investigator, Jonathan Chow, MD, an assistant professor of anesthesiology and critical care medicine at George Washington University, in Washington, D.C., said:*
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> *'At the beginning of the pandemic, in March and April of 2020, my colleagues and I observed that all these COVID patients in the intensive care unit began to develop excess clot formation and complications related to blood clots and microclot formation throughout the body.'*
>
> *Numerous autopsy studies from last spring showed these patients had activation of platelets throughout the body and an excessive number of precursors to platelets, according to Dr. Chow.*
>
> *'That got us thinking, 'Why don't we start using an antiplatelet medication, such as aspirin, to treat these patients?' he said. 'Aspirin has been studied extensively in cardiovascular disease to prevent clot formation, and it is widely available and inexpensive.'"*

Chow and his team reviewed the charts of 412 patients, 23.7% of whom had either received aspirin within 24 hours of admission, or had taken aspirin for at least seven days prior to admission, and 76.3% who did not.

> **"Based on this research, it appears COVID-19-related hospital deaths could have been cut nearly in**

> **half, had aspirin been routinely used.”**

After adjusting for several confounding variables, including comorbidities, aspirin was independently associated with a:

- 44% decreased risk for mechanical ventilation
- 43% reduced risk for ICU admission
- 47% decrease in hospital mortality

Based on this research, it appears COVID-19-related hospital deaths could have been cut nearly in half, had aspirin been routinely used. Chow commented on the results:[8]

> *“The results of the study do not really surprise us because we know that COVID causes excess clot formation and we know that aspirin is a very potent blood thinner. So, when you have a disease that causes clots and a medication that thins your blood, that may lead to the protective effects that we found.”*

Aberrant Coagulation in Severe Influenza Pneumonia

As in COVID-19, pneumonia caused by influenza also involves microclotting in the lungs. According to research published in 2016, aberrant coagulation is what causes a hyperinflammatory response in severe influenza pneumonia:[9]

> *“Dysfunctional coagulation is a common complication in pathogenic influenza, manifested by lung endothelial activation, vascular leak, disseminated intravascular coagulation and pulmonary microembolism.*
>
> *Importantly, emerging evidence shows that an uncontrolled coagulation system, including both the cellular (endothelial cells and platelets) and protein (coagulation factors, anticoagulants and fibrinolysis proteases) components, contributes to the pathogenesis of influenza by augmenting viral replication and immune pathogenesis.”*

This paper also highlighted the benefits of aspirin, noting it:[10]

- Protects mice from lethal influenza virus infection
- Acts as an anti-influenza virus agent in vitro by inhibiting pro-inflammatory NF-κB activity
- Improves influenza outcomes
- Potentially inhibits platelet activation

Fibrinolytics May Be the Key

According to the 2016 paper above, "Fibrinolysis is involved in both lung inflammation and the influenza A virus life cycle." Fibrinolysis is a process that prevents blood clots from forming and growing. This is part of your body's normal processes, but sometimes the clotting becomes too excessive, requiring a fibrinolytic to help break down the clots that have already formed.

Fibrin is the material that blood clots are made of, and while aspirin can help break them down, I believe proteolytic enzymes like lumbrokinase, serrapeptase and nattokinase are superior choices.

These enzymes, when taken on an empty stomach, away from food, act as natural anticoagulants by breaking down fibrin. They must be taken at least one hour before or two hours after meals containing protein, though. Otherwise, they'll be wasted in the digestion of the protein in your food and won't be able to activate their fibrinolytic properties.

Fibrinolytic Enzymes for COVID-19

Another paper[11] published in July 2020, this one a case series, also hints at the usefulness of fibrinolytic enzymes for COVID. It presented three case studies of patients with severe COVID-19 respiratory failure who were treated with tissue plasminogen

activator (TPA), a serine protease enzyme found on endothelial cells that is involved in the breakdown of blood clots.[12]

All three patients benefited from the treatment, with partial pressure of oxygen/FiO2 (P/F) ratios, a measure of lung function, improving from 38% to 100%.

Other research[13] has shown that the thrombolytic activity of equivalent amounts of nattokinase and TPA are identical, so nattokinase could be a useful alternative. The benefit of nattokinase is that you can take it at home, without a prescription, while TPA is an emergency stroke treatment that is only given intravenously to patients suspected of having an ischemic stroke.

Considering fibrinolytic enzymes are thrombolytics comparable to both aspirin[14] and TPA, it seems reasonable to conclude that they can be helpful in the treatment of COVID-19.

Fibrinolytic Enzymes May Be Useful in Long-COVID as Well

Another paper[15] published in November 2020 highlighted that people who died from COVID-19 had extensive lung damage, including clotting and long-term persistence of virus cells in pneumocytes and endothelial cells.

The findings indicate that virus-infected cells may persist for long periods inside the lungs, contributing to scar tissue. In an interview with Reuters,[16] study co-author Mauro Giacca, a professor at King's College London, described "really vast destruction of the architecture of the lungs," with healthy tissue "almost completely substituted by scar tissue."

This scar tissue, Giacca said, may be responsible for so-called "long COVID," in which symptoms persist for months after the infection has cleared up. "It could very well be envisaged that one of the reasons why there are cases of long COVID is because there is vast destruction of lung (tissue)," he told Reuters. "Even if someone recovers from COVID, the damage that is done could be massive."

The good news is that proteolytic enzymes can help dissolve scar tissue as well, as fibrin is a primary component. I would alternate between lumbrokinase and serrapeptase, as you'll need to take it for about three months and sensitivity can develop over time if you use any one of them daily without interruption.

A Breakdown of the Top Three Fibrinolytics

While lumbrokinase, nattokinase and serrapeptase are all effective thrombolytics, lumbrokinase is by far the most potent, which is why it's my personal favorite. Lumbrokinase is 30 times more potent than nattokinase and 300 times more potent than serrapeptase.[17,18,19]

This means you need much higher doses if you're taking nattokinase or serrapeptase, compared to lumbrokinase. That said, as just mentioned, if you intend to take a fibrinolytic enzyme daily, I recommend alternating them to prevent a sensitivity or allergy from developing. Also remember that they must be taken on an empty stomach.

Aside from potency, each enzyme also has its own set of benefits that might make one preferable over another:

1. **Lumbrokinase —** A highly effective antithrombotic agent that reduces blood viscosity and platelet aggregation[20] while also degrading fibrin, which is a key factor in clot formation.

   I recommend that everyone keep some high-quality lumbrokinase in your emergency kit. A while back I developed a significant bruise from a weight training injury. I took a high dose of lumbrokinase for a week, which cleared it up.

   I also took lumbrokinase after being stung by three wasps on my forehead right before bed. The stings swelled to nearly the size of half a tennis ball. Wasp venom contains proteins that fibrinolytic enzymes can break down, so I took half a dozen pills and went to sleep.

The next morning, the swelling was nearly gone. If you are going to try this, the sooner you take it after you're stung, the better it will likely work as it denatures the venom proteins before they inflict their damage.

2. **Serrapeptase —** Research has shown serrapeptase can help patients with chronic airway disease, lessening the viscosity of sputum and reducing coughing.[21] Serrapeptase also breaks down fibrin and helps dissolve dead or damaged tissue without harming healthy tissue.[22]

3. **Nattokinase —** Nattokinase has been shown to break down blood clots and reduce the risk of serious clotting[23] by dissolving excess fibrin in your blood vessels,[24] improving circulation and decreasing blood viscosity.

Aspirin Has Benefits Similar to Fasting

I have long been a fan of fasting for many reasons, but primarily because it has been known to lower biomarkers of inflammation as well as increase autophagy. Interestingly, there was a study done that suggests that aspirin also does precisely this. The study was in mice and used 8 mg/kg which is the equivalent of about two 5 grain (325 mg) tablets a day.[25]

The study showed that aspirin, or its active metabolite salicylate, caused autophagy by inhibiting the acetyltransferase activity of EP300 which is a specific gene, also known as p300, which codes for proteins that regulate the activity of many genes in tissues throughout your body. It plays an essential role in controlling cell growth and division, prompting cells to mature and take on specialized functions.

Purchasing Guidelines for Aspirin

Getting back to aspirin, if you do decide to use aspirin, be sure to avoid coated extended-release aspirin. It's not recommended due to the additives they put in it. Immediate-release aspirin is the preferred version and can be found on Amazon.

Look carefully at the list of inactive ingredients. The only one should be corn starch. I looked long and hard and found one that meets all those criteria. The recommended dose is one 325 milligram tablet per day with your largest meal.

Earlier this year I became convinced of the prophylactic value of aspirin, and I now take 325 mg per day. But I use a version that is not a tablet and is 99% pure USP aspirin. I find its prometabolic, antilipolytic, anti-inflammatory, anticortisol, and anti-estrogen effects very appealing, and its safety is well-established.

It is important to understand that there was a massive discrediting propaganda campaign hurled at it by Big Pharma when it came out with its panoply of expensive and dangerous non-steroidal anti-inflammatories (NSAIDs) fifty years ago. Many may not recall that I was the first person on the internet to warn the dangers of one of these NSAIDs, Vioxx, a year before it was released into the market and killed around 100,000 people.

If you are sensitive to aspirin, it would be best to use a salicylic acid or willow bark supplement. When you consume aspirin, the acetylsalicylic acid is metabolized in your body into salicylic acid, which is the compound responsible for the anti-inflammatory, pain-relieving and antithrombotic effects of aspirin. This can be found in willow bark.

To learn more about the risks and benefits of aspirin, and how it compares to fibrinolytic enzymes, see "**Daily Aspirin — Healthy or Harmful?**"

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