

## Benefits of Apple Cider Vinegar

### What is Apple Cider Vinegar?

Apple cider vinegar is a type of vinegar made by the fermentation of apple cider. During the fermentation process, sugar in the apple cider is broken down by bacteria and yeast into alcohol and then into vinegar. Like many types of vinegar, apple cider vinegar contains a substance called acetic acid. Apple cider vinegar also contains some lactic, citric and malic acids.

### Benefits of Apple Cider Vinegar

Proponents claim that apple cider vinegar can help with the following health conditions:

- [acne](#)
- [allergies](#)
- [arthritis](#)
- [chronic fatigue syndrome](#)
- [diabetes](#)
- [flu](#)
- [gout](#)
- [heartburn](#)
- [high cholesterol](#)
- [sore throat](#)

In addition, many people use apple cider vinegar as a [weight loss aid](#). Find out more about the use of [apple cider vinegar for weight loss](#).

It's important to know, however, that due to the lack of supporting research, apple cider vinegar cannot be recommended for treatment or prevention of any health problem.

### The Science Behind Apple Cider Vinegar

To date, few studies have tested the health effects of apple cider vinegar. Here's a look at some key findings from the available research:

#### 1) Diabetes

Some preliminary research suggests that vinegar (both apple cider vinegar and other types) may benefit people with diabetes. For example, in a 2007 study published in *Diabetes Care*, researchers found that type 2 diabetes patients who consumed two tablespoons of apple cider vinegar at bedtime showed favorable changes in blood sugar levels the following morning. And in an animal-based study published in the *Pakistan Journal of Biological Sciences*, scientists found that diabetic rats fed an apple-cider-vinegar-enhanced diet for four weeks experienced an increase in HDL ("good") cholesterol (as well as a reduction in their levels of triglycerides, a type of harmful blood fat).

#### 2) Weight Loss

There is limited scientific support for the claim that apple cider vinegar can promote weight loss. However, one small study (published in *Bioscience, Biotechnology, and Biochemistry* in 2009) found that obese people who consumed acetic acid daily for 12 weeks experienced significant decreases in body weight, [abdominal fat](#), waist circumference, and triglycerides. In tests on mice, another 2009 study (published in the *Journal of Agricultural and Food Chemistry*) found that acetic acid may help prevent the buildup of body fat and certain liver fats.

It's unknown whether these studies tested the use of acetic acid derived from apple cider vinegar or from other vinegar types.

### 3) Blood Pressure

Acetic acid may help [lower blood pressure](#), according to an animal-based study published in *Bioscience, Biotechnology, and Biochemistry* in 2001. Again, it's unknown whether this study tested the use of acetic acid derived from apple cider vinegar or from another vinegar type.

### 4) Cholesterol

Published in the *British Journal of Nutrition*, a 2006 study found that rats fed acetic acid for 19 days had a significant reduction in total cholesterol and triglyceride levels.

### Apple Cider Vinegar Home Remedies

Here are two popular home remedies that include apple cider vinegar:

#### 1) Dandruff

A home remedy for [dandruff](#) is to mix 1/4 cup apple cider vinegar with 1/4 cup water. The vinegar solution is thought to restore the pH balance of the scalp and discourage the overgrowth of *malassezia furfur*, the yeast-like fungus thought to trigger dandruff.

The vinegar mixture is usually poured into a spray bottle and spritzed on the hair and scalp, avoiding the eye and ear area. A towel is then wrapped around the head and left on 15 minutes to an hour. After that, the vinegar can be washed from the hair. Alternative practitioners often recommend it once or twice a week for dandruff.

#### 2) Acne

When using apple cider vinegar to treat acne, some alternative practitioners recommend mixing one part apple cider vinegar with three parts water. The solution is then dabbed onto the pimple. Since there have been case reports of skin damage and burns from using full-strength vinegar on the face, it's important to take caution when using this remedy.

### Apple Cider Vinegar and Alkaline Acid Balance

Some alternative practitioners recommend using apple cider vinegar to restore alkaline acid balance. The theory behind the alkaline diet is that our blood is slightly alkaline (with a normal pH level of between 7.35 and 7.45) and that our diet should reflect this pH level. Proponents of the alkaline-acid theory believe that a diet high in acid-producing foods leads to lack of energy, excessive mucous production, infections, [anxiety](#), irritability, headache, sore throat, nasal and sinus congestion, allergic reactions, and increased risk of conditions such as arthritis and gout.

Despite being an acidic solution, some proponents of apple cider vinegar believe it has an alkalinizing effect on the body. As such, they recommend one to two teaspoons of apple cider vinegar in water as a daily health tonic. Although this is a popular remedy, its effectiveness hasn't been researched.

### Side Effects and Safety Concerns

Undiluted apple cider vinegar, in liquid or pill form, may damage the esophagus and other parts of the digestive tract. Apple cider vinegar drinks may damage tooth enamel if sipped.

One case report linked excessive apple cider vinegar consumption with low blood potassium levels (hypokalemia) and low bone mineral density. People with [osteoporosis](#), low potassium levels, and those taking potassium-lowering medications should use caution.

People with allergies to apples should avoid apple cider vinegar.

Vinegar applied to the skin may cause burns and scarring.

Excessive doses of apple cider vinegar have been found to cause damage to the stomach, duodenum, and liver in animals.

### **Possible Drug Interactions**

Theoretically, prolonged use of apple cider vinegar could lead to lower potassium levels, which could increase the risk of toxicity of cardiac glycoside drugs such as Lanoxin (digoxin), insulin, laxatives, and diuretics such as Lasix (furosemide).

Because apple cider vinegar may affect blood glucose and insulin levels, it could theoretically have an additive effect if combined with diabetes medications. Apple cider vinegar may also lower blood pressure, so it may have an additive effect if combined with high blood pressure medications.

Source: