



About

Academics

Admissions

Research

Resources

Events

The Proper Way to Make Elderberry Syrup

Get Research and Program Updates:



Black elderberries have a rich history in herbal medicine and elderberry syrup is a must-have in any natural cold and flu medicine chest. Elderberry syrup gained significant attention in the natural health community shortly after the H1N1 flu outbreak when a study was released + demonstrating its ability to effectively inhibit this widespread strain of the flu (Roschek, et.al., 2009). It is now available at just about any corner drugstore—though it can easily be made at home.

Research reveals that it prevents the common cold and the flu by inhibiting viral replication, so it is best taken at the very first sign of illness or just after a known exposure to someone who is sick (Kinoshita, et.al., 2012). It can also be taken in smaller doses preventively during the cold and flu season or during times of increased exposure such as holiday travel.

For example, in a 2016 study, [which FIW reviewed here](#), evaluated cold symptoms among travelers and found that when elderberry supplementation was compared to placebo, it produced significant differences in overall health (Tiralongo, et.al., 2016). The elderberry treatment group experienced a total of 57 days of illness (compared to the 117 days in the placebo group) and on a rating scale of symptoms, experienced a severity of 247 (compared to the 583 among placebo patients).

Elderberry and the Flu

As a potent antiviral, elderberry syrup is strongly indicated for flu viruses. In one Norwegian study, 60 patients were given elderberry syrup within the first 48 hours of developing flu symptoms. This included patients with both type A and type B influenza. The patients receiving elderberry were over the flu virus within an average of 4 fewer days than those with placebo. (Zakay-Rones, et al, 2004).

Similarly, a known outbreak of influenza B in Panama evaluated elderberry intake over 6 days, measuring fever, feeling of improvement, and complete cure along with serum antibody tests. In the elderberry treatment group, over 93% of cases saw improvements in just 2 days. This is far

better than the control group, which took 6 days to reach only 91.7%. Almost 90% of the treatment group was completely cured in only 2-3 days. (Zakay-Rones, et al, 1995).

Is Elderberry Syrup Safe?

+

Usually. However, many homemade formulas can actually worsen an illness by causing additional symptoms such as nausea or vomiting. The elderberry plant can contain a cyanogenic glycoside *sambunigrin* which must be deactivated by heat prior to ingesting medicinally to avoid adverse effects. (A cyanogenic glycoside contains a cyanide group attached to a sugar. When digested, it is released, and can harm the body.)

The berries also contain an alkaloid, *sambucine*, which causes nausea and vomiting. So why do we ingest elderberries? Because these components are easily deactivated through heat, which enables us to produce a finished product that does not contain any of the dangerous types of alkaloids or glycosides.

This also means that the berries should not be used in a tincture, glycerite, or other uncooked preparation. It is ideally suited for use in a syrup or gummy. Commercially prepared brands of syrup which have not been cooked sufficiently to eliminate the toxic components will cause nausea and vomiting, and could lead to more serious effects.

Who Should *Not* Take Elderberry Syrup?

Elderberry syrup is what we refer to as a *culinary herb*, meaning it is used frequently in culinary doses without any health concerns. However, when the dosage is increased to medicinal levels, some people may experience negative responses. Prolonged, large medicinal doses should be avoided by those who have autoimmune conditions without guidance from a professional as it can increase pro-inflammatory cytokines.

Additionally, elderberries have diuretic actions, so they could potentiate (increase) the effects of pharmaceutical diuretics. Elderberries can also interfere with immune suppressing drugs by

enhancing immune function. However, culinary doses used for preventive purposes are not contraindicated.

+ What's the Proper Way to Make Elderberry Syrup?

It's crucial that the elderberries are from a reputable source, that all excess twigs or unripe berries are removed, and that the berries are cooked sufficiently to eliminate the toxin that is found in the seeds. Even when elderberries are dried before cooking and the syrup is strained, it is possible for this toxin to produce complications if the syrup is not cooked sufficiently. Remember, the purpose of an extract is to extract the active constituents from the herbs; this includes toxins. In one example, individuals consuming elderberry juice were hospitalized due to the remains of this toxin in the juice (MMWR, 1984).

To make a proper batch of safe and effective elderberry syrup, you will need:

100 g dried elderberries

1-2 quarts cold distilled water*

1 1/2 cup thick, liquid sweetener such as brown rice syrup or honey

Combine the berries and water in a large (cold) saucepot. If time permits, allow the berries to soak until they are soft, about 30 – 60 minutes. Place over medium heat and gradually bring to a boil. Once a rolling boil has been reached, reduce heat to a simmer and continue to cook for 30-45 minutes, stirring frequently. Do not cover the pot during this phase. This process cannot be shortened as it is crucial for eliminating the cyanide-like toxin in the seeds. Remove from heat and cool to room temperature.

Strain the concentrated extract and measure the liquid. It should be approximately 2 cups.* (If you have less than 2 cups, water can be added to reach 2 cups. If you have more than two cups, continue boiling the mixture down. It is crucial to have a 2-cup measurement at this state to ensure accurate dosing.) Combine with the cup and a half of honey, brown rice syrup, glycerin or

simple sugar solution. Bring back to a boil and continue to boil for 10-30 minutes until the mixture is thick. Allow to cool slightly and pour into prepared bottles. Store in the refrigerator.

+ ***Note:** The previous version of this formula called for 1 quart of water to produce 2 cups of extract. Depending on altitude, humidity and other factors, that may not be enough to cook for the required duration without burning the berries. Adjust the initial water measurement as needed to ensure that the final result is 2 cups of extract per 100g berries after having been cooked for 30-45 minutes and thoroughly strained.

How Much Elderberry Syrup Can I Take?

The average dose used in studies to treat viral infections is 15ml of a syrup with 38% elderberry, 4x a day for adults and the same amount at a 19% concentration for children. Commercial doses are often much less potent than those used in clinical studies. For the equivalent of a single dose of a commercially prepared product, the formula provided above produces 35 total doses. (To determine dosing, measure the total amount of product you have and divide by 35.)

For active infections, an adult could take a full dose every 2-3 waking hours for up to 2-4 days. For prevention, such frequency is neither necessary nor recommended. General dosing is 1/35 of the formula 2-3 times a day for an adult. Children will need smaller doses, which are determined by age and weight. **NOTE:** All of these doses are based on the assumption that the product has been prepared with sufficient heat to deactivate the toxic components.

It is important to note that dosing for elderberry syrup is dependent upon the **total concentration** of elderberry extract in the syrup. Homemade products that do not adhere to specific formulas produce syrups with an unknown concentration of elderberry, making precise dosing impossible. This places both safety and efficacy at risk.

Keep in mind that the half-life of the active components in elderberry treatments is only a couple of hours total, so frequent dosing is required. As a result, one dose per day will not be effective at either prevention or treatment. (Frank, et. al., 2007).

References:

- Centers for Disease Control (CDC). (1984). Poisoning from elderberry juice—California. *MMWR. Morbidity and mortality weekly report*, 33(13), 173.
- Frank, T., Janssen, M., Netzel, G., Christian, B., Bitsch, I., & Netzel, M. (2007). Absorption and excretion of elderberry (*Sambucus nigra* L.) anthocyanins in healthy humans. *Methods and findings in experimental and clinical pharmacology*, 29(8), 525-534.
- Kinoshita, E., Hayashi, K., Katayama, H., Hayashi, T., & Obata, A. (2012). Anti-influenza virus effects of elderberry juice and its fractions. *Bioscience, biotechnology, and biochemistry*, 76(9), 1633-1638.
- Roschek, B., Fink, R. C., McMichael, M. D., Li, D., & Alberte, R. S. (2009). Elderberry flavonoids bind to and prevent H1N1 infection in vitro. *Phytochemistry*, 70(10), 1255-1261.
- Tiralongo, E., Wee, S. S., & Lea, R. A. (2016). Elderberry supplementation reduces cold duration and symptoms in air-travellers: A randomized, double-blind placebo-controlled clinical trial. *Nutrients*, 8(4), 182.
- Zakay-Rones, Z., Varsano, N., Zlotnik, M., Manor, O., Regev, L., Schlesinger, M., & Mumcuoglu, M. (1995). Inhibition of several strains of influenza virus in vitro and reduction of symptoms by an elderberry extract (*Sambucus nigra* L.) during an outbreak of influenza B Panama. *The Journal of Alternative and Complementary Medicine*, 1(4), 361-369.
- Zakay-Rones, Z., Thom, E., Wollan, T., & Wadstein, J. (2004). Randomized study of the efficacy and safety of oral elderberry extract in the treatment of influenza A and B virus infections. *Journal of International Medical Research*, 32(2), 132-140.

How to cite this article: Franklin Institute of Wellness. (2018). *The Proper Way to Make Elderberry Syrup*. Retrieved from <https://franklininstituteofwellness.com/proper-elderberry-syrup/> on October 21, 2018.