

Natural therapies for viruses

Moderate evidence for colds or the flu (not COVID-19!):

- **Vitamin C** can reduce the duration of cold symptoms *if you've started taking it regularly before falling sick*. This seems especially true for athletes and older people.^{[47][48][49][50]} There is a [clinical trial](#) of IV vitamin C for severe COVID-19-induced pneumonia underway, and we will report on it when it is published. However, it should be noted that a single study is very preliminary evidence, so *even if* it finds some benefit, more studies will be required for confirmation before the treatment can be recommended.
- **Vitamin D** can help prevent upper respiratory infections.^{[51][52][53][54]} People's spending a lot of time indoors in the winter is tied to seasonal flu through higher viral transmission in closed areas and a lack of sun (in addition to allowing your skin to synthesize vitamin D, solar UV rays can inactivate viruses).^{[55][56]} But the impact of supplemental vitamin D on the novel coronavirus is unknown. Do not take high amounts just because you've heard that "vitamin D is good for the immune system"!
- **Zinc oral lozenges** may reduce symptom severity for the common cold by inhibiting viral replication at the back of your throat.^{[57][58][59]} Swallowed tablets aren't effective, and nasal spray may cause permanent adverse effects.^[60] Zinc acetate lozenges may be a bit more effective than zinc gluconate lozenges, although perhaps not significantly so.^{[59][61]} Note that the doses that showed efficacy (75–95 mg of zinc per day) are [too high](#) to be safe in the long run. Don't take them for more than a couple of weeks.

Weak or preliminary evidence, typically for colds and rarely for the flu:

- **Quercetin** is a plant flavonol from the flavonoid group of polyphenols. **Mechanistic** studies (not actual trials in humans!) have suggested that it may inhibit infection with various strains of influenza.^{[62][63]} Preprint (not peer-reviewed) **mechanistic** evidence suggests some potential for the novel coronavirus,^[64] but keep in mind that many compounds that are found to be safe or effective in animal and *in vitro* studies fail when rigorously tested in humans.^{[65][66]}
- **Garlic** has many more antibacterial studies than antiviral studies.^{[67][68]} Limited evidence exists for the prevention (but not the treatment) of the common cold.^[69]
- **Echinacea** has some evidence for the prevention^{[70][71]} and maybe the treatment^[70] of the common cold, although the benefit shown is very small.
- **Elderberry** has some evidence for the treatment of influenza^[72] and the common cold,^{[72][73]} but very few studies exist thus far.
- **Pelargonium sidoides** also has few studies, and only on cold treatment, not on prevention.^{[76][77]}
- **Probiotics** aren't one monolithic thing. Certain specific strains may help with cold prevention, although evidence is mixed. Efficacy may vary greatly from individual to individual due to everyone having a different gut microbiome.^{[78][79][80][81]}
- **N-Acetylcysteine** (NAC) has limited evidence for reducing flu episodes,^[82] and a combination of L-cystine and [L-theanine](#) has limited evidence for reducing episodes

of the common cold.^[83] Note that NAC has evidence for tumor initiation in animals when used regularly at high doses.^{[84][85][86]}

Nutrition and lifestyle interventions

A poor diet is tied to an increase in general infection risk, and lack of sleep is possibly an even greater factor. Yet when it comes to infection prevention and treatment, way more trials look at supplements than at dietary and lifestyle strategies. Don't be fooled! There's greater financial incentive to run supplement trials, and they are much cheaper, shorter, and easier to conduct than diet trials.

Moderate evidence for immune function in general:

- **Sleep.** If you don't sleep enough, your immune system is impaired,^[87] making you more likely to catch the flu and the common cold.^[88] **Sleep quality** is also important.
- **Less ultraprocessed food.** High amounts of processed carbohydrates and refined fats can interfere with proper immune function.^[89] Even short-term hyperglycemia can impair your response to infection.^[90]

Very, very weak or preliminary evidence for colds or the flu (not COVID-19!):

- **Gargling.** A randomized trial reported that gargling with water could help ward off upper respiratory tract infections.^[91] Another reported that saline nasal irrigation and gargling could reduce the symptoms of upper respiratory tract infection.^[92]
- **Honey.** *In vitro* evidence suggests anti-influenza properties,^[93] but there have been no human trials. Relatively stronger evidence indicates that honey may help with coughs, though.^{[94][92][95]}

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