

Antibacterials

## Description

Use this as an aide to your own research and share with your doctor as appropriate. You can use [drugs.com](https://www.drugs.com) or other trusted health websites to look up the latest information on prescription drugs, herbs, foods or other treatments possible side & interaction effects often by typing in the name of two drugs or drug/herb and interaction effects into a search engine.

default watermark

Antibacterials

Antibacterials/Antibiotics

Internal-

What helps kill bacterial infections:

Gallium by prescription (helps antibiotics be 75% effective against antibiotic resistant bacteria, over 90% with iron chelation added)

Iron chelation- blood draw, oral deferiprone (online outside pharmacy), injected desferal,

Biomedical Frontierâ€™s synthetic, transferrin & lactoferrin especially if low in body and/or low PH in infection site & unless bacteria can extract iron from them, & hepcidin?

Probiotics for stomach & gastrointestinal tract (swallowed)

The more strains & count the better, given with the last meal/food of the night.

Probiotics for mouth & throat (BLIS-K12 chewed) for throat & mouth infections

Green stevia leaf

Elderberry or elder flower

Oregano oil

Nigella sativa (black seed oil)

Manuka or medihoney

Colloidal silver

\

Coconut oil (lauric acid turns into monolaurin in body)

Catâ€™s claw

Olive leaf & organic extra virgin olive oil (from one country)

Spirulina

Echinacea

Significantly enhances antibacterials-

Lecithin Liposomal Vitamin C

Vitamin D3

Vitamin B complex

Bee propolis (up to 10x increased effectiveness)

N-acetylcysteine (NAC) may improve antibiotic absorption

D-mannose sugar for UTIs

Zinc

Vinegar for ear infections (bacterial or fungal)

Topical bacterial infections-

Manuka honey, medihoney, raw, organic, and or local honey

Colloidal silver

Molecular, nascent or Lugol's iodine

Magnesium chloride

Tea tree oil

Vinegar

Chestnut leaf

Coriander essential oil

Blue light therapy

B&W Burn & Wound Treatment

## **Antibacterial foods**

â€“ D-mannose, a noncaloric sugar in cranberry juice, reduces UTIs by 85% in some studies

Clove (also topical painkiller for gums/teeth)

Oregano

Garlic

Catâ€™s claw

Cranberry, Uva Ursi, marshmallow root help UTIs, including yarrow-also canker sores (no if pregnant)

Thyme

Cinnamon

Echinacea

Cumin

Ginger

Rosemary

Basil

Fennel

Coriander

Galangal

Black pepper

Chamomille

Onion

*default watermark*

Turmeric (curcumin) w/black pepper

Lemon

Lemon balm

Pau d'Arco™

Licorice root

Usnea

Cayenne

Peppermint

Calendula

Oregon grape root

Goldenseal

Astragalus

Andrographis

Mullein- ear infections

[botanicalinstitute.org/antibacterial-herbs](http://botanicalinstitute.org/antibacterial-herbs)

[Siobhan Mendicino](#) October 13, 2022 The 10 Best Antibacterial Herbs, Medical Review by: [Daniel Powers, MS](#)

[naturalnews.com/047232\\_Ebola\\_natural\\_immunity\\_virus.html#ixzz3G5](http://naturalnews.com/047232_Ebola_natural_immunity_virus.html#ixzz3G5)

The smell of garlic on the breath can be reduced significantly by eating mint leaves, apples, & lettuce.

Antibacterial and Antifungal Activities of Spices. Liu Q, Meng X, Li Y, Zhao CN, Tang GY, Li HB. Int J Mol Sci. 2017 Jun 16;18(6):1283. doi: 10.3390/ijms18061283. PMID: 28621716; PMCID: PMC5486105.

[ncbi.nlm.nih.gov/pmc/articles/PMC5486105/](https://ncbi.nlm.nih.gov/pmc/articles/PMC5486105/)

Garlic

Garlic appears to inhibit many bacterial, viral, fungal infections, heart disease, diabetes, cancer, liver damage.

Garlic: a review of potential therapeutic effects. Bayan L, Koulivand PH, Gorji A. Avicenna J Phytomed. 2014 Jan;4(1):1-14. PMID: 25050296; PMCID: PMC4103721.

[ncbi.nlm.nih.gov/pmc/articles/PMC4103721/](https://ncbi.nlm.nih.gov/pmc/articles/PMC4103721/)

[medicalnewstoday.com/articles/321108#seven-best-natural-antibiotics](https://medicalnewstoday.com/articles/321108#seven-best-natural-antibiotics)

## **What can cause bacterial infections/food poisoning?**

Fruits need to be washed or bacteria on the surface can be transferred to the middle when

cutting with a knife.

Raw flour

Cooked food left to cool rather than immediately refrigerated like soups.

Previously cooked meats.

Raw pet food.

Medium rare hamburgers.

Raw milk.

Bagged salad greens

Sprouts eaten raw.

6 Surprising foods that can give you food poisoning by Robert B. Gravani

Symptoms- fever over 101.5

Blood in stool

Frequent vomiting

4 day diarrhea

Decreased urination, dry mouth/throat, dizzy when stand up

## **Drug resistant infections**

If have a drug resistant infection, getting evaluated by an infectious-disease specialist were 59% less likely in one study to die within 30 days with some infection types.

## **Prescription antibiotics (may lower magnesium)**

Sulfa drugs (Bactrim) & nitrofurantoin

Sulfa drugs (brand names include Thiosulfil Forte and Bactrim) and urinary germicides called nitrofurantoin (Furantin and Macrobid) can cause birth defects & nitrofurantoin appear to cause lung, kidney & liver damage & bladder cancer after even short term use in some populations (older women)

Bactrim may cause kidney damage and rarely, Steven Johnson syndrome- burning rash, sores, blisters cough, headache, fatigue, joint pain that can be deadly.

[cureus.com/articles/13992-nitrofurantoin-toxicity-a-near-case-of-mistaken-identity](https://cureus.com/articles/13992-nitrofurantoin-toxicity-a-near-case-of-mistaken-identity)

[twm.my/title/khor-cn.htm](https://twm.my/title/khor-cn.htm)

[medsafe.govt.nz/profs/puarticles/NitrofurantoinBenefitsOutweighRisks](https://medsafe.govt.nz/profs/puarticles/NitrofurantoinBenefitsOutweighRisks)

## Fluoroquinolone antibiotics

Fluoroquinolone antibiotics may increase peripheral neuropathy, nerve damage, arrhythmia, depression, suicidal thoughts, hallucinations, seizures, aortic aneurysms, ruptured tendons and permanent joint damage, especially in children. They can cause disturbances in attention, disorientation, agitation, nervousness, memory impairment and delirium according to the FDA.

*default watermark*

levofloxacin (Levaquin)

ciprofloxacin (Cipro)

ciprofloxacin extended-release tablets

moxifloxacin (Avelox)

ofloxacin

gemifloxacin (Factive)

delafloxacin (Baxdela)

Absorption may be significantly reduced if taken with calcium, milk, dark leafy salad greens.

Better may be taking it one hour before or two hours after these products.

## Peripheral Neuropathy Associated with Fluoroquinolones

Jay S Cohen

doi: 10.1345/aph.1Z429 Ann Pharmacotherap December 2001 vol. 35 no. 12 1540-1547

[unsafeproducts.com/dangerous-drugs/flq-antibiotics/](http://unsafeproducts.com/dangerous-drugs/flq-antibiotics/)

[fda.gov/news-events/press-announcements/fda-updates-warnings-fluoroquinolone-antibiotics-risks-mental-health-and-low-blood-sugar-adverse](http://fda.gov/news-events/press-announcements/fda-updates-warnings-fluoroquinolone-antibiotics-risks-mental-health-and-low-blood-sugar-adverse)

## Tetracycline antibiotics

In children before nine years old they may discolor teeth  
1hr before, 2hrs after eating, never with dairy/calcium/dark leafy greens

Rolitetracycline

According to duration of action:

Short-acting (Half-life is 6-8 hrs)

Tetracycline

Chlortetracycline

Oxytetracycline

Intermediate-acting (Half-life is ~12 hrs)

Demeclocycline

Methacycline

Long-acting (Half-life is 16 hrs or more), allowing to be used one or twice daily only

Doxycycline

Minocycline

Tigecycline

Broad spectrum antibiotics can increase antibiotic resistance & cause clostridium difficile (c-diff) infections which kills over 5%-  
cephalexin (Keflex)  
ciprofloxacin (Cipro, Proquin)  
levofloxacin (Levaquin)  
tetracycline

### **Antibiotics for children**

Fluoroquinolones appear to interfere with cartilage development and trigger inflammation and can cause permanent joint damage in children.

Tetracyclines may cause tooth discoloration in children younger than nine years old, with doxycycline appearing to cause little or no discoloration. They also increase sun sensitivity during usage.

[uspharmacist.com/article/pediatric-antibiotic-use-a-focused-review-of-fluoroquinolones-and-tetracyclines](https://www.uspharmacist.com/article/pediatric-antibiotic-use-a-focused-review-of-fluoroquinolones-and-tetracyclines)

Macrolide antibiotics, hearing loss & tinnitus

Macrolide antibiotics may increase hearing loss by 25% over other antibiotics & trigger tinnitus. Macrolide antibiotics include:

azithromycin, clarithromycin, erythromycin, fidaxomicin, roxithromycin, spiramycin, and telithromycin.

Shim, S.R., Lee, Y., In, S.M. *et al.* Increased risk of hearing loss associated with macrolide use: a systematic review and meta-analysis. *Sci Rep* **14**, 183 (2024). <https://doi.org/10.1038/s41598-023-50774-1> [nature.com/articles/s41598-023-50774-1#citeas](https://www.nature.com/articles/s41598-023-50774-1#citeas)

## **Vitamin C in pregnancy & breastfeeding**

Vitamin C may be used safely in 1000mg daily doses in women who are pregnant. If a woman has a viral or bacterial infection during pregnancy higher doses may be used up to fight the infection before crossing through the placenta or going into the breast milk. Liposomal vitamin C may be 50 times stronger than regular vitamin C. To be cautious liposomal vitamin C usage may be delayed until the infant/child is no longer breastfed.

<https://breastfeeding.support/vitamin-c-breastfeeding/>

## **Chronic inflammatory response syndrome**

Chronic inflammatory response syndrome causing fatigue, muscle aching, cramping, abdominal pain, respiratory symptoms, impressive cognitive issues and diarrhea from blue-green algae/mold/Pfiesteria infections may be treatable by cholestyramine.

<https://chriskresser.com/dr-ritchie-shoemaker-on-chronic-inflammatory-response-syndrome/>

## Ear infections

To prevent and treat ear infections, emptying a small eye dropper full of vinegar and hydrogen peroxide nightly, or vinegar one night & peroxide the other into the ear may prevent/treat most if not all ear infections. Swimmers, who immerse their ears in water daily, use this mix at the end of showering after swimming to prevent ear infections. Tip the ear up facing the ceiling, then drop in the vinegar/peroxide, then open the jaw up & down (side to side may cause damage) and simultaneously push the base of the small flap in the lower front of the ear repeatedly or grab & wiggle the ear for a minute to get it to the eardrum before tipping the ear towards the ground to let the liquid run out. Hydrogen peroxide is especially good for bacterial infections and vinegar is good for bacterial & excellent for fungal infections (candida). For people who have recurring ear infections, it can be bacterial or fungal and treatment at least twice a week often prevents the itching & subsequent infections completely. Often people do it at the beginning or end of a shower.

Complementary to this, especially for children, is using each nostril separately to blow up a balloon three times a day. This treats the thick fluid that can build up

in the middle ear. Close off one nostril & use the other to blow up a balloon, then switch nostrils. Even when it doesn't clear it up completely it can relieve pressure & improve sleep. Children often find it a novelty & fun if made into a game.

[http://well.blogs.nytimes.com/2015/07/30/a-balloon-to-treat-glue-ear-a-common-childhood-problem/?em\\_pos=small&emc=edit\\_hh\\_20150804&nl=health&nid=262199](http://well.blogs.nytimes.com/2015/07/30/a-balloon-to-treat-glue-ear-a-common-childhood-problem/?em_pos=small&emc=edit_hh_20150804&nl=health&nid=262199)

## **Bacterial Sinusitis**

Sinusitis may be viral or fungal as well as bacterial or a combination. Signs of bacterial sinusitis may be high fever & thick colored mucus for half a week or more or milder symptoms for more than a week and a half or gets better then comes back suddenly. Many of the herbal antibacterials can be used in a netti pot (at low concentrations).

Treating bacterial sinusitis is more than just getting rid of the discomfort & symptoms. Many of us carry potentially deadly bacteria in our nasal cavities that are normally safe there unless a nose is cleaned (picked) without a double layer tissue and then the eyes or mouth are touched. A long term (more than a couple weeks) sinus bacterial infection can become complicated by meningitis or other deadly bacteria and can be deadly.

[consumerreports.org/antibiotics/antibiotics-for-kids/](http://consumerreports.org/antibiotics/antibiotics-for-kids/)

## **Bacterial pneumonia and dental cleanings**

Of 26,000 people studied, those who never saw a dentist had 86% more bacterial pneumonia than those who got checkups 2x a year.

Michelle E. Doll, MD, MPH VCUSM, Richmond

## **Diabetes & periodontal disease**

Periodontal disease & diabetes may have a 93% co-occurrence. People with diabetes or pre-diabetes should then get 2x a year cleanings.

## **Probiotics & diarrhea/strep throat/tonsillitis/ear infections**

Antibiotics often kill off the good & protective bacteria in the stomach, as does

chlorinated/flourinated water, steroids, lack of fiber/fermented foods, obesity, diabetes, liver

disease, birth control hormones, PPI & H2 blockers, opiates, and food & water when traveling.

Supplementing with probiotics during & after taking antibiotics can help replenish the good

bacteria. Probiotics have good bacteria that help crowd dangerous bacteria like E. coli, H. pylori

from the stomach. Probiotics can help fight gastroenteritis, influenza, IBD, Crohn's, ulcerative

colitis, celiac disease/gluten sensitivity, weight gain, immune rejection in transplants, bacterial

infections throughout the body, liver failure, and osteoporosis.

Diarrhea is often treated with

probiotics like boudardii. In a review of over 80 studies probiotics were found to reduce diarrhea

after antibiotic usage by 40%.

Probiotic usage has been associated with 80% less sick days, stress, cancer, less complications from head trauma, lowered mortality 60%, happier babies, less postpartum weight gain, less baby vaccine reactions, less colic, gestational diabetes & constipation.

Research shows using a product with the most types (Now Foods has a mix with 10) has the best health outcomes, and taking it within the hour after the last meal of the day and then

nothing but water until the morning appears to allow for the best proliferation & effectiveness.

People who don't eat organic (Roundup is sprayed on a lot of nonorganic crops for desiccation)

and people with active bacterial infections ESPECIALLY if taking antibiotics, which can kill the good bacteria in the gut, may do best by taking probiotics daily.

## **Iron chelation**

Bacteria need a lot of iron to grow, and chelating iron to lower iron levels makes bacteria more vulnerable. Blood donation or withdrawal is the most effective way to reduce iron. Oral

deferiprone is only available by an online pharmacy outside of the USA. Other iron chelators

are injected desferal, Biomedical Frontiers' synthetic, transferrin & lactoferrin especially if they are low in the body. Transferrin & lactoferrin may also work well if the PH is low in the infection

site & unless specific bacteria can extract iron from them. Hepcidin

The protozoa causing sleeping sickness may be extremely vulnerable to deferiprone or desferal, as well as one that causes malaria- plasmodium flaciparum, and a fungal pathogen “ pneumocytis carinii

Transferrin & lactoferrin are being developed and may be useful when levels are low and when iron saturation of transferrin is elevated like with toxic chemo prior to getting bone marrow stem cells.

### **Probiotics and c. diff**

Probiotics in one study reduced c. diff infections by nearly 250% in hospitalized patients on antibiotics.

Shen NT et al. Timely use of probiotics in hospitalized adults prevents clostridium difficile infection: A systematic review with meta-regression analysis. Gastroenterology 2017 Feb 10; [e-pub]. (<http://dx.doi.org/10.1053/j.gastro.2017.02.003>)

Probiotics may be most effective when taken one to two hours after the last meal eaten at night, with a full glass of water, then with nothing more to eat or drink except water until morning. This gives the probiotics time to multiple uninterrupted in the digestive tract.

Probiotics for the Prevention and Treatment of Antibiotic-Associated Diarrhea

A Systematic Review and Meta-analysis FREE

Susanne Hempel, PhD; Sydne J. Newberry, PhD; Alicia R. Maher, MD; Zhen Wang, PhD;  
Jeremy N. V. Miles, PhD; Roberta Shanman, MS; Breanne Johnsen, BS; Paul G. Shekelle, MD, PhD  
JAMA. 2012;307(18):1959-1969. doi:10.1001/jama.2012.3507.  
Your Health with Dr. Richard Becker & Cindy Becker 01/06/16

## Strept throat & probiotics

One probiotic, streptococcus salivarius (BLIS K12) has been found to reduce strep throat and tonsillitis infections in adults by 80% and strep throat in children by 90% & ear infections by 40% when five billion CFUs slow release are taken daily.  
<http://healthimpactnews.com/2013/oral-probiotic-reduces-ear-and-throat-infections-in-children-and-adults/>

Di Pierro F, Adami T, Rapacioli G, Giardini N, Streitberger C. Clinical evaluation of the oral probiotic Streptococcus salivarius K12 in the prevention of recurrent pharyngitis and/or tonsillitis caused by Streptococcus pyogenes in adults. Expert Opin Biol Ther. 2013 Mar;13(3):339-43.

Di Pierro F, Donato G, Fomia F, Adami T, Careddu D, Cassandro C, Albera R. Preliminary pediatric clinical evaluation of the oral probiotic Streptococcus salivarius K12 in preventing recurrent pharyngitis and/or tonsillitis caused by Streptococcus

pyogenes and recurrent acute  
otitis media. Int J Gen Med. 2012;5:991-7.

Di Pierro F et al. "Use of Streptococcus salivarius K12 in the  
prevention of streptococcal  
and viral pharyngotonsillitis in children." Drug, Healthcare and  
Patient Safety. Published online  
February 13, 2014.

Now Foods has ten different probiotics, 50 billion count in either  
powder form or 50 vegetarian  
capsules that includes all the main ones.

Streptococcus salivarius (BLIS K12) is usually available alone, not in  
a large mix.

## Tattoos

Make sure a new needle is used, they used an autoclave machine to  
sterilize their equipment  
after the last client, and they have their license and are regularly  
cleaned and inspected.

How to Safely Get a Tattoo If You Have Diabetes By Elizabeth  
Nelson

[http://blog.thediabetessite.com/diabetic-tattoo-  
safety/?gg\\_source=dbs&gg\\_campaign=Ad%20-%  
20468x250tattoo-safetyoctober-  
2016&gg\\_medium=house&gg\\_content=2016-10/468x250tatt  
oosa\\_161018091131.jpg](http://blog.thediabetessite.com/diabetic-tattoo-safety/?gg_source=dbs&gg_campaign=Ad%20-%20468x250tattoo-safetyoctober-2016&gg_medium=house&gg_content=2016-10/468x250tattooosa_161018091131.jpg)

Pneumonia infections can be viral, bacterial, or fungal  
In a large study of pneumonia, a pathogen was detected in only 38%  
of cases, and two thirds of  
pathogens were viruses. The rest were unidentified, likely viruses &  
or bacteria. Treating

lung/throat/upper respiratory infects with antivirals/antibiotics/antifungals that don't engender resistance is the best course to be sure to kill it. Liposomal vitamin C is a strong antiviral, antibacterial, & antifungals and may help no matter what type of pneumonia is present.

What Organisms Cause Community-Acquired Pneumonia in Adults?  
Allan S. Brett, MD Reviewing Jain S et al., N Engl J Med 2015 Jul 30; 373:415

## **Bacterial Pneumonia**

EPA & DHA omega3 fatty acids

Taking omega3 fatty acids in a rat study of strept pneumonia found a significant reduction in mortality, inflammation, and bacteria invasion. Spirulina is the source of EPA & DHA omega3 fatty acids & may need to be taken in a meal with a vegetable to be effective.

Omega-3 Fatty Acids Protect Against Pneumococcal Pneumonia  
Cecilia A. Hinojosa, Norberto Gonzalez-Juarbe, Luis F. Reyes, Carlos J. Orihuela, and Marcos I.

Restrepo

C104. ACUTE RESPIRATORY INFECTION: CLINICAL STUDIES.  
May 1, 2017, A6855-A6855

Guide to sepsis treatment

The management of sepsis: science & fiction

Paul E. Marik

Vol 12, Supplement 1 (February 01, 2020): Journal of Thoracic Disease (Sepsis: Science and Fiction)

[jtd.amegroups.com/article/view/34724/html](http://jtd.amegroups.com/article/view/34724/html)

Early diagnosis with complete blood count and differential and procalcitonin.

Early appropriate antibiotics without artificial time limits.

Early & full source control.

Good fluid management, individualized, physiologically guided.

Early norepinephrine.

IV thiamine, vitamin C, high dose melatonin.

I would add:

Gallium

Vitamin B3

Vitamin D3, high dosage

robotics

**Vitamin C & tuberculosis, sepsis, MRSA**

Vitamin C when used with antibiotics significantly boosts their effectiveness against bacterial infections and works to prevent & treat sepsis, MRSA, and antibiotic resistant tuberculosis (when used with antituberculosis drugs). It can help antibiotics to become effective again against antibiotic resistant infections. Lecithin liposomal vitamin C (must have lecithin) appears to be up to 25X more effective than powdered vitamin C and may be the treatment of choice against bacterial & viral infections when used with antibiotics. Liposomal C can be made very inexpensively (recipes are available on the internet). Cheapest to buy premade is from Mercola multiple times a day when sick.

Holford P, Carr AC, Jovic TH, Ali SR, Whitaker IS, Marik PE, Smith AD. Vitamin C-An Adjunctive Therapy for Respiratory Infection, Sepsis and COVID-19. *Nutrients*. 2020 Dec 7;12(12):3760. doi: 10.3390/nu12123760. PMID: 33297491; PMCID: PMC7762433.

[pubmed.ncbi.nlm.nih.gov/33297491/](https://pubmed.ncbi.nlm.nih.gov/33297491/)

Kashiouris MG, Lâ€™Heureux M, Cable CA, Fisher BJ, Leichtle SW, Fowler AA. The Emerging Role of Vitamin C as a Treatment for Sepsis. *Nutrients*. 2020 Jan 22;12(2):292. doi: 10.3390/nu12020292. PMID: 31978969; PMCID: PMC7070236

[pubmed.ncbi.nlm.nih.gov/31978969](https://pubmed.ncbi.nlm.nih.gov/31978969)

John X. Wilson. Mechanism of action of vitamin C in sepsis: Ascorbate modulates redox signaling in endothelium. *BioFactors*, 2009; 35 (1): 5 DOI:

10.1002/biof.7

University of Western Ontario. "Vitamin C may offer potential life-saving treatment for sepsis."

ScienceDaily. ScienceDaily, 18 November 2010.

[sciencedaily.com/releases/2010/1/101117184457.htm](http://sciencedaily.com/releases/2010/1/101117184457.htm).

C. Vilcheze et al., "Mycobacterium tuberculosis is extraordinarily sensitive to killing by a vitamin

C-induced Fenton reaction," Nature Communications, doi:10.1038/ncomms2898, 2013.

Babbar, I. (1948) Observations of ascorbic acid. Part XI. Therapeutic effect of ascorbic acid in tuberculosis. The Indian Medical Gazette 83:409-410.

Charpy, J. (1948) Ascorbic acid in very large doses alone or with vitamin D2 in tuberculosis.

Bulletin de l'Académie Nationale de Médecine (Paris) 132:421-423.

Pharmacol Ther. 2018 Sep;189:63-70. doi:

10.1016/j.pharmthera.2018.04.007. Epub 2018 Apr 21.

Vitamin C, vitamin B1, arginine & hydrocortisone for sepsis

Taking arginine, vitamin B1, hydrocortisone, & intravenous vitamin C, appears to help prevent organ damage & overall mortality in people with severe sepsis & septic shock. Up to 70% of people who develop sepsis have thiamine deficiency, which appears to increase lactic acidosis.

Vitamin C for the treatment of sepsis: The scientific rationale.

Marik PE

Crit Care Nurs Clin North Am. 2018 Sep;30(3):343-351. doi:

10.1016/j.cnc.2018.05.002. Epub 2018 Jun 28.

Emerging Adjunctive Approach for the Treatment of Sepsis: Vitamin C and Thiamine.

Badeaux JE1, Martin JB2.

Chest. 2017 Jun;151(6):1229-1238. doi:

10.1016/j.chest.2016.11.036. Epub 2016 Dec 6.

Hydrocortisone, Vitamin C, and Thiamine for the Treatment of Severe Sepsis and Septic Shock: A Retrospective Before-After Study.

Marik PE1, Khangoora V2, Rivera R3, Hooper MH2, Catravas J4.

The role of arginine in infection and sepsis.

Luiking YC, et al. JPEN J Parenter Enteral Nutr. 2005 Jan-Feb.

Mallat J, Lemyze M, Thevenin D. Do not forget to give thiamine to your septic shock patient!

Journal of Thoracic Disease. 2016;8(6):1062-1066.

doi:10.21037/jtd.2016.04.32.

Moskowitz A, Andersen LW, Cocchi MN, Karlsson M, Patel PV, Donnino MW. Thiamine as a

Renal Protective Agent in Septic Shock. A Secondary Analysis of a Randomized, Double-Blind,

Placebo-controlled Trial. Annals of the American Thoracic Society. 2017;14(5):737-741.

doi:10.1513/AnnalsATS.201608-656BC.

Curr Opin Anaesthesiol. 2018 Feb;31(1):55-60. doi:

10.1097/ACO.0000000000000549.

Vitamin C in sepsis.

Kuhn SO, Meissner K, Mayes LM, Bartels K

Crit Care. 2015 Nov 27;19:418. doi: 10.1186/s13054-015-1131-2.

Ascorbate-dependent vasopressor synthesis: a rationale for vitamin C administration in severe

sepsis and septic shock?

Carr AC, Shaw GM, Fowler AA, Natarajan R

Chest. 2017 Jun;151(6):1229-1238. doi:

10.1016/j.chest.2016.11.036. Epub 2016 Dec 6.

Hydrocortisone, Vitamin C, and Thiamine for the Treatment of Severe Sepsis and Septic Shock:

A Retrospective Before-After Study.

Marik PE, Khangoora V, Rivera R, Hooper MH, Catravas J

Melatonin & sepsis

In two studies with infants & sepsis, 10mg of melatonin increased survival to 100%. There are a lot of animal studies showing melatonin helps in sepsis as well. High dose melatonin (over 50mg for adults) perhaps should be used in every sepsis & infection treatment.

Colunga Biancatelli RML, Berrill M, Mohammed YH, Marik PE.

Melatonin for the treatment of sepsis: the scientific rationale. J

Thorac Dis. 2020 Feb;12(Suppl 1):S54-S65. doi:

10.21037/jtd.2019.12.85. PMID: 32148926; PMCID: PMC7024751.

[jtd.amegroups.com/article/view/34768/html](http://jtd.amegroups.com/article/view/34768/html)

The Effect of Melatonin on Thrombosis, Sepsis and Mortality Rate in COVID-19 Patients

Zainab Thanon Hasan, Dr. Mohammed Qasim Yahya Mal Allah Al Atrakji, Dr. Ahmed Kayes Mehuaiden

Open Access Published: October 11,  
2021 DOI: <https://doi.org/10.1016/j.ijid.2021.10.012>

[ijidonline.com/article/S1201-9712\(21\)00798-0/fulltext](http://ijidonline.com/article/S1201-9712(21)00798-0/fulltext)

### **DMSO & sepsis**

J Surg Res. 1999 Apr;82(2):294-9.

Inhibitory effect of dimethyl sulfoxide on nuclear factor-kappa B activation and intercellular adhesion molecule 1 gene expression in septic rats.

Chang CK, Llanes S, Schumer W.

Tanya ab mansour infectious disease specialist

### **Vitamin B3**

Vitamin B3 (niacinamide) appears to stimulate the gene C/EBP $\epsilon$ , which increases the killing power of white blood cells by up to 1000 times and in one study helped antibiotics to kill antibiotic resistant staph infections.

J Clin Invest. 2012;122(9):3316-3329. doi:10.1172/JCI62070

C/EBP $\mu$  mediates nicotinamide-enhanced clearance of Staphylococcus aureus in mice

Pierre Kyme et al.

### **Vitamin D3**

Getting blood levels of vitamin D3 above 50 ng/ml not only kills 90% of viral infections, it

appears to both prevent and speed up recovery from tuberculosis

and other bacterial infections.

Martineau AR, et al. (2007) A single dose of vitamin D enhances immunity to mycobacteria. *Am J Respir Crit Care Med* 176(2):208â€“213.

Coussens AK, et al. (2012) Vitamin D accelerates resolution of inflammatory responses during tuberculosis treatment. *Proc Natl Acad Sci USA* 109(38):15449â€“15454. doi: 10.1073/pnas.1200072109

Martineau AR, et al. (2010) Association between Gc genotype and susceptibility to TB is dependent on vitamin D status. *Eur Respir J* 35(5):1106â€“1112.

Liu PT, et al. (2006) Toll-like receptor triggering of a vitamin D-mediated human antimicrobial response. *Science* 311(5768):1770â€“1773. DOI: 10.1126/science.1123933

*Acta Med Indones.* 2006 Jan-Mar;38(1):3-5.

The effect of vitamin D as supplementary treatment in patients with moderately advanced pulmonary tuberculous lesion.

Nursyam EW, Amin Z, Rumende CM.

Shedding light on the vitamin Dâ€“tuberculosisâ€“HIV connection *PNAS* November 22, 2011 vol. 108 no. 47  
doi: 10.1073/pnas.1116513108

Wilkinson R.J., Llewelyn M., Toossi Z., Patel P., Pasvol G., Lalvani A., et al. Influence of vitamin D deficiency and vitamin D receptor polymorphisms on tuberculosis among Gujarati Asians in west London: a case-control study. *Lancet.* 2000;355:618â€“621  
*Pathog Glob Health.* 2012 Nov; 106(7): 378â€“379.

doi: 10.1179/2047772412Z.000000000087

Dissecting the immunological, antimicrobial and clinical effects of vitamin D therapy in tuberculosis

Ajit Lalvani, FMedSci and David W Connell

Scand J Infect Dis. 2010 Jul;42(6-7):455-60. doi: 10.3109/00365541003602049.

Vitamin D and methicillin-resistant Staphylococcus aureus nasal carriage.

Matheson EM, Mainous AG 3rd, Hueston WJ, Diaz VA, Everett CJ.

### **MRSA & other staph infections**

Staph infections on the skin (& in the bloodstream) can become deadly. There are a number of substances listed below that help against staph infections in general & MRSA in particular.

Because combining some might negate some of the benefits (except honey & silver particles),

using one topical antistaph at a time and rotating to a new one with every dressing change may

be the most effective way to kill the staph infection, not giving it a chance to develop resistance

to any one antibacterial.

Wang, Y.L.; Yu, Q.H.; Chen, S.K.; Wang, Y.H.

In-vitro activity of honey and topical silver in wound care management.

Drug Res. 2015, 65, 592â€“596.

### **Gallium**

Gallium is a metal used in transistors and in medicine. Gallium nitrate (Ganite) is an

FDA-approved treatment for too much calcium in the blood- 5 day continuous IV infusion, and gallium citrate has been used to successfully treat two types of cancers.

Multiple studies show gallium also fools bacteria into thinking it is iron (they need a lot) and kills

multiple antibiotic resistant gram negative bacteria at high rates (75%)- *A. baumannii*,

tuberculosis, *M. avium*, *P. aeruginosa* (100% mortality reverse) in cystic fibrosis, *K.*

*pneumoniae*, Staph, *Rhodococcus equi*, *E. coli*, *S. maltophilia*, *Burkholderia cepacia* etc. It

heals wounds + is an anti-inflammatory. If iron chelation, another antibiotic resistance fighting

strategy is added, gallium apparently goes from highly to extremely potent (over 90% effective)

against multiple antibiotic resistant bacteria. Gallium may be effective against lyme disease as it

appears effective against biofilms.

Biofactors. 2014 May-Jun;40(3):303-12. doi: 10.1002/biof.1159.

Epub 2014 Feb 14.

Repurposing of gallium-based drugs for antibacterial therapy.

Bonchi C, Imperi F, Minandri F, Visca P, Frangipani E.

J Clin Invest. 2007 Apr;117(4):877-88. Epub 2007 Mar 15.

The transition metal gallium disrupts *Pseudomonas aeruginosa* iron metabolism and has

antimicrobial and antibiofilm activity.

Kaneko Y, Thoendel M, Olakanmi O, Britigan BE, Singh PK.

Curr Opin Pharmacol. 2013 Oct;13(5):707-16. doi:

10.1016/j.coph.2013.07.001. Epub 2013 Jul

19.

Gallium-based anti-infectives: targeting microbial iron-uptake mechanisms.

Kelson AB, Carnevali M, Truong-Le V.

doi: 10.1128/AAC.01519-12 Antimicrob. Agents

Chemother. November 2012 vol. 56 no.

115961-5970

Journal of Clinical Investigation. "Gallium: A New Antibacterial Agent?" ScienceDaily.

ScienceDaily, 16 March 2007.

<[www.sciencedaily.com/releases/2007/03/070315210325.htm](http://www.sciencedaily.com/releases/2007/03/070315210325.htm)>.

DOI: 10.1039/C7RA10265H (Paper) RSC Adv., 2017, 7, 52266-52273

Antimicrobial effect of gallium nitrate against bacteria encountered in burn wound infections

Zhaorong Xu, Xiaolong Zhao, Xiaodong Chen, Zhaohong Chen and Zhaofan Xia

Vlachogiannis, Georgios & Hedayat, Somaieh & Vatsiou, Alexandra & Jamin, Yann &

Fernández-Mateos, Javier & Khan, Khurum & Lampis, Andrea & Eason, Katherine &

Huntingford, Ian & Burke, Rosemary & Rata, Mihaela & Koh, Dow-Mu & Tunariu, Nina & Collins,

David & Wilson, Sanna & Ragulan, Chanthirika & Spiteri, Inmaculada & Moorcraft, Sing Yu &

Chau, Ian & Valeri, Nicola. (2018). Patient-derived organoids model treatment response of

metastatic gastrointestinal cancers. Science. 359. 920-926.

10.1126/science.aao2774.

## **Stevia and bacterial infections**

Stevia appears to help kill E. coli, S. aureus, Vibrio mimicus, Salmonella typhimurium, S.mutans, Bacillus subtilis, Shigella dysenteriae, and Vibrio cholera and Borrelia Burgdorferi and it's™s persistors -Lyme disease- better than a three antibiotic combination in one preclinical study.

Theophilus PAS, Victoria MJ, Socarras KM, et al. Effectiveness of Stevia Rebaudiana WholeLeaf Extract Against the Various Morphological Forms of Borrelia Burgdorferi in Vitro. European Journal of Microbiology & Immunology. 2015;5(4):268-280. doi:10.1556/1886.2015.00031. Stevia may also help fight cancer, diabetes, weight loss, high blood pressure, and raises HDL while lowering LDL & triglycerides.

[draxe.com/stevia/](http://draxe.com/stevia/)

## **Samento & Banderol**

Samento & Banderol have been found to be significantly effective in Lyme treatment.

In Vitro Effectiveness of Samento and Banderol Herbal Extracts on the Different Morphological

Forms of *Borrelia burgdorferi* by Akshita Datar, Navroop Kaur, Seema Patel, David F. Luecke, and Eva Sapi, PhD

Lyme Disease Research Group University of New Haven

[townsendletter.com/July2010/sapi0710.html](http://townsendletter.com/July2010/sapi0710.html)

## Monolaurin

*default watermark*

Monolaurin is a fat found in coconut oil (50% lauric acid can convert into monolaurin) & human breast milk. It appears to kill lyme disease and other gram positive bacteria, reduce inflammation and increase T-cell production. It appears to kill influenza, viruses like cytomegalovirus/Epstein Barr, HIV-1, HIV, the measles virus, the human lymphotropic viruses (type 1), the vesicular stomatitis virus, the visna virus, the pneumovirus, the sarcoma virus, and the syncytial virus. Monolaurin appears to kill candida (fungal infection), and intestinal parasites.

Goc, A., Niedzwiecki, A. and Rath, M. (2015), In vitro evaluation of antibacterial activity of phytochemicals and micronutrients against *Borrelia burgdorferi* and *Borrelia garinii*. *J Appl Microbiol*, 119: 1561–1572. doi:10.1111/jam.12970

[selfhacked.com/blog/monolaurin-benefits/](http://selfhacked.com/blog/monolaurin-benefits/)  
[askdrray.com/lyme-disease-the-great-imitator/](http://askdrray.com/lyme-disease-the-great-imitator/)  
[naturalcurelabs.com/insights/2017/6/18/monolaurin-and-lyme-disease-treating-chronic-and-long-term-lyme-disease-with-monolaurin](http://naturalcurelabs.com/insights/2017/6/18/monolaurin-and-lyme-disease-treating-chronic-and-long-term-lyme-disease-with-monolaurin)  
[ppt-health.com/disease-protocols/lyme-disease/](http://ppt-health.com/disease-protocols/lyme-disease/)

## Proteolytic enzymes

The following proteolytic enzymes appear to dissolve the biofilm protecting bacteria so monolaurin can get to them to kill them.

Serrapeptase  
Nattokinase (in natto)  
Bromelain  
Grapefruit Seed Extract  
Papain  
Amylase  
Glucoamylase  
N-Acetyl L-Cysteine (NAC)  
Boswellic acid (boswellia)

[ppt-health.com/disease-protocols/lyme-disease/](http://ppt-health.com/disease-protocols/lyme-disease/)

## Oregano oil

Oregano oil and organic oregano are excellent antivirals, antibacterials (strongest), antifungals & antiparasitics. They also stop norovirus, which causes many food borne illnesses. The most effective version is supposed to be wild oregano versions thymus capitatus and origanum vulgare from the Mediterranean. I have used it very successfully to treat strep throat along with probiotics.

Oregano oil may cause mild stomach upset & not recommended for women who are pregnant in large amounts. It can thin the blood and lower blood sugar levels.

[webmd.com/vitamins-supplements/ingredientmono-644-oregano.aspx?activeingredientid=644&activeingredientname=oregano](http://webmd.com/vitamins-supplements/ingredientmono-644-oregano.aspx?activeingredientid=644&activeingredientname=oregano)

Inhibitory effect of oregano and thyme essential oil on airborne bacteria  
N. Paster, B. J. Juven, E. Shaaya, M. Menasherov, R. Nitzan, H. Weisslowicz and U. Ravid

Letters in Applied Microbiology Volume 11, Issue 1, pages 33-37, Jul  
DOI: 10.1111/j.1472-765X.1990.tb00130.x

LWT " Food Science and Technology Volume 36, Issue 5, August 2003, Pages 467-473

Sensitivity of four pathogenic bacteria to Turkish thyme and oregano hydrosols  
Osman Saçlıoğlu, Mustafa Özalp, Mustafa Özalp, Mustafa Özalp

Note: Inhibition of Pathogenic Bacteria by Essential Oils at Different Concentrations  
G. Özkan, O. Saçlıoğlu, M. Özkan

doi: 10.1177/1082013203009002003 Food Science and Technology International April 2003 vol. 9 no. 2 85-88

Chemical Composition, Antimicrobial and Antioxidative Activity of Laurel, Sage, Rosemary, Oregano and Coriander Essential Oils

M. Tiziana Barattaa, H. J. Damien Dormana, Stanley G. Deansa, Daniela M. Biondib & Giuseppe Rubertob

Journal of Essential Oil Research Volume 10, Issue 6, 1998 pages 618-627 DOI: 10.1080/10412905.1998.9700989

Antiviral efficacy and mechanisms of action of oregano essential oil and its primary component carvacrol against murine norovirus D.H. Gilling, M. Kitajima, J.R. Torrey and K.R. Bright Journal of Applied Microbiology Volume 116, Issue 5, pages 1149-1163, May 2014 DOI: 10.1111/jam.12453

## Thyme

Thyme may be a major antiviral equal to oregano .

## Olive leaf

Olive leaf is a good antiviral, antifungal and antibiotic (at least against H. pylori, C. jejuni, S.

aureus, MRSA, E. coli, staphylococcus aureus, klebsiella pneumoniae, bacillus cereus,

salmonella, B. cereus, C. albicans, C. neoformans, K. pneumoniae, P. aeruginosa, C. jejuni,

hemophilus influenza, moraxella catarrhalis, salmonella

Typhimurium, vibrio parahaemolyticus,

vibrio cholera, vibrio alginolyticus, lactobacillus plantarum, L. brevis,

pediococcus cerevisiae,  
leuconostoc mesenteroides, bacillus subtilis, enterobacter  
aerogenes, e. cloacae, escherichia  
coli, pseudomonas fluorescens, p. solanacearum, p. lachrymans,  
erwinia carotovora, e.  
tracheiphila, xanthomonas vesicatoria, and corynebacterium  
michiganense, meningitis,  
encephalitis, pneumonia, tuberculosis, gonorrhoea, dengue,  
dental/ear/urinary tract/surgical  
infections).

Olive leaf has 31 phenols and reduces fever, kills all viruses tested  
(rotovirus, AIDS, etc),  
antibiotic-salmonella, mycoplasma, MRSA, sinusitis, psoriasis, is an  
antifungal/antiyeast,  
antimalarial, increases immune response, lowers autoimmune  
overresponse, stops new blood  
to tumors/kills cancer cells, increases wound contraction by  
85%/wound tensile strength by  
35%, speeds healing of cartilage, anti-inflammatory, lowers high  
blood pressure, prevents  
diabetes/lowers blood sugar, lead chelator, lowers uric acid in gout,  
has vitamin E, prevents  
heart disease, lowers cholesterol, 1000mg daily lowers blood  
pressure 13pts, prevents damage  
from chemotherapy, prevents seizures from scabies, prevents fatty  
liver, helps menopausal  
symptoms, helps pain/stops opiate tolerance & addiction, is safe for  
infants  
(Dr. Richard Becker, Your Health)

According to drugs.com, olive leaf has no well documented side effects except mildly lowering blood sugar in some 11/4/2014 [drugs.com/npc/olive-leaf.html](http://drugs.com/npc/olive-leaf.html)  
Annals of Biological Research, 2012, 3 (8):4189-4191

### **Antimicrobial activity of olive leaf aqueous extract**

Morteza Azizollahi Aliabadi, Reza Kazemi Darsanaki, Mahdiyeh Laleh Rokhi, Maryam

Nourbakhsh, Golnaz Raeisi

<http://library.iyte.edu.tr/tezler/master/biyoteknoloji/T000831.pdf>

ANTIMICROBIAL AND ANTIOXIDANT ACTIVITIES OF OLIVE LEAF EXTRACT AND ITS FOOD APPLICATIONS

A Thesis Submitted to the Graduate School of Engineering and Sciences of İzmir Institute of Technology

Kerem Kaan AYTUL

<http://drhoffman.com/article/olive-leaf-extract-2>

International Journal of Antimicrobial Agents Volume 33, Issue 5, May 2009, Pages 461-463

Antimicrobial activity of commercial *Olea europaea* (olive) leaf extract

Aurelia N. Sudjana, Carla D'Orazio, Vanessa Ryan, Nooshin Rasool, Justin Ng, Nabilah Islam, Thomas V. Riley, Katherine A. Hammer

Bioresource Technology Volume 101, Issue 10, May 2010, Pages 3751-3754

Antioxidant and antimicrobial activities of individual and combined phenolics in *Olea europaea* leaf extract

Ok-Hwan Lee, Boo-Yong Lee

Dynamic Chiropractic July 14, 1997, Vol. 15, Issue 15

Herbal Health Report: Olive Leaf Extract Regains Interest as a Superb Anti-microbial Agent

Paul S. Nash, DC, CCN, Lic. Acu.

In vitro antimicrobial activity of olive leaves

D. Markin, L. Duek and I. Berdicevsky

Mycoses Volume 46, Issue 3-4, pages 132-136, March 2003

DOI: 10.1046/j.1439-0507.2003.00859.x

Molecules 2007, 12(5), 1153-1162; doi:10.3390/12051153

Article

Phenolic Compounds and Antimicrobial Activity of Olive (*Olea europaea* L. Cv. Cobrançosa)

Leaves

Ana Paula Pereira, Isabel CFR Ferreira, Filipa Marcelino, Patricia Valentão, Paula B Andrade,

Rosa Seabra, Leticia Estevinho, Albino Bento and José Alberto Pereira

Olive leaf is very effective against different types of malaria, including *Plasmodium falciparum*,

*Plasmodium vivax*, *Plasmodium ovale* and *Plasmodium malariae*.

Dynamic Chiropractic July 14, 1997, Vol. 15, Issue 15

Herbal Health Report: Olive Leaf Extract Regains Interest as a Superb Anti-microbial Agent

Paul S. Nash, DC, CCN, Lic. Acu.

Olive leaf appears to lower the nephrotoxicity of gentamicin.

[sid.ir/EN/VEWSSID/J\\_pdf/116620120106.pdf](http://sid.ir/EN/VEWSSID/J_pdf/116620120106.pdf)

Olive leaf works against HIV and viral haemorrhagic septicaemia rhabdovirus (VHSV).

Biochemical and Biophysical Research Communications Volume  
307, Issue 4, 8 August 2003,  
Pages 1029-1037

Anti-HIV activity of olive leaf extract (OLE) and modulation of host  
cell gene expression by HIV-1  
infection and OLE treatment

Sylvia Lee-Huang, Li Zhang, Philip Lin Huang, Young-Tae Chang,  
Paul L Huang

Antiviral Research Volume 66, Issues 2-3, June 2005, Pages  
129-136

The olive leaf extract exhibits antiviral activity against viral  
haemorrhagic septicaemia  
rhabdovirus (VHSV)

Vicente Micol, Nuria Caturla, Laura Pérez-Fons, Vicente  
Májis, Luis Pérez, Amparo Estepa

## Italian seasoning

Italian seasoning has many anti-infectious herbs- taking them in  
multiple meals a day may  
prevent most bacterial infections.

## Bee propolis

Bee propolis appears to help against gram positive bacteria and  
some fungal infections. In  
combination with zinc it prevents middle ear infections. The  
caucasian bumblebee propolis  
tests best against bacteria. Bee propolis helps against mouth sores  
(aphthous stomatitis), cold  
sore/herpes. It appears to help improve the effectiveness of  
antibiotics.

[raysahelian.com/otitismedia.html](http://raysahelian.com/otitismedia.html)

J R Soc Med. Mar 1990; 83(3): 159-160.

PMCID: PMC1292560

Antibacterial properties of propolis (bee glue).

J M Grange and R W Davey

## Echinacea

Echinacea stimulates the body to produce killer white blood cells and T-lymphocytes as well as interferons. It works against viral infections and some bacterial infections. Echinacea should only be taken when sick, NOT as a preventative as the body gets tolerant to its effects. 400mg every four hours for two days can be taken, then stopped for at least a week until the next infection. Echinacea stops working if used continuously. Even though many studies show it's effective as a treatment and ineffective if used as a preventative every other year a study comes out that tries to use it as a preventative and fails, and the media reports that as a failure of echinacea rather than a failure by design. Echinacea may cause an allergic response if sensitive to ragweed or if you have an autoimmune disorder (I am sensitive and it doesn't affect my allergies).

[askdrsears.com/topics/feeding-eating/family-nutrition/foods-to-boost-immunity/freque](http://askdrsears.com/topics/feeding-eating/family-nutrition/foods-to-boost-immunity/frequently-asked-questions-about-echinacea)

[ntly-asked-questions-about-echinacea](http://askdrsears.com/topics/feeding-eating/family-nutrition/foods-to-boost-immunity/frequently-asked-questions-about-echinacea)

[smart-publications.com/articles/echinacea-boost-immune-system-and-treat-colds-flu](http://smart-publications.com/articles/echinacea-boost-immune-system-and-treat-colds-flu)

Roland Schoop, Peter Klein, Andy Suter, MD, PhD Sebastian L.

Johnston

Echinacea in the prevention of induced rhinovirus colds: A meta-analysis

Clinical Therapeutics Volume 28, Issue 2, February 2006, Pages 174-183

Stephan Pleschka, Michael Stein, Roland Schoop and James B Hudson

Anti-viral properties and mode of action of standardized Echinacea purpurea extract against

highly pathogenic avian Influenza virus (H5N1, H7N7) and swine-origin H1N1 (S-OIV)

DM, Broumand N, Sahl L, Tilles JG.

In vitro effects of echinacea and ginseng on natural killer and antibody-dependent cell

cytotoxicity in healthy subjects and chronic fatigue syndrome or acquired

immunodeficiency syndrome patients.

Immunopharmacol 1997;35:229-35.

Leuttig B, Steinmuller C, Gifford GE, et al.

Macrophage activation by the polysaccharide

arabinogalactan isolated from plant cell cultures of

Echinacea purpurea. J Natl Cancer Inst 1989;81:669-75.

Virology Journal 2009, 6:197 doi:10.1186/1743-422X-6-197

Echinacea also lowers the cytokine response the body can overproduce in response to strong

viral infections, which at high levels can cause death.

Manju Sharmaa, Shawn A. Andersonb, Roland Schoopc, James B. Hudsona

Induction of multiple pro-inflammatory cytokines by respiratory

viruses and reversal by  
standardized Echinacea, a potent antiviral herbal extract Antiviral  
Research Volume 83, Issue  
2, August 2009, Pages 165-170

## Elderberry

Elderberry juice and extracts both work against viral infections and stimulate the immune system. Elderberry speeds recovery from multiple types of viral infections significantly.

[ncbi.nlm.nih.gov/pubmed/9395631](http://ncbi.nlm.nih.gov/pubmed/9395631)

Zakay-Rones Z1, Varsano N, Zlotnik M, Manor O, Regev L, Schlesinger M, Mumcuoglu M.

Inh reduction of symptoms by an elderberry extract (*Sambucus nigra* L.) during an outbreak of influenza B Panama.

J Altern Complement Med. 1995 Winter;1(4):361-9.

[ncbi.nlm.nih.gov/pubmed/15080016](http://ncbi.nlm.nih.gov/pubmed/15080016)

Zakay-Rones Z, Thom E, Wollan T, Wadstein J. Randomized study of the efficacy and safety of oral elderberry extract in the treatment of influenza A and B virus infections. The Journal of

International Medical Research, 2004 Mar-Apr;32:132-40.

[sciencedirect.com/science/article/pii/S0031942209002386](http://sciencedirect.com/science/article/pii/S0031942209002386)

Bill Roschek Jr.a, Ryan C. Finkb, Matthew D. McMichaela, Dan Lic, Randall S. Albertea,

Elderberry flavonoids bind to and prevent H1N1 infection in vitro  
Phytochemistry Volume 70, Issue 10, July 2009, Pages 1255-1261

[intmedpress.com/journals/avcc/article.cfm?id=1744&pid=92&sType=A](http://intmedpress.com/journals/avcc/article.cfm?id=1744&pid=92&sType=A)

Donald F Smee<sup>1,\*</sup>, Brett L Hurst<sup>1</sup>, Min-Hui Wong<sup>1</sup>  
Effects of TheraMax on influenza virus infections in cell culture and  
in mice

Antiviral Chemistry & Chemotherapy 2011; 21:231-237

doi: 10.3851/IMP1744

[stocknews.ch/images/stories/sambucol%20poster.pdf](http://stocknews.ch/images/stories/sambucol%20poster.pdf)

S. Balasingam\*, R. Lambkin\*, D. Safirman\*\*, M. Mumcuoglu\*\* & J.S.  
Oxford\*

Neutralizing activity of SAMBUCOL<sup>®</sup>  
against avian NIBRG-14 (H5N1) influenza virus

[tandfonline.com/doi/abs/10.1271/bbb.120112](http://tandfonline.com/doi/abs/10.1271/bbb.120112)

Emiko KINOSHITA<sup>a</sup>, Kyoko HAYASHI<sup>b</sup>, Hiroshi KATAYAMA<sup>a</sup>,  
Toshimitsu HAYASHI<sup>b</sup> & Akio  
OBATA<sup>a</sup>

Anti-Influenza Virus Effects of Elderberry Juice and Its Fractions  
Bioscience, Biotechnology, and Biochemistry Volume 76, Issue 9,  
2012 pages 1633-1638

Fan<sup>ø</sup> kun Kong, PhD.

OJPK-Online Journal of Pharmacology and Pharmacokinetics  
Volume 5: 32<sup>ø</sup> ?43, 2009

Pilot Clinical Study on a Proprietary Elderberry Extract: Efficacy in  
Addressing Influenza  
Symptoms

Echinacea can cause nausea and an allergic reaction in people  
sensitive to ragweed, mums,  
marigolds, or daisies.

[webmd.com/vitamins-supplements/ingredientmono-981-  
echinacea.aspx?activeingre](http://webmd.com/vitamins-supplements/ingredientmono-981-<br/>echinacea.aspx?activeingre)

dientid=981&activeingredientname=echinacea

Elderberry extract not only works against multiple types of viral infections but gram positive and gram negative bacteria as well.

[biomedcentral.com/1472-6882/11/16/](http://biomedcentral.com/1472-6882/11/16/)

Christian Krawitz<sup>1</sup>Ã¸ ?, Mobarak Abu Mraheil<sup>1</sup>Ã¸ ?, Michael Stein<sup>2</sup>, Can Imirzalioglu<sup>1</sup>, Eugen Domann<sup>1</sup>, Stephan Pleschka<sup>2\*</sup> and Torsten Hain

Inhibitory activity of a standardized elderberry liquid extract against clinically-relevant human

respiratory bacterial pathogens and influenza A and B viruses

BMC Complementary and Alternative Medicine 2011, 11:16

doi:10.1186/1472-6882-11-16

Cooked elderberry juice appears safest. Because it stimulates the immune system, people with

autoimmune disorders should make sure thereâ€™s no exacerbation.

[webmd.com/vitamins-supplements/ingredientmono-434-elderberry.aspx?activeingred](http://webmd.com/vitamins-supplements/ingredientmono-434-elderberry.aspx?activeingred)

ientid=434&activeingredientname=elderberry

## Topic Antibacterials

Zinc both topically & internally

Zinc supplementation reduces the incidence of pneumonia, diarrhea, bacterial and viral

infections, rhinovirus, acne, viral STIs, and mortality in people with viral infections that are

causing diarrhea. Zinc supplementation improves the effectiveness of antibiotics significantly

against deadly bacteria.

Zinc is so important to wound healing that 20% of the bodyâ€™s

zinc is in the skin. People with low zinc levels have slower wound healing & more infections. Zinc oxide (not zinc sulfate) used topically on wounds appears to reduce infections & speed up wound closure and healing even in people whoâ€™s levelâ€™s arenâ€™t low because of the increased demands for zinc during the skin repair process.

According to webmd.com, zinc can irritate the stomach & mouth (take with food), can lower copper levels, and lozenges can reduce the sense of smell & taste temporarily while zinc nasal sprays can reduce the sense of smell permanently (not recommended). 11/4/2014

[webmd.com/vitamins-and-supplements/lifestyle-guide-11/supplement-guide-zinc?page=2](http://webmd.com/vitamins-and-supplements/lifestyle-guide-11/supplement-guide-zinc?page=2)

e=2

<http://onlinelibrary.wiley.com/doi/10.1002/14651858.CD005978.pub2/p>

Zohra S Lassi, Batool A Haider, Zulfiqar A Bhutta

Zinc supplementation for the prevention of pneumonia in children aged 2 months to 59 months

DOI: 10.1002/14651858.CD005978.pub2

Acta Derm Venereol Suppl (Stockh). 1990;154:1-36.

Studies on zinc in wound healing.

Agren MS

Bull World Health Organ vol.82 n.7 Genebra Jul. 2004

<http://dx.doi.org/10.1590/S0042-96862004000700010>

Cost-effectiveness of zinc as adjunct therapy for acute childhood diarrhoea in developing countries

Journal of Health, Population and Nutrition Vol. 22, No. 4, December 2004 >

Zinc Therapy for Diarrhoea

Baqi, H.B.; Black R.E.; Arifeen S.E. et. al.

Anim. Res. 54 (2005) 203-218 DOI: 10.1051/animres:2005012

Alternatives to in-feed antibiotics in pigs: Evaluation of probiotics, zinc or organic acids as

protective agents for the intestinal mucosa. A comparison of in vitro and in vivo results

Marianna Rosellia, Alberto Finamore, Maria Serena Britta, Paolo Bosib, Isabelle Oswald and

Elena Mengheria

Effect of zinc gluconate on propionibacterium acnes resistance to erythromycin in patients with

inflammatory acne: in vitro and in vivo study Volume 15, number 3, May-June 2005

Zinc for severe pneumonia in very young children: double-blind placebo-controlled trial

Dr W Abdullah Brooks MD, M Yunus MB, Prof Mathuram Santosham MD, MA Wahed BA, Kamrun

Nahar MB, Sultana Yeasmin MB, Prof Robert E Black MD

The Lancet " 22 May 2004 ( Vol. 363, Issue 9422, Pages 1683-1688 )

DOI: 10.1016/S0140-6736(04)16252-1

<http://adc.bmj.com/content/91/7/573.short>

W Sharieff<sup>1</sup>, Z Bhutta<sup>2</sup>, C Schauer<sup>3</sup>, G Tomlinson<sup>4</sup>, S Zlotkin<sup>5</sup>  
Micronutrients (including zinc) reduce diarrhoea in children: The Pakistan Sprinkles Diarrhoea Study

Arch Dis Child 2006;91:573-579 doi:10.1136/adc.2005.086199

[jfcmonline.com/article.asp?issn=2230-](http://jfcmonline.com/article.asp?issn=2230-)

[8229;year=2010;volume=17;issue=2;spage=7](#)

9;epage=82;aulast=Telmesani

Abdulwahab MA Telmesani

Oral rehydration salts,zinc supplement and rota virus vaccine in the management of childhood

acute diarrhea

Journal of Family & Community Medicine 2010 17:2 79-82

<http://journals.cambridge.org/action/displayAbstract?fromPage=online&>

9665106000073

Rosalind S. Gibson

Zinc: the missing link in combating micronutrient malnutrition in developing countries

Proceedings of the Nutrition Society / Volume 65 / Issue 01 / February 2006, pp 51-60

<http://journals.lww.com/co->

[clinicalnutrition/Abstract/2009/11000/Zinc\\_\\_role\\_in\\_immunity,\\_oxidative\\_stress\\_and.16.aspx](http://journals.lww.com/co-clinicalnutrition/Abstract/2009/11000/Zinc__role_in_immunity,_oxidative_stress_and.16.aspx)

Prasad, Ananda S

Zinc: role in immunity, oxidative stress and chronic inflammation

Current Opinion in Clinical Nutrition & Metabolic Care:

November 2009 " Volume 12 " Issue 6 " p 646-652

doi: 10.1097/MCO.0b013e3283312956

<http://imr.sagepub.com/content/40/1/28.short>

S Maggini, S Beveridge, M Suter

A Combination of High-Dose Vitamin C plus Zinc for the Common Cold

doi: 10.1177/147323001204000104

Journal of International Medical Research February 2012 vol. 40 no. 1 28-42

<http://aac.asm.org/content/56/1/358.short>

Zinc Acetate/Carrageenan Gels Exhibit Potent Activity In Vivo  
against High-Dose Herpes

Simplex Virus 2 Vaginal and Rectal Challenge

JosÃfÂ© A. FernÃfÂ¿ndez-Romeroa, Ciby J. Abrahama, Aixa  
Rodrigueza, et al.

doi: 10.1128/AAC.05461-11 Antimicrob. Agents Chemother. January  
2012 vol. 56 no. 1 358-368

[https://helda.helsinki.fi/bitstream/handle/10138/40083/CMAJ2012\\_Zinc](https://helda.helsinki.fi/bitstream/handle/10138/40083/CMAJ2012_Zinc=2)  
=2

Science M, Johnstone J, Roth DE, Guyatt G, Loeb M.

Zinc for the treatment of the common cold:  
a systematic review and meta-analysis of randomized controlled  
trials.

CMAJ. 2012 Jul 10;184(10):E551-61.

[cmaj.ca/content/early/2012/05/07/cmaj.111990.short](http://cmaj.ca/content/early/2012/05/07/cmaj.111990.short)

Michelle Science, Jennie Johnstone, Daniel E. Roth, Gordon Guyatt,  
Mark Loeb

Zinc for the treatment of the common cold: a systematic review and  
meta-analysis of  
randomized controlled trials

CMAJ May 7, 2012 First published May 7, 2012, doi:  
10.1503/cmaj.111990

[bioscirep.org/bsr/024/bsr0240023.htm](http://bioscirep.org/bsr/024/bsr0240023.htm)

George A. EBY

Zinc Lozenges: Cold Cure or Candy? Solution Chemistry  
Determinations

Bioscience Reports (2004) 24, (23Ã¢ ?39) (Printed in Great Britain)

<http://jcm.asm.org/content/38/5/1758.short>

Max Arens, and Sharon Travis

## Zinc Salts Inactivate Clinical Isolates of Herpes Simplex Virus In Vitro

J. Clin. Microbiol. May 2000 vol. 38 no. 5 1758-1762

<http://ajcn.nutrition.org/content/79/3/430.short>

Dilip Mahalanabis, Madhurima Lahiri, Dilip Paul, Susham Gupta, Atul Gupta, Mohammed A Wahed, and Mohammed A Khaled

Randomized, double-blind, placebo-controlled clinical trial of the efficacy of treatment with zinc or vitamin A in infants and young children with severe acute lower respiratory infection<sup>1,2,3</sup>

Am J Clin Nutr March 2004 vol. 79 no. 3 430-436

<http://qjmed.oxfordjournals.org/content/96/1/35.short>

S.B. Mossad

Effect of zincum gluconicum nasal gel on the duration and symptom severity of the common cold in otherwise healthy adults

QJM: An International Journal of Medicine Volume 96, Issue 1 Pp. 35-43.

<http://onlinelibrary.wiley.com/doi/10.1080/08035250600603024/abstract>  
+Online+Library+will+be+disrupted+on+the+18th+October+from+10%  
0+EDT%29+for+essential+maintenance+for+approximately+two+hours  
s+to+improve+our+services+to+you&userIsAuthenticated=false&denie  
sage=

Zafer KurugÃ¶llü<sup>1,\*</sup>, MÃ¶nner Akilli<sup>2</sup>, Nuri Bayram<sup>1</sup>  
and Guldane Koturoglu<sup>1</sup>

The prophylactic and therapeutic effectiveness of zinc sulphate on common cold in children

Acta Paediatrica

Volume 95, Issue 10, pages 1175–1181, October 2006

DOI: 10.1080/08035250600603024

[sciedirect.com/science/article/pii/S0011393X98850583](http://sciedirect.com/science/article/pii/S0011393X98850583)

Edward J. Petrus, a, , Kenneth A. Lawsonb, Luke R. Buccic,  
Kenneth Blumd

Randomized, double-masked, placebo-controlled clinical study of the effectiveness of zinc

acetate lozenges on common cold symptoms in allergy-tested subjects

Current Therapeutic Research

Volume 59, Issue 9, September 1998, Pages 595–607

[http://journals.lww.com/clinicalnutrition/Abstract/2008/11000/Zinc\\_and\\_diarrheal\\_disease\\_\\_current\\_status\\_and.7.aspx](http://journals.lww.com/clinicalnutrition/Abstract/2008/11000/Zinc_and_diarrheal_disease__current_status_and.7.aspx)

Scrimgeour, Angus Ga; Lukaski, Henry Cb

Zinc and diarrheal disease: current status and future perspectives

Current Opinion in Clinical Nutrition & Metabolic Care:

November 2008 “ Volume 11 “ Issue 6 “ p 711–717

doi: 10.1097/MCO.0b013e3283109092

[sciedirect.com/science/article/pii/S0140673605671097](http://sciedirect.com/science/article/pii/S0140673605671097)

Prof W Abdullah Brooks, MPH<sub>a</sub>, , , Prof Mathuram Santosham, MPH<sub>b</sub>, Aliya Naheed, MPH

Effect of weekly zinc supplements on incidence of pneumonia and diarrhoea in children younger

than 2 years in an urban, low-income population in Bangladesh: randomised controlled trial

The Lancet Volume 366, Issue 9490, 17–23 September 2005, Pages 999–1004

<http://onlinelibrary.wiley.com/doi/10.1002/14651858.CD001364.pub3/a>  
Wiley+Online+Library+will+be+disrupted+on+the+18th+October+from+  
%3A00+EDT%29+for+essential+maintenance+for+approximately+two  
grades+to+improve+our+services+to+you

Zinc for the common cold

Meenu Singh\*, Rashmi R Das

DOI: 10.1002/14651858.CD001364.pub3

[george-eby-research.com/anosmia/hirt-nobel-barron.pdf](http://george-eby-research.com/anosmia/hirt-nobel-barron.pdf)

<http://annals.org/article.aspx?articleid=713795>

Ananda S. Prasad, MD, PhD; James T. Fitzgerald, PhD; Bin Bao,  
MD et al.

Duration of Symptoms and Plasma Cytokine Levels in Patients with  
the Common Cold Treated  
with Zinc Acetate: A Randomized, Double-Blind, Placebo-Controlled  
Trial

Ann Intern Med. 2000;133(4):245-252. doi:10.7326/0003-4819-133-  
4-200008150-00006

<http://pediatrics.aappublications.org/content/121/2/326.short>

Marek Lukacik, MDa, Ronald L. Thomas, PhDb, Jacob V. Aranda,  
MD, PhDb

A Meta-analysis of the Effects of Oral Zinc in the Treatment of Acute  
and Persistent Diarrhea

PEDIATRICS Vol. 121 No. 2 February 1, 2008

pp. 326 -336

(doi: 10.1542/peds.2007-0921)

Because different formulations get different results, I recommend  
using zinc as a preventative &  
a supplemental but not first line treatment for viral infections, but  
absolutely essential as an

additive to antibacterial treatments with daily zinc supplementation in powdered or tablet form, increasing the dosage only moderately during an active viral infection but significantly more during a bacterial infection.

Zinc appears safe at 15mg a day taken orally. Taking zinc lozenges can temporarily lower the sense of smell & zinc nasal sprays permanently.

[webmd.com/vitamins-supplements/ingredientmono-982-zinc.aspx?activeingredientid=982&activeingredientname=zinc](http://webmd.com/vitamins-supplements/ingredientmono-982-zinc.aspx?activeingredientid=982&activeingredientname=zinc)

Manuka honey from New Zealand topically for MRSA & staph infections

Manuka honey is a medical grade topical antibacterial treatment that kills MRSA and other bacterial infections. When MRSA gets into the bloodstream from a skin infection, topical treatment with manuka honey can render the internal infection vulnerable to common antibiotics.

Manuka honey kills all topical bacterial infections including MRSA strains. It works against E. coli, H. pylori, and chronic sinusitis. It comes from New Zealand from the bees that pollinate manuka flowers.

Twice as much is sold as is made, which means that at least half of the honey on the market isn't manuka & may not even be honey. Because it is so popular and supplies are limited the only honey you can trust is one that exports & sells from the same company that harvests it in New Zealand.

Honey contains over a dozen lactic acid bacteria that produce antimicrobial compounds.

Adding cultured lactic acid bacteria to honey in a study of ten treatment resistant horses killed the infections in all.

Honey: its medicinal property and antibacterial activity

Mandal MD, Mandal S. Asian Pac J Trop Biomed. 2011 Apr;1(2):154-60. doi: 10.1016/S2221-1691(11)60016-6. PMID: 23569748; PMCID: PMC3609166.

[ncbi.nlm.nih.gov/pmc/articles/PMC3609166/](http://ncbi.nlm.nih.gov/pmc/articles/PMC3609166/)

Tobias C Olofsson, Eile Butler, Pawel Markowicz, Christina Lindholm, Lennart Larsson, Alejandra VÃ¡squez. Ã¢ Lactic acid bacterial symbionts in honeybees Ã¢ ? an unknown key to honeyâ€™s antimicrobial and therapeutic activities.Ã¢ ? Intl Wound J., 8 Sept. 2014.

[worldhealth.net/news/honey-compounds-antibiotic-alternative/](http://worldhealth.net/news/honey-compounds-antibiotic-alternative/)

Molan, P.; Rhodes, T.

Honey: A Biologic Wound Dressing.

Wounds 2015, 27, 141â€“151. [PubMed]

Jenkins, R.; Cooper, R.

Improving antibiotic activity against wound pathogens with manuka honey in vitro.

PLoS ONE 2012, 7, e45600.

D.J. Willix, P.C. Molan and C.G. Harfoot

A comparison of the sensitivity of wound-infecting species of bacteria

to the antibacterial activity  
of manuka honey and other honey  
Journal of Applied Bacteriology Volume 73, Issue 5, pages 388-394, November 1992  
DOI: 10.1111/j.1365-2672.1992.tb04993.x  
David Wayne Johnson, Carolyn van Eps, David William Mudge,  
Kathryn Joan Wiggins, Kirsty  
Armstrong, Carmel Mary Hawley, Scott Bryan Campbell, Nicole  
Maree Isbel, Graeme Robert  
Nimmo and Harry Gibbs  
Randomized, Controlled Trial of Topical Exit-Site Application of  
Honey (Medihoney) versus  
Mupirocin for the Prevention of Catheter-Associated Infections in  
Hemodialysis Patients  
March 23, 2005, doi: 10.1681/ASN.2004110997  
JASN May 1, 2005 vol. 16 no. 5 1456-1462  
R. Cooper, P. Molan  
The use of honey as an antiseptic in managing Pseudomonas  
infection  
Journal of Wound Care Volume 8, Issue 4  
DOI: <http://dx.doi.org/10.12968/jowc.1999.8.4.25867>  
Molan PC: The antibacterial nature of honey. 1. The nature of the  
antibacterial activity.  
Bee World 1992, 73(1):5-28.  
Bhavin G. Visavadia, , Jan Honeysett, Martin H. Danford  
Manuka honey dressing: An effective treatment for chronic wound  
infections  
British Journal of Oral and Maxillofacial Surgery  
Volume 46, Issue 1, January 2008, Pages 55-56  
Asian Pac J Trop Biomed. 2011 Apr; 1(2): 154-160.

doi: 10.1016/S2221-1691(11)60016-6

PMCID: PMC3609166

Honey: its medicinal property and antibacterial activity

Manisha Deb Mandal and Shyamapada Mandal

Cooper RA1, Molan PC, Harding KG.

Antibacterial activity of honey against strains of *Staphylococcus aureus* from infected wounds.

J R Soc Med. 1999 Jun;92(6):283-5.

Taormina PJ, Niemira BA, Beuchat LR: Inhibitory activity of honey against foodborne pathogens

as influenced by the presence of hydrogen peroxide and level of antioxidant power.

Int J Food Microbiol 2001, 69:217-225.

J Antimicrob Chemother. 2011 Nov;66(11):2536-42. doi:

10.1093/jac/dkr340. Epub 2011 Sep 7.

Manuka honey inhibits cell division in methicillin-resistant *Staphylococcus aureus*.

Jenkins R1, Burton N, Cooper R.

Gethin G, Cowman PS (2008) Bacteriological changes in sloughy venous leg ulcers treated with

manuka honey or hydrogel: an RCT. J Wound Care 17(6): 241-247

Medical-Grade Honey Kills Antibiotic-Resistant Bacteria In Vitro and Eradicates Skin

Colonization

Paulus H. S. Kwakman et al.

Clin Infect Dis. (2008) 46 (11): 1677-1682. doi: 10.1086/587892

Manuka honey slows tumor growth & improves cancer survival in mice cotreated with

chemotherapy in one study.

Fernandez-Cabezudo MJ, El-Kharrag R, Torab F, Bashir G, George

JA, et al. (2013)

Intravenous Administration of Manuka Honey Inhibits Tumor Growth and Improves Host Survival

When Used in Combination with Chemotherapy in a Melanoma Mouse Model. PLoS ONE 8(2): e55993. doi:10.1371/journal.pone.0055993

Raw, organic, and or local honey may be better than silver sulfadiazene (SSD) dressing in burns

— Honey dressings improve wound healing, make wound sterile in lesser duration, and have better outcomes in terms of incidence of hypertrophic scars and postburn contractures when compared to SSD dressings—

J Cutan Aesthet Surg. 2011 Sep-Dec; 4(3): 183—187.

doi: 10.4103/0974-2077.91249

PMCID: PMC3263128

Honey Dressing Versus Silver Sulfadiazene Dressing for Wound Healing in Burn Patients: A

Retrospective Study

Shilpi Singh Gupta, Onkar Singh, Praveen Singh Bhagel, Sonia Moses, Sumit Shukla, and Raj Kumar Mathur

Raw, organic, and or local honey may help protect against radiation-induced oral mucositis.

Song, Jason J. MD, PhD; Twumasi-Ankrah, Philip PhD; Salcido, Richard MD

Systematic Review and Meta-analysis on the Use of Honey to Protect from the Effects of Radiation-Induced Oral Mucositis

Advances in Skin & Wound Care:

January 2012 " Volume 25 " Issue 1 " p 23-28

doi: 10.1097/01.ASW.0000410687.14363.a3

Medihoney from Australia is another type of antibacterial medicinal honey.

## Colloidal silver

Colloidal silver (silver nanoparticles) can be bought online or made yourself. Silver was used for centuries to kill every type of bacteria before refrigeration and antibiotics were invented. Now silver & copper coated hospital room furniture and surgical utensils are being used to prevent hospital acquired infections.

Research shows it will kill viral, fungal, parasitic & other infectious organisms.

Colloidal silver apparently reduces allergies & inflammatory reactions, as well as the bacteria that may be triggering rheumatoid arthritis.

When taking orally can first rinse the mouth.

Well Being Journal v29, #1, pp 14-18

I've used it to kill a very stubborn skin infection, and it worked immediately & completely. On the skin a gel form may stay on the wound better than pure liquid. It apparently works against staph infections as well.

[http://microbewiki.kenyon.edu/index.php/Silver\\_as\\_an\\_Antimicrobial\\_A](http://microbewiki.kenyon.edu/index.php/Silver_as_an_Antimicrobial_A)

[http://idosi.org/ijmr/ijmr1\(1\)10/5.pdf](http://idosi.org/ijmr/ijmr1(1)10/5.pdf)

Taking extremely large doses for years of the wrong form of colloidal silver internally can turn

the skin blue.

[webmd.com/vitamins-supplements/ingredientmono-779-colloidal%20silver.aspx?activeingredientid=779&activeingredientname=colloidal%20silver](http://webmd.com/vitamins-supplements/ingredientmono-779-colloidal%20silver.aspx?activeingredientid=779&activeingredientname=colloidal%20silver)

[mayoclinic.org/healthy-living/consumer-health/expert-answers/colloidal-silver/faq-20058061](http://mayoclinic.org/healthy-living/consumer-health/expert-answers/colloidal-silver/faq-20058061)

Colloidal silver is safer when used against bacterial infections on the skin.

Dai, T.; Huang, Y.Y.; Sharma, S.K.; Hashmi, J.T.; Kurup, D.B.; Hamblin, M.R.

Topical antimicrobials for burn wound infections.

Recent Pat. Anti-Infect. Drug Discov. 2010, 5, 124â€“151. [CrossRef]

Barajas-Nava, L.A.; Lopez-Alcalde, J.; Roque i Figuls, M.; Sola, I.; Bonfill Cosp, X.

Antibiotic prophylaxis for preventing burn wound infection.

Cochrane Database Syst. Rev. 2013, 6, CD008738. [PubMed]

Guthrie, K.M.; Agarwal, A.; Tackes, D.S.; Johnson, K.W.; Abbott, N.L.; Murphy, C.J.; Czuprynski,

C.J.; Kierski, P.R.; Schurr, M.J.; McAnulty, J.F.

Antibacterial efficacy of silver-impregnated polyelectrolyte multilayers immobilized on a

biological dressing in a murine wound infection model. Ann. Surg. 2012, 256, 371â€“377.

Sun, W.; Qu, D.; Ma, Y.; Chen, Y.; Liu, C.; Zhou, J. Enhanced stability and antibacterial efficacy

of a traditional Chinese medicine-mediated silver nanoparticle delivery system.

Int. J. Nanomed. 2014, 9, 5491â€“5502.

Murugan, K.; Senthilkumar, B.; Senbagam, D.; Al-Sohaibani, S.

Biosynthesis of silver nanoparticles using *Acacia leucophloea* extract and their antibacterial activity.

Int. J. Nanomed. 2014, 9, 2431–2438.

Glasser, J.S.; Guymon, C.H.; Mende, K.; Wolf, S.E.; Hospenthal, D.R.; Murray, C.K.

Activity of topical antimicrobial agents against multidrug-resistant bacteria recovered from burn patients.

Burns 2010, 36, 1172–1184.

New Is Old, and Old Is New: Recent Advances in Antibiotic-Based, Antibiotic-Free and Ethnomedical Treatments against Methicillin-Resistant *Staphylococcus aureus* Wound Infections

Jian-Lin Dou, Yi-Wei Jiang, Jun-Qiu Xie and Xiao-Gang Zhang

Int. J. Mol. Sci. 2016, 17, 617; doi:10.3390/ijms17050617

Chestnut leaf extract may help to disrupt staph bacteria without causing resistance

Cassandra L. Quave, James T. Lyles, Jeffery S. Kavanaugh, Kate Nelson, Corey P. Parlet, Heidi

A. Crosby, Kristopher P. Heilmann, Alexander R. Horswill. *Castanea sativa* (European Chestnut)

Leaf Extracts Rich in Ursene and Oleanene Derivatives Block *Staphylococcus aureus* Virulence

and Pathogenesis without Detectable Resistance. PLOS ONE, 2015; 10 (8): e0136486 DOI:

10.1371/journal.pone.0136486

Emory Health Sciences. “Chestnut leaves yield extract that disarms deadly staph bacteria:

Extract shuts down staph without boosting its drug resistance.â€•  
ScienceDaily. ScienceDaily, 21  
August 2015.  
<[www.sciencedaily.com/releases/2015/08/150821164150.htm](http://www.sciencedaily.com/releases/2015/08/150821164150.htm)>.

## Black seed oil (nigella)

Black seed oil appears to work against bacterial infections topically & internally, including MRSA. It also appears to lower seizures & inflammation. It may be used by over a billion people because Mohammad praised it vigorously in the Koran.

Emeka LB, Emeka PM, Khan TM. Antimicrobial activity of Nigella sativa L. seed oil against multi-drug resistant Staphylococcus aureus isolated from diabetic wounds. Pak J Pharm Sci. 2015 Nov;28(6):1985-90. PMID: 26639493.

Hannan A, Saleem S, Chaudhary S, Barkaat M, Arshad MU. Anti bacterial activity of Nigella sativa against clinical isolates of methicillin resistant Staphylococcus aureus. J Ayub Med Coll Abbottabad. 2008 Jul-Sep;20(3):72-4. PMID: 19610522.

[researchgate.net/figure/Effect-of-Black-seed-oil-on-S-aureus-control-70-black-seed-oil\\_fig1\\_283121405](https://www.researchgate.net/figure/Effect-of-Black-seed-oil-on-S-aureus-control-70-black-seed-oil_fig1_283121405)

[euphoricherbals.com/en-ca/blogs/news/benefits-of-nigella-seed](http://euphoricherbals.com/en-ca/blogs/news/benefits-of-nigella-seed)

## Tea tree oil

Tea tree oil (terpenes) used topically may help against MRSA infections and other skin and digestive tract infections.

Edmondson, M.; Newall, N.; Carville, K.; Smith, J.; Riley, T.V.; Carson, C.F.

Uncontrolled, open-label, pilot study of tea tree (*Melaleuca alternifolia*) oil solution in the decolonisation of methicillin-resistant *Staphylococcus aureus* positive wounds and its influence on wound healing. *Int. Wound J.* 2011, 8, 375–384.

Sherry, E.; Boeck, H.; Warnke, P.H.

Percutaneous treatment of chronic MRSA osteomyelitis with a novel plant-derived antiseptic.

*BMC Surg.* 2001, 1, 1

Carson, C. F., Mee, B. J. & Riley, T. V.

(2002). Mechanism of action of *Melaleuca alternifolia* (Tea tree) oil on *Staphylococcus aureus* determined by time-kill, lysis, leakage, and salt tolerance assays and electron microscopy.

*Antimicrobial Agents and Chemotherapy* 46, 1914–20.

Ernst, E. & Huntley, A.

Tea tree oil: a systematic review of randomized clinical trials.

*Forschende Komplementärmedizin und Klassische Naturheilkunde* 7, 17–20. 2000

Caelli, M., Porteous, J., Carson, C. F., Heller, R. & Riley, T. V.

Tea tree oil as an alternative topical decolonization agent for methicillin-resistant *Staphylococcus aureus*.

*Journal of Hospital Infection* 46, 236–7 2000.

## **Aloe vera**

Aloe vera may help against some gram negative bacteria.

Cataldi, V.; di Bartolomeo, S.; di Campi, E.; Nostro, A.; Cellini, L.; di Giulio, M.

In vitro activity of Aloe vera inner gel against microorganisms grown in planktonic and sessile phases.

Int. J. Immunopathol. Pharmacol. 2015, 28, 595–602.

### **Vinegar & baking soda**

Vinegar & baking soda mixed together may help to fight staph infections.

### **Iodine**

Iodine may help against MRSA infections.

### **Garlic**

Freshly crushed garlic may help against staph infections when applied topically. Garlic was used extensively in WWII in wounds to prevent infection.

Garlic extract and two diallyl sulphides inhibit methicillin-resistant *Staphylococcus aureus*

infection in BALB/cA mice

Shyh-ming Tsao, Cheng-chin Hsu and Mei-chin Yin

Journal of Antimicrobial Chemotherapy (2003) 52, 974–980 DOI: 10.1093/jac/dkg476

Wu, X.; Santos, R.R.; Fink-Gremmels, J. Analyzing the antibacterial effects of food ingredients:

Model

experiments with allicin and garlic extracts on biofilm formation and viability of *Staphylococcus epidermidis*.

Food Sci. Nutr. 2015, 3, 158–168.

### **Duabanga grandiflora**

Duabanga grandiflora is a tree that grows up to 80 feet. The leaves may help kill MRSA

infections when applied topically.

Molecules. 2015 Mar 10;20(3):4473-82. doi:  
10.3390/molecules20034473.

Inhibitory effect of Duabanga grandiflora on MRSA biofilm formation via prevention of cell-surface attachment and PBP2a production.

Santiago C, Lim KH, Loh HS, Ting KN.

BMC Complement Altern Med. 2015; 15: 178.

Published online 2015 Jun 10. doi: 10.1186/s12906-015-0699-z

Inhibition of penicillin-binding protein 2a (PBP2a) in methicillin resistant Staphylococcus aureus

(MRSA) by combination of ampicillin and a bioactive fraction from Duabanga grandiflora

Carolina Santiago, Ee Leen Pang, Kuan-Hon Lim, Hwei-San Loh, and Kang Nee Ting

### **Chestnut leaf**

In one study chestnut leaf extract was effective against staph infection.

Castanea sativa (European Chestnut) Leaf Extracts Rich in Ursene and Oleanene Derivatives

Block Staphylococcus aureus Virulence and Pathogenesis without Detectable Resistance

Cassandra L. Quave, et al.

<http://dx.doi.org/10.1371/journal.pone.0136486>

## Blue light therapy

Blue light therapy appears to kill a lot of bacterial skin infections including acne. It is good to wear yellow tinted glasses if using on the face.

[alienherbalist.com/blue-light-therapy](http://alienherbalist.com/blue-light-therapy)

default watermark

## Acne

Acne may be over 75% treatable with these individually- tea tree oil in a shampoo (like Dr. Bronners), spraying on vinegar, rubbing on zinc powder with aloe vera, taking brewerâ€™s yeast (especially that has *Saccharomyces cerevisiae Hansen CBS*), taking spirulina w/a vegetable (to release the EPA&DHA omega3 fatty acids), reduce milk & wheat.

[healthline.com/health/skin/acne](http://healthline.com/health/skin/acne)

[healthline.com/nutrition/get-rid-of-pimples-fast](http://healthline.com/nutrition/get-rid-of-pimples-fast)

**Category**

1. Medicine

**Date Created**

April 27, 2021

**Author**

biggs

*default watermark*