

headaches

menopause

PRAKTIKOS
HEALTH SERIES

dementia

indigestion

stress

vision

incontinence

Protecting Yourself and Your Family from Colds and the Flu

allergies

migraines

sinusitis

influenza

heart health

back pain

respiratory disease

diabetes

asthma

arthritis

migraines

skin conditions

stds

obesity

depression

childhood diseases

indigestion

chronic

incontinence

periodontal disease

stomach disorders

prostate health

skin conditions

urinary tract infections

Sara S. Dehart, MSN, PhD

Colds and the Flu

Protecting Yourself and Your Family from Colds and the Flu

Sara S. DeHart, MSN, PhD

PRAKTIKOS
BOOKS

DISCLAIMER

Ideas and information in this book are based upon the experience and training of the author and the scientific information currently available. The suggestions in this book are definitely not meant to be a substitute for careful medical evaluation and treatment by a qualified, licensed health professional. The author and publisher do not recommend changing or adding medication or supplements without consulting your personal physician. They specifically disclaim any liability arising directly or indirectly from the use of this book.

Praktikos Books
P.O. Box 118
Mount Jackson, VA 22842
888.542.9467 info@praktikosbooks.com

Protecting Yourself and Your Family from Colds and the Flu by Sara S. DeHart is licensed under a Creative Commons Attribution 3.0 Unported License. To view a copy of this license, visit <http://www.creativecommons.org/licenses/by/3.0/> or send a letter to Creative Commons, 444 Castro Street, Suite 900, Mountain View, California, 94041, USA.

Praktikos Books are produced in alliance with Axios Press.

Contents

Protecting Yourself and Your Family from Colds and the Flu	1
Some Background	4
Treatment	6
Prevention.	13
Endnotes	21
References	27
About the Author	39

Protecting Yourself and Your Family from Colds and the Flu

EVERY YEAR, AROUND THE TIME SCHOOL STARTS, the media are full of articles and advice about how to avoid sniffles, colds, and the flu (influenza). Worried parents take their kids to the pediatrician, and perhaps visit the family doctor themselves, looking for guidance.

What they usually get is the conventional wisdom, based on the teachings of mainstream medicine. A lot of that advice is sound: wash your hands frequently; cough into your elbow, not your hands; keep a sick child at home—and stay home yourself if you're sick; and so on.

However, parents often ask their doctors other questions that are more problematic. This cold just won't quit; can you give me some antibiotics? (A good doctor won't; antibiotics are useless against cold viruses.) Is it safe for my six-month-old baby to have a flu shot? My two-year-old? Is FluMist® any better? Should I worry about thimerosal (mercury-based) preservatives in vaccines? Can vitamins prevent a cold?

These parents may or may not get good answers to these important questions. Doctors and other health practitioners have little time in a typical 15-minute patient visit to talk much about prevention. They are much more likely to settle for delivering the standard recommendations of the US Centers for Disease Control and Prevention (CDC)¹ because that puts them in line with the conventional "standards of care." Doctors do not get questioned if they follow the CDC's talking points, even if their patients suffer nasty side effects (from flu shots, for instance).

The time limitation, plus the fact that conventional doctors are not trained to consider dietary

or herbal solutions to treat very common recurring problems like colds and flu, means that these approaches will probably not be discussed. Natural remedies, such as vitamin D3 (from sunshine or supplementation) or other dietary or herbal approaches to prevention are rarely mentioned.

And even if doctors did mention these options, their efforts could easily run aground on the fact that Americans are not patient people. Television drug commercials have taught many of us to expect immediate results. Herbal and dietary approaches generally are often slower but safer methods of treatment.

In fact, the best way to cope with the threat of colds and the flu is to avoid getting them in the first place—and herbal and dietary measures can be powerful prevention tools. They offer a way to take advantage of the obvious fact that cold or flu epidemics, or even pandemics (worldwide outbreaks of disease), do not affect everyone. Some people remain healthy regardless of disease conditions around them.

We are hardly powerless, and we need not be sitting ducks, waiting for common cold or flu

symptoms to hit. The rest of this booklet will discuss the differences between the common cold and influenza and what natural medicine has to offer in the way of treatment and prevention measures.

Some Background

COLDS AND THE FLU are both quite common. According to the National Institute of Allergies and Infectious Diseases (NIAID), Americans suffer about 1 billion colds each year—a little over three per person.² The US CDC estimates that 22 million school days are lost to colds every year.

Cases of the flu are much less common, but can be more serious. While colds can make you miserable, they are generally little more than a nuisance. Influenza, on the other hand, is often more disabling and can be deadly (NIAID reports that since the 1970s the flu has been associated with an average of more than 25,000 American deaths each year, though the flu itself—as opposed to complications such as pneumonia—

directly accounts for 1,000–2,000 each year).³ The infamous 1918–1920 pandemic (worldwide outbreak) of the so-called Spanish flu infected nearly one-third of the world's entire population and killed 50 million or more.

The common cold occurs more often in children, though adults get their fair share and often lose workdays if sinus or bronchial (lung or chest) infections follow the original cold. A 2003 study by University of Michigan researchers found that the common cold carries a \$40 billion annual price tag,⁴ which makes it more costly, in terms of economic impact, than asthma or heart failure.⁵ The impacts of seasonal flu outbreaks, let alone epidemics, no doubt also run into the billions every year by the time the costs of doctor visits, lost productivity, and so on are added up.

The Michigan study also reported that colds lead to more than 100 million physician visits a year, and that more than one-third of the patients who saw a doctor received an antibiotic prescription. As already noted, antibiotics rarely help with colds. Worse, this treatment pattern is thought to be one of the major causes

of antibiotic resistance and “superbugs” that do not respond to regular treatment.⁶

Colds and influenza are both caused by viruses, and people sometimes confuse them. Here’s how to tell the difference:⁷

Symptom	Cold	Flu
Fever	Rare	Usually present
Aches	Slight	Usual, often severe
Chills	Uncommon	Fairly common
Tiredness	Mild	Moderate to severe
Symptoms	Appears gradually	Appears within 3–6 hours
Cough	Hacking, productive cough	Dry, unproductive cough
Sneezing	Common	Uncommon
Stuffy nose	Common	Uncommon
Sore throat	Common	Uncommon
Chest Discomfort	Mild to moderate	Often severe
Headache	Uncommon	Common

Treatment

CONVENTIONAL (PHARMACEUTICAL) MEDICINE has little to offer cold sufferers. Generally doctors advise that a cold will last about 10 days, so just “ride it out.” As mentioned earlier, the 2003

University of Michigan study found that fully a third of patients seeking treatment for colds were given a prescription for an antibiotic. However, because colds are viral in origin, antibiotics should be restricted to those who develop a bacterial sinus or bronchial (lung) infection. The major sign of a bacterial infection is yellow or green (purulent) nasal drainage.

And while the drug industry has produced and marketed hundreds of drugs meant to “treat” colds, their effect is mainly to mask or treat the symptoms. They do not cure nor alter the length of time (about 10 days) of most colds. Many over-the-counter (OTC) drugs are ineffective at best and often harmful.⁸

In general, regardless of which of the 200 or more viruses that can cause colds is at fault, most children and adults will recover in 7 to 10 days with good supportive care. However, there is one type of cold virus that needs special attention, respiratory syncytial virus (RSV). RSV can be very serious in infants, and while adults will often describe it as a “really bad cold” the large amount of sticky mucus that can develop

into mucus plugs and block airways can be life threatening in infants as well as some adults.⁹

One of the treatments for the sticky and thick mucus is guaifenesin, an OTC expectorant found in several commercial preparations.¹⁰ This medication will thin the mucus so that it can be more easily coughed up and spit out. The dosage needs to be adjusted for age and weight. Adults can take 1,200 milligrams every 12 hours for up to seven days. Children's dosages need to be much smaller and it is wise to consult a pediatrician (medical or Naturopathic doctor) or pediatric (child) nurse practitioner for the correct dosage.

Guaifenesin is listed as a drug without side effects but there are some reports of older adults having allergic responses to the drug. Persons with known allergies should be cautious about all drugs, including those claiming to be "safe and without side effects."

While RSV is most dangerous for infants and children, adults can also develop mucus plugs while sleeping. They can awaken gasping for breath and unable to breathe or speak. Swallowing very

warm or hot water can often loosen the mucus plug so it can be coughed up. Dairy products (milk, yogurt, and ice cream) increase the build-up of mucus, so it is important to avoid these foods when you have a cold or the flu. (And if you're prone to asthma, it is wise to avoid these foods all the time.) Rice and soy milk do not seem to have the same effect on respiratory mucus build-up, so some children are given these instead of cow's milk after they've been weaned. These children do well on growth and development charts.

As for treating the flu (which, like colds, is viral in origin), once again antibiotics are not much help and treatment tends to be supportive (focused on relieving symptoms). There are antiviral drugs available, such as Tamiflu® and Relenza, but recent studies have questioned their effectiveness.¹¹ The CDC recommends that if one is allergic to eggs or has any health condition that prevents using the flu vaccine (younger than six months of age, acute illness with fever, or previous reaction to the flu shot such as Guillain-Barré Syndrome), then antiviral drugs should be used if one is exposed to the flu. But be aware that

Tamiflu® now carries a serious delirium warning and in Japan it is no longer recommended for children ages 10–19.¹²

How does alternative medicine weigh in on treating colds and influenza? It offers a number of potentially effective treatments, despite the research “odds” being somewhat stacked against it. Western medical schools focus much of their curricula on pharmacological (patented drug) approaches to healing and almost none on nutritional or vitamin supplementation. Because supplements are mostly not patentable, they do not attract much research funding and can never be approved by the federal Food and Drug Administration. Patents and FDA approval are enormously profitable to drug companies, so the system continues almost unchallenged.

Nevertheless, over the years alternative medicine has produced important insights about the treatment of colds and influenza:

- The flu is now thought by some scientists to be a vitamin D deficiency disease. Natural sunlight and/or supplementation are effective treatments. (See discussion and

recommended dosages in the Prevention section below).¹³ Dr. Jonathan Wright, a Harvard-trained physician and publisher of *Nutrition and Healing*, believes that research is showing how important vitamin D is in preventing viral and other infections by stimulating the production of “natural human antibiotics.”¹⁴

- Vitamin C boosts the immune system. Although vitamin C will not prevent either colds or flu it does have an effect on the time one will be sick from these illnesses.¹⁵
- Elimination of allergies reduces overall incidence of viral and other infections.¹⁶
- Years ago Professor Emanuel Cheraskin demonstrated that refined sugar impairs (lessens) the ability of white blood cells to fight germs.¹⁷ Eating refined sugar in any form lessens the immune response and makes one more vulnerable to both colds and flu.¹⁸
- Use of zinc lozenges is an older treatment that has varying success rates.¹⁹ Effectiveness depends on the type of zinc

lozenge used and whether you hold it in your mouth long enough (about 5 minutes) so the mouth and throat membranes are covered with zinc acetate.

- Colloidal silver treatment: Dr. Wright recommends use of this product in either of two forms (Argentyn 23™ or Sovereign Silver™). He recommends taking one tablespoon to start followed by one teaspoon every three to four hours while awake until the infection is gone.²⁰
- *Panax quinquefolius* (American ginseng) can be used both for prevention and treatment of colds and the flu. It is sold under the trade name COLD-FX™ and is highly effective. COLD-FX™ is not a germ killer itself; instead it enhances the ability of the immune systems to kill germs and remove germ-infected cells.²¹
- The medical herbalist Kerry Bone recommends andrographis, echinacea, propolis, and elderberry. He has had considerable success in treating children who have had multiple respiratory infections and

repeated trials with antibiotics. Androgaphis in particular is not well known in the United States but is quite effective.²²

Prevention

FOR BOTH INFLUENZA AND COLDS, as with all illnesses, focusing on prevention seems like the first priority. The conventional approach to preventing illness generally relies on vaccines, but the 200 or so different rhinoviruses that cause cold symptoms have frustrated drug/vaccine companies' efforts to produce a vaccine against the common cold. Influenza, on the other hand, is fought every year by means of vast and expensive campaigns to inoculate millions of people with vaccines tailored for whichever flu strains are expected to emerge and spread that season.

However, some conventional physicians and most alternative medical practitioners question this recommendation,²³ for several reasons. First, the risks of having the flu—and therefore the benefits of widespread vaccination—may

be overstated. Influenza is certainly no fun, but while the CDC asserts that influenza kills thousands of Americans every year, it does not make clear that all but a few of these deaths are due to follow-on bacterial infections that claim victims already weakened by the flu.

Second, it's not clear that the vaccines even work very well. A report from the highly respected Cochrane Collaborative (a group of nearly 30,000 volunteers worldwide that systematically reviews the best studies of medical interventions) concluded that there is no evidence that injecting children 6–23 months of age with flu vaccine is any more effective than a placebo (sterile water). For healthy adults, the results were similar. The Cochrane report found that flu shots reduced the risk of influenza by 6 percent and the average number of days missed from work by less than one.²⁴ As for the elderly, a Cochrane review of 64 studies noted that “the 100 percent effectiveness that’s touted by proponents [of the flu shot] was nowhere to be seen.”²⁵

Finally, there are also concerns about some of the adjuvants and preservatives in flu vaccines.²⁶

About 80 percent of all flu shots distributed in the United States contain a mercury-based preservative called thimerosal. Thimerosal consists of almost 50 percent ethyl mercury, an antibacterial and antifungal that allows manufacturers to sell the vaccine in large, multi-dose containers without fear of contamination. Some flu vaccines marketed particularly for the elderly contain squalene (a natural organic compound derived from shark liver oil or vegetable oils) even though a number of scientists are concerned that squalene may cause auto-immune diseases such as lupus, rheumatoid arthritis, and asthma.²⁷ Currently flu vaccine with squalene (MF 59) has not been approved for sale in the United States; however, it is widely marketed in Europe and it is only a matter of time before it is introduced into the US market.

Fortunately, there are several effective things you can do to help avoid getting colds or the flu and to reduce their severity if you do catch them. One of the most important things is to make sure your intake of vitamin D is adequate—and “adequate” means a lot more than you might expect.

In recent years scientists have realized that human beings can benefit from far greater consumption of vitamin D than the recommended daily allowance (RDA) of 400 IU (international units). We and our primate ancestors evolved over the past several million years mainly in sunny tropical regions, especially Africa. Since the body makes vitamin D by exposure to sunlight, new estimates suggest that our distant ancestors—who spent most of their lives outdoors and wore little or no clothing—each routinely synthesized 5,000 IU or more *per day*.²⁸

It has also become clearer that vitamin D is a powerful immune system stimulant—and so maybe it's no coincidence that the cold and flu “season” is the fall and winter months, when the hours of sunlight decline in the temperate zones and people living there wear more clothing and spend less time outside—all of which reduce sunlight exposure and thus vitamin D synthesis. There is a connection between low serum (blood) vitamin D levels and the common cold.²⁹

As a result, some physicians, such as Dr. Donald Miller of the University of Washington, have

begun recommending far higher daily doses of vitamin D than the RDA. Dr. Miller even has recommended taking vitamin D3 rather than flu shots. To achieve all of vitamin D's benefits, he says, you have to take an amount ten times the government's RDA (400 mg); he recommends taking 4,000 to 5,000 IU a day. The current RDA of 400 IU daily is enough to prevent rickets in children and osteomalacia (bone softening) in adults, but not enough to prevent colds and flu.³⁰

Other published guidelines suggest that 4,000 IU daily is "safe for practically all adults." A 2008 guideline now advocates 2,000 IU daily for children.³¹ A Boston University School of Medicine researcher advocates the following doses:

- Adults and teens over 100 pounds:
4,000 IU/day
- Ages 8–12: 3,000 IU/day
- Ages 2–8: 2,000 IU/day
- First year: 1,000 IU/day³²

The nonprofit Vitamin D Council recommends that children from ages 12 months to 4 years take 1,500 IU Vitamin D3 per day. Children over the age of 4 and less than 10 years of age should

take 2,000 IU a day unless they get enough sun exposure. On the days they are out in the sun, they do not need to take any; in the winter they will need to take 2,000 IU every day.³³

In addition to taking vitamin D, there are some simple but effective guidelines for reducing your vulnerability to colds and the flu:³⁴

- Avoid sugar (it suppresses immunity).
- Avoid vegetable oils made from corn, safflower, sunflower, peanut, canola, and soybeans; they also suppress immunity.
- Avoid dairy products (milk, ice cream, cheese); they increase mucus production
- Eat and cook with garlic.
- Learn how to manage stress and teach your children how to manage stress.
- Exercise regularly.
- Wash your hands! Viruses spread from touching objects that are contaminated with germs, including doorknobs, phones, shared computer keyboards, and other people's hands.
- Teach children to cough and sneeze into their elbows rather than their hands.³⁵

It needs to be stressed that simple hygienic methods such as hand washing and never coughing into your hands are a highly effective strategy for preventing the spread of colds and flu. Teaching good hygiene, along with avoiding foods containing sugar, will do more to prevent colds and flu than any patented medicine available.

Finally, if you or a member of your family catches a cold or the flu, remember that the more you expose others, the greater the impact on your immediate environment. Children who catch a cold or the flu should not go to school and infect their classmates and teachers. Adults should do their best not to expose their workplace colleagues to their cold and flu viruses.

Endnotes

1. CDC and Flu. <http://www.cdc.gov/flu>.
2. <http://www.niaid.nih.gov/topics/commonCold/Pages/overview.aspx>.
3. <http://www.niaid.nih.gov/topics/flu/understandingflu/pages/keyfacts.aspx>.
4. <http://www.med.umich.edu/opm/newspage/2003/cold.htm>.
5. Catching a cold isn't cheap. <http://www.med.umich.edu/opm/newspage/2003/cold.htm>.
6. Fendrick, A. M., A. S. Monto, B. Nightengale and M. Sarnes. 2003. The Economic burden of non-influenza-related respiratory tract infection in the United States. *Arch. Intern. Med* 163:487–494.
7. Cold or Flu (Table). <http://www.flufacts.com/about/cold.aspx>.
8. <http://www.otcsafety.org/withdrawn.html>.
Weil, A. 2008. Alternatives to Kids' cold medicines. <http://www.drweil.com/drw/u/ART02888/alternatives-torecaled-cold-medicine>.

9. CDC. *Respiratory syncytial virus activity—United States*. July 2008-December 2008. 57(50):1355–1358.
Falsey, A. R. and E. E. Walsh. July 2000. Respiratory syncytial virus infection in adults. *Clin Microbiol Rev* 13 (3):371–384.
Sethi, S. and T. F. Murphy. April 28, 2005. RSV Infection: Not for kids anymore. *NEJM* 352(17):1810–1812.
10. <http://www.healthline.com/multumcontent/guaifenesin>.
11. <http://www.webmd.com/cold-and-flu/news/20091209/tamiflu-effectiveness-doubted>.
12. Avian flu: How safe is Tamiflu? 1.12.05
<http://www.wddty.com/03363800373049230741/avian-flu-how-safe-is-tamiflu.html>.
Akre, J. March 04, 2008. Tamiflu finally gets stronger delirium warning.
<http://www.injuryboard.com/national-news/bayer-patent.aspx?googleid=29896>.
13. Cannell, J. J. October 2008. Vitamin D in Pediatrics.
<http://www.vitamindcouncil.org/newsletter/2008-october.shtml>.
Cannell, J. J. and B. W. Hollis. 2008. Use of vitamin D in clinical practice. *Alternative Medical Review* 13(1):6–20.
14. Wright, J. V. October 2007. 5 ways to make sure you've had your last bout with the common cold. *Nutrition and Healing* 14(8):1–4.
15. Ritter, S. Y. January 1, 2005. Ascorbic acid effects on the immune system and type 1/type 2 cytokine

- balance in humans. EDT collection for *Houston Academy of Medicine-Texas Medical Center Paper AA13193454*.
16. Breneman, J. C. *Basics of Food Allergy* (Springfield, IL: Charles C. Thomas Press, 1978).
 17. http://www.doctoryourself.com/cheraskin_naturopath.html.
 18. Wright, J. V. October 2007. 5 ways to make sure you've had your last bout with the common cold. *Nutrition and Healing* 14(8):1-4.
 19. Eby, G. A. May 02, 2008. Zinc Lozenges as a common cold treatment. <http://zinc-lozenges.com>.
Prasad, A. S, J. T. Fitzgerald, B. Bao, F. W. Beck, and P. H. Chandrasekar. 2000. 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* 133(4):245-252.
 20. Wright, J. V. October 2007. 5 ways to make sure you've had your last bout with the common cold. *Nutrition and Healing* 14(8):1-4.
Wright, J. V. September 2006. Stop super-germs in their tracts with one powerful silver bullet. *Nutrition and Healing* 13(8):1-5.
 21. Wright, J. V. November 2006. 15 ways to strengthen your immune system. *Nutrition and Healing* 13(9):3.
McElhaney, K. E., V. Ole, B. Toane, et al. 2006. Efficacy of COLD-FX in the prevention of respiratory symptoms in community-dwelling adults: A randomized, double-blinded, placebo controlled trial. *J. Altern Complement Med* 12(2):153-7.

22. Bone, K. October 2006. Nature's cold and flu remedies for children. *Nutrition and Healing* 13(8):5-6.
23. Miller, D. W., Jr. 2008. Avoid flu shots: Take Vitamin D instead. <http://www.lewrockwell.com/miller/miller27.html>.
- Wright, J. V. November 2006. Cure for the common cold? *Nutrition and Healing* 13(9):1-3.
- Wright, J. V. October 2007. How to make sure you've had your last bout with the common cold. *Nutrition and Healing* 14(8):1-4.
24. Tenpenny, S. May 1, 2006. Flu shots and the new adjuvants: Beware. <http://www.newswithviews.com/Tenpenny/sherri6.htm>.
25. Ibid.
26. <http://www.jsonline.com/news/29295284.html>.
27. <http://www.nvic.org>.
- Tenpenny, S. May 1, 2006. Flu shots and the new adjuvants: Beware. <http://www.newswithviews.com/Tenpenny/sherri6.htm>.
28. Honeyman, M. C. and L.C. Harrison. "Alternative and additional mechanisms to the hygiene hypothesis," in G.A.W. Rook, ed., *The Hygiene Hypothesis and Darwinian Medicine* (Basel: Birkhäuser, 2009).
29. Ginde, A. A., J. M. Mansbach and C. A. Carmarago. 2009. Association between serum 25-hydroxyvitamin D level and upper respiratory tract infection in the third national health and nutrition examination survey. *Arch Intern Med* 169(4):384-390.
30. Miller, D. W., Jr. 2008. Avoid flu shots: Take Vitamin D instead.

31. Cannell, J. J., R. Vieth, W. Walter, et al. 2008. Cod liver oil, Vitamin A toxicity, frequent respiratory infections, and Vitamin D epidemic. *Ann. Otol Rhinol Laryngol* 11:864–870.
32. Holick, M. F. 2006. High prevalence of vitamin D inadequacy and implications for health. *Mayo Clin Proc* 81(3):353–73.
33. Cannell, J. J. 2004. Treating disease with vitamin D. <http://www.vitamindcouncil.org/treatment.shtml>.
34. Wright, J. V. April 2001. Preventing colds, flu and infection: Plan ahead to fight off germs for this fall's season of sickness. *Nutrition and Healing Newsletter*.
Wright, J. V. October 2007. 5 ways to make sure you've had your last bout with the common cold. *Nutrition and Healing* 15(3):1–8.
35. *Common Cold Information*. Cardiff University, UK. <http://www.cardiff.ac.uk/biosi/subsites/cold/commoncold.html>.

References

Articles and Journals

Akre, J. (March 04 2008). Tamiflu finally gets stronger delirium warning. <http://www.injuryboard.com/national-news/bayer-patent.aspx?googleid=29896>.

Alternative Common Cold Medications. Cardiff University, UK. <http://www.cardiff.ac.uk/biosi/subsites/cold/alt.html>.

Avian flu: How safe is Tamiflu? (January 12 2005) <http://www.wdty.com/03363800373049230741/avian-flu-how-safe-is-tamiflu.html>.

Avian Flu: Strictly for the Birds (Special Report 2005). *What Doctors Don't Tell You*. 16(9).

Basco, W. T. Zerr, DM, Englund, JA et al. (2008) Hospital-based influenza vaccination in children: An opportunity to prevent subsequent hospitalization. *Pediatrics* 121 (2): 345–8.

Barrett, B. & Brown DJ (March 2007) *Therapeutic Monograph and Clinical Overview for CVT-E002 (COLD-FX)* <http://abc.herbalgram.org/site/DocServer/5594COLD-fX.pdf?docID=48>.

Bone, Kerry (2000) Herbs for Children: How to boost immunity and help fight infections. In Mills and Bone, *Principles and Practice of Phytotherapy*. Churchill Livingstone Elsevier Limited.

Bone, Kerry (October 2006) Nature's cold and flu remedies for children. *Nutrition and Healing* 13(8): 5–6.

Bukowski, J (April 21, 2003). Drinking tea may boost immune system. *Scientific American*. http://www.brighamandwomens.org/publicaffairs/Newsreleases/tea_immunity_04_21_03.aspx.

Cannell, J.J., Vieth, R. Umhau, J.C., et al. (2006) Epidemic Influenza and Vitamin D. *Epidemiol Infect* 2006; 134 (6): 1129–40.

Cannell, JJ (2004). *Treating disease with vitamin D* <http://www.vitamincouncil.org/treatment.shtml>.

Cannell, JJ (October 2008). Vitamin D in Pediatrics. <http://www.vitamincouncil.org/newsletter/2008-october.shtml>.

Cannell, JJ, Hollis, BW (2008). Use of Vitamin D in Clinical Practice. *Alternative Medicine Review* 13 (1), 6–20.

Cannell, JJ, Vieth, R, Walter, W, Zasloff, M, Hathcock, J, White, JH, Tanumihardjo, SA, Larson-Meyer, DE, Bischoff-Ferrari, HA, Lamberg-Allardt CJ, Lappe, JM, Norman, AW, Zittermann, A, Whiting, SJ, Grant, WB, Hollis, BW, Giovannucci, E. (2008). Cod liver oil,

Vitamin A toxicity, frequent respiratory infections, and Vitamin D epidemic. *Ann. Otol Rhinol Laryngol* 11: 864–870.

Cannell, JJ, Zaslloff, M, Garland, CF, Scragg, R, Giovannucci, E. (2008). On the epidemiology of influenza, *Virology* 5. <http://www.virology.com/content/5/1/29>.

CDC and Flu: www.cdc.gov/flu.

CDC. Respiratory syncytial virus activity—United States, July 2008–December 2008. *MMWR* 57(50), 1355–1358.

Chandra, R.K. Nutritional regulation of immunity and risk of infection in old age. *Immunology* 1989 67, 141–47.

Cheraskin, E. (1998) The health of the naturopath: Vitamin supplementation and psychologic state. *Journal of Orthomolecular Medicine* 13: #4. 223–224, Fourth Quarter. http://www.doctoryourself.com/cheraskin_naturopath.html; <http://healthier.cchn.edu/health.aspx>.

Cohen, S., Doyle WJ, Alpert, CM, Janicki-Deverts, D, Turner, RB. (January 12, 2009). Sleep habits and susceptibility to the common cold. *Archives of Internal Medicine*: 169(1).

Cold or Flu (Table). www.flufacts.com/about/cold.aspx.

Common Cold: http://www.goldbamboo.com/topic-t11198-al-6Common_Cold.html.

Catching a cold isn't cheap. <http://www.med.umich.edu/opm/newspage/2003/cold.htm>.

Common Cold Information (Iceberg concept of infection) Cardiff University. UK <http://www.cardiff.ac.uk/biosi/subsites/cold/commoncold.html>.

Doshi, P. Are US flu death figures more PR than science? (December 2005). *BMJ* 331, 1412.

Eby, G.A., Davis, D.R., Halcomb, W.W. Reduction in duration of common colds by zinc gluconate lozenges in a double-blind study. *Antimicrob Agents Chemother* 1984;25(1): 20–24.

Eby, G.A. (May 02, 2008). Zinc Lozenges as a common cold treatment. <http://zinc-lozenges.com/>.

Falsey, A.R. and Walsh, E.E. (July 2000). Respiratory syncytial virus infection in adults. *Clin. Microbiol. Rev.* 13(3): 371–384.

Feng, QL, et al., A Mechanistic study of the antibacterial effect of silver ions on *Escherichia coli* and *staphylococcus aureus*, *J Biomed Mater Res* March 2000; 52:662.

FluMist: <http://www.drugs.com/cdi/flumist.html?printable=1>.

FluMist. Live attenuated influenza vaccine. <http://www.vaccinesafety.edu/FluMist.htm>.

Freid, VM, Makuc DM, Rooks, RN. Ambulatory health care visits by children: Principal diagnosis and place of visits. National Center for health statistics. *Vital Health Statistics* 13(137) 1998.

Garcia-Garcia J. & Ramos C. (2006). Influenza: An existing public health problem. <http://www.medscape.com/medline/abstract/16813133>.

Garabedian, M & Ben-Mekhbi, H (1999). Rickets and vitamin D deficiency. In *Vitamin D Physiology, Molecular Biology, and Clinical Applications*. M.F. Holick, ed. Humana Press. NJ, USA. 273–286.)

Gillie, O. (November 2008) *Scotland's Health Deficit*. <http://www.healthresearchforum.org.uk/reports/scotland.pdf>. November 2008.

Gihring, T. (April 2006). The Pandemic Prophecy. <http://www.minnesotamonthly.com/media/Minnesota-Monthly/April-2006/The-Pandemic-Prophecy/>.

Guillain-Barré Syndrome. <http://poisonnevercure.150m.com/iseases/influenza2.htm>.

Ginde, AA; Mansbach, JM; Carmargo, CA (2009): Association between serum 25-hydroxyvitamin D level and upper respiratory tract infection in the third national health and nutrition examination survey. *Arch Intern Med*. 169(4): 384–390.

Guan, Y, Chen, H. (2005). Resistance to anti-influenza agents. *The Lancet* 366 (9492) 1139–1140.

Hamilton, P. (n.d.) <http://ezinearticles.com/?some-interesting-common-cold-statistics-for-the-new-season&id=323372&opt=print>.

Haber, P., DeStefano, F. Angulo, F.J. et al. (2004). Guillain-Barre Syndrome following Influenza vaccination. *JAMA* 292: 2478–2481.

History of Zinc Lozenges in treating and curing common colds. George Eby Research website (<http://george-eby-research.com/html/history.html>).

Hitt, E. (March 12, 2003). Vitamin C Boosts immune system in as little as three hours. <http://www.webmd.com/content/article/62/71548.htm>.

Holick MF. The vitamin D epidemic and its health consequences. *J Nutr*. 2005;135(11):2739S-48S.

Holick, M.F. High prevalence of vitamin D inadequacy and implications for health. *Mayo Clin Proc* 2006; 81 (3): 353–73.

Holick, M.F. (2006) Resurrection of vitamin D deficiency and rickets. *Journ. Clin. Invest.* 116 (8) 2062–2072.

Holick, M.F. Vitamin D deficiency. *N Engl J Med* 2007: 357 (3): 266–81.

Holick, MF and Jenkins M. (2005). The UV advantage: The medical breakthrough that shows how to harness the power of the sun for your health. Paperback ebooks.

Influenza activity U.S. and Worldwide: 2007–08 Seasons. <http://www.cdc.gov/mmwr/preview/mmwrhtml/mm5725a5.htm>.

Influenza and Tamiflu resistance (December 16, 2008) <http://breakglass.wordpress.com/2008/12/16/influenza-and-tamiflu-resistance/>.

Jackson ML, et al. Influenza vaccination and risk of community-acquired pneumonia in immunocompetent elderly people: A population-based, nested case-control study. *Lancet* 2008; 372: 398–405.

Kemps, B.S. and Reyes-Teran Hoffman (2006) *Influenza Report* <http://www.influenzareport.com/ir/overview.htm>.

Krause R. The swine flu episode and the fog of epidemics. *Emerg Infect Dis.* 2006 Jan. <http://www.cdc.gov/ncidod/EID/vol12no01/05-1132.htm>.

Lazzari S, Stohr K. Avian influenza and influenza pandemics. *Bull World Health Organ* 2004; 82: 242.

Little P, Rumsby K, Kelly J, Watson, L, Moore M, Warner, G. Fahey, T, & Williamson, I. Information leaflet and antibiotic prescribing strategies for acute lower respiratory tract infection. *JAMA* 2005; 293: 3029–3035.

Lo CW, Paris PW, Clemens TL, Nolan J, Holick, MF (1985). Vitamin D absorption in healthy subjects and in patients with intestinal malabsorption syndromes. *American Journal of Clinical Nutrition*, 1985. <http://www.ajcn.org/cgi/content/abstract/42/4/644>.

Louis Pasteur Vs. Antoine Bechamp and the Germ Theory of Disease Causation-I. http://www.laleva.org/eng/2004/05/louis_pasteur_vs_antoine_bchamp_and_the_germ_theory_of_disease.

McElhaney, JE, Goel V, Toane B, Hooten J, Shan JJ, Efficacy of COLDFX in the prevention of respiratory symptoms in community-dwelling adults: A randomized, double-blinded, placebo controlled trial. *J. Altern Complement Med.* 2006.

Miller, D.W. Jr. (2008). Avoid flu shots: Take Vitamin D instead. <http://www.lewrockwell.com/miller/miller27.html>.

Miller, D.W. Jr. (2007). Vitamin D in a new light. <http://www.lewrockwell.com/miller/miller25.html>.

Miller, D. W. Jr. (December 2004). A user-friendly vaccination schedule. <http://www.lewrockwell.com/miller/miller15.html>.

Miller, D.W. Jr. (2004). Mercury on the Mind. <http://www.lewrockwell.com/miller/miller14.html>.

NIAID. Prevention, Common cold. <http://www3.niaid.nih.gov/topics/commonCold/prevention.htm>.

Palamara AT, Nencioni L, Aquilano K, et al. Inhibition of influenza A virus replication by resveratrol. *J Infect Dis.* 2005 May 15;191(10):1719–29.

Pandemics and Pandemic scares in the 20th Century. <http://www.hhs.gov/nvpo/pandemics/flu3.htm>.

Pike J. & Chandra, R.K (1995): Effects of vitamin and trace element supplementation on immune indices in healthy elderly. *International J. Vitamin Nutr Res.*; 65 (2), 117–20.

Prasad, A.S., Beck, F.W.J., Bao, B. Snell, D. and Fitzgerald, J.T. (March 2008). Duration and severity of symptoms and levels of plasma interleukin-1 receptor antagonist, soluble tumor necrosis factor receptor and adhesion molecules in patients with common cold treated with zinc acetate. *JID* 197: 795–802.

Prasad, AS, Fitzgerald JT, Bao B, Beck, FW, Chandrasekar PH. 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*; 133(4): 245–252.

Podda A. The adjuvanted influenza vaccines with novel adjuvants: experience with the MF59-adjuvanted vaccine. *Vaccine* March 21; 19 (17–19): p2673-2680.

Ritter, S.Y. (January 1, 2005). Ascorbic acid effects on the immune system and type-1/type-2 cytokine balance in humans. *EDT collection for Houston Academy of Medicine-Texas Medical Center Paper AA13193454*. <http://digitalcommons.library.tmc.edu/dissertations/AA13193454>.

Sethi, S. and Murphy, T.F. (April 28, 2005). RSV infection: Not for kids only. *NEJM* 352(17). 1810–1812.

Shaman, J. and Kohn, M. (February 2, 09). Absolute humidity modulates influenza survival, transmission, and seasonality. *Proceedings National Academy of Sciences (PNAS)*. <http://www.pnas.org/content/early/2009/02/09/0806852106.abstract>.

Studies question effectiveness of flu treatments (09.22.05). <http://www.redorbit.com/news/display/?id=24851>.

Tamiflu (January 2008). European Centre for Disease Prevention and Control. Resistance to oseltamivir (Tamiflu) found in some European influenza virus samples. http://ecdc.europa.eu/Health_topics/influenza/080127_.html.

Tenpenny, S (May 1, 2006). Flu shots and the new adjuvants: Beware. <http://www.newswithviews.com/Tenpenny/sherri6.htm>.

Vitamin D Newsletter (October 2006). Epidemic Influenza and Vitamin D.

Weil, A. (2008) Alternatives to Kids' cold medicines. <http://www.drweil.com/drw/u/ART02888/alternatives-torecalled-cold-medicine>.

Wright, J.V. (April 2001) Preventing colds, flu and infection: Plan ahead to fight off germs for this fall's season of sickness. *Nutrition and Healing Newsletter* (April 2001).

Wright, J.V. (September 2006) Stop super-germs in their tracks with one powerful silver bullet. *Nutrition & Healing* 13 (8), p 1–5.

Wright, JV (November 2006) Cure for the common cold? *Nutrition & Healing* 13(9) p 1–3.

Wright, JV (November 2006) 15 ways to strengthen your immune system. *Nutrition & Healing* 13(9) p 3.

Wright, JV (October 2007) 5 ways to make sure you've had your last bout with the common cold. *Nutrition and Healing*. 14(8) p 1–4.

Wright, JV (May 2008). Harnessing the healing power of light Part 1: What you need to know about UV rays—beyond sunburn. *Nutrition and Healing* 15(3), p. 1–8.

Wright, JV (June 2008). Harnessing the healing power of light Part 2: Time-tested strategies for beating superbugs and more of today's deadliest health threats. *Nutrition and Healing* 15(4), p. 1–5.

Zokay-Rones Z., Thom, E. Wollan T, Wadstein J. (Mar-Apr 2004) Randomized study of the efficacy and safety of oral elderberry extract in the treatment of influenza A and B virus infections. *J Int. Med Res.* 32(2) 132–40.

Books

Brenenan, James C. (1978). *Basics of Food Allergy*. Springfield, Ill: Charles C. Thomas.

Mills, S. & Bone, K. (2000). *Principles and Practice of Phytotherapy*. Churchill Livingstone Elsevier Limited.

Garrett, Laurie (1994). *The Coming Plague*. New York: Penguin Books.

Garrett, Laurie (2000). *Betrayal of trust: The collapse of global public health*. New York: Hyperion.

Matsumoto, Gary *Vaccine A*. New York: Basic Books, 2004.

Thomas, C. L. (editor) (1981). *Taber's Cyclopedic Medical Dictionary*. Philadelphia: F.A. Davis Company.

Websites

Dextromethorphan Hydrobromide, Guaifenesin Oral Tablet: www.healthline.com/multumcontent/guaifenesin.

OTCSafety.org—Resource for Over-the-Counter Medicine Safety: www.otcsafety.org.

National Vaccine Information Center: www.nvic.org.

Most Flu Shots Contain Mercury, But Few Know It: www.jsonline.com/news/29295284.html.

Prevalence and Incidence Statistics: www.wrongdiagnosis.com/admin/preval.htm.

Common Cold: www.wrongdiagnosis.com/c/cold/stats.htm#medical_stats.

Pandemic Flu: www.pandemicflu.gov/general/index.html.

The Common Cold: www.kidsource.com/health/the.common.cold.html.

Laleva.org: www.laleva.org: http://www.laleva.org/eng/2004/05/louis_pasteur_vs_antoin_bchamp_and_the_germ_theory_of_disease_causation_-_1.html

The Vaccine Page: www.vaccines.org.

Vaccine Adjuvants: www.vaccination.inoz.com/adjuvants.html.

The Vitamin D Council: www.vitamindcouncil.org.

Vitamin D: <http://lpi.oregonstate.edu/infocenter/vitamins/vitaminD/>.

About the Author

SARA S. DEHART, MSN, PHD is Associate Professor Emeritus, University of Minnesota and formerly was a Visiting Scholar in Nursing, University of Washington. She has over 20 years experience in research and education, specializing in global and national Public Health problems.

Since her retirement from academia she has focused her writing on specific issues that impact health care delivery and public health policy.

Among Dr. DeHart's Internet publications are:

- Strontium and osteoporosis: A treatment not offered to American women (2008)
- Strontium and osteoporosis II: On our own (2010)

- Substituting deception for sound public health policy (2004)
- Depleted Uranium: The American legacy (with Louis Farshee) (2003)
- Smallpox, propaganda and Fear (2003)

Email :

Dehart.ss@frontier.com

sdehart@dehartresearch.com