

Pills for your upcoming trip

Maybe not this weekend, maybe not even Christmas, but chances are that someday soon you will be traveling.

And whether you're visiting your parents after your first semester at college or you're flying south for some fun in the sun, there is a good chance that you'll be in a plane, train or automobile with someone who has that pesky winter cold or flu.



From boarding to baggage claim, the opportunities for picking up stray germs during holiday travel can seem endless. Supplements can help you stay healthy.

So if you are not already congested and uncomfortable, you sure are worried that you will be once you get where you're going.

Other hazards of travel are jet lag and traveler's diarrhea.

Nothing could be more frustrating than wasting your vacation time sneezing, coughing, and feeling miserable. Except maybe being totally jet-lagged or running to the toilet every few minutes.

In such risky times, you feel like you need to arm yourself with preventive and healing remedies.

So you pick up some cold medicine and stomach remedies at the drug store, and some vitamins at the health food store, and hope they do the trick.

Anything to shield yourself from getting sick.

Not so fast.

You also need to know how all these different drugs, supplements and over the

counter remedies, might interact, for better or worse.

That's why I created a web application called **Pill Advised**, where you can learn about interactions between medications and vitamins.

Here are some of the supplements that I use to stay healthier, beat jet lag and avoid major stomach distress when I travel.

1. Russian Choice Immune.

Probiotics like lactobacillus, a type of bacteria normally found in the human intestine, have been shown to help boost immunity. Research done in Japan indicates that these probiotics may not need to be living to accomplish this effect. (1)

Russian Choice Immune is an extract made from freeze dried lactobacillus that has immune modulating effects. (2)

I first learned of this product over 10 years ago and read that it had been shown to improve immune function in people exposed to high doses of radiation. When flying at 30,000 feet, people are exposed to cosmic radiation that is filtered out by the atmosphere at lower elevations.

I reasoned that people who got sick every time they traveled might be experiencing some immune stress from cosmic rays plus exposure to poor air quality and germs in airplanes. I take 75 milligrams of Russian Choice Immune, twice a day, the day before, the day of and the day after flying.

2) NAC (N-acetylcysteine)

This amino acid is a powerful antioxidant that has been shown to:

- enhance immune function, (3)
- enhance respiratory tract function, (4)
- and assist detoxification by the liver.

Research done at a university in Spain found that NAC improves immune function in postmenopausal women. The study concluded "NAC could contribute to maintenance of good health and quality of life in **postmenopausal women** by decreasing the probability of immune system-related diseases, such as infections, in aging." (5)

In an Italian study, researchers found that NAC 1500, mg/day, reduced the development of flu symptoms by 75% and improved immunity among a group of seniors during an epidemic of H1N1 flu. (6)

The benefits of taking NAC may build over time. I use NAC, 1500 mg/day, throughout the winter, especially if I will be flying.

3) Melatonin

Several studies have demonstrated improvement in jet lag with the use of melatonin. (7-9)

Melatonin, a hormone naturally produced by the pineal gland at the base of the brain, is secreted in the dark and is helpful in regulating the body's internal clock.

Successful studies of melatonin's effect on jet lag have used doses as low as 0.5 mg administered at 5 PM the day before flying, on boarding the flight and at bedtime for 3-4 nights after arriving at destination.

If insomnia is a problem, higher doses of melatonin (3-5 mg) can be used at bedtime after arriving at destination, but higher melatonin doses sometimes cause daytime drowsiness.

Melatonin has not been studied much for westbound travel because jetlag is not as pronounced when flying west. One protocol calls for taking a low dose of melatonin (0.5 mg) at 6 AM the day of travel and then taking melatonin at bedtime for 3-4 days after arrival at destination. (10) I often combine melatonin with NADH, a form of vitamin B3, taken at a dose of 20 mg each morning after arriving at the destination; this dose has been shown to increase daytime alertness after travel across time zones. (11)

4) Saccharomyces Boulardii.

The French call this yeast “yeast against yeast”. It is used for both treatment and prevention of traveler’s diarrhea and antibiotic-induced diarrhea. (12) It appears to work by stimulating the immune system in the intestinal tract. In Europe it is the standard treatment for acute infectious diarrhea.

When traveling to a country where food or water-borne infection is common, the protocol is *Saccharomyces boulardii*, two 250 mg caps, twice a day, with or without food.


Because *Saccharomyces boulardii* is a yeast, it is not killed by standard antibiotics and can usually be taken at the same time they are taken. The brand used in the research studies comes from France and is marketed under the trade name Florastor in the US.

References:

- 1) J Nutr. 2006 Dec;136(12):3069-73.PMID: 17116721 “Daily intake of heat-killed *Lactobacillus plantarum* L-137 augments acquired immunity in healthy adults.” Hirose Y, Murosaki S, Yamamoto Y, Yoshikai Y, Tsuru T.
- 2) Inflamm Allergy Drug Targets. 2010 Jul 1;9(3):192-6. “*Lactobacillus rhamnosus* cell lysate in the management of resistant childhood atopic eczema.” Hoang BX, Shaw G, Pham P, Levine SA.
- 3) Free Radic Biol Med. 2008 Nov 1;45(9):1252-62. Epub 2008 Jul 27. “The glutathione precursor N-acetylcysteine improves immune function in postmenopausal women.” Arranz L, Fernández C, Rodríguez A, Ribera JM, De la Fuente M.
- 4) Clin Ther. 2000 Feb;22(2):209-21.” Efficacy of oral long-term N-acetylcysteine in chronic bronchopulmonary disease: a meta-analysis of published double-blind, placebo-controlled clinical trials.” Grandjean EM, Berthet P, Ruffmann R, Leuenberger P.
- 5) Arranz L, Fernández C, Rodríguez A, Ribera JM, De la Fuente M in Free Radic Biol Med. 2008 Nov 1;45(9):1252-62. Epub 2008 Jul 27.
- 6) Eur Respir J. 1997 Jul;10(7):1535-41 Attenuation of influenza-like symptomatology and improvement of cell-mediated immunity with long-term N-acetylcysteine treatment.

De Flora S, Grassi C, Carati L.

7) Aviat Space Environ Med. 2001 Jul;72(7):638-46. "Effectiveness and tolerability of melatonin and zolpidem for the alleviation of jet lag." Suhner A, Schlagenhauf P, Höfer I, Johnson R, Tschopp A, Steffen R.

 Chronobiol Int. 1998 Nov;15(6):655-66. "Comparative study to determine the optimal melatonin dosage form for the alleviation of jet lag." Suhner A, Schlagenhauf P, Johnson R, Tschopp A, Steffen R.

9) J Appl Physiol. 2004 Jan;96(1):50-8. Epub 2003 Sep 5. "Caffeine or melatonin effects on sleep and sleepiness after rapid eastward transmeridian travel." Beaumont M, Batéjat D, Piérard C, Van Beers P, Denis JB, Coste O, Doireau P, Chauffard F, French J, Lagarde D.

10) J Clin Endocrinol Metab. 2006 Jan;91(1):54-9. Epub 2005 Nov 1. "Advancing human circadian rhythms with afternoon melatonin and morning intermittent bright light." Revell VL, Burgess HJ, Gazda CJ, Smith MR, Fogg LF, Eastman CI.

11) Wien Med Wochenschr. 2002;152(17-18):450-4. "Stabilized NADH (ENADA) improves jet lag-induced cognitive performance deficit" Birkmayer GD, Kay GG, Vürre E.

12) World J Gastroenterol. 2010 May 14;16(18):2202-22. "Systematic review and meta-analysis of *Saccharomyces boulardii* in adult patients." McFarland LV.

– See more at:

<http://pilladvised.com/2010/11/pills-for-your-upcoming-trip/#sthash.3L2UPGoX.dpuf>