MRSA: Natural Methods for Prevention

©2008 Huntington College of Health Sciences

By Gene Bruno, MS, MHS

Whether you call it "staph", "staph A" or “MRSA” (pronounces mersa), it’s all the same: Methicillin-resistant Staphylococcus aureus. MRSA is a bacterial infection which is resistant to methicillin and other antibiotics in the penicillin family. Although staph is a common bacterium found on the skin of healthy people, if staph gets into the body it can cause a minor infection such as boils or pimples or serious infections such as pneumonia or blood infections. In fact, MRSA symptoms are similar to those for any type of Staph infection:

- Skin appears red and inflamed around wound sites;
- In serious cases may include fever, lethargy, and headache;
- Urinary tract infections, pneumonia, toxic shock syndrome, and even death.

In addition, MRSA-specific symptoms include:

- Red bump that may be pus filled (sometimes mistaken for a spider bite)
- Warmth
- Pain
- Swollen, red, tender skin lesions

MRSA is not just a kids problem

Listening to or reading news reports, you might think MRSA is only a problem occurring in children. Not so. In fact, MRSA was first seen in hospital patients who are elderly or very ill. However, any place where people come in close contact may be a venue for contracting MRSA. This includes schools and gyms, as well as hospitals. You may also be at more risk if you have had frequent, long-term, or intensive use of antibiotics. In addition, those with long-term illnesses, intravenous drug users or those who are immuno-suppressed are also at increased risk.

Prevalence of MRSA

According to the Centers for Disease Control and Prevention, MRSA may be responsible for over 94,000 serious infections and is associated with nearly 19,000 deaths in the United States in 2005. It has been observed that these numbers Make MRSA responsible for more deaths each year than AIDS.

Conventional Treatment/Prevention

As you’ve undoubtedly heard from news reports, hand washing is a good way to help prevent MRSA. Alcohol based topical sanitizer are also an effect means of helping to prevent the transmission of MRSA.

Although MRSA is resistant to traditional antibiotics, it can be treated with other types sulfa drugs, tetracyclines, and clindamycin. Some types of MRSA are even resistant to these, but may be treated with vancomycin, or even newer drugs, such as linezolid.

Complementary & Alternative Treatment

From a complementary or alternative perspective, there are a number of things that can be done to help prevent MRSA. These include some adjustments to the diet, as well as the addition of certain dietary supplements to one’s personal health program. Such changes may help build up immunity so that the body’s
own defense systems can help prevent and fight infections of all types, including MRSA.

**Adjustments to the diet**
From a dietary standpoint, it is important to restrict sugar since sugar interferes with the ability of white blood cells to destroy bacteria. I’m not talking about the type or amount of sugar you get from eating fruit, but rather the amount you get from drinking soda and eating sweets and other junk food. Likewise, alcohol interferes with a wide variety of immune defenses, and excessive dietary fat reduces natural killer cell activity. So just eating a healthy diet can be beneficial for good immune function.

**Dietary supplements for general immune response**
In terms of dietary supplements, there are some general immune-promoting nutrients which may have benefit in preventing MRSA infections:

- Vitamin A plays an important role in immune system function and helps mucous membranes, including those in the lungs, resist invasion by microorganisms.
- Vitamin C stimulates the immune system by both elevating interferon levels and enhancing the activity of certain immune cells.
- Marginal deficiencies of zinc result in impairments of immune function. Supplementation with zinc has been shown to increase immune function in healthy people.

**Dietary supplements against MRSA and staph**
Some specific dietary supplements might have benefit against MRSA directly:

- Research on Pomegranate has shown beneficial effect on the human immune system and cardiovascular system, as well as offering antioxidant benefits. In one study, pomegranate was also shown to have antibacterial activity against MRSA specifically. The authors of that study suggest a beneficial effect from the daily intake of pomegranate "as dietary supplements to augment the human immune system's antioxidant, antimalarial and antimicrobial capacities."
- Green Tea & Pau D’ Arco are herbs that have also been shown to reduce MRSA levels in patients, and have benefit against penicillin-resistant *staphylococcus aureus*, respectively.
- Other herbs have been shown to have benefit against regular *staphylococcus aureus*. These include Ginger, Feverfew, Echinacea, Golden Seal, Garlic, St. John’s Wort and Cranberry.

**Conclusion**
With so many choices, it might be hard to decide which of these supplements to use. My personal recommendation would be to regularly take a basic foundation program of nutrients (e.g., a multiple vitamin, a vitamin C product, a vitamin E product and a multiple mineral) which would provide vitamins A, C and zinc, as well as other important nutrients that are need anyway for good health; in addition to a pomegranate supplement, and an echinacea/goldenseal supplement. The basic foundation program and pomegranate supplement could be used all the time. The echinacea/goldenseal combination should only be used for about two months, and then there should be about one month’s break. After that you can continue using just Echinacea. The reason for this is that ongoing use of goldenseal might deplete certain B vitamins. Also, goldenseal is only typically taken if an infection is present. However, given the current prevalence of MRSA, there may be preventive value in this short-term use of goldenseal.

**References**


