

the active one; others, the berberine. All note extensive data to support their positions. Furthermore, several respected clinical herbalists support the use of massive doses of goldenseal for systemic bacterial infections, whereas others think only tiny amounts should be used. Both sides cite long-term clinical experience to support their positions.

One Seattle clinician notes that he has worked with severe mucous membrane infections in AIDS patients for the past 20 years and that the incidence of antibiotic-resistant disease in this population has grown. Dosages of goldenseal that were effective 12 years ago (10 capsules per day) are no longer sufficient, and the dose range has now risen to 25 capsules per day to combat active bacterial and fungal infections in the body's mucosal systems. This same clinician has found goldenseal effective as a systemic antibacterial agent and has successfully used it for treatment of a medically cultured antibiotic-resistant staph infection in the foot that had not responded to any antibiotics. With conventional medical treatment, the foot would have been amputated. The dosage in this case was 25 double-ought capsules a day for 2 weeks.

Other clinicians insist that side effects such as excessive drying of the membrane systems, severe abdominal cramping, vomiting, possible liver damage, and nervous tremors will occur with doses that large and that in any event, the dose will not be effective. Clinicians who use high doses deny ever having seen such symptoms in their patients even with decades of experience at such dose levels. A monkey wrench for the low-dose purists: lengthy historical use, Food and Drug Administration (FDA) reports (notoriously overresponsive to even a whiff of adverse reactions), and poison center reports all fail to note the side effects ascribed to high doses of goldenseal. A clear resolution of the conflicting positions remains elusive. One factor that might be important: In traditional Chinese medicine goldenseal relatives (such as *Coptis chinensis*) are considered to be contraindicated for people that tend to be dry and thin. It is generally used for people who are considered moist — i.e., moist skin and slightly plump. It might be that people with more naturally occurring body moisture have less tendency for their mucous membranes to “dry out” when they take goldenseal or its analogues.

When taken internally the herb does not appear to simulate the immune system directly but rather the healthy functioning of the mucous membranes of the body and, as a result, the level of active immunoglobulin A antibodies (IgA) in the mucus. IgA is one of the