There has been renewed interest in herbal products. Two recent randomized trials have shown **Echinacea** has no effect in adults or kids for the common cold. For **ginseng** in the form of **COLD-FX** a trial in 2003-4 reported a modest effect for prevention of colds but no significant effect for treatment (see below). In the Glucosamine/Chondroitin Arthritis Intervention Trial (GAIT), **glucosamine and chondroitin sulfate** alone or in combination was not more effective than placebo or celecoxib in reducing pain in patients with osteoarthritis of the knee after 24 weeks or after 2 years of treatment. A subgroup of patients with moderate-to-severe pain appeared to benefit at 2 weeks but this effect was lost at 2 years. In addition, glucosamine and chondroitin sulfate alone or in combination showed no benefit over placebo in slowing loss of cartilage in knee osteoarthritis after 2 years. Even despite no direct evidence, **LAKOTA'S** (which contains glucosamine plus 8 other ingredients) continued marketing efforts has generated much interest in herbal remedies.

### Summary of the COLD-FX trial for PREVENTING colds (American Ginseng: Panax quinquefolium)

**BACKGROUND** COLD-FX was studied in 323 adults aged 18-65 with a hx of 2 colds in the previous year; COLD-FX was given 400mg/2 caps/day vs placebo for ~4 months from Sep 2003 to April 2004 in Edmonton, Alberta. (Trial funded by CV Technologies ~0.4; 4 of 6 authors have connection with company)

**Jackson Score**: sum of severity ratings (1=mild, 2=moderate, 3=severe) for 8 cold sx: sneezing, runny nose, nasal obstruction, sore throat, cough, headache, chilliness, & malaise.

**EXCLUSION**: vaccinated against influenza in the previous 6 months; if MS, TB, diabetes, cancer, lupus, HIV, heart/lung/renal/liver/neurological diseases; if on immunosuppressives, corticosteroids, warfarin, phenelzine, pentobarbital, haloperidol or cyclosporine; & if pregnant, lactating or heavy smokers.

**RESULTS**: 55 vs 64% NS had 1 cold Jackson defined; 10 vs 22.8% had ≥2 colds during the 4 months; & Duration of cold: 8.7 vs 11.1days (2.4 days less)

**LIMITATIONS**: Pactive ingredient & mechanism; Jackson 2 vs 6 day score used thus only more severe illness were evaluated; not intention-to-treat analysis, symptom self-reporting & many excluded in adults, **COLD-FX** ≥0.25 colds/person in those who had ≥2 colds in the previous year. Further verification of this result is awaited.

**BOTTOM LINE**: ✔ Handwashing, 14 possibly gargling, & the influenza vaccine are proven to prevent upper respiratory infections. (other interventions lack evidence)
References (Pg 1 of 2; see more references online):
5. Turner RB. Studies of “natural” remedies for the common cold: pitfalls and pralfalls. CMJ. 2005 Oct 25;173(9):1043-8. 6. NCCAM. Glucosamine/Chondroitin Arthritis Intervention Trial (GAIT). Available at: http://nccam.nih.gov/research/results/gait. Accessed July 10, 2012. National Institutes of Health (NIH) Glucosamine/Chondroitin Arthritis Intervention Trial (GAIT) (The 1,538-patient GAIT trial compared the effectiveness and safety of these supplements taken alone and in combination in patients with painful knee osteoarthritis [WOMAC Pain 125-400 mm] treated at 16 academic medical centers in the U.S. The response rate for all patients was 60.1% in a placebo group, 64% in a glucosamin hydrochloride arm (500 mg TID); 65.4% in a chondroitin alone arm (400 mg TID); & 66.6% in a glucosamine plus-chondroitin arm (500 mg/400mg TID) (p=0.09), according to a study results reported at the American College of Rheumatology, San Diego Nov/05)
15. Satomura K, et al.; Great Cold Investigators
20. Clegg et al. National Institutes of Health (NIH) Glucosamine/Chondroitin Arthritis Intervention Trial (GAIT) Clegg DO, et al. Glucosamine, chondroitin sulfate, and the two in combination for painful knee osteoarthritis. N Engl J Med 2006 Feb 23;354(8):795-808. CONCLUSIONS: Glucosamine and/or chondroitin sulfate alone or in combination did not reduce pain effectively in the overall group of patients with osteoarthritis of the knee. Exploratory analyses suggest that the combination of glucosamine and chondroitin sulfate may be effective in the subgroup of patients with moderate-to-severe knee pain. (The 1,538-patient GAIT trial compared the effectiveness & safety of these supplements taken alone and in combination in patients with painful knee osteoarthritis (WOMAC Pain 125-400 mm) treated at 16 academic medical centers in the U.S. The response rate for all patients was 60.1% in a placebo group, 64% in a glucosamin hydrochloride arm (500 mg TID); 65.4% in a chondroitin alone arm (400 mg TID); & 66.6% in a glucosamine plus-chondroitin arm (500 mg/400mg TID) (p=0.09), according to a study results reported at the American College of Rheumatology meeting in San Diego Nov/05). http://nccam.nih.gov/health/19972000/121100/gluc.htm (infoPEOMs: Glucosamine HC and chondroitin provides modest if any symptomatic benefit for patients with mild osteoarthritis of the knee. This study was well designed and avoided many of the design flaws of earlier studies. However, it had a high dropout rate (20%) and used a different glucosamine salt than most previous studies. In addition, post-hoc analysis of the study results revealed a trend toward benefit for many secondary outcomes. (LOE = 1b) )