

There has been renewed interest in herbal products. Two recent randomized trials have shown no effect in adults ² & kids ³ with **Echinacea** for the common cold. For **ginseng** in the form of Cold-fX a recent cold trial ⁴ is promising, but has limitations ⁵. Plus we await publication of the NIH sponsored osteoarthritis GAIT ⁶ trial with **glucosamine & chondroitin**. Even despite no direct evidence, Lakota's (which contains glucosamine plus 8 other ingredients) continued marketing efforts has generated much interest in herbal remedies.

Herbal Products:

AGENT	POSSIBLE USE / LIMITED EVIDENCE	SIDE EFFECTS, CI , DI	DOSE	COST
<p>Ginseng root extract ^x ⊗</p> <p>Cold-fX 4,5,8,9</p> <p>200mg CVT-E002[®] cap</p> <p>300mg CVT-E002[®] Extra strength cap</p> <p>Liquid available</p> <p>(~95% Panax quinquefolium)</p> <p>North American ginseng</p> <p>Extraction process in China.</p> <p>(CVT-EOO2= Immunity-FX)</p> <p>CBC Marketplace Video: http://www.cbc.ca/marketplace/2012/whatfx/</p>	<p>Treat at onset of cold/flu symptoms or help prevent cold/flu symptoms</p> <p>(?? Activates macrophages / ??enhance acquired immune response, only preliminary <u>not</u> conclusive evidence)</p> <p>Less people acquired at least 1 cold in the treatment group, although any difference did not reach significance. Differences were statistically significant (in favor of treatment) for those suffering recurring colds. Cold duration was ↓. However, cold or flu confirmation testing was not done.⁴</p>	<p>SE: From other ginseng products reports of→ nervousness, excitation, diarrhea, insomnia, inability to concentrate, headache, hypertension, epistaxis, allergies & skin eruptions.</p> <p>CI: pregnant & lactating women, kids <12 or if allergy to herb</p> <p>DI: alcohol→ may ↑ alcohol clearance from the body</p> <p>corticosteroids→herb may affect steroid concentrations</p> <p>estrogens/corticosteroids→ herb may have additive effects (reported mastalgia & postmenopausal bleeding)</p> <p>furosemide→ report of diminishing furosemide effect</p> <p>heart & blood pressure meds→ herb has negative chronotropic & inotropic activity, as well as possible ↓BP</p> <p>hypoglycemics→ herb may add to hypoglycemic effect</p> <p>MAOI's/neuroleptics→may inhibit reuptake of neurotransmitters & ↑ tremor/mania thus contraindicated</p> <p>mood stabilizers→herb may induce mania</p> <p>oral contraceptives→ herb may interfere in effectiveness of sex hormone treatment</p> <p>sedatives→ herb may potentiate/antagonize sedative SE</p> <p>warfarin ↑ ↓ INR → herb may cause ↑ bleeding by itself or ↓ INR (Case reports¹⁰)</p>	<p>200mg caps as follows:</p> <p>Treat: Day 1→ 3cap tid Day 2→ 2 cap tid Day 3→ 1 cap tid then 1 or 2 caps/d until feeling better (7d~25 caps) [Not labeled/approved indication by Health Canada]</p> <p>Prevent: 1 cap bid x 8-12wk (USA study²²)</p> <p>New cold Prevention CDN trial dose used:⁴ 2cap od x 4 month</p> <p>300mg cap: 1 cap twice a day x10day at 1st sign of cold/flu (on an empty stomach)</p>	<p>\$14/18 caps</p> <p>\$25/60 caps</p> <p>\$55/150 caps</p>
<p>Glucosamine ^x ⊗</p> <p>500mg tab/cap...</p> <p>Currently better evidence with the sulfate ^{Guide 12, Cochrane 18} salt than the hydrochloride salt ^{Gait, 18, 19}</p>	<p>Adjunctive symptomatic relief of osteoarthritis. (may have some efficacy in a small group of pts with moderate to severe pain^{6,11,12})</p> <p>-Consider stopping IF not some relieve of pain after 3months therapy</p>	<p>SE: may cause GI side effects such as diarrhea.</p> <p>CI: allergy (shellfish), pregnant & lactating women</p> <p>DI:</p> <p>Hypoglycemics/insulin→does not ↑HgA_{1c}¹³, may cause insulin resistance</p> <p>? ↑ resistance to doxorubicin & etoposide.</p>	<p>500mg po tid</p> <p>Max 1500mg/day</p> <p>(Well absorbed)</p>	<p>\$12/120 caps</p>
<p>Lakota Joint Care Formula ^x ⊗</p> <p>Capsule contains: (Glucosamine Sulfate 150mg & Glucosamine HCl 150mg, Boswellian extract, Collagen type 2, White Willow bark powder, Devil's Claw, Sarsparilla, Yucca root, Feverfew leaf & Bromelain)</p> <p>Lakota Osteo^x ⊗: contains only Collagen type 2 & L-proline</p>	<p>For arthritis pain & to ↓ cartilage breakdown</p> <p>(?possibly effective; some evidence for glucosamine, but at higher doses; <u>but</u> also contains 8 other ingredients lacking outcome evidence) .</p> <p>Consider stopping IF not some relieve of pain after 3months therapy</p>	<p>Some GI irritation (caution if peptic ulcer)</p> <p>CI: pregnant & lactating women, Reye's syndrome, kids <12 or if allergy (to herbs, shellfish or ASA)</p> <p>DI:</p> <p>Antihypertensives→ Devil's Claw may further ↓BP & can affect HR & contractility</p> <p>ASA/Warfarin→White Willow Bark - contains salicin & therefore may have additive effect to ASA; Feverfew - may inhibit platelet aggregation; Bromelain - may have additive anticoagulant/platelet effects (↑ bleeding risk)</p> <p>Digoxin: Sarsparilla may ↑ digoxin absorption</p> <p>Hypoglycemics/insulin→glucosamine may cause insulin resistance</p> <p>Iron→may precipitate because of high tannin content</p>	<p>Initially 4-6 capsules/d with meals, then decrease to 2-4caps/d to maintain benefit</p> <p>Max 9 capsules/d</p>	<p>\$40/120 caps</p>

ac=before ASA=aspirin BP=blood pressure **CI**=contraindication **DI**=drug interaction **Dx**=disease **Fx**=function **HR**=heart rate **hx**=history **NS**=non significant **pts**=patients **rx**=reaction **SE**=side effects **x** not Sask. formulary ⊗ not NIHB

Summary of the recent Cold-fX trial for PREVENTING colds (American Ginseng: Panax quinquefolium) ^{4,5}

General: Cold-fX was studied in 323 adults (age 18-65) with a history of 2 colds in the previous year; Cold-fX was given 400mg (2 caps)/day vs placebo for ~4months from Sep 2003 to April 2004 in Edmonton Alberta. (Trial funded by CV Technologies ^{Alexa}; 4 of 6 authors have connection with company)

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: ? what is the active 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 (if 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, phenazine, pentobarbital, haloperidol or cyclosporine; & if **pregnant, lactating** or heavy smokers).

In adults, Cold-fX ↓**d** by 0.25 colds/person in those who had ≥2 colds in the previous year. Thus we await further verification of this result.

✓ Handwashing, ¹⁴ possibly gargling, ¹⁵ & the influenza vaccine ¹⁶ are proven to prevent upper respiratory infections. (others lack evidence) ^{17,20}

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