INTERACTIONS
DRUG & NATURAL HEALTH PRODUCTS
OUR MISSION

Our passion is people, health and well-being. We are committed to the health and wellness of our customers, our communities and our planet. We value sustainability, ethical resource management, and charitable-giving while upholding the highest standards for clean formulations, product quality, evidence-based research and support for our customers.

YOUR HEALTH IS OUR PASSION

Patients

• Earn their trust as a dispensary with strict standards for product quality and evidence-based research
• Support their health needs with expert staff
• Provide expert staff to answer their questions
• Offer a wide product selection

Health Professionals

• Act as a link between our vendors and the professional community
• Provide an extension to their practice for patient care
• Support their practice with referrals and a wide product selection

OUR COMMITMENT TO YOU

• Carrying only quality supplements which are:
  • research based
  • therapeutically proven
  • third party tested for label compliance
• Offering a wide selection of supplement brands
• Being happy to order special products
• Providing computerized prescription tracking
• Hiring caring professionally trained staff
• Providing free delivery and mailorder service
• Carrying a large selection of specialty products
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<td><strong>Acid Inhibitors</strong></td>
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<tr>
<td>Antacids (OTC)</td>
<td>Aluminum hydroxide, magnesium hydroxide (Maalox), bismuth subsalicylate (Peptobismal), calcium carbonate</td>
<td>Betaine hydrochloride</td>
<td>Calcium, phosphorus, vitamin B12, iron, protein, zinc</td>
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<tr>
<td>H2 Antagonists</td>
<td>Cimetidine, ranitidine</td>
<td>Betaine hydrochloride</td>
<td>Calcium, folates, iron, vitamin B12, D, zinc</td>
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<td>Proton Pump Inhibitors</td>
<td>Omeprazole, lansoprazole</td>
<td>St. John’s Wort may increase side effect of photosensitivity, betaine hydrochloride</td>
<td>Vitamin B12, iron, protein, zinc</td>
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<td><strong>Antibiotics</strong></td>
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<td></td>
<td></td>
</tr>
<tr>
<td>Amino-glycosides</td>
<td>Neomycin, gentamycin, tobramy</td>
<td>• Grapefruit juice may decrease drug effect.</td>
<td>Beta-carotene, calcium, magnesium, iron, potassium, sodium, vitamin A, K</td>
</tr>
<tr>
<td>Cephalosporins</td>
<td>Cephalexin, cefiximi</td>
<td>• Grapefruit juice may decrease drug effect.</td>
<td>Vitamin K</td>
</tr>
<tr>
<td>Fluoroquinones</td>
<td>Ciprofloxacin</td>
<td>• Grapefruit juice may decrease drug effect. • Fennel may decrease drug effect. • Minerals calcium, iron, and zinc may decrease absorption of drug; take at least 2 hrs apart.</td>
<td>Vitamin K</td>
</tr>
<tr>
<td>Macrolides</td>
<td>Azithromycin, erythromycin</td>
<td>• Grapefruit juice may decrease drug effect.</td>
<td>Vitamin K</td>
</tr>
<tr>
<td>Penicillins</td>
<td>Amoxicillin, ampicillin, penicillin G</td>
<td>• Grapefruit juice may decrease drug effect.</td>
<td>Potassium</td>
</tr>
<tr>
<td>Sulfonamides</td>
<td>Co-trimoxazole, pentamidine</td>
<td>• Grapefruit juice may decrease drug effect. • PABA may decrease drug effect.</td>
<td>Folates, magnesium</td>
</tr>
<tr>
<td>Tetracyclines</td>
<td>Doxycycline, tetracycline</td>
<td>• Grapefruit juice may decrease drug effect.</td>
<td>Calcium, magnesium, iron</td>
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<tr>
<td><strong>Anticonvulsants</strong></td>
<td></td>
<td></td>
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</tr>
<tr>
<td>Phenytoin</td>
<td></td>
<td>• Folate decreased drug levels. • Ginkgo may decrease drug effect.</td>
<td>Biotin, calcium, folates, vitamin B12, D, K</td>
</tr>
<tr>
<td>Valproic acid</td>
<td></td>
<td>• High doses of Vitamin A may increase risk of birth defects when used in pregnant women.</td>
<td>L-carnitine, folates</td>
</tr>
<tr>
<td>Carbamazepine</td>
<td></td>
<td>• Grapefruit juice may increase drug levels. • Vitamin B3 as niacin may induce hypotension.</td>
<td>Biotin, calcium, folates, vitamin D</td>
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</table>
### Drug Class
- **ACE Inhibitors**
  - Examples: Catopril, enalapril, ramipril
  - Contraindications: Should not be combined with potassium; may cause hyperkalemia.

- **Antiplatelet/Anti-coagulants**
  - Examples: Warfarin (Coumadin)
  - Contraindications: Coumarin containing herbs may increase risk of bleeding: ginger, feverfew, dong quai, garlic, ginkgo, Phosphatidylserine, phosphatidylethanolamine may increase risk of bleeding. St. John’s Wort may decrease drug levels. Ginseng spp. may decrease drug effect. Vitamin E, vitamin K, high doses of vitamin C may increase risk of bleeding.

- **Beta Blockers**
  - Examples: enolol, metropolol
  - Contraindications: Calcium supplements may lower drug levels, decreasing drug effect.

- **Calcium Channel Blockers**
  - Examples: Nefedipine, veramilipil, diltiazem
  - Contraindications: Avoid use of peppermint oil, may decrease drug effect.

- **Cardiac Glycosides**
  - Examples: Digoxin
  - Contraindications: Siberian ginseng may cause falsely elevated drug levels upon blood tests. Licorice may cause low potassium and increase side effects of drug. Magnesium may decrease drug absorption, effect. Should be taken 2 hr away from the drug. St. John’s Wort may decrease drug levels, effect.

- **Diuretics (Loop, Thiazide, Potassium Sparing Diuretics)**
  - Examples: Furosemide, Hydrochlorothiazide, Spironolactone, amiloride
  - Contraindications: Calcium supplements may increase risk of hypercalcemia. Ginseng-germanium combination may block effect of drug. Licorice may decrease drug effect, cause hyperkalemia, high blood pressure.

- **Nitrites**
  - Examples: Nitroglycerin
  - Contraindications: N-acetyl cysteine with drug may cause severe headaches.

- **Statins (HMG-CoA Reductase Inhibitors)**
  - Examples: Atorvastatin, lovastatin, pravastatin
  - Contraindications: None known

### Nutrients Depleted by Drug
- **Cardiovascular Medications**
  - None known

### NHPs that Increase or Decrease Drug Activity; Contraindications
- **Coenzyme Q10**
  - Examples: Loop: Calcium, magnesium, potassium, sodium, vitamin B1, B12, B6, C, zinc; Thiazide: Coenzyme Q10, magnesium, phosphorus, potassium, sodium, zinc; Potassium Sparing: Calcium, folates, zinc

### Simple Supplement Tips
- Take multivitamins with food. Don’t take them late in the evening as they can boost your energy.
### Drug Class

**Chemotherapy Drugs**
- Anticancer agents deplete antioxidants as part of their mechanism of action; repletion of these is controversial at present, since it is thought that it may decrease drug efficacy. A 2007 systematic review found, however, that there is a lack of evidence showing significant decreases in efficacy from antioxidant supplementation (glutathione, melatonin, vitamin A, an antioxidant mixture, vitamin C, N-acetylcysteine, vitamin E, or ellagic acid) during chemotherapy; instead there was a suggestion of increased survival time, tumor response, and less drug toxicity (Block).
- Administration of natural health products should be timed around the chemotherapy protocol. The timing depends on the individual pharmacokinetic characteristics of the drugs used. It is recommended that patients consult a naturopathic doctor to determine optimal schedule of dosing around chemotherapy protocol.
- Gastrointestinal side effects of chemotherapy may lead to generalized nutrient depletions. Additional specific depletions are listed below.

### Examples

- **Alkylating agents (includes platinum based agents)**: Carboplatin, cisplatin, cyclophosphamide, dacarbazine, streptozocin
- **Anti-neoplastic Antibiotics**: Bleomycin, doxorubicin, mitomycin, mitoxantrone
- **Anti-metabolites**: Flururidine, 5-fluorouracil, gemcitabine, mercaptopurine, methotrexate
- **Natural Source Derivatives**: Docetaxel, etoposide, paclitaxel, vinblastine, vincristine
- **Biological Response Modifiers**: Tamoxifen, erlotinib

### NHPs that Increase or Decrease Drug Activity; Contraindications

- **L-carnitine, magnesium, potassium, vitamin E, zinc**
- **Arginine, vitamin B2, K**
- **Choline, folate, vitamin B1, 2, 3**
- **St. John’s Wort may decrease anticancer effect of etoposide.**

### Nutrients Depleted by Drug

- **Magnesium**

### Immunosuppressants

- **Corticosteroids**: Betamethasone, budesonide, dexamethasone, hydrocortisone, prednisone
- **Cyclosporin**: None documented
- **5-Amino-salicylic Acid Derivatives**: Mesalamine, sulfasalazine
- **Methotrexate**: Folates

**SIMPLE SUPPLEMENT TIPS**

- Take Vitamin C to increase absorption of an iron supplement.
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| Non Steroidal Anti-Inflammatory Drugs (NSAIDs) | NSAIDs: Acetaminophen, aspirin, diclofenac, ibuprofen | • Vitamin E may increase risk of bleeding with aspirin.  
• High levels of vitamin C (>3g) may increase levels and effect of acetaminophen.  |
|                                   |                                   | Folates; Salicylates also deplete: Iron, potassium, sodium, and vitamin C  
Acetaminophen: glutathione |
| Oral Contraceptives              | Combinations of estrogens and progestins or progestins alone | • Resveratrol may mimic estrogen action, avoid concurrent use of resveratrol and estrogens  
• Licorice may exacerbate water retention and increase risk of high blood pressure.  
• St. John’s Wort may decrease efficacy.  |
|                                   |                                   | Folates, magnesium, tryptophan, vitamin B2, B3, B6, B12, C, zinc |
| Oral Hypoglycemics                |                                    |                                                                       |                           |
| Sulfonylureas                     | Glyburide                         | • Ginseng spp. may potentiate hypoglycemia.  |
|                                   |                                   | Coenzyme Q10 |
| Biguanides                        | Metformin                         | • Lipoic acid, Gymnema sylvestre, Momordica charantia  |
|                                   |                                   | Coenzyme Q10, folates, vitamin B12 |
| Thiazolidinediones                | Pioglitazone                      | None known  |
|                                   |                                   | None documented |
| Psychiatric Drugs                 |                                    |                                                                       |                           |
| Anti-psychotics                   | Respidrone, Haloperidol, Lithium   | • Avoid sedating herbs such as kava, valerian, scutellaria, passiflora; may cause excessive sedation and drowsiness.  
• Lithium: avoid use of diuretic herbs such as dandelion, burdock, goldenrod, horsetail, etc.  
• Dehydration increases risk of toxicity.  |
|                                   |                                   | Haloperidol: CoQ10  
Lithium: Inositol  
General: DHEA, vitamin B2, Selenium |
| Monoamine Oxidase Inhibitors      | Phentazime, selegiline            | • Avoid sedating herbs such as kava, valerian, scutellaria, passiflora; may cause excessive sedation and drowsiness.  
• Tyramine containing foods should not consumed by persons on MAOIs.  |
|                                   |                                   | Vitamin B6 |
| Selective Serotonin Reuptake Inhibitors | Citalopram, paroxetine, fluoxetine  | • Avoid sedating herbs such as kava, valerian, scutellaria, passiflora, L-tryptophan, 5-HTP; may cause excessive sedation and drowsiness.  |
|                                   |                                   | Melatonin, sodium |

**SIMPLE SUPPLEMENT TIPS**  
*If you are taking antibiotics, take probiotics, ('acidophilus'), with foods, at least two hours after the antibiotic.*
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<tr>
<td>Tricyclic Anti-depressants</td>
<td>Amitriptyline, nortriptyline</td>
<td>• Avoid sedating herbs such as kava, valerian, scutellaria, passiflora; may cause excessive sedation and drowsiness.</td>
<td>Vitamin B2, coenzyme Q10</td>
</tr>
<tr>
<td>Benzo-diazepines</td>
<td>Lorazepam</td>
<td>• Avoid sedating herbs such as kava, valerian, scutellaria, passiflora; may cause excessive sedation and drowsiness.</td>
<td>Melatonin</td>
</tr>
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### Miscellaneous

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<tr>
<td>Bromocriptine</td>
<td></td>
<td>• Vitex may increase the effect of the drug in decreasing prolactin levels.</td>
<td>None known</td>
</tr>
<tr>
<td>Anti-Gout Agents</td>
<td>Colchicine</td>
<td>None known</td>
<td>Vitamin B12, calcium, potassium, sodium, betacarotene</td>
</tr>
<tr>
<td>Anti-retrovirals</td>
<td>Idinavir</td>
<td>• St. John’s Wort may decrease levels, effect</td>
<td>None known</td>
</tr>
<tr>
<td>Parkinson’s Disease Agents</td>
<td>Levodopa</td>
<td>• Branched chain amino acids may temporarily decrease effect of drug.</td>
<td>Potassium, SAMe</td>
</tr>
<tr>
<td></td>
<td>Isotretinoin (Accutane)</td>
<td>• Vitamin A may increase toxicity.</td>
<td>None known</td>
</tr>
<tr>
<td>Thyroid Hormone Replacement Therapy</td>
<td>L-thyroxine</td>
<td>• Calcium carbonate and/or iron may decrease absorption of drug; take 2 hrs apart. • Soy may decrease drug effect.</td>
<td>Calcium, magnesium, iron, phosphate</td>
</tr>
</tbody>
</table>

### References


### SIMPLE SUPPLEMENT TIPS

- Avoid taking fatty acids with fatty meals.
IN THE SUPPLEMENT MARKETPLACE, there are an ever growing number of combination, or ‘kitchen sink’ supplements, offering bigger and allegedly, better combinations of ingredients. A surprising number of people, even those who are knowledgeable about their health, buy these supplements thinking that they are covering all the bases and getting good value in the process.

Unfortunately, in the vast majority of cases, this is simply just not true.

**Quantity is not quality, especially when it comes to your health**

At Nature’s Source we carry very few of these combination products. Here’s why:

- They don’t measure up to the product quality standards we have set at nature’s source, in that many manufacturers of these products may not conduct objective third party testing.
- Many of these products use fillers, binders or tableting procedures that prevent proper absorption of the supplement’s contents.
- A great number of these products are loaded with ingredients, but tend to ignore many of the issues surrounding dosage, ingredient compatibility, stability and mechanism of action, for the sake of being able to offer a large number of ingredients.

**Too many ingredients can diminish the end result**

In the rush to impress you with their vast array of ingredients, many of these ‘kitchen sink’ supplements may offer ingredients that are complementary, but which have incompatible chemistry. This means that they simply can’t deliver on the promise they make, because one ingredient may cancel out the efficacy of another.

A second risk is that ingredients may end up competing with each other, creating a net result of failure.

Another risk is that many of these multiingredient products don’t contain enough of any one ingredient to really have any effect at all. This, of course, can pave the way for a serious health risk, especially if you are taking one of these combination supplements as part of a treatment program for a specific ailment.

**We have the supplements you need & the knowledge you will appreciate**

At nature’s source, you will find only supplements that have gone through the most rigorous approval processes, all verified by third party testing. You will also find that our staff are professional and well informed about all the controversial issues regarding these ‘kitchen sink’ supplements.

**WE SHIP ACROSS CANADA!**

Please visit natures-source.com to shop online or call your nearest Nature’s Source or Nature’s Signature dispensary.

(Free shipping any orders $50 or more)