# Commonly Used Ethiopian Herbs/Spices and their Potential Drug Interactions

An asterisk (*) indicates an interaction that would be rare when the spices and herbs are used as food additives, but occasionally may be encountered when the spices and herbs are consumed in large quantities medicinally.

<table>
<thead>
<tr>
<th>HERB/SPICE</th>
<th>COMMON USES</th>
<th>DRUGS AFFECTED</th>
<th>MECHANISM</th>
<th>CONSEQUENCES</th>
</tr>
</thead>
<tbody>
<tr>
<td>Basil Ocimum basilicum Besobila (A) Zahahene (O)</td>
<td>Mostly culinary • Medicinal: headache, insect repellent, malaria</td>
<td>Anticoagulants • Hypoglycemic agents</td>
<td>Oil extract can increase clotting time • Synergistic interaction with insulin and oral hypoglycemic agents</td>
<td>Increased chance of bleeding • May further lower blood glucose</td>
</tr>
<tr>
<td>Black Mustard Brassica nigra Senafitch (A) Senafitcha (O)</td>
<td>Culinary use • Medicinal use: stomachache, constipation, bloating, amoebic dysentery and abortifacient • Also used for wound dressing.</td>
<td>Proton Pump Inhibitors • H₂ receptor antagonists • Anticoagulants • May interact with aspirin</td>
<td>Mustard seeds &amp; oil may increase production of stomach acid • Allyl thiocyanate is an irritant that can cause severe burns and tissue necrosis (Fullas 2003) • High concentration of Vitamin K</td>
<td>Interferes with antacid treatment • Antagonizes effects of Warfarin</td>
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<tr>
<td>Black seed Nigella sativa Tiqur azmud (A) Awoseta (T) Gura (O)</td>
<td>Culinary uses • Medicinal: headache, stomachache, abortifacient</td>
<td>Anti-coagulants • Anti-hypertensives • Insulin and oral hypoglycemic drugs</td>
<td>Platelet aggregation inhibition • Increases pancreatic insulin secretion • Evidence in animal studies of reduced arterial blood pressure by increasing vasodilation &amp; inhibiting contraction • Evidence of pregnancy inhibitor in rats (Fullas, 2003)</td>
<td>Increased risk of bleeding • Synergistic action with medication that lowers blood pressure and blood glucose</td>
</tr>
</tbody>
</table>

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<tr>
<th>Capsicum pepper</th>
<th>Cayenne pepper</th>
<th>Capsicum annum</th>
<th>Berbere (A)</th>
<th>Mostly culinary</th>
<th>Medicinal: stomachache, antimicrobial</th>
<th>Anti-coagulants</th>
<th>Anti-hypertensives</th>
<th>ACE inhibitors</th>
<th>Capsaicin may inhibit platelet aggregation</th>
<th>Increases production of catecholamines</th>
<th>Decreases blood glucose levels and stimulates insulin release</th>
<th>Increased risk of bleeding</th>
<th>May counteract mechanism of anti-hypertensives</th>
<th>Recorded incidences of increased cough when combined with ACE inhibitors</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cinnamon</td>
<td>Cinnamomum zelanicum</td>
<td>Qarafa (A) Crete (T) Carafu (O)</td>
<td>Culinary</td>
<td>Medicinal: treatment for cold symptoms</td>
<td>Antacids</td>
<td>Tetracyclines</td>
<td>Possibly increases stomach acid</td>
<td>Experimental evidence of tetracycline dissolution rate interference</td>
<td>May counteract antacids</td>
<td>May inhibit tetracycline action</td>
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<tr>
<td>Coriander</td>
<td>Coriandrum sativum</td>
<td>Dimbelal (A) Zagada (T) Shucar (O)</td>
<td>Mostly culinary</td>
<td>Medicinal: stomachache and colic</td>
<td>Insulin and oral hypoglycemic agents</td>
<td>Unknown, but has been shown to be effective in treating stomach upset (Fullas 2003)</td>
<td>*Lowers blood sugar levels;</td>
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<tr>
<td>Cumin</td>
<td>Cuminum cyminum</td>
<td>Ensilal (A) Kemano (T) Hawaja (O)</td>
<td>Mostly culinary</td>
<td>Hypoglycemic agents</td>
<td>Anticoagulants</td>
<td>May have hypoglycemic properties</td>
<td>May have anticoagulating properties</td>
<td>*Hypoglycemia</td>
<td>*Increased risk of bleeding</td>
<td></td>
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</tr>
<tr>
<td>Dingetegna (A) No common English name Taverniera abyssinica</td>
<td>Medicinal only for stomach upset</td>
<td>Fever reduction</td>
<td>No specific class</td>
<td>Antispasmodic properties may affect absorption of medication</td>
<td>Decreased absorption of medication</td>
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<tr>
<td>Fenugreek</td>
<td>Trigonella foenum-graceum</td>
<td>Abish (A) Halbata (O)</td>
<td>Mostly culinary</td>
<td>Medicinal: stomachache, antispasmodic, powder used for wound dressing</td>
<td>Antidiabetic drugs</td>
<td>Lipid lowering drugs</td>
<td>Thyroid Replacement Therapy</td>
<td>Warfarin</td>
<td>Fenugreek acts synergistically with blood glucose lowering drugs</td>
<td>Decreases total cholesterol &amp; LDLs</td>
<td>Alters T&lt;sub&gt;3&lt;/sub&gt; &amp; T&lt;sub&gt;4&lt;/sub&gt; levels</td>
<td>Anticoagulating properties</td>
<td>*Hypoglycemia</td>
<td>*Lower cholesterol</td>
</tr>
</tbody>
</table>

| **Flaxseed and flaxseed oil**  
*Linum usitatissimum*  
Telba (A)  
Lina (T)  
Konfur (O) | **Medicinal:** purgative, diuretic, laxative | **Anti-coagulants**  
Cardiac glycosides  
Laxatives  
Insulin and oral hypoglycemic agents  
Hormonal drugs  
Lipid lowering agents | **Flaxseed and oil decrease platelet aggregation, increase effects of lipid lowering and hypoglycemic agents**  
Lignans (phyto-estrogens) from flaxseed (not oil) possess hormonal effects  
As a bulk forming laxative, flaxseed may bind to cardiac glycosides and other orally administered medications and prevent absorption  
Flaxseed enhances laxative effects of stool softeners | **Increased risk of bleeding**  
Reduced intestinal absorbance of oral medication; as any fiber source  
Increased risk of hypoglycemia  
Possible dehydration from increased laxative effects of flaxseed (Due to absorption of liquid by fiber. It is important for patient to drink enough water.) |
| **Garlic**  
*Allium sativum*  
Nech shinkrut (A)  
Tsada shgurti (T)  
Qullabbiadii (O) | **Culinary**  
**Medicinal:** common cold, malaria, cough, pulmonary TB, hypertension, wounds, STDs, asthma, parasitic infections, toothache, diabetes, hemorrhoids | **Antiplatelets**  
Anticoagulants  
Insulin and oral hypoglycemic agents  
Cholesterol lowering drugs  
Thyroid replacement therapy | **May be additive with cholesterol-lowering drugs**  
Hypertensive activity but it is not known if this effect is antihypertensive drug additive  
Decreases T₃ and T₄ levels  
May have blood thinning properties | **Possible increased risk of bleeding;**  
**Reverses effects of orally administered thyroxine** |
| **Ginger**  
*Zingiber officinale*  
Zingibil (A) (T) | **Culinary**  
**Medicinal:** stomachache, cough, fever, influenza | **Antacids**  
Anticoagulants | **Irritates gastric mucosa**  
Decreases platelet aggregation | **Inhibits antacid therapy**  
**Increased risk of bleeding:** |

| Khat  
* Catha edulis  
Chat (A)  
Ciut (T) (O) | Mostly recreational  
Medicinal: stimulant, mental illness, gonorrhea, common cold | Amphetamines  
Amoxicillin and ampicillin, PCN others | Cathinone (active ingredient) may act synergistically with amphetamines  
Tannins (component of Khat) complexes with β-lactam antibiotics | Possible additive effect with amphetamines  
Decreases absorbability of β-lactam antibiotics  
Lowers seizure threshold, Increases b.p and heart rate and induces cardiac arrhythmias. |
| Peppermint  
* Mentha piperita  
Nanna (A) (O)  
Semhal (T) | Medicinal: common cold, headache | Felodipine and simvastatin  
Iron  
Warfarin  
Acid Suppression therapy (antacids) | Inhibits gut wall metabolism of felodipine and simvastatin  
Decreases absorption of non-heme iron  
Reduces Warfarin internal normalized ratio to sub-therapeutic levels | Increased risk of clots if patient is in a hypercoagulable state  
Non-absorption of felodipine, simvostatin and iron  
Increases GERD symptoms unless taken as enteric-coated capsules |
| Rue  
* Ruta chalepensis  
Tenadam (A) (T)  
Talatam (O) | Medicinal: common cold, stomachache, diarrhea, influenza | Psoraien Ultraviolet (PUVA) therapy  
Warfarin | No major interactions reported  
5-methoxy psoralen content of rue may increase phototoxic response  
May interact with Warfarin | Anticoagulant effects maybe additive |
| Turmeric  
* Curcuma longa  
Ird (A) (O) | Mostly culinary  
Medicinal: used topically for “crying eyes” in children | Antiplatelets & anticoagulants  
Insulin and oral hypoglycemics | Has been shown to inhibit platelet aggregation *vitro*  
Curcuminoids and sesquiterpene components of turmeric have hypoglycemic effects | Increased risk of bleeding (theoretical risk; has not been demonstrated)  
Reduces blood sugar levels |

Language key: (A) – Amharic  
(T) – Tigrinya  
(O) – Oromo