Commonly Used Ethiopian Herbs/Spices and their Potential Drug Interactions

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

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.

HERB/SPICE	COMMON USES	DRUGS AFFECTED	MECHANISM	CONSEQUENCES
Basil *Ocimum basilicum* Besobila (A) Zahahene (O)	▪ Mostly culinary ▪ Medicinal: headache, insect repellent, malaria	▪ Anticoagulants ▪ Hypoglycemic agents	▪ Oil extract can increase clotting time ▪ Synergistic interaction with insulin and oral hypoglycemic agents	▪ Increased chance of bleeding ▪ May further lower blood glucose
Black Mustard *Brassica nigra* Senafitch (A) (T) Senafitcha (O)	▪ Culinary use ▪ Medicinal use: stomachache, constipation, bloating, amoebic dysentery and abortifacient ▪ Also used for wound dressing.	▪ Proton Pump Inhibitors ▪ H_2 receptor antagonists ▪ Anticoagulants ▪ May interact with aspirin	▪ Mustard seeds & 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	▪ Interferes with antacid treatment ▪ Antagonizes effects of Warfarin
Black seed *Nigella sativa* Tiqur azmud (A) Awoseta (T) Gura (O)	▪ Culinary uses ▪ Medicinal: headache, stomachache, abortifacient	▪ Anti-coagulants ▪ Anti-hypertensives ▪ Insulin and oral hypoglycemic drugs	▪ Platelet aggregation inhibition ▪ Increases pancreatic insulin secretion ▪ Evidence in animal studies of reduced arterial blood pressure by increasing vasodilation & inhibiting contraction ▪ Evidence of pregnancy inhibitor in rats (Fullas, 2003)	▪ Increased risk of bleeding ▪ Synergistic action with medication that lowers blood pressure and blood glucose

Capsicum pepper Cayenne pepper *Capsicum annum* Berbere (A)	▪ Mostly culinary ▪ Medicinal: stomachache, antimicrobial	▪ Anti-coagulants ▪ Anti-hypertensives ▪ ACE inhibitors	▪ Capsaicin may inhibit platelet aggregation ▪ Increases production of catecholamines ▪ Decreases blood glucose levels and stimulates insulin release	▪ Increased risk of bleeding ▪ May counteract mechanism of anti-hypertensives ▪ Recorded incidences of increased cough when combined with ACE inhibitors
Cinnamon *Cinnamomum zelanicum* Qarafa (A) Crefte (T) Carafu (O)	▪ Culinary ▪ Medicinal: treatment for cold symptoms	▪ Antacids ▪ Tetracyclines	▪ Possibly increases stomach acid ▪ Experimental evidence of tetracycline dissolution rate interference	▪ May counteract antacids ▪ May inhibit tetracycline action
Coriander *Coriandrum sativum* Dimbelal (A) Zagada (T) Shucar (O)	▪ Mostly culinary ▪ Medicinal: stomachache and colic	▪ Insulin and oral hypoglycemic agents	▪ Unknown, but has been shown to be effective in treating stomach upset (Fullas 2003)	▪ *Lowers blood sugar levels;
Cumin *Cuminum cyminum* Ensilal (A) Kemano (T) Hawaja (O)	▪ Mostly culinary	▪ Hypoglycemic agents ▪ Anticoagulants	▪ May have hypoglycemic properties ▪ May have anticoagulating properties	▪ *Hypoglycemia ▪ *Increased risk of bleeding
Dingetegna (A) No common English name *Taverniera abyssinica*	▪ Medicinal only for stomach upset ▪ Fever reduction	▪ No specific class	▪ Antispasmodic properties may affect absorption of medication	▪ Decreased absorption of medication
Fenugreek *Trigonella foenum-graceum* Abish (A) Halbata (O)	▪ Mostly culinary ▪ Medicinal: stomachache, antispasmodic, powder used for wound dressing	▪ Antidiabetic drugs ▪ Lipid lowering drugs ▪ Thyroid Replacement Therapy ▪ Warfarin	▪ Fenugreek acts synergistically with blood glucose lowering drugs ▪ Decreases total cholesterol & LDLs ▪ Alters T_3 & T_4 levels ▪ Anticoagulating properties	▪ *Hypoglycemia ▪ *Lower cholesterol ▪ *Reduced intestinal absorbance of medication ▪ *Increased risk of bleeding

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) Qullabbiiadii (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 T_3 and T_4 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 arrythmias.
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 *in vitro* ▪ Curcuminoids and sesquiterpene components of turmeric have hypoglycemic effects	▪ Increased risk of bleeding (theoretical risk; has not been demonstrated) ▪ Reduces blood sugar levels

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