

ETHIOPIAN TRADITIONAL AND HERBAL MEDICATIONS AND THEIR INTERACTIONS WITH CONVENTIONAL DRUGS

Language key: (A) – Amharic

(T) – Tigrinya

(O) – Oromo

Herb/Spice	Common Uses	Drug Affected	Mechanism	Consequences
Basil <i>Ocimum basilicum</i> Besobila (A) Zahahene (O)	<ul style="list-style-type: none"> ▪ Mostly culinary ▪ Medicinal: headache, insect repellent, malaria 	<ul style="list-style-type: none"> ▪ Anticoagulants ▪ Hypoglycemic agents 	<ul style="list-style-type: none"> ▪ Oil extract has been found to increase clotting time ▪ Synergistic interaction with insulin and oral hypoglycemic agents 	<ul style="list-style-type: none"> ▪ Increased chance of bleeding ▪ May further lower blood glucose
Black Mustard <i>Brassica nigra</i> Senafitch (A) (T) Senafitcha (O)	<ul style="list-style-type: none"> ▪ Culinary use ▪ Medicinal use: stomach ache, constipation, bloating, amoebic dysentery and abortifacient ▪ Also used for wound dressing. 	<ul style="list-style-type: none"> ▪ Proton Pump Inhibitors ▪ H₂ receptor antagonists ▪ Anticoagulants ▪ May interact with aspirin 	<ul style="list-style-type: none"> ▪ Mustard seeds and oil <i>may</i> 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 	<ul style="list-style-type: none"> ▪ Interferes with antacid treatment ▪ Antagonizes effects of Warfarin
Black Seed <i>Nigella sativa</i> Tiqur azmud (A) Awoseta (T) Gura (O)	<ul style="list-style-type: none"> ▪ Culinary uses ▪ Medicinal: headache, stomachache, abortifacient 	<ul style="list-style-type: none"> ▪ Anti-coagulants ▪ Anti-hypertensives ▪ Insulin and oral hypoglycemic drugs 	<ul style="list-style-type: none"> ▪ Platelet aggregation inhibition ▪ Increases pancreatic insulin secretion ▪ Evidence in animal studies of reduced arterial blood pressure by increasing 	<ul style="list-style-type: none"> ▪ Increased risk of bleeding ▪ Synergistic action with medication that lowers blood pressure and blood glucose

			<p>vasodilation and inhibiting contraction.</p> <ul style="list-style-type: none"> Evidence of pregnancy inhibitor in rats (Fullas, 2003) 	
<p>Capsicum Pepper</p> <p>Cayenne Pepper</p> <p><i>Capsicum annum</i></p> <p>Berbere (A)</p>	<ul style="list-style-type: none"> Mostly culinary Medicinal: stomach ache, antimicrobial 	<ul style="list-style-type: none"> Anti-coagulants Anti-hypertensives ACE inhibitors 	<ul style="list-style-type: none"> Capsaicin may inhibit platelet aggregation Increases production of catecholamines Decreases blood glucose levels and stimulates insulin release 	<ul style="list-style-type: none"> Increased risk of bleeding May counteract mechanism of anti-hypertensives Recorded incidences of increased cough when combined with ACE inhibitors
<p>Cinnamon</p> <p><i>Cinnamomum zelanicum</i></p> <p>Qarafa (A)</p> <p>Crefte (T)</p> <p>Carafu (O)</p>	<ul style="list-style-type: none"> Culinary Medicinal: treatment for cold symptoms 	<ul style="list-style-type: none"> Antacids Tetracyclines 	<ul style="list-style-type: none"> Claimed to increase stomach acid Experimental evidence of tetracycline dissolution rate interference 	<ul style="list-style-type: none"> May counteract antacids May inhibit tetracycline action
<p>Coriander</p> <p><i>Coriandrum sativum</i></p> <p>Dimbelal (A)</p> <p>Zagada (T)</p> <p>Shucar (O)</p>	<ul style="list-style-type: none"> Mostly culinary Medicinal: stomach ache and colic 	<ul style="list-style-type: none"> Insulin and oral hypoglycemic agents 	<ul style="list-style-type: none"> Unknown, but has been shown to be effective in treating upset stomach (Fullas, 2003) 	<ul style="list-style-type: none"> *Lowers blood sugar levels
<p>Cumin</p> <p><i>Cuminum cyminum</i></p> <p>Ensilal (A)</p> <p>Kemano (T)</p> <p>Hawaja (O)</p>	<ul style="list-style-type: none"> Mostly culinary 	<ul style="list-style-type: none"> Hypoglycemic agents Anticoagulants 	<ul style="list-style-type: none"> May have hypoglycemic properties May have anticoagulating properties 	<ul style="list-style-type: none"> *Hypoglycemia *Increased risk of bleeding

<p>Dingetegna (A)</p> <p>No common English name</p> <p><i>Taverniera abyssinica</i></p>	<ul style="list-style-type: none"> ▪ Medicinal only for stomach upset ▪ Fever reduction 	<ul style="list-style-type: none"> ▪ No specific class 	<ul style="list-style-type: none"> ▪ Antispasmodic properties may affect absorption of medication 	<ul style="list-style-type: none"> ▪ Antispasmodic properties may affect absorption of medication
<p>Fenugreek</p> <p><i>Trigonella foenum-graceum</i></p> <p>Abish (A)</p> <p>Halbata (O)</p>	<ul style="list-style-type: none"> ▪ Mostly culinary ▪ Medicinal: stomachache, antispasmodic, powder used for wound dressing 	<ul style="list-style-type: none"> ▪ Antidiabetic drugs ▪ Lipid lowering drugs ▪ Thyroid Replacement Therapy ▪ Warfarin 	<ul style="list-style-type: none"> ▪ Studies have shown that fenugreek acts synergistically with blood glucose lowering drugs ▪ Decreases total cholesterol and LDLs ▪ Alters T₃ and T₄ levels ▪ Anticoagulating properties 	<ul style="list-style-type: none"> ▪ *Hypoglycemia ▪ *Lower cholesterol ▪ *Reduced intestinal absorbance of medication ▪ *Increased risk of bleeding
<p>Flaxseed and Flaxseed Oil</p> <p><i>Linum usitatissimum</i></p> <p>Telba (A)</p> <p>Lina (T)</p> <p>Konfur (O)</p>	<ul style="list-style-type: none"> ▪ Medicinal purgative, diuretic, laxative 	<ul style="list-style-type: none"> ▪ Anti-coagulants ▪ Cardiac glycosides ▪ Laxatives ▪ Insulin and oral hypoglycemic agents ▪ Hormonal drugs ▪ Lipid lowering agents 	<ul style="list-style-type: none"> ▪ Flaxseed and oil decrease platelet aggregation, increase effects of lipid lowering and hypoglycemic agents ▪ Lignans (phytoestrogens) 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 	<ul style="list-style-type: none"> ▪ *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.)

			laxative effects of stool softeners	
Garlic <i>Allium sativum</i> Nech shinkrut (A) Tsada shgurti (T) Qullabbiadii (O)	<ul style="list-style-type: none"> ▪ Culinary ▪ Medicinal: common cold, malaria, cough, pulmonary TB, hypertension, wounds, STDs, asthma, parasitic infections, toothache, diabetes, hemorrhoids 	<ul style="list-style-type: none"> ▪ Antiplatelets ▪ Anticoagulants ▪ Insulin and oral hypoglycemic agents ▪ Cholesterol lowering drugs ▪ Thyroid replacement therapy 	<ul style="list-style-type: none"> ▪ 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 	<ul style="list-style-type: none"> ▪ *Possible increased risk of bleeding; ▪ *Reverses effects of orally administered thyroxine
Ginger <i>Zingiber officinale</i> Zingibil (A) (T)	<ul style="list-style-type: none"> ▪ Culinary ▪ Medicinal: stomachache, cough, fever, influenza 	<ul style="list-style-type: none"> ▪ Antacids ▪ Anticoagulants 	<ul style="list-style-type: none"> ▪ Irritates gastric mucosa ▪ Decreases platelet aggregation 	<ul style="list-style-type: none"> ▪ *Inhibits antacid therapy ▪ *Increased risk of bleeding
Khat <i>Catha edulis</i> Chat (A) Ciut (T) (O)	<ul style="list-style-type: none"> ▪ Mostly recreational ▪ Medicinal: stimulant, mental illness, gonorrhoea, common cold 	<ul style="list-style-type: none"> ▪ Amphetamine ▪ Amoxicillin and ampicillin, PCN others 	<ul style="list-style-type: none"> ▪ Cathinone (active ingredient) may act synergistically with amphetamines ▪ Tannins (component of Khat) complexes with β-lactam antibiotics 	<ul style="list-style-type: none"> ▪ 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 <i>Mentha piperita</i> Nanna (A) (O) Semhal (T)	<ul style="list-style-type: none"> ▪ Medicinal: common cold,, headache 	<ul style="list-style-type: none"> ▪ Felodipine and simvastatin ▪ Iron ▪ Warfarin 	<ul style="list-style-type: none"> ▪ Inhibits gut wall metabolism of felodipine and simvastatin ▪ Decreases absorption of non-heme iron 	<ul style="list-style-type: none"> ▪ Increased risk of clots if patient is in a hypercoagulable state ▪ Non-absorption of felodipine,

		<ul style="list-style-type: none"> ▪ 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 	<ul style="list-style-type: none"> ▪ Reduces Warfarin internal normalized ratio to sub-therapeutic levels ▪ Increased risk of clots if patient is in a hypercoagulable state ▪ Non-absorption of felodipine, simvastatin and iron ▪ Increases GERD symptoms unless taken as enteric-coated capsules 	<p>simvastatin and iron</p> <ul style="list-style-type: none"> ▪ Increases GERD symptoms unless taken as enteric-coated capsules
<p>Rue <i>Ruta chalepensis</i> Tenadam (A) (T) Talatam (O)</p>	<ul style="list-style-type: none"> ▪ Medicinal: common cold, stomach pain, influenza 	<ul style="list-style-type: none"> ▪ Psoralen Ultraviolet (PUVA) therapy ▪ Warfarin 	<ul style="list-style-type: none"> ▪ No major interactions reported ▪ 5-methoxy psoralen content of rue may increase phototoxic response ▪ May interact with Warfarin 	<ul style="list-style-type: none"> ▪ Anticoagulant effects may be additive
<p>Tumeric <i>Curcuma longa</i> Ird (A) (O)</p>	<ul style="list-style-type: none"> ▪ Mostly culinary ▪ Medicinal: used topically for “crying eyes” in children 	<ul style="list-style-type: none"> ▪ Antiplatelets and anticoagulants ▪ Insulin and oral hypoglycemics 	<ul style="list-style-type: none"> ▪ Has been shown to inhibit platelet aggregation <i>in vitro</i> ▪ Curcuminoids and sesquiterpene components of turmeric have hypoglycemic 	<ul style="list-style-type: none"> ▪ Increased risk of bleeding (theoretical risk; has not been demonstrated) ▪ Reduces blood sugar levels

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