

Herb of the Week: **Ginger**

Common name: Common Ginger, Cooking Ginger, Stem Ginger, Canton Ginger, Canton

Botanical (Latin) name: *Zingiber officinale*

Botanical Family: Zingiberaceae

Medicinal parts: root (also called rhizome)

Energetics: hot, dry, relaxant

Herbal actions: anti-inflammatory, carminative, anodyne, antiemetic, antispasmodic, antimicrobial, aromatic, diaphoretic, expectorant, diffusive, stimulant, relaxant, emmenagogue, rubefacient, sialagogue, stomach tonic, blood moving^{1,2}

System/organ/tissue affinities: Ginger works in the stomach and the gut, helping to stimulate digestion and reduce bloating, constipation, or cramping. It is also effective against nausea. Ginger is warming and a relaxant, so it helps relieve tension for those with headaches or muscle aches. It can stimulate blood circulation within the body and promotes healthy menstrual flow. Its anti-inflammatory action helps with treating cardiovascular problems.¹

Notable constituents: The rhizome of ginger, which is also known as the root, contains essential oil and pungent principles. It contains oleoresin, which is made up of phenols (such as gingerols and shogaols), fats, waxes, and volatile oils. The volatile oil includes sesquiterpenes and monoterpenes. Ginger also has proteins, vitamin A, niacin, minerals, and amino acids. The constituents of ginger root has given it is antiemetic, carminative, antispasmodic, and anti-inflammatory properties.⁴

Medicinal applications (“uses”): Ginger is a very widely used herb around the world. It is a well-known remedy to treating nausea and related conditions like morning sickness. Ginger can also help with inflammation and pain in the body. Joint pain due to poor circulation can be relieved through the use of ginger. In traditional Asian medicine, ginger has been used to stimulate appetite and promote perspiration.³ In addition, ginger root can be used for treatment of gastrointestinal issues, such as indigestion, diarrhea, constipation, and flatulence, as well as helping with menstrual cramping. It has been shown to treat symptoms of the flu and the cold. For instance, it can help with coughing, relieve congestion, and treat chills or a fever.² Overall, there are many benefits in using ginger medicinally to help boost our immune system and treat ailments.

Physiological mechanisms of action: Some studies show that ginger root inhibits the production of cytokines, which mediate our body’s immune responses and promote inflammation. By targeting the cytokines, ginger can be used to treat inflammation. It has also been shown to slow down LDL and triglyceride production in the liver and prevent clotting of platelets in blood vessels.³

Cautions & contraindications: As a precaution, ginger should be used carefully during pregnancy because it has the potential to cause uterine contractions due to its emmenagogue effects. Ginger should also be avoided before surgeries because of its blood thinning effect. It may interfere with the

absorption of dietary iron and fat-soluble vitamins.² For people with gallstones, they should consult a physician before using ginger in any way.⁴

Herb-drug interactions: Because ginger has a blood thinning effect, it can interact with blood-thinning medications such as warfarin or aspirin. Ginger's emmenagogic effect can also increase one's menstrual flow.¹ Ginger may lower blood sugar, potentiating the effects of insulin and other diabetes medications. Lastly, it may also interact with barbiturates and beta-blockers.³

Dosing & administration guidelines:

- Fresh ginger root: 1/3 of an ounce daily
- Dried ginger root: 150-300mg, up to three times daily in capsule or powder form
- Tea: 3-4 cups daily
- Infusion or decoction: 0.25-1.0 g in 150 mL boiled water three times daily
- Fluid extract 1:1 (g/mL): 0.25-1.0 mL three times daily
- Tincture: 1:2, 60% alcohol, 1-2 mL in water three times daily

Personal Experience:

Ginger is so versatile and can be used in many different ways. This week, I tried using fresh ginger, powdered ginger, and ginger tea bags. Firstly, I used a tea bag and made ginger lemon tea. The color was dark beige and smelled slightly sour and spicy. When I tasted it, it wasn't too strong but I could taste the sharpness of the ginger in my throat and it left a spicy aftertaste on my tongue. Then, I made tea by boiling freshly sliced up ginger in water. While doing this, the smell of ginger took over my kitchen. The tea from the fresh ginger was stronger in flavor and spicier. I felt like it had more of an effect on me over the tea bag. I could feel the warmth of the ginger going down my throat and chest when drinking it. I had been feeling nauseas due to being sick and I actually think that drinking ginger tea helped relieve some of the nausea. Lastly, I used powdered ginger and mixed it with honey to create a paste. This was mentioned in the "Herbal Medicine for Beginners" book, so I decided to give it a try. I spread the paste on some toast and I enjoyed the sweet but sharp citrus/peppery taste. Usually I get a little bloated when I eat bread, but I think the combination of ginger tea and ginger honey paste helped reduce the bloating a bit.

References:

1. Herbal Medicine for Beginners, Katja Swift and Ryn Midura (pages 82-83)
2. <https://www.herbalremediesadvice.org/health-benefits-of-ginger.html>
3. <https://www.herbal-supplement-resource.com/ginger-root.html>
4. <http://cms.herbalgram.org/expandedE/Gingerroot.html>