



GINKGO

Common Names: *ginger, black ginger, ginger root, ginger essential oil*

Scientific Names: *Zingiber officinale*

Effectiveness: Currently there is a lack of reliable evidence to suggest benefit in osteoarthritis and rheumatoid arthritis.

Use in rheumatic conditions is not recommended.

Safety: Likely safe when used orally in appropriate doses; unknown long term.

What is ginger?

- Ginger is a plant with leafy stems and flowers. Ginger spice comes from the roots of the plant. It is often used to flavour drinks and foods.

What it is it used for in people with rheumatic conditions?

- People have used ginger for the management of rheumatoid arthritis (RA) and osteoarthritis (OA) to relieve pain and improve function.

How is it thought to work?

- Ginger is thought to reduce inflammation and to reduce pain when used orally.
- Some chemicals in ginger may decrease the release and action of substances (pro-inflammatory messengers) that increase inflammation in the body.

Does it Work? What the Science Says:

Ginger extract 250mg 3–4 times daily

- Studies of ginger extract in RA and OA are limited. Some trials suggested a small pain reduction in patients with OA while others demonstrated no benefit compared to placebo after 4-12 weeks of use.
- Most of the trials are small and of poor quality.
- Supplements with ginger extract likely provides little or no significant benefit in RA and OA.

What are possible side effects and what can I do about them?

- Ginger is generally well tolerated when used orally. Reports of side-effects are more severe with higher doses (more than 5g per day).
- Some common side effects may include: general stomach discomfort, irritation in the mouth and throat, heartburn, diarrhea. Sedation and drowsiness have also been reported.

Interactions

With drugs:

- Theoretically, excess dose of ginger can reduce the amount platelets clump together (platelet aggregation). This could increase the risk bruising and/or bleeding when taken with anticoagulant/antiplatelet medications.
 - Common antiplatelet and anticoagulant drugs may include: *warfarin (Coumadin), ASA (Aspirin), and clopidogrel (Plavix), ticagrelor (Brilinta), prasugrel (Effient), enoxaparin (Lovenox), dalteparin (Fragmin), dabigatran (Pradax), rivaroxaban (Xarelto), apixaban (Eliquis) and others.*

With other diseases:

- High doses of ginger may increase the risk of bleeding in people with bleeding disorders.

With other natural health products:

- Ginger may have additive effect when combined with natural health products that have anticoagulant and antiplatelet effects. This could increase the risk of bleeding.
 - Such as: *garlic, ginkgo, certain types of ginseng, and red clover, and others.*