

# GREEN MANDARIN

*Citrus reticulata var deliciosa* 10ml

goDesana  
feel the pure plant difference



## application

Aromatic • Bath • Internal • Topical

## properties

**Wildcrafted**

**GRAS Certified**

**Producing Organ:** Unripened Fruit

**Extraction:** Cold Expression

**Country of Origin:** Italy

**Safety Group:** #1

**Main Chemical Constituents:** limonene, geraniol, citral

**Therapeutic Properties:** Antiseptic, antispasmodic, carminative, digestive, diuretic (mild), laxative (mild), sedative, stimulant (digestive and lymphatic), tonic

## uses

- Add 10 drops Green Mandarin with 10 drops Pink Grapefruit to ½ cup Clay Vitality or Vitality Bath Salts and mix into warm bath water to benefit those suffering from poor circulation, water retention, obesity, and cellulite.\*
- Add 10-20 drops to cream or lotion to aid poor circulation, water retention, obesity, and cellulite.\*
- Use 1 drop neat for acne and skin blemishes.\*
- Diffuse 10-15 drops as an effective remedy for insomnia, nervous tension, and agitation. Particularly useful for children and pregnant women at bedtime.\*
- Mix 20 drops with 4 ounces of distilled water and a cobalt blue glass or PET plastic spray bottle. Mist into the environment when you are feeling anxious, overwhelmed, or stressed and need strength to keep going.\*
- Dilute one drop in 4 ounces of water for a refreshing, citrus flavor and immune supportive properties.\*

## product summary

Mandarin oranges were first brought to the USA around 1845, and were later renamed tangerines. Mandarin oranges resemble the common orange in shape, but are much smaller in size and come in both red and green varieties. Green Mandarin essential oil is cold expressed from the unripened fruit of the Mandarin tree.\*

Mandarin oranges are supercharged with tangeretin, a naturally occurring phytochemical concentrated in the peel. Only recently have scientists studied the biological activity of tangeretin, but according to some in-vitro studies, tangeretin may help prevent certain types of cancer.\*<sup>(1)</sup>

Tangeretin has also been shown to protect cells against the effects of bacterial mutagens, substances or agents (physical or environmental) that induce change in the DNA (i.e. causes a genetic mutation). Although mutagens are not solely synonymous with carcinogens, the ability of a substance to cause mutations and its ability to cause cancer have a strong correlation.\*<sup>(2)</sup>

Green Mandarin is also a great source of limonene, a natural compound that has gained attention in recent years due to its potential in preventing cancer and cardiovascular disease. Limonene has produced anti-cancer effects in animals and prevented the spread of human breast cancer in-vitro, and has also been shown to act as a solvent for cholesterol.\*<sup>(3)(4)</sup>

1. Hirano T, Abe K, Gotoh M and Oka K: Citrus flavone tangeretin inhibits leukaemic HL-60 cell growth partially through induction of apoptosis with less cytotoxicity on normal lymphocytes. *Br J Cancer.* 72:1380-1388. 1995.
2. Manthey JA and Guthrie N: Antiproliferative activities of citrus flavonoids against six human cancer cell lines. *J Agric Food Chem.* 50:5837-5843. 2002.
3. Crowell PL, et al. Human metabolism of the experimental cancer therapeutic agent d-limonene. *Cancer Chemother Pharmacol* 1994;35:31-7.
4. Jia SS, Xi GP, Zhang M, et al. Induction of apoptosis by D-limonene is mediated by inactivation of Akt in LS174T human colon cancer cells. *Oncol Rep.* 2013 Jan;29(1):349-54

## responsible cautions

- Non-toxic, non-irritant, non-sensitizing.
- Keep out of reach of children and pets.
- Avoid in allergic skin conditions.
- Although the least photo-toxic of all the citrus fruits, it could still cause some burning in those with very pale or sensitive skin if exposed to sunlight after application.
- If you are pregnant, nursing, or under a doctor's care, consult your healthcare provider prior to use.

\*The information in this document has not been evaluated by the FDA and is not intended to treat, diagnose, cure, or prevent any disease. This information is not intended as a substitute for the advice or medical care of a qualified healthcare professional and you should seek the advice of your healthcare professional before undertaking any dietary or lifestyle changes. This information is provided for educational purposes only.