



# Grapefruit Seed Extract

INTRODUCED 2004

## What Is It?

Grapefruit seed extract is a highly concentrated fungal and microbial balancing formula. It exerts these effects within the gastrointestinal (GI) tract to promote healthy microflora and gut ecology.\*

## Uses For Grapefruit Seed Extract

**Microbial and fungal balance:** A preliminary clinical trial reported that grapefruit seed extract supplements helped support healthy GI function and comfort. An *in vitro* study using human skin fibroblast cells indicated that grapefruit seed extract promoted healthy gram-positive and gram-negative balance. Other studies support these findings, citing that grapefruit seed extract promotes a healthy environment when exposed to a wide range of bacterial biotypes.\*

## What Is The Source?

Grapefruit seed extract is derived from the seed and standardized to contain 40% flavones and flavonones. It has been tested for Benzethonium chloride and does not contain this contaminant. Ascorbyl palmitate is derived from corn dextrose fermentation and palm oil.

## Recommendations

Pure Encapsulations recommends 1–4 capsules daily, in divided doses, with meals, with 6–8 oz of water.


## Are There Any Potential Side Effects Or Precautions?

Not to be taken by pregnant or lactating women. At this time, there are no known side effects or precautions. Consult your physician for more information.

## Are There Any Potential Drug Interactions?

The capacity for grapefruit seed extract to produce drug interactions remains unknown. Like all botanical products, grapefruit seed extract is a complex material with numerous phytochemicals that remain largely uncharacterized with respect to drug pharmacokinetics. Human studies have established that two furanocoumarins, bergamottin and 6,7-dihydroxybergamottin (DHB), are primarily responsible for drug interactions with grapefruit juice. An 8-ounce glass of grapefruit juice typically contains 1-2 mg bergamottin and 2-3 mg DHB. HPLC analysis revealed less than 0.1 mg/g bergamottin and 2.99 mg/g DHB in Pure Encapsulations grapefruit seed extract. The effective dose range for the seed in promoting microbial balance is 250-1,000 mg, which yields 0.75-2.99 mg DHB and less than 0.025-0.1 mg bergamottin per day. Therefore, 4 capsules of our seed extract falls below the range associated with bergamottin-mediated events, but is within the range of DHB-associated drug interactions. The negligible bergamottin suggests this extract does not recapitulate completely the negative effects of grapefruit juice and should be regarded as a distinct seed material. Consult your physician for more information.

### Grapefruit Seed extract

each vegetable capsule contains	 v 3
grapefruit seed extract	250 mg
(standardized to contain 40% flavones and flavonones)	
ascorbyl palmitate (fat-soluble vitamin C)	10 mg
1-4 capsules per day, in divided doses, with meals, with 6-8 oz of water.	

\*These statements have not been evaluated by the Food & Drug Administration. This product is not intended to diagnose, treat, cure or prevent any disease.

For educational purposes only. Consult your physician for any health problems.