

Egyptian Herbal Monograph

Volume 4

Herbal Formulations used in Egypt

Egyptian Drug Authority (EDA)

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Peppermint oil / Thyme oil

زيت نعناع / زيت زعتر

1. Names & Synonyms

Peppermint (1)

Mentha piperita L.

Family: Lamiaceae.

Arabic: Ni'na نعناع .

English: Peppermint.

Thyme (2)

Thymus vulgaris L.

Syns.: *Origanum thymus* Kuntze, *Thymus collinus* Salisb.

Family: Lamiaceae (Labiatae).

Arabic: Za'ater زعتر .

English: English Thyme, Garden Thyme.

Thymus zygis L.

Syns.: *Origanum zygis* (L.) Kuntze, *Thymus angustifolius* Salisb.

Family: Lamiaceae (Labiatae).

Arabic: Za'ater زعتر .

English: Spanish Thyme.

2. Parts used for medicinal purpose

Peppermint oil: Fresh overground parts and the dried leaves (1,3,4).

Thyme oil: Dried and fresh herb (5,6).

3. Major chemical constituents

Peppermint oil: Menthol, menthone, menthyl acetate, menthofuran, and 1,8-cineole (eucalyptol) (7).

Thyme oil: Thymol, carvacrol, *p*-cymene, γ -terpinene, linalool, terpinen-4-ol, borneol, 1,8- cineole, α -pinene and caryophyllene (6).

4. Medicinal uses (Indications)

Symptomatic treatment of digestive disorders such as dyspepsia (indigestion), flatulence, minor spasms of the gastrointestinal tract and for irritable bowel syndrome (1,3,4,8,9).

5. Herbal preparations correlated to medicinal use

Combination of Peppermint oil and Thyme oil.

Herbal preparation is in solid gastro-resistant pharmaceutical dosage forms. The pharmaceutical form should be described by the Pharmacopoeia full standard term.

6. Posology and method of administration correlated to medicinal use

Adults and elderly

20 mg Peppermint oil and 20 mg Thyme oil, 3 times daily.

Duration of use:

The treatment should be taken until symptoms resolve, usually within 2 to 4 weeks.

Method of administration: Oral use.

The gastro-resistant dosage forms must be taken whole 30 minutes before meals (8).

7. Contraindications

- Hypersensitivity to the active substances and to other plants of the same family.
- Patients with liver disease, cholangitis, achlorhydria, gallstones and any other biliary disorders (3, 8-10).

8. Special warnings and precautions for use

- If the symptoms worsen during the use of the medicinal product, a doctor or a pharmacist should be consulted.
- The use in children and adolescents under 18 years of age is not recommended (11).
- Other medicinal products containing peppermint oil should be avoided during the use of this medicinal product (8).

- The gastro-resistant solid dosage forms should be swallowed whole, i.e. not broken or chewed, because this would release the peppermint oil prematurely, possibly causing local irritation of the mouth and oesophagus (8).
- Patients who already suffer from heartburn or hiatal hernia, have sometimes an exacerbation of this symptom after taking peppermint oil. Treatment should be discontinued in these patients (8).
- The product should be used with caution in inflamed and ulcerated conditions of the gastrointestinal tract (8).

9. Interactions with other medicinal products and other forms of interaction

- Concomitant use of food or antacids could cause early release of the content the medicinal product (8).
- Other medicinal products used to decrease stomach acid, such as histamine-2 blockers and proton pump inhibitors may cause premature dissolution of the gastro-resistant solid dosage forms and should be avoided (8).

10. Fertility, pregnancy and lactation

- Safety during pregnancy and lactation has not been established. In the absence of sufficient data, the use during pregnancy or lactation is not recommended (3,8,9, 12).
- No fertility data available (8, 4).

11. Effects on ability to drive and use machines

No studies on the effect on the ability to drive and use machines have been performed (6,8).

12. Undesirable effects

- If adverse reactions occur, a doctor or a pharmacist should be consulted.
- Urine and stools with an odour of menthol, dysuria and inflammation of the glans of the penis (8).
- Allergic reactions to menthol (bradycardia, muscle tremor, ataxia, anaphylactic shock (8), flushing, mucous membrane irritation, urticaria (9), headache and erythematous skin rash) may occur (8,9).
- Heartburn, nausea (8,9), vomiting, perianal burning blurred vision and dry mouth (8).



13. Overdose (8)

Overdose may cause:

- Severe gastro-intestinal symptoms such as diarrhea and rectal ulceration.
- Epileptic convulsions, loss of consciousness, apnoea, nausea, disturbances in cardiac rhythms, ataxia and other CNS problems, probably due to the presence of menthol.
- In the event of overdose, the stomach should be emptied by gastric lavage. Observation should be carried out with symptomatic treatment, if necessary.

14. Relevant biological properties

Not required as per Egyptian guidelines for registration of herbal medicines.

15. Additional information

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16. Date of compilation/last revision

13/08/2023.

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