



Egyptian Herbal Monograph

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Volume 3

Herbal Formulations Used in Egypt

Egyptian Drug Authority (EDA)

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Artichoke, Milk thistle, Peppermint, Magnesium

خرشوف/ شوك الجمل/ نعناع/ ماغنسيوم

1. Names & Synonyms

Artichoke (1)

Cynara cardunculus L.

Family: Asteraceae (Compositae).

Syns: *Cynara scolymus* L.

Arabic: Kharshouf خرشوف

English: Artichoke, Globe Artichoke.

Milk thistle (2)

Silybum marianum L. Gaertn.,(3).

Family: Compositae (Asteraceae) (3).

Syns.: *Carduus marianus* L. (3).

Arabic: Shawk Sennari شوك سناري, Shok El-Gamal شوك الجمل (4).

English: Milk thistle and St. Mary's thistle (4).

Peppermint (5)

Mentha piperita L.

Family: Lamiaceae.

Arabic: Ni'na نعناع

English: Peppermint.



2. Parts used for medicinal purpose

Artichoke: Leaves (1).

Milk thistle: Seeds (2).

Peppermint: leaves (5-7).

3. Major chemical constituents

Artichoke (8)

- **Phenolic acids:** Caffeic acid, chlorogenic acid (3-*O*-caffeoylquinic acid), cynarin (1,5di-*O*-caffeoylquinic acid), 1-*O*-caffeoylquinic acid, 4-*O*-caffeoylquinic acid, 5-*O*-caffeoylquinic acid.
- **Sesquiterpene lactones:** Cynaropicrin, dehydrocynaropicrin, grosheimin and their derivatives.
- **Flavonoids:** Luteolin-7-*O*-rutinoside (scolymoside), luteolin-7-*O*-glucoside, and luteolin-4-*O*-glucoside, cynaroside and cynarotrioside.
- **Essential oil:** Consisting mainly of β -selinene and caryophyllene.
- **Phytosterols:** Taraxasterol.

Milk thistle (3,4,9-11)

- **Flavonolignans:** Silymarin mixture mainly (silybin A, silybin B, isosilybin A, isosilybin B, silychristin, isosilychristin, silydianin).
- **Flavonoids:** Taxifolin, apigenin, kaempferol and their derivatives.
- **Fixed oil:** Linoleic, oleic, palmitic and stearic acids.
- **Sterols:** Tocopherol (vitamin E) and phospholipids.
- **Others:** Mucilage, sugars, amines and saponins.

peppermint

- **Essential oils:** Menthol, menthone, menthyl acetate, menthofuran, and 1,8cineole (eucalyptol) (12).



- **Flavonoids:** Luteolin, luteolin-7-O-glucoside, naringenin-7-O-glucoside, isorhoifolin, eriodictyol, eriocitrin glycoside and apigenin (13).

4. Medicinal Uses (Indications)

- A) Symptomatic treatment of digestive disorders such as dyspepsia, flatulence, minor spasms of the gastrointestinal tract, abdominal pain and irritable bowel syndrome, gastritis and indigestion.
- B) Support the liver function, after serious conditions have been excluded by physician
- C) Increase bile flow (Choleretic)

5. Herbal preparations correlated to medicinal use

Combination artichoke dry extract, milk thistle dry extract, peppermint dry extract and Magnesium.

Herbal preparations are in 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:

Combination of 100-200 mg of artichoke dry extract, 62.5-125 mg of milk thistle dry extract, 25-50 mg of peppermint dry extract and 24.129-48.258 mg Magnesium, 3 times daily.

Duration of use:

- If the symptoms persist longer than 2 weeks during the use of the medicinal product, a doctor or a pharmacist should be consulted.
- It is possibly safe when taken as a medicine for up to 12 weeks.

Method of administration: Oral use.

7. Contraindications

- Hypersensitivity to active substances and to other plants of the same families.



- Obstruction of bile duct (1,14,15).
- Patients with gastro oesophageal reflux (heartburn) because it can worsen the case (16).
- Hormone-sensitive conditions such as breast, uterine and ovarian cancers, endometriosis or uterine fibroids (17,18).

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 cholangitis, gallstones and any other biliary disorders requires medical supervision and advice (14-16,19-21)
- The use in children under 18 years of age is not recommended (20, 22-23).
- Use cautiously in hepatic or renal diseases (20).
- If icterus or a change in colour of urine or stool appears, a doctor should be consulted immediately (23).

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

- Possible interaction with coumarin-type anticoagulants (1).
- The product may decrease blood glucose, taking it along with diabetes medications might cause blood sugar to drop too low (20,24).

10. Fertility, pregnancy and lactation

- Safety during pregnancy and lactation has not been established. In the absence of sufficient data, the use during pregnancy and lactation is not recommended (14,16). (17,18,23)
- No fertility data available

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.

12. Undesirable effects

- Gastrointestinal complaints included mild diarrhoea, accompanied by abdominal cramps, upper abdominal pain, nausea, and heartburn (3,14,25).
- Anorexia, increased indigestion with hiatal hernia, exacerbation of biliary colic & bronchospasm (20).
- If adverse reactions occur, a doctor or a pharmacist should be consulted.

13. Overdose

No case of overdose has been reported.

14. Relevant biological activities

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

15. Additional information

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16. Date of compilation/last revision

20/04/2026



References

1.	WHO monographs on selected medicinal plants (2006). Monographs on selected medicinal plants, 4 , 92-107.
2.	WHO monographs on selected medicinal plants (2002). Monographs on selected medicinal plants, 2 , 300-316.
3.	Barnes, J., Anderson, L. A. and Phillipson, J. D. (2007). Herbal Medicines, 3 rd edition. Published by the Pharmaceutical Press. ISBN 978 0 85369 623 0.
4.	Hassan, N. M. and Abdallah W. E. (2020). <i>Silybum marianum</i> (L.) Gaertn. In: Egyptian Encyclopedia of Wild Medicinal Plants, 10 , 8-33. Academy of Scientific Research and Technology, Cairo, Egypt.
5.	WHO monographs on selected medicinal plants (2002). Monographs on selected medicinal plants, 2 , 188-198, 199-205.
6.	Natural Health Product -Peppermint – <i>Mentha piperita</i> (2018). Health Canada, http://webprod.hc-sc.gc.ca/nhp/nd/bdipsn/monoReq.do?id=144
7.	ESCOP Monographs (2019). <i>Mentha piperita</i> folium- Peppermint Leaf. European Scientific Cooperative on Phytotherapy. Edited by Roberta Hutchins and Simon Mills. ISBN 978-1901964-66-0.
8.	El-Mesallamy, A. M. D., Abdel-Hamid, N., Srour, L. and Hussein, S. A. M. (2020). Identification of polyphenolic compounds and hepatoprotective activity of Artichoke (<i>Cynara scolymus</i> L.) edible part extracts in rats. <i>Egypt. J. Chem.</i> 63 , 6, 2273 – 2285.
9.	Kroll, D. J., Shaw, H. S. and Oberlies, N. H. (2007). Milk Thistle nomenclature: Why it matters in cancer research and pharmacokinetic studies. <i>Integrative Cancer Therapies</i> , 6 (2), 110–119.
10.	Graf , T. N., Cech , N. B., Polyak , S. J. and Oberlies , N. H. (2016). A validated UHPLC-tandem mass spectrometry method for quantitative analysis of flavonolignans in milk thistle (<i>Silybum marianum</i>) extracts. <i>J. Pharm. Biomed. Anal.</i> , 126 , 26-33.
11.	Chambers , C. S., Holečková , V., Petrásková , L., Biedermann , D., Valentová , K., Buchta , M. and Křen , V. (2017). The silymarin composition... and why does it matter? <i>Food Res. Int.</i> , 100 (3), 339-353.



هَيْئَةُ الدَّوَاءِ الْمَصْرِئِيَّةِ

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12.	Desam, N. R., Al-Rajab, A. J., Sharma, M., Mylabathula, M. M., Gowkanapalli, R. R. and Albratty, M. (2019). Chemical constituents, <i>in vitro</i> antibacterial and antifungal activity of <i>Mentha piperita</i> L. (peppermint) essential oils. <i>Journal of King Saud University - Science</i> , 31 (4), 528533.
13.	Brahmi, F., Khodir, M., Mohamed, C. and Pierre, D. (2017). Chemical composition and biological activities of <i>Mentha</i> species. <i>InTech</i> . doi: 10.5772/67291 https://doi.org/10.5772/67291 .
14.	European Union Herbal Monograph on <i>Cynara cardunculus</i> L. (syn. <i>Cynara scolymus</i> L.), folium (2017). EMA/HMPC/194014/2017. Committee on Herbal Medicinal Products (HMPC).
15.	http://webprod.hc-sc.gc.ca/nhpid-bdipsn/monoReq.do?id=101&lang=eng
16.	European Union Herbal Monograph on <i>Mentha x piperita</i> L., folium (2020). EMA/HMPC/572705/2014. Committee on Herbal Medicinal Products (HMPC).
17.	https://www.rxlist.com/consumer_milk_thistle_carduus_marianum/drugs-condition.htm
18.	https://www.webmd.com/vitamins/ai/ingredientmono-138/milk-thistle
19.	Braun, L. and Cohen, M. (2009). Herbs and natural Supplements: an Evidence-Based Guide. 3 rd ed., ISBN 9780729539104.
20.	Skidmore-Roth, L. (2010). Mosby's Handbook of Herbs & Natural Supplements. 4 th ed. ISBN 9780323057417.
21.	https://www.rxlist.com/consumer_artichoke_cynara_scolymuscynarin/drugs-condition.htm
22.	http://webprod.hc-sc.gc.ca/nhpid-bdipsn/monoReq.do?id=138&lang=eng
23.	European Union Herbal Monograph on <i>Silybum marianum</i> (L.) Gaertn., fructus (2018). EMA/HMPC/294187/2013. Committee on Herbal Medicinal Products (HMPC).
24.	https://www.webmd.com/vitamins/ai/ingredientmono-842/artichoke