

เอกสารอ้างอิง

1. Backer CA, Brink RCB. Flora of Java Vol. II Groningen: N.V. Wolters-Norrdhoff. 1965:641pp.
2. ชัยนนต์ พิเชียรสุนทร แม้นมาส ขวลิขิต วิเชียร จีรวงศ์. คำอธิบายตำราพระโอสถพระนารายณ์. กรุงเทพมหานคร: สำนักพิมพ์อมรินทร์; 2542
3. นันทวัน บุญยะประภัศร และคณะ. 2543. สมุนไพรไม้พุ่มบ้าน (4). กรุงเทพมหานคร: สำนักพิมพ์ ประชาชน; 2543.
4. กองผลิตภัณฑ์สมุนไพร. บัญชียาหลักแห่งชาติด้านสมุนไพร พ.ศ. 2566 ตามประกาศคณะกรรมการ พัฒนาระบบยาแห่งชาติ เรื่อง บัญชียาหลักแห่งชาติด้านสมุนไพร [อินเทอร์เน็ต]. นนทบุรี: สำนักงาน คณะกรรมการอาหารและยา; 2566 [เข้าถึงเมื่อ 14 ต.ค. 2568]. เข้าถึงได้จาก: <https://herbal.fda.moph.go.th/media.php?id=565337537405657088&name=2023-11-15%20ebook%20D3.pdf>
5. Qazi G, Bedi KL, Johri RK, et al. Extracts from cuminum seed as bioavailability bioefficacy enhancer for drugs and nutraceuticals. PCT Int Appl WO 2004 9,061 2004;25pp.
6. Iacobellis NS, Lo Cantore P, Capasso F, Senatore Fe. Antibacterial activity of *Cuminum cyminum* L. and *Carum carvi* L. essential oils. J Agric Food Chem. 2005;53(1):57-61.
7. Jirovetz L, Buchbauer G, Stoyanova AS, Georgiev EV, Damianova ST. Composition, quality control and antimicrobial activity of the essential oil of cumin (*Cuminum cyminum* L.) seeds from Bulgaria that had been stored for up to 36 years. IJFST. 2005;40(3):305-10.
8. Singh G, Marimuthu P, de Lampasona MP, Catalan CAN. *Cuminum cyminum*. L chemical constituents, antioxidant and antifungal studies on its volatile oil and acetone extract. Indian Perfumer. 2006;50(3):31-9.
9. Gachkar L, Yadegari D, Rezaei MB, Taghizadeh M, Astaneh SA, Rasooli I. Chemical and biological characteristics of *Cuminum cyminum* and *Rosmarinus officinalis* essential oils. Food Chem. 2007;102(3):898-904.
10. Derakhshan S, Sattari M, Bigdeli M. Effect of subinhibitory concentrations of cumin (*Cuminum cyminum* L.) seed essential oil and alcoholic extract on the morphology, capsule expression and urease activity of *Klebsiella pneumoniae*. Int J Antimicrob Agents. 2008;32(5):432-6.
11. Fakoor MH, Rasooli I. Pathogen control by antioxidative characteristics of *Cuminum cyminum* and *Rosmarinus officinalis* essential oils. Acta Horticulturae. 2008;786:125-36.
12. Lu Z, Feng D, Li W. Abstraction of essential oil from cumin and its scavenging capacity against the DPPH radical. Huaxue Yanjiu Yu Yingyong. 2008;20(5):647-51.
13. EL-Manylawi MA, Ali HFM 2009. Gas chromatography-mass spectroscopy analysis and evaluate cumin seeds and their essential oil as growth promoters of New Zeland White rabbits. Int J Agric Res. 2009;4(3):107-15.

14. Hajlaoui H, Mighri H, Noumi E, Snoussi M, Trabelsi N, Ksouri R, Bakhrouf A. Chemical composition and biological activities of Tunisian *Cuminum cyminum* L. essential oil: a high effectiveness against *Vibrio* spp. strains. *Food Chem Toxicol.* 2010;48(8-9):2186-92.
15. Oroojalian F, Kasra-Kermanshahi R, Azizi M, Bassami MR. Phytochemical composition of the essential oils from three Apiaceae species and their antibacterial effects on food-borne pathogens. *Food Chem.* 2010;120:765–70.
16. Yeom HJ, Kang JS, Kim GH, Park IK. Insecticidal and acetylcholine esterase inhibition activity of Apiaceae plant essential oils and their constituents against adults of German cockroach (*Blattella germanica*). *J Agric Food Chem.* 2012;60(29):7194-203.
17. Morovati A, Pourghassem Gargari B, Sarbakhsh P, Azari H, Lotfi-Dizaji L. The effect of cumin supplementation on metabolic profiles in patients with metabolic syndrome: A randomized, triple blind, placebo-controlled clinical trial. *Phytother Res.* 2019;33(4): 1182-90. doi: 10.1002/ptr.6313.
18. Goodarzi S, Tabatabaei MJ, Mohammad Jafari R, Shemirani F, Tavakoli S, Mofasseri M, et al. *Cuminum cyminum* fruits as source of luteolin-7-O-glucoside, potent cytotoxic flavonoid against breast cancer cell lines. *Nat Prod Res.* 2020;34(11):1602-6. doi: 10.1080/14786419.2018.1519824.
19. Ekhtelat M, Khalili Borujeni F, Siahpoosh A, Ameri A. Chemical composition and antibacterial effects of some essential oils individually and in combination with sodium benzoate against methicillin-resistant *Staphylococcus aureus* and *Yersinia enterocolitica*. *Vet Res Forum.* 2020;11(4):333-8. doi: 10.30466/vrf.2018.93152.2248.
20. Korinek M, Handoussa H, Tsai YH, Chen YY, Chen MH, Chiou ZW, et al. Anti-Inflammatory and antimicrobial volatile oils: Fennel and cumin inhibit neutrophilic inflammation via regulating calcium and MAPKs. *Front Pharmacol.* 2021;12:674095. doi: 10.3389/fphar.2021.674095.
21. Ishida M, Ohara R, Miyagawa F, Kikuzaki H, Nishi K, Onda H, et al. Umbelliferose isolated from *Cuminum cyminum* L. seeds inhibits antigen-induced degranulation in rat basophilic leukemia RBL-2H3 cells. *Molecules.* 2022a;27(13):4101. doi: 10.3390/molecules27134101.
22. Nouri A, Mofasseri M, Jahani R, Ghodrati M, Emam SMM, Ebadi MT. Phytochemical composition, hypnotic activity, and antinociceptive properties of cumin essential oil collected from various geographical regions. *Food Sci Nutr.* 2024;12(11):9025-34. doi: 10.1002/fsn3.4432.
23. Zare R, Heshmati F, Fallahzadeh H, Nadjarzadeh A. Effect of cumin powder on body composition and lipid profile in overweight and obese women. *Complement Ther Clin Pract.* 2014;20(4):297-301. doi: 10.1016/j.ctcp.2014.10.001.

24. Taghizadeh M, Memarzadeh MR, Asemi Z, Esmailzadeh A. Effect of the *Cuminum cyminum* L. Intake on weight loss, metabolic profiles and biomarkers of oxidative stress in overweight subjects: A randomized double-blind placebo-controlled clinical trial. *Ann Nutr Metab.* 2015;66(2-3):117-24. doi: 10.1159/000373896.
25. Aslam M, Habib-Ur-Rehman, Tufail T, Almehmadi Y, Abualamah WA, Alzahrani AR, et al. Synergistic effects of a carbohydrate-controlled diet and *Cuminum cyminum* herbal infusion on metabolic syndrome. *Front Nutr.* 2025;12:1623478. doi: 10.3389/fnut.2025.1623478.
26. Omidvar S, Nasiri-Amiri F, Bakhtiari A, Begum K. Clinical trial for the management dysmenorrhea using selected spices. *Complement Ther Clin Pract.* 2019;36:34-8. doi: 10.1016/j.ctcp.2019.04.002.
27. Abd Ellah NH, Shaltout AS, Abd El Aziz SMM, Abbas AM, Abd El Moneem HG, Youness EM, et al. Vaginal suppositories of cumin seeds essential oil for treatment of vaginal candidiasis: Formulation, *in vitro*, *in vivo*, and clinical evaluation. *Eur J Pharm Sci.* 2021;157:105602. doi: 10.1016/j.ejps.2020.105602.
28. Amin EA, Ismail E, Mahboobeh R, Tabandeh S. The effect of *Cuminum cyminum* on the return of bowel motility after abdominal surgery: a triple-blind randomized clinical trial. *BMC Complement Med Ther.* 2024;24(1):254. doi: 10.1186/s12906-024-04530-1.
29. Farshad F, Sahebzad ES, Kheirkhah M, Khani MS, Azmoude E. Comparison of the effect of *Cuminum cyminum* and nettle oral drops on the breast milk sufficiency indicators in new mothers. *Sultan Qaboos Univ Med J.* 2024;24(2):209-15. doi: 10.18295/squmj.3.2024.022.
30. Surya D, Vijayakumar RS, Nalini N. Oxidative stress and the role of cumin (*Cuminum cyminum* Linn.) in alloxan-induced diabetic rats. *J Herbs Spices Med P.* 2005;11(3):127-39.
31. Thippeswamy, N. B.; Naidu, K. Akhilender. Antioxidant potency of cumin varieties-cumin, black cumin and bitter cumin-on antioxidant systems. *Eur Food Res Technol.* 2005;220(5-6):472-6.
32. Nickavar B, Abolhasani FS, Kamalinejad M, Reza Khani MR, Mojab F. Free radical scavenging activity of ethanolic extracts from some Apiacean species. *Planta med* 2006; 72.
33. Topal U, Sasaki M, Goto M, Otlés S. Chemical compositions and antioxidant properties of essential oils from nine species of Turkish plants obtained by supercritical carbon dioxide extraction and steam distillation. *Int J Food Sci Nutr.* 2008;59(7-8):619-34.
34. Nickavar B, Abolhasani FA. Screening of antioxidant properties of seven Umbelliferae fruits from Iran. *Pak J Pharm Sci.* 2009;22(1):30-5.

35. Bukhari SB, Iqbal S, Bhanger MI. Antioxidant potential of commercially available cumin (*Cuminum cyminum* Linn.) in Pakistan. *Int J Food Sci Nutr.* 2009;60(3):240-7.
36. Allahghadri T, Rasooli I, Owlia P, Nadooshan MJ, Ghazanfari T, Taghizadeh M, Astaneh SD. Antimicrobial property, antioxidant capacity, and cytotoxicity of essential oil from cumin produced in Iran. *J Food Sci.* 2010;75(2):H54-61.
37. Jagtap AG, Patil PB. Antihyperglycemic activity and inhibition of advanced glycation end product formation by *Cuminum cyminum* in streptozotocin induced diabetic rats. *Food Chem Toxicol.* 2010;48(8-9):2030-6.
38. El-Ghorab AH, Nauman M, Anjum FM, Hussain S, Nadeem M. A comparative study on chemical composition and antioxidant activity of ginger (*Zingiber officinale*) and cumin (*Cuminum cyminum*). *J Agric Food Chem.* 2010;58(14):8231-7.
39. Koppula S, Choi DK. *Cuminum cyminum* extract attenuates scopolamine-induced memory loss and stress-induced urinary biochemical changes in rats: a noninvasive biochemical approach. *Pharm Biol.* 2011;49(7):702-8.
40. Lu M, Yuan B, Zeng M, Chen J. Antioxidant capacity and major phenolic compounds of spices commonly consumed in China. *Food Res Int.* 2011;44:530-6.
41. Rebey IB, Zakhama N, Karoui IJ, Marzouk B. Polyphenol composition and antioxidant activity of cumin (*Cuminum cyminum* L.) seed extract under drought. *J Food Sci.* 2012;77(6):C734-9.
42. Mahnashi MH, Alyami BA, Alqahtani YS, Alqarni AO, Jan MS, Ayaz M, et al. Neuroprotective potentials of selected natural edible oils using enzyme inhibitory, kinetic and simulation approaches. *BMC Complement Med Ther.* 2021;21(1):248. doi: 10.1186/s12906-021-03420-0.
43. Bonjar S. Evaluation of antibacterial properties of some medicinal plants used in Iran. *J Ethnopharmacol* 2004;94:301-5.
44. Kamble VA, Patil SD. *In vitro* antibacterial activity of essential oils from important spices. *Indian Perfumer* 2007;51(2):31-5.
45. Mandal S, Mandal DM, Saha K, Pal NK. *In vitro* antibacterial activity of three Indian spices against methicillin-resistant *Staphylococcus aureus*. *Oman Med J.* 2011;26(5):319-23.
46. Pajohi MR, Tajik H, Farshid AA, Hadian M. Synergistic antibacterial activity of the essential oil of *Cuminum cyminum* L. seed and nisin in a food model. *J Appl Microbiol* 2011;110: 943-51.
47. Sharifi A, Mohammadzadeh A, Salehi TZ, Mahmoodi P, Nourian A. *Cuminum cyminum* L. essential oil: A promising antibacterial and antivirulence agent against multidrug-resistant

- Staphylococcus aureus*. Front Microbiol. 2021;12:667833. doi: 10.3389/fmicb.2021.667833.
48. Chatterjee S, Paul P, Chakraborty P, Das S, Sarker RK, Sarkar S, et al. Cuminaldehyde exhibits potential antibiofilm activity against *Pseudomonas aeruginosa* involving reactive oxygen species (ROS) accumulation: a way forward towards sustainable biofilm management. 3 Biotech. 2021;11(11):485. doi: 10.1007/s13205-021-03013-1.
 49. Ghannay S, Aouadi K, Kadri A, Snoussi M. *In vitro* and *in silico* screening of anti-*Vibrio* spp., antibiofilm, antioxidant and anti-quorum sensing activities of *Cuminum cyminum* L. volatile oil. Plants (Basel). 2022;11(17):2236. doi: 10.3390/plants11172236.
 50. Tanhaieian A, Pourgonabadi S, Akbari M, Mohammadipour HS. The effective and safe method for preventing and treating bacteria-induced dental diseases by herbal plants and a recombinant peptide. J Clin Exp Dent. 2020;12(6):e523-e532. doi:
 51. Kang E-J, Ryu I-H, Lee K-S. Purification and properties of HPS (halitosis prevention substance) isolated from cumin (*Cuminum cyminum* L.) seed. Food Sci Biotechnol. 2005;14(5):621-7.
 52. Alomar HA, Fathallah N, Abdel-Aziz MM, Ibrahim TA, Elkady WM. GC-MS Profiling, anti-*Helicobacter pylori*, and anti-inflammatory activities of three apiaceous fruits' essential oils. Plants (Basel). 2022;11(19):2617. doi: 10.3390/plants11192617.
 53. Aruna K, Sivaramakrishnan VM. Anticarcinogenic effects of some Indian plant products. Food Chem Toxicol. 1992;30(11):953-6.
 54. Gagandeep, Dhanalakshmi S, Méndiz E, Rao AR, Kale RK. Chemopreventive effects of *Cuminum cyminum* in chemically induced forestomach and uterine cervix tumors in murine model systems. Nutr Cancer. 2003;47(2):171-80.
 55. Nalini N, Sabitha K, Viswanathan P, Menon VP. Spices and glycoprotein metabolism in experimental colon cancer rats. Med Sci Res. 1998b;26(11):781-4.
 56. Nalini N, Sabitha K, Viswanathan P, Menon VP. Influence of spices on the bacterial (enzyme) activity in experimental colon cancer. J Ethnopharmacol. 1998a;62:15-24.
 57. Nalini N, Manju V, Menon VP. Effect of spices on lipid metabolism in 1,2-dimethylhydrazine-induced rat colon carcinogenesis. J Med Food. 2006;9(2):237-45.
 58. Aruna K, Sivaramakrishnan VM. Anticarcinogenic effects of the essential oils from cumin, poppy and basil. Phytother Res. 1996;10:577-80.
 59. Jayakumar R, Kanthimathi MS. Dietary spices protect against hydrogen peroxide-induced DNA damage and inhibit nicotine-induced cancer cell migration. Food Chem. 2012; 134:1580–84.

60. Aqil F, Jeyabalan J, Munagala R, Ahmad I, Schultz DJ, Gupta RC. Cumin prevents 17β estradiol-associated breast cancer in ACI rats. *Int J Mol Sci.* 2021;22(12):6194. doi: 10.3390/ijms22126194.
61. Chandrasekaran R, Krishnan M, Chacko S, Gawade O, Hasan S, Joseph J, et al. Assessment of anticancer properties of cumin seed (*Cuminum cyminum*) against bone cancer. *Front Oncol.* 2023;13:1322875. doi: 10.3389/fonc.2023.1322875.
62. Roman-Ramos R, Flores-Saenz JL, Alarcon-Aguilar FJ. Anti-hyperglycemic effect of some edible plants. *J Ethnopharmacol* 1995;48(1):25-32.
63. Nomura Y, Arai Y, Shiomi N. Distribution and some properties of amylase in spices. *Food Sci Technol Res.* 1999;5(2):161-3.
64. Willatgamuwa SA, Platel K, Saraswathi G, Srinivasan K Antidiabetic influence of dietary cumin seeds (*Cuminum cyminum*) in streptozotocin induced diabetic rats. *Nutr Res.* 1998;18(1):131-42.
65. Dhandapani S, Subramanian VR, Rajagopal S, Namasivayam N. Hypolipidemic effect of *Cuminum cyminum* L. on alloxan-induced diabetic rats. *Pharmacol Res.* 2002;46(3):251-5.
66. Vador N, Jagtap AG, Damle A. Vulnerability of gastric mucosa in diabetic rats, its pathogenesis and amelioration by *Cuminum cyminum*. *Indian J Pharm Sci.* 2012;74(5): 387-96.
67. Patil SB, Takaliker SS, Joglekar MM, Haldavnekar VS, Arvindekar AU. Insulinotropic and β cell protective action of cuminaldehyde, cuminol and an inhibitor isolated from *Cuminum cyminum* in streptozotocin-induced diabetic rats. *Br J Nutr.* 2013:1-10.
68. Lee H-S. Cuminaldehyde: aldose reductase and α -glucosidase inhibitor derived from *Cuminum cyminum* L. seeds. *J Agric Food Chem.* 2005;53:2446-50.
69. Kim SY, Lee HS. Hyperglycemic and diabetic complication preventing composition containing cuminaldehyde. *Repub Korean Kongkae Taeho Kongbo.* KR2003090396 2003.
70. Lakshmanan G, Selvam R, Altemimi AB, Baldelli A, Bharathi AR, Gopalakrishnan B, et al. Phytochemical screening of ethanolic extracts of *Cuminum cyminum* L. seeds along with the evaluation of antidiabetic properties by molecular docking approach. *Nat Prod Res.* 2023;37(4):681-6. doi: 10.1080/14786419.2022.2078973.
71. Kumar PA, Reddy PY, Srinivas PN, Reddy GB. Delay of diabetic cataract in rats by the antiglycating potential of cumin through modulation of α -crystallin chaperone activity. *J Nutr Biochem.* 2009;20(7):553-62.
72. Sayyah M, Peirovi A, Kamalinejad M. Anti-nociceptive effect of the fruit essential oil of *Cuminum cyminum* L. in rat. *Iran Biomed J.* 2002a;6(4):141-5.

73. Koohsari S, Sheikholeslami MA, Parvardeh S, Ghafghazi S, Samadi S, Poul YK, et al. Antinociceptive and antineuropathic effects of cuminaldehyde, the major constituent of *Cuminum cyminum* seeds: Possible mechanisms of action. *J Ethnopharmacol.* 2020;255:112786. doi: 10.1016/j.jep.2020.112786.
74. Sheikholeslami MA, Ghafghazi S, Parvardeh S, Koohsari S, Aghajani SH, Pouriran R, et al. Analgesic effects of cuminic alcohol (4-isopropylbenzyl alcohol), a monocyclic terpenoid, in animal models of nociceptive and neuropathic pain: Role of opioid receptors, L-arginine/NO/cGMP pathway, and inflammatory cytokines. *Eur J Pharmacol.* 2021;900:174075. doi: 10.1016/j.ejphar.2021.174075.
75. Boskabady MH, Kianai S, Azizi H. Relaxant effect of *Cuminum cyminum* on guinea pig tracheal chains and its possible mechanism(s). *Indian J Pharmacol.* 2005;37:111-5.
76. Ishida M, Miyagawa F, Nishi K, Sugahara T. Aqueous extract from *Cuminum cyminum* L. seed alleviates ovalbumin-induced allergic rhinitis in mouse via balancing of helper T cells. *Foods.* 2022b;11(20):3224. doi: 10.3390/foods11203224.
77. Janahmadi M, Niazi F, Danyali S, Kamalinejad M. Effects of the fruit essential oil of *Cuminum cyminum* Linn. (Apiaceae) on pentylenetetrazol-induced epileptiform activity in F1 neurones of *Helix aspersa*. *J Ethnopharmacol.* 2006;104:278–2.
78. Sayyah M, Mahboubi A, Kamalinejad M. Anticonvulsant effect of the fruit essential oil of *Cuminum cyminum* in mice. *Pharm Biol.* 2002b;40(6):478-80.
79. Hosseinzadeh H, Ramezani M, Fadishei M, Basirat M. Anticonvulsant effects of *Cuminum cyminum* L. seed extracts and essential oil in mice. *Faslnameh-i Giyahan-i Daruyi* 2002;1(2):9-14.
80. Venkatesh V, Sharma JD, Kamal Raka. A comparative study of effect of alcoholic extracts of *Sapindus emarginatus*, *Terminalia belerica*, *Cuminum cyminum* and *Allium cepa* on reproductive organs of male albino rats. *Asian J Exp Sci.* 2002;16(1&2):51-63.
81. Gupta RS, Kachhawa JBS, Saxena P. Reversible contraceptive effect of isolated fractions of *Cuminum cyminum* (Linn.) seed extract on reproductive functions of male rats. *Planta Med.* 2008;9(74):PA123.
82. Gupta RS, Saxena P, Gupta R, Kachhawa JBS. Evaluation of reversible contraceptive activities of *Cuminum cyminum* in male albino rats. *Contraception* 2011;84:98-107.
83. Jagtap A, Shirke S, Jadhav S. Pharmacological evaluation of *Cuminum cyminum* for estrogenic activity. *Proceedings of The Physiological Society, Life Sciences 2007 Proc Life Sciences*, PC568.
84. Patil SR, Patil MB. Evaluation of estrogenic activity of various extracts of *Cuminum cyminum* seeds in female rats. *JCTR.* 2012;12(1):3055-60.

85. Shirke SS, Jadhav SR, Jagtap AG. Methanolic extract of *Cuminum cyminum* inhibits ovariectomy-induced bone loss in rats. *Exp Biol Med*. 2008;233(11):1403-10.
86. Lee H, Song Y, Park YH, Uddin MS, Park JB. Evaluation of the effects of *Cuminum cyminum* on cellular viability, osteogenic differentiation and mineralization of human bone marrow-derived stem cells. *Medicina (Kaunas)*. 2021;57(1):38. doi: 10.3390/medicina57010038.
87. Aruna K, Rukkumani R, Varma PS, Menon VP. Therapeutic role of *Cuminum cyminum* on ethanol and thermally oxidized sunflower oil induced toxicity. *Phytother Res*. 2005b; 19(5):416-21.
88. Aruna K, Rukkumani R, Varma PS, Menon VP. Role of *Cuminum cyminum* on ethanol and preheated sunflower oil induced lipid peroxidation. *J Herbs Spices Med Plants*. 2005a; 11(4):103-14.
89. Elhabib EM, Homeida MMA, Adam SEI. Effect of combined paracetamol and *Cuminum cyminum* or *Nigella sativa* use in wistar rats. *Pharmacol Toxicol*. 2007;2(7):653-9.
90. Miah P, Mohona SBS, Rahman MM, Subhan N, Khan F, Hossain H, et al. Supplementation of cumin seed powder prevents oxidative stress, hyperlipidemia and non-alcoholic fatty liver in high fat diet fed rats. *Biomed Pharmacother*. 2021;141:111908. doi: 10.1016/j.biopha.2021.111908.
91. Mahesh CM, Gowda KPS, Gupta AK. Protective action of *Cuminum cyminum* against gentamicin-induced nephrotoxicity. *J Pharmacy Res* 2010;3:753-7. (485386)
92. Omari Z, Kazunori S, Sabti M, Bejaoui M, Hafidi A, Gadhi C, et al. Dietary administration of cumin-derived cuminaldehyde induce neuroprotective and learning and memory enhancement effects to aging mice. *Aging (Albany NY)*. 2021;13(2):1671-85. doi: 10.18632/aging.202516.
93. Haroun EM, Mahmoud OM, Adam SE. Effect of feeding *Cuminum cyminum* fruits, *Thymus vulgaris* leaves or their mixture to rats. *Vet Hum Toxicol*. 2002;44(2):67-9.
94. Dhar ML, Dhar MM, Dhawan BN, Mehrotra BN, Ray C. Screening of Indian plants for biological activity: Part I. *Indian J Exp Biol*. 1968;6:232-47.
95. Shah AH, Qureshi S, Tariq M, Ageel AM. Toxicity studies on six plants used in the traditional Arab system of medicine. *Phytother Res*. 1989;3(1):25-9.
96. Vasudevan K, Vembar S, Veeraraghavan K, Haranath PS. Influence of intragastric perfusion of aqueous spice extracts on acid secretion in anesthetized albino rats. *Indian J Gastroenterol*. 2000;19:53-6.
97. DerMarderosian A (ed). *The review of natural products*. 5th ed. St. Louis, Missouri: Facts and Comparisons, 2008.

98. Sambaiah K, Srinivasan K. Influence of spices and spice principles on hepatic mixed function oxygenase system in rats. *Indian J Biochem Biophys.* 1989;26(4):254-8.
99. Sachin BS, Sharma SC, Sethi S, et al. Herbal modulation of drug bioavailability: enhancement of rifampicin levels in plasma by herbal products and a flavonoid glycoside derived from *Cuminum cyminum*. *Phytother Res.* 2007;21(2):157-63.
100. Haghparast A, Shams J, Khatibi A, Alizadeh AM, Kamalinejad M. Effects of the fruit essential oil of *Cuminum cyminum* Linn. (Apiaceae) on acquisition and expression of morphine tolerance and dependence in mice. *Neurosci Lett.* 2008;440(2):134-9.
101. Khatibi A, Haghparast A, Shams J, Dianati E, Komaki A, Kamalinejad M. Effects of the fruit essential oil of *Cuminum cyminum* L. on the acquisition and expression of morphine-induced conditioned place preference in mice. *Neurosci Lett.* 2008;448(1):94-8.
102. Kermani M, Azizi P, Haghparast A. The role of nitric oxide in the effects of cumin (*Cuminum cyminum* L.) fruit essential oil on the acquisition of morphine-induced conditioned place preference in adult male mice. *Chin J Integr Med.* 2012;1-6.