Dong Quai

url: https://medlineplus.gov/druginfo/natural/936.html  
  
  
Dong Quai  
What is it?  
Dong quai (Angelica sinensis) is a plant that has been used for a variety of conditions, with little evidence. It may be unsafe when too much is consumed.  
  
  
Dong quai is a member of the same plant family as parsley, celery, and carrots. It's popular in Chinese medicine for female health concerns. The root might affect estrogen and other hormones.   
  
People commonly use dong quai for menopausal symptoms, menstrual cramps, migraine, and many other conditions, but there is no good scientific evidence to support these uses.  
  
  
How effective is it?  
There is interest in using dong quai for a number of purposes, but there isn't enough reliable information to say whether it might be helpful.  
  
  
Is it safe?  
When taken by mouth: Dong quai is possibly safe when taken for up to 6 months. It's been safely used in combination with other ingredients in doses up to 150 mg daily. It might make the skin extra sensitive to sunlight. Common side effects include burping, gas, and high blood pressure.  
  
  
Taking dong quai in higher doses for more than 6 months is possibly unsafe. Dong quai contains chemicals that might cause cancer.  
When applied to the skin: There isn't enough reliable information to know if dong quai is safe or what the side effects might be.  
  
Special precautions & warnings:  
Pregnancy: Taking dong quai by mouth during pregnancy is possibly unsafe for the baby. Dong quai seems to affect the uterus. Some research suggests that taking dong quai with other herbs during the first 3 months of pregnancy can increase the risk of birth defects. Do not use dong quai if you are pregnant.  
Breast-feeding: There isn't enough reliable information to know if dong quai is safe to use when breast-feeding. Stay on the safe side and avoid use.  
Bleeding disorders. Dong quai might slow blood clotting and increase the chance of bruising and bleeding in people with bleeding disorders.  
Hormone-sensitive conditions such as breast cancer, uterine cancer, ovarian cancer, endometriosis, or uterine fibroids: Dong quai might act like estrogen. If you have any condition that might be made worse by estrogen, don't use dong quai.  
Surgery: Dong quai might slow blood clotting. It might increase the risk of bleeding during and after surgery. Stop taking dong quai at least 2 weeks before a scheduled surgery.  
  
  
Are there interactions with medications?  
MajorDo not take this combination.Warfarin (Coumadin)Warfarin is used to slow blood clotting. Dong quai might also slow blood clotting. Taking dong quai along with warfarin might increase the risk of bruising and bleeding. Be sure to have your blood checked regularly. The dose of your warfarin might need to be changed.ModerateBe cautious with this combination.EstrogensDong quai might act like the hormone estrogen. When taken together, dong quai might increase the risk of estrogen side effects.Medications that slow blood clotting (Anticoagulant / Antiplatelet drugs)Dong quai might slow blood clotting. Taking dong quai along with medications that also slow blood clotting might increase the risk of bruising and bleeding.  
  
  
Are there interactions with herbs and supplements?  
Herbs and supplements that might slow blood clottingDong quai might slow blood clotting and increase the risk of bleeding. Taking it with other supplements with similar effects might increase the risk of bleeding in some people. Examples of supplements with this effect include garlic, ginger, ginkgo, nattokinase, and Panax ginseng.  
  
  
Are there interactions with foods?  
There are no known interactions with foods.  
  
  
How is it typically used?  
Dong quai is most often used in combination products. There isn't enough reliable information to know what an appropriate dose of dong quai might be. Keep in mind that natural products are not always necessarily safe and dosages can be important. Be sure to follow relevant directions on product labels and consult a healthcare professional before using.  
  
  
Other names  
Angelica China, Angelica sinensis, Angelica polymorpha var. sinensis, Angelicae Gigantis Radix, Ang lique Chinoise, Ang lique de Chine, Chinese Angelica, Dang Gui, Danggui, Danguia, Dang Gui Shen, Dang Gui Tou, Dang Gui Wei, Don Quai, Female Ginseng, Kinesisk Kvan, Ligustilides, Radix Angelicae Gigantis, Radix Angelicae Sinensis, Tang Kuei, Tan Kue Bai Zhi, Tanggwi, Toki.  
  
  
Methodology  
  
 To learn more about how this article was written, please see the Natural Medicines Comprehensive Database methodology.   
   
  
  
References  
Zhang Y, Gu L, Xia Q, Tian L, Qi J, Cao M. Radix Astragali and Radix Angelicae Sinensis in the Treatment of Idiopathic Pulmonary Fibrosis: A Systematic Review and Meta-analysis. Front Pharmacol. 2020 Apr 30;11:415. View abstract.  
Fung FY, Wong WH, Ang SK, et al. A randomized, double-blind, placebo- controlled study on the  
anti-haemostatic effects of Curcuma longa, Angelica sinensis and Panax ginseng. Phytomedicine. 2017;32:88-96. View abstract.  
Wei-An Mao, Yuan-Yuan Sun, Jing-Yi Mao, et al. Inhibitory Effects of Angelica Polysaccharide on Activation of Mast Cells. Evid Based Complement Alternat Med 2016;2016:6063475 doi:10.1155/2016/6063475. View abstract.  
 Hudson TS, Standish L, Breed C, and et al. Clinical and endocrinological effects of a menopausal botanical formula. J Naturopathic Med 1998;7:73-77.  
 Dantas SM. Menopausal synptoms and alternative medicine. Prim Care Update OB/Gyn 1999;6:212-220.  
 Napoli M. Soy & dong quai for hot flashes: latest studies. HealthFacts 1998;23:5.  
 Jingzi LI, Lei YU, Ningjun LI, and et al. Astragulus mongholicus and Angelica sinensis compound alleviates nephrotic hyperlipidemia in rats. Chinese Medical Journal 2000;113:310-314.  
 Yan, S., Qiao, G., Liu, Z., Liu, K., and Wang, J. Effect of the Oil of Angelica sinensis on the Contractile Function of Isolated Uterine Smooth Muscle of Mice. Chinese Traditional and Herbal Drugs 2000;31:604-606.  
 Wang, Y. and Zhu, B. [The effect of angelica polysaccharide on proliferation and differentiation of hematopoietic progenitor cell]. Zhonghua Yi Xue.Za Zhi 1996;76:363-366.  
 Wilbur P. The phyto-oestrogen debate. European Journal of Herbal Medicine 1996;2:20-26.  
 Xue JX, Jiang Y, and Yan YQ. Effect and mechanism of antiplatelet aggregation of Cyperus rotundus, Ligusticum chuanxiong and Paeonia lactiflora in combination with Astragalus membranaceus and Angelica sinensis. Journal of China Pharmaceutical University 1994;25:39-43.  
 Goy SY and Loh KC. Gynaecomastia and the herbal tonic "Dong Quai". Singapore Medical Journal 2001;42:115-116.  
 Eagon PK, Elm MS, Hunter DS, and et al. Medicinal herbs: modulation of estrogen action. Era of Hope Mtg, Dept Defense, Breast Cancer Res Prog, June 8-11 2000;  
 No J. Re: dong quai monograph. American Botanical council 1998;1.  
 Qi-bing M, Jing-yi T, and Bo C. Advances in the pharmacological studies of radix Angelica sinensis (Oliv) diels (Chinese danggui). Chinese Med J 1991;104:776-781.  
 Roberts H. Natural therapy in menopause. New Ethics Journal 1999;15-18.  
 Israel, D. and Youngkin, E. Q. Herbal therapies for perimenopausal and menopausal complaints. Pharmacotherapy 1997;17:970-984. View abstract.  
 Kotani, N., Oyama, T., Sakai, I., Hashimoto, H., Muraoka, M., Ogawa, Y., and Matsuki, A. Analgesic effect of a herbal medicine for treatment of primary dysmenorrhea--a double-blind study. Am.J Chin Med 1997;25:205-212. View abstract.  
 Hsu, H. Y. and Lin, C. C. A preliminary study on the radioprotection of mouse hematopoiesis by dang-gui-shao-yao-san. J Ethnopharmacol. 1996;55:43-48. View abstract.  
 Shaw, C. R. The perimenopausal hot flash: epidemiology, physiology, and treatment. Nurse Pract. 1997;22:55-56. View abstract.  
 Raman, A., Lin, Z. X., Sviderskaya, E., and Kowalska, D. Investigation of the effect of Angelica sinensis root extract on the proliferation of melanocytes in culture. J Ethnopharmacol. 1996;54(2-3):165-170. View abstract.  
 Chou, C. T. and Kuo, S. C. The anti-inflammatory and anti-hyperuricemic effects of Chinese herbal formula danggui-nian-tong-tang on acute gouty arthritis: a comparative study with indomethacin and allopurinol. Am.J Chin Med 1995;23(3-4):261-271. View abstract.  
 Zhao, L., Zhang, Y., and Xu, Z. X. [Clinical effect and experimental study of xijian tongshuan pill]. Zhongguo Zhong.Xi.Yi.Jie.He.Za Zhi. 1994;14:71-3, 67. View abstract.  
 Sung, C. P., Baker, A. P., Holden, D. A., Smith, W. J., and Chakrin, L. W. Effect of extracts of Angelica polymorpha on reaginic antibody production. J Nat Prod 1982;45:398-406. View abstract.  
 Kumazawa, Y., Mizunoe, K., and Otsuka, Y. Immunostimulating polysaccharide separated from hot water extract of Angelica acutiloba Kitagawa (Yamato tohki). Immunology 1982;47:75-83. View abstract.  
 Tu, J. J. Effects of radix Angelicae sinensis on hemorrheology in patients with acute ischemic stroke. J Tradit.Chin Med 1984;4:225-228. View abstract.  
 Li, Y. H. [Local injection of angelica sinensis solution for the treatment of sclerosis and atrophic lichen of the vulva]. Zhonghua Hu Li Za Zhi 4-5-1983;18:98-99. View abstract.  
 Tanaka, S., Ikeshiro, Y., Tabata, M., and Konoshima, M. Anti-nociceptive substances from the roots of Angelica acutiloba. Arzneimittelforschung. 1977;27:2039-2045. View abstract.  
 Weng, X. C., Zhang, P., Gong, S. S., and Xiai, S. W. Effect of immuno-modulating agents on murine IL-2 production. Immunol.Invest 1987;16:79-86. View abstract.  
 Sun, R. Y., Yan, Y. Z., Zhang, H., and Li, C. C. Role of beta-receptor in the radix Angelicae sinensis attenuated hypoxic pulmonary hypertension in rats. Chin Med J (Engl.) 1989;102:1-6. View abstract.  
 Okuyama, T., Takata, M., Nishino, H., Nishino, A., Takayasu, J., and Iwashima, A. Studies on the antitumor-promoting activity of naturally occurring substances. II. Inhibition of tumor-promoter-enhanced phospholipid metabolism by umbelliferous materials. Chem.Pharm Bull.(Tokyo) 1990;38:1084-1086. View abstract.  
 Yamada, H., Komiyama, K., Kiyohara, H., Cyong, J. C., Hirakawa, Y., and Otsuka, Y. Structural characterization and antitumor activity of a pectic polysaccharide from the roots of Angelica acutiloba. Planta Med 1990;56:182-186. View abstract.  
 Zuo, A. H., Wang, L., and Xiao, H. B. [Research progress studies on pharmacology and pharmacokinetics of ligustilide]. Zhongguo Zhong.Yao Za Zhi. 2012;37:3350-3353. View abstract.  
 Ozaki, Y. and Ma, J. P. Inhibitory effects of tetramethylpyrazine and ferulic acid on spontaneous movement of rat uterus in situ. Chem Pharm Bull (Tokyo) 1990;38:1620-1623. View abstract.  
 Zhuang, S. R., Chiu, H. F., Chen, S. L., Tsai, J. H., Lee, M. Y., Lee, H. S., Shen, Y. C., Yan, Y. Y., Shane, G. T., and Wang, C. K. Effects of a Chinese medical herbs complex on cellular immunity and toxicity-related conditions of breast cancer patients. Br.J.Nutr. 2012;107:712-718. View abstract.  
 Shi, Y. M. and Wu, Q. Z. [Idiopathic thrombocytopenic purpura in children treated with replenishing qi and tonifying kidney and the changes in thrombocyte aggregative function]. Zhong.Xi.Yi.Jie.He.Za Zhi. 1991;11:14-6, 3. View abstract.  
 Mei, Q. B., Tao, J. Y., and Cui, B. Advances in the pharmacological studies of radix Angelica sinensis (Oliv) Diels (Chinese Danggui). Chin Med J (Engl.) 1991;104:776-781. View abstract.  
 Zhuang, X. X. [Protective effect of Angelica injection on arrhythmia during myocardial ischemia reperfusion in rat.]. Zhong.Xi.Yi.Jie.He.Za Zhi. 1991;11:360-1, 326. View abstract.  
 Kan, W. L., Cho, C. H., Rudd, J. A., and Lin, G. Study of the anti-proliferative effects and synergy of phthalides from Angelica sinensis on colon cancer cells. J Ethnopharmacol. 10-30-2008;120:36-43. View abstract.  
 Cao, W., Li, X. Q., Hou, Y., Fan, H. T., Zhang, X. N., and Mei, Q. B. [Structural analysis and anti-tumor activity in vivo of polysaccharide APS-2a from Angelica sinensis]. Zhong.Yao Cai. 2008;31:261-266. View abstract.  
 Hann, S. K., Park, Y. K., Im, S., and Byun, S. W. Angelica-induced phytophotodermatitis. Photodermatol.Photoimmunol.Photomed. 1991;8:84-85. View abstract.  
 Circosta, C., Pasquale, R. D., Palumbo, D. R., Samperi, S., and Occhiuto, F. Estrogenic activity of standardized extract of Angelica sinensis. Phytother.Res. 2006;20:665-669. View abstract.  
 Haimov-Kochman, R. and Hochner-Celnikier, D. Hot flashes revisited: pharmacological and herbal options for hot flashes management. What does the evidence tell us? Acta Obstet Gynecol.Scand 2005;84:972-979. View abstract.  
 Wang, B. H. and Ou-Yang, J. P. Pharmacological actions of sodium ferulate in cardiovascular system. Cardiovasc.Drug Rev 2005;23:161-172. View abstract.  
 Tsai, N. M., Lin, S. Z., Lee, C. C., Chen, S. P., Su, H. C., Chang, W. L., and Harn, H. J. The antitumor effects of Angelica sinensis on malignant brain tumors in vitro and in vivo. Clin Cancer Res 5-1-2005;11:3475-3484. View abstract.  
 Huntley, A. Drug-herb interactions with herbal medicines for menopause. J Br Menopause.Soc 2004;10:162-165. View abstract.  
 Fugate, S. E. and Church, C. O. Nonestrogen treatment modalities for vasomotor symptoms associated with menopause. Ann Pharmacother 2004;38:1482-1499. View abstract.  
 Dong, W. G., Liu, S. P., Zhu, H. H., Luo, H. S., and Yu, J. P. Abnormal function of platelets and role of angelica sinensis in patients with ulcerative colitis. World J Gastroenterol 2-15-2004;10:606-609. View abstract.  
 Kupfersztain, C., Rotem, C., Fagot, R., and Kaplan, B. The immediate effect of natural plant extract, Angelica sinensis and Matricaria chamomilla (Climex) for the treatment of hot flushes during menopause. A preliminary report. Clin Exp Obstet.Gynecol 2003;30:203-206. View abstract.  
 Zheng, L. [Short-term effect and the mechanism of radix Angelicae on pulmonary hypertension in chronic obstructive pulmonary disease]. Zhonghua Jie He He Hu Xi Za Zhi 1992;15:95-97, 127. View abstract.  
 Xu, J. Y., Li, B. X., and Cheng, S. Y. [Short-term effects of Angelica sinensis and nifedipine on chronic obstructive pulmonary disease in patients with pulmonary hypertension]. Zhongguo Zhong.Xi.Yi.Jie.He.Za Zhi. 1992;12:716-8, 707. View abstract.  
 Russell, L., Hicks, G. S., Low, A. K., Shepherd, J. M., and Brown, C. A. Phytoestrogens: a viable option? Am J Med Sci 2002;324:185-188. View abstract.  
 Scott, G. N. and Elmer, G. W. Update on natural product--drug interactions. Am J Health Syst.Pharm 2-15-2002;59:339-347. View abstract.  
 Xu, J. and Li, G. [Observation on short-term effects of Angelica injection on chronic obstructive pulmonary disease patients with pulmonary hypertension]. Zhongguo Zhong Xi Yi Jie He Za Zhi 2000;20:187-189. View abstract.  
 Ye, Y. N., Liu, E. S., Li, Y., So, H. L., Cho, C. C., Sheng, H. P., Lee, S. S., and Cho, C. H. Protective effect of polysaccharides-enriched fraction from Angelica sinensis on hepatic injury. Life Sci 6-29-2001;69:637-646. View abstract.  
 Lee, S. K., Cho, H. K., Cho, S. H., Kim, S. S., Nahm, D. H., and Park, H. S. Occupational asthma and rhinitis caused by multiple herbal agents in a pharmacist. Ann.Allergy Asthma Immunol. 2001;86:469-474. View abstract.  
 Ye, Y. N., Liu, E. S., Shin, V. Y., Koo, M. W., Li, Y., Wei, E. Q., Matsui, H., and Cho, C. H. A mechanistic study of proliferation induced by Angelica sinensis in a normal gastric epithelial cell line. Biochem.Pharmacol. 6-1-2001;61:1439-1448. View abstract.  
 Bian, X., Xu, Y., Zhu, L., Gao, P., Liu, X., Liu, S., Qian, M., Gai, M., Yang, J., and Wu, Y. Prevention of maternal-fetal blood group incompatibility with traditional Chinese herbal medicine. Chin Med J (Engl.) 1998;111:585-587. View abstract.  
 Xiaohong, Y., Jing-Ping, O. Y., and Shuzheng, T. Angelica protects the human vascular endothelial cell from the effects of oxidized low-density lipoprotein in vitro. Clin.Hemorheol.Microcirc. 2000;22:317-323. View abstract.  
 Cho, C. H., Mei, Q. B., Shang, P., Lee, S. S., So, H. L., Guo, X., and Li, Y. Study of the gastrointestinal protective effects of polysaccharides from Angelica sinensis in rats. Planta Med 2000;66:348-351. View abstract.  
 Nambiar, S., Schwartz, R. H., and Constantino, A. Hypertension in mother and baby linked to ingestion of Chinese herbal medicine. West J Med 1999;171:152. View abstract.  
 Bradley, R. R., Cunniff, P. J., Pereira, B. J., and Jaber, B. L. Hematopoietic effect of Radix angelicae sinensis in a hemodialysis patient. Am.J Kidney Dis. 1999;34:349-354. View abstract.  
 Thacker, H. L. and Booher, D. L. Management of perimenopause: focus on alternative therapies. Cleve.Clin J Med 1999;66:213-218. View abstract.  
 Newton, K. M., Reed, S. D., Grothaus, L., Ehrlich, K., Guiltinan, J., Ludman, E., and Lacroix, A. Z. The Herbal Alternatives for Menopause (HALT) Study: background and study design. Maturitas 10-16-2005;52:134-146. View abstract.  
 Haranaka, K., Satomi, N., Sakurai, A., Haranaka, R., Okada, N., and Kobayashi, M. Antitumor activities and tumor necrosis factor producibility of traditional Chinese medicines and crude drugs. Cancer Immunol Immunother. 1985;20:1-5. View abstract.  
 Xu, R. S., Zong, X. H., and Li, X. G. [Controlled clinical trials of therapeutic effects of Chinese herbs promoting blood circulation and removing blood stasis on the treatment of reflex sympathetic dystrophy with type of stagnation of vital energy and blood stasis]. Zhongguo Gu.Shang 2009;22:920-922. View abstract.  
 Kelley, K. W. and Carroll, D. G. Evaluating the evidence for over-the-counter alternatives for relief of hot flashes in menopausal women. J.Am.Pharm.Assoc. 2010;50:e106-e115. View abstract.  
 Mazaro-Costa, R., Andersen, M. L., Hachul, H., and Tufik, S. Medicinal plants as alternative treatments for female sexual dysfunction: utopian vision or possible treatment in climacteric women? J.Sex Med. 2010;7:3695-3714. View abstract.  
 Wong, V. C., Lim, C. E., Luo, X., and Wong, W. S. Current alternative and complementary therapies used in menopause. Gynecol.Endocrinol. 2009;25:166-174. View abstract.  
 Cheema, D., Coomarasamy, A., and El Toukhy, T. Non-hormonal therapy of post-menopausal vasomotor symptoms: a structured evidence-based review. Arch Gynecol.Obstet 2007;276:463-469. View abstract.  
 Carroll, D. G. Nonhormonal therapies for hot flashes in menopause. Am Fam.Physician 2-1-2006;73:457-464. View abstract.  
 Low, Dog T. Menopause: a review of botanical dietary supplements. Am J Med 12-19-2005;118 Suppl 12B:98-108. View abstract.  
 Rock, E. and DeMichele, A. Nutritional approaches to late toxicities of adjuvant chemotherapy in breast cancer survivors. J Nutr 2003;133(11 Suppl 1):3785S-3793S. View abstract.  
 Huntley, A. L. and Ernst, E. A systematic review of herbal medicinal products for the treatment of menopausal symptoms. Menopause. 2003;10:465-476. View abstract.  
 Kang, H. J., Ansbacher, R., and Hammoud, M. M. Use of alternative and complementary medicine in menopause. Int.J Gynaecol.Obstet. 2002;79:195-207. View abstract.  
Burke BE, Olson RD, Cusack BJ. Randomized, controlled trial of phytoestrogen in the prophylactic treatment of menstrual migraine. Biomed Pharmacother 2002;56:283-8. View abstract.  
 He, Z. P., Wang, D. Z., Shi, L. Y., and Wang, Z. Q. Treating amenorrhea in vital energy-deficient patients with angelica sinensis-astragalus membranaceus menstruation-regulating decoction. J Tradit.Chin Med 1986;6:187-190. View abstract.  
 Liao, J. Z., Chen, J. J., Wu, Z. M., Guo, W. Q., Zhao, L. Y., Qin, L. M., Wang, S. R., and Zhao, Y. R. Clinical and experimental studies of coronary heart disease treated with yi-qi huo-xue injection. J Tradit.Chin Med 1989;9:193-198. View abstract.  
 Willhite, L. A. and O'Connell, M. B. Urogenital atrophy: prevention and treatment. Pharmacotherapy 2001;21:464-480. View abstract.  
Ellis GR, Stephens MR. Untitled (photograph and a brief case report). BMJ 1999;319:650.   
Rotem C, Kaplan B. Phyto-Female Complex for the relief of hot flushes, night sweats and quality of sleep: randomized, controlled, double-blind pilot study. Gynecol Endocrinol 2007;23:117-22. View abstract.  
Jalili J, Askeroglu U, Alleyne B, and Guyuron B. Herbal products that may contribute to hypertension. Plast.Reconstr.Surg 2013;131:168-173. View abstract.  
Lau CBS, Ho TCY, Chan TWL, Kim SCF. Use of dong quai (Angelica sinensis) to treat peri- and postmenopausal symptoms in women with breast cancer: is it appropriate? Menopause 2005;12:734-40. View abstract.  
Chuang CH, Doyle P, Wang JD, et al. Herbal medicines used during the first trimester and major congenital malformations: an analysis of data from a pregnancy cohort study. Drug Saf 2006;29:537-48. View abstract.  
Wang H, Li W, Li J, et al. The aqueous extract of a popular herbal nutrient supplement, Angelica sinensis, protects mice against lethal endotoxemia and sepsis. J Nutr 2006;136:360-5. View abstract.  
Monograph. Angelica sinensis (Dong quai). Altern Med Rev 2004;9:429-33. View abstract.  
Chang CJ, Chiu JH, Tseng LM, et al. Modulation of HER2 expression by ferulic acid on human breast cancer MCF7 cells. Eur J Clin Invest 2006;36:588-96. View abstract.  
Zhao KJ, Dong TT, Tu PF, et al. Molecular genetic and chemical assessment of radix Angelica (Danggui) in China. J Agric Food Chem 2003;51:2576-83. View abstract.  
Lu GH, Chan K, Leung K, et al. Assay of free ferulic acid and total ferulic acid for quality assessment of Angelica sinensis. J Chromatogr A 2005;1068:209-19. View abstract.  
Harada M, Suzuki M, Ozaki Y. Effect of Japanese Angelica root and peony root on uterine contraction in the rabbit in situ. J Pharmacobiodyn 1984;7:304-11. View abstract.  
Cheong JL, Bucknall R. Retinal vein thrombosis associated with a herbal phytoestrogen preparation in a susceptible patient. Postgrad Med J 2005;81:266-7.. View abstract.  
Liu J, Burdette JE, Xu H, et al. Evaluation of estrogenic activity of plant extracts for the potential treatment of menopausal symptoms. J Agric Food Chem 2001;49:2472-9.. View abstract.  
Hoult JR, Paya M. Pharmacological and biochemical actions of simple coumarins: natural products with therapeutic potential. Gen Pharmacol 1996;27:713-22.. View abstract.  
Choy YM, Leung KN, Cho CS, et al. Immunopharmacological studies of low molecular weight polysaccharide from Angelica sinensis. Am J Chin Med 1994;22:137-45. View abstract.  
Zhu DP. Dong Quai. Am J Chin Med 1987;15:117-25.. View abstract.  
Yim TK, Wu WK, Pak WF, et al. Myocardial protection against ischaemia-reperfusion injury by a Polygonum multiflorum extract supplemented 'Dang-Gui decoction for enriching blood', a compound formulation, ex vivo. Phytother Res 2000;14:195-9. View abstract.  
Kronenberg F, Fugh-Berman A. Complementary and alternative medicine for menopausal symptoms: a review of randomized, controlled trials. Ann Intern Med 2002;137:805-13.. View abstract.  
Shi M, Chang L, He G. [Stimulating action of Carthamus tinctorius L., Angelica sinensis (Oliv.) Diels and Leonurus sibiricus L. on the uterus]. Zhongguo Zhong Yao Za Zhi 1995;20:173-5, 192. View abstract.  
Amato P, Christophe S, Mellon PL. Estrogenic activity of herbs commonly used as remedies for menopausal symptoms. Menopause 2002;9:145-50. View abstract.  
Dr. Duke's Phytochemical and Ethnobotanical Databases. Available at: http://www.ars-grin.gov/duke/.  
Eagon PK, Elm MS, Hunter DS, et al. Medicinal herbs: modulation of estrogen action. Era of Hope Mtg, Dept Defense; Breast Cancer Res Prog, Atlanta, GA 2000;Jun 8-11.  
Heck AM, DeWitt BA, Lukes AL. Potential interactions between alternative therapies and warfarin. Am J Health Syst Pharm 2000;57:1221-7. View abstract.  
Hardy ML. Herbs of special interest to women. J Am Pharm Assoc 200;40:234-42. View abstract.  
Wang SQ, Du XR, Lu HW, et al. Experimental and clinical studies of Shen Yan Ling in treatment of chronic glomerulonephritis. J Tradit Chin Med 1989;9:132-4. View abstract.  
Page RL II, Lawrence JD. Potentiation of warfarin by dong quai. Pharmacotherapy 1999;19:870-6. View abstract.  
Choi HK, Jung GW, Moon KH, et al. Clinical study of SS-Cream in patients with lifelong premature ejaculation. Urology 2000;55:257-61. View abstract.  
Hirata JD, Swiersz LM, Zell B, et al. Does dong quai have estrogenic effects in postmenopausal women? A double-blind, placebo-controlled trial. Fertil Steril 1997;68:981-6. View abstract.  
Foster S, Tyler VE. Tyler's Honest Herbal: A Sensible Guide to the Use of Herbs and Related Remedies. 3rd ed., Binghamton, NY: Haworth Herbal Press, 1993.  
Newall CA, Anderson LA, Philpson JD. Herbal Medicine: A Guide for Healthcare Professionals. London, UK: The Pharmaceutical Press, 1996.  
Tyler VE. Herbs of Choice. Binghamton, NY: Pharmaceutical Products Press, 1994.  
Blumenthal M, ed. The Complete German Commission E Monographs: Therapeutic Guide to Herbal Medicines. Trans. S. Klein. Boston, MA: American Botanical Council, 1998.  
Monographs on the medicinal uses of plant drugs. Exeter, UK: European Scientific Co-op Phytother, 1997.