

### 本刊介绍 Intro

- [历史沿革](#)
- [基本信息](#)
- [所获奖项](#)
- [栏目设置](#)
- [引证报告](#)
- [顾问委员会](#)
- [编辑委员会](#)
- [刊务委员会](#)
- [编辑部](#)

### 投稿指南 Guide

- [投稿须知](#)
- [在线投稿](#)
- [稿件查询](#)
- [录用公告](#)

### 广告发行 Ad

- [订阅发行](#)
- [在线订阅](#)
- [广告刊登](#)

### 相关链接 Links

- [凌昌全名中医工作室](#)
- [长海医院中医科](#)
- [第二军医大学](#)
- [重庆维普科技期刊数据库](#)
- [国家自然科学基金委员会](#)
- [Google](#)
- [百度](#)
- [CONSORT](#)
- [第二军医大学中医系](#)
- [上海市中西医结合学会](#)

标题: [异黄酮的医用价值](#)

[\[HTM下载\]](#) [\[PDF下载\]](#) [\[英文版\]](#) [\[上一篇\]](#) [\[下一篇\]](#) [\[本期目次\]](#)

作者:

1. 杜宁 (上海第二医科大学附属瑞金医院伤科, 上海市伤骨科研究所 上海 200025 E-mail: [duning@vip.163.com](mailto:duning@vip.163.com))
2. 许勇 (上海第二医科大学附属瑞金医院伤科, 上海市伤骨科研究所 上海 200025)

期刊信息: 《中西医结合学报》2003年, 第1卷, 第4期, 第296-300页

DOI: 10.3736/jcim20030421

摘要: 异黄酮是广泛存在于豆类植物中的植物雌激素, 能够调整人体的内分泌功能, 防治妇女更年期综合征, 降低血脂, 减少冠心病的发生, 防治骨质疏松症, 抗癌, 并能止痛消肿。本文总结了近年来有关异黄酮医用价值研究的成果。

欢迎阅读《中西医结合学报》! 您是该文第 **1315** 位读者!

若需在您的论文中引用此文, 请按以下格式著录参考文献:

中文著录格式:	杜宁, 许勇. 异黄酮的医用价值. 中西医结合学报. 2003; 1(4): 296-300.
英文著录格式:	Du N, Xu Y. Medical value of isoflavones. J Chin Integr Med / Zhong Xi Yi Jie He Xue Bao. 2003; 1(4): 296-300.

参考文献:

1	Adlercreutz H, Mazur W. Phyto-oestrogens and Western diseases[J].Ann Med, 1997, 29(2): 95-120. .
2	Anthony MS, Clarkson TB, Bullock BC, et al. Soy protein versus soy phytoestrogens in the prevention of diet-induced coronary artery atherosclerosis of male cynomolgus monkeys[J].Arterioscler Thromb Vasc Biol, 1997, 17(11): 2524-2531. .
3	Crouse JR III, Terry JG, Morgan TM, et al. Soy protein containing isoflavones reduces plasma concentrations of lipids and lipoproteins[J].Circulation, 1998, 97: 816. .
4	Potter SM, Baum JA, Teng H, et al. Soy protein and isoflavones: their effects on blood lipids and bone density in postmenopausal women[J].Am J Clin Nutr, 1998, 68(6 suppl): 1375S-1379S. .
5	Anthony MS, Clarkson TB. Comparison of soy phytoestrogens and conjugated equine estrogens on atherosclerosis progression in postmenopausal monkeys[J].Circulation, 1998, 97: 829. .
6	Tikkanen MJ, Wahala K, Ojala S, et al. Effect of soybean phytoestrogen intake on low density lipoprotein oxidation resistance[J].Proc Natl Acad Sci USA, 1998, 95(6): 3106-3110. .
7	Makela S, Savolainen H, Aavik E, et al. Differentiation between vasculoprotective and uterotrophic effects of ligands with different binding affinities to estrogen receptors alpha and beta[J].Proc Natl Acad Sci USA, 1999, 96(12): 7077-7082. .
8	Nakashima S, Koike T, Nozawa Y. Genistein, a protein tyrosine kinase inhibitor, inhibits thromboxane A2-mediated human platelet responses[J].Mol Pharmacol, 1991, 39(4): 475-480. .

9	Schoene NW, Guidry CA. Dietary soy isoflavones inhibit activation of rat platelets[J].J Nutr Biochem, 1999, 10: 421-426. .
10	Nestel PJ, Yamashita T, Sasahara T, et al. Soy isoflavones improve systemic arterial compliance but not plasma lipids in menopausal and perimenopausal women [J].Arterioscler Thromb Vasc Biol, 1997, 17(12): 3392-3398. .
11	Washburn S, Burke GL, Morgan T, et al. Effect of soy protein supplementation on serum lipoproteins, blood pressure, and menopausal symptoms in perimenopausal women [J].Menopause, 1999, 6(1): 7-13. .
12	West SG, Stoney Ca M, Habash D L, et al. Soy supplements with phytoestrogens reduce blood pressure at rest and during stress in middle-aged men[A]. The fourth international symposium the role of soy in preventing and treating chronic disease[C]. San Diego, CA, November 4-7, 2001.
13	Yoon HK, Chen K, Baylink DJ, et al. Differential effects of two protein tyrosine kinase inhibitors, tyrphostin and genistein, on human bone cell proliferation as compared with differentiation[J].Calcif Tissue Int, 1998, 63(3): 243-249. .
14	Chen XW, Garner SC, Anderson JJ. Isoflavones regulate interleukin-6 and osteoprotegerin synthesis during osteoblast cell differentiation via an estrogen-receptor-dependent pathway[J].Biochem Biophys Res Commun, 2002, 295(2): 417-422. .
15	Gao YH, Yamaguchi M. Inhibitory effect of genistein on osteoclast-like cell formation in mouse marrow cultures[J].Biochem Pharmacol, 1999, 58(5): 767-772. .
16	Rassi CM, Lieberherr M, Chaumaz G, et al. Down-regulation of osteoclast differentiation by daidzein via caspase 3[J].J Bone Miner Res, 2002, 17(4): 630-638. .
17	Kajiya H, Okabe K, Okamoto F, et al. Protein tyrosine kinase inhibitors increase cytosolic calcium and inhibit actin organization as resorbing activity in rat osteoclasts[J].J Cell Physiol, 2000, 183(1): 83-90. .
18	Gao YH, Yamaguchi M. Suppressive effect of genistein on rat bone osteoclasts: apoptosis is induced through Ca <sup>2+</sup> signaling[J].Biol Pharm Bull, 1999, 22(8): 805-809. .
19	Anderson JJ, Ambrose WW. Orally dosed genistein from soy and prevention of cancellous bone loss in two ovariectomized rat models[J].J Nutr, 1995, 125(suppl): 783-799. .
20	Arjmandi BH, Alekel L, Hollis BW, et al. Dietary soybean protein prevents bone loss in an ovariectomized rat model of osteoporosis[J].J Nutr, 1996, 126(1): 161-167. .
21	Arjmandi BH, Birnbaum R, Goyal NV, et al. Bone-sparing effect of soy protein in ovarian hormone-deficient rats is related to its isoflavone content[J].Am J Clin Nutr, 1998, 68(6 suppl): 1364s-1368s. .
22	Ishida H, Uesugi T, Hirai K, et al. Preventive effects of the plant isoflavone, daidzein and genistein, on bone loss in ovariectomized rats fed a calcium-deficient diet[J].Biol Pharm Bull, 1998, 21(1): 62-66. .
23	Fanti O, Faugere MC, Gang Z, et al. Systemic administration of genistein partially prevents bone loss in ovariectomized rats in a nonestrogen-like mechanism[J].Am Nutr, 1998, 68 (suppl): 1517-1522. .
24	Alekel DL, Germain AS, Peterson CT, et al. Isoflavone-rich soy protein isolate attenuates bone loss in the lumbar spine of perimenopausal women[J].Am J Clin Nutr, 2000, 72(3): 844-852. .
25	Olsen E L, Jensen JE, Kenneth DR, et al. Isoflavone-rich soymilk prevents bone loss in the lumbar spine of postmenopausal Women. A 2-y Study[A]. The fourth international symposium the role of soy in preventing and treating chronic disease[C]. San Diego, CA, November 4-7, 2001.
26	Mei J, Yeung SS, Kung AW. High dietary phytoestrogen intake is associated with higher bone mineral density in postmenopausal but not premenopausal women[J].J Clin Endocrinol Metab, 2001, 86(11): 5217-5221. .
27	Tang GWK. The climacteric of Chinese factory workers[J].Maturitas, 1994, 19(13): 177-182. .
28	Albertazzi P, Pansini F, Bonaccorsi G, et al. The effect of dietary soy supplementation on hot flushes[J].Obstet Gynecol, 1998, 91(1): 6-11. .
29	Upmalis D, Lobo R, Bradley L. Evaluation of the safety and efficacy of an oral soy extract in the treatment of vasomotor symptoms in menopausal women[J].Menopause, 1999, 6(-):

	327. .
30	Dalais FS, Rice GE, Wahlqvist ML, et al. Effects of dietary phytoestrogens in postmenopausal women[J].Climacteric, 1998, 1(2): 124-129. .
31	Kolonel LN. Variability in diet and its relation to risk in ethnic and migrant groups[J].Basic Life Sci, 1988, 43(-): 129-135. .
32	Akiyama T, Ishida J, Nakagawa S, et al. Genistein, a specific inhibitor of tyrosine specific protein kinases[J].J Biol Chem, 1987, 262(12): 5592-5595. .
33	Lamartiniere CA, Murrill WB, Manzillo PA, et al. Genistein alters the ontogeny of mammary gland development and protects against mammary cancer in rats[J].Proc Soc Exp Biol Med, 1997, 217(-): 358-364. .
34	Wei H, Wei L, Frankel K, et al. Inhibition of tumor promoter induced hydrogen peroxide formation in vitro and in vivo by genistein[J].Nutr Cancer, 1993, 20(1): 1-12. .
35	Fotsis T, Pepper M, Adlercreutz H, et al. Genistein, a dietary ingested isoflavonoid, inhibits cell proliferation and in vitro angiogenesis[J].J Nutr, 1995, 125(3 suppl): 790S-797S. .
36	Terson TG, Kim H, Barnes S. Genistein may inhibit the growth of human mammary epithelial (HME) cells by augmenting transforming growth factor beta (TGFb) signaling [J].Am J Clin Nutr, 1998, 68(suppl): 1527S (abstr). .
37	Lee HP, Gourley L, Duffy SW, et al. Dietary effects on breast cancer risk in Singapore [J].Lancet, 1991, 337(8751): 1197-1200. .
38	Peterson G, Barnes S. Genistein inhibition of the growth of human breast cancer cells independence from estrogen receptors and the multi-drug resistance gene[J].Biochem Biophys Res Commun, 1991, 179(1): 661-667. .
39	Zava DT, Duwe G. Estrogenic and antiproliferative properties of genistein and other flavonoids in human breast cancer cells in vitro[J].Nutr Cancer, 1997, 27(1): 31-40. .
40	Lamartiniere CA. Protection against breast cancer with genistein: a component of soy [J].Am J Clin Nutr, 2000, 71(6 suppl): 1705s-1707s. .
41	Peterson G, Barnes S. Genistein and biochanin A inhibit the growth of human prostate cancer cells but not epidermal growth factor receptor tyrosine autophosphorylation [J].Prostate, 1993, 22(4): 335-345. .
42	Morton MS, Chan PS, Cheng C, et al. Lignans and isoflavonoids in plasma and prostatic fluid in men: samples from Portugal, Hong Kong, and the United Kingdom[J].Prostate, 1997, 32(2): 122-128. .
43	Schleicher RL, Lamartiniere CA, Zheng M, et al. The inhibitory effect of genistein on the growth and metastasis of a transplantable rat accessory sex gland carcinoma[J].Cancer Lett, 1999, 136(2): 195-201. .
44	Onozawa M, Kawamori T, Baba M, et al. Effects of a soybean isoflavone mixture on carcinogenesis in prostate and seminal vesicles of F344 rats[J].Jpn J Cancer Res, 1999, 90(4): 393-398. .
45	Mentor-Marcel R, Lamartiniere CA, Elgavish A. Mechanisms by which genistein may prevent prostate cancer in a transgenic mouse model[A]. In: Proceedings of the international conference on prostate cancer research[C]. Iowa City, IA, 1999.
46	Rosenberg ZRS, Jenkins DJ, Brown TJ, et al. Flavonoids can block PSA production by breast and prostate cancer cell lines[J].Clin Chim Acta, 2002, 317(1-2): 17-26. .
47	Sadowska-Krowicka H, Mannick EE, Oliver PD, et al. Genistein and gut inflammation: role of nitric oxide[J].Proc Soc Exp Biol Med, 1998, 217(3): 351-357. .
48	Rice MM, LaCroix AZ, Lampe JW, et al. Dietary soy isoflavone intake, postmenopausal estrogen use, and self-reported arthritis in older Japanese American women[A]. The fourth international symposium the role of soy in preventing and treating chronic disease[C], San Diego, CA, November 4-7, 2001.
49	Gabor M, Razga Z. Effect of benzopyrone derivatives on simultaneously induced croton oil ear oedema and carrageenin paw oedema in rats[J].Acta Physiol Hung, 1991, 77(3-4): 197-207. .
50	Kalashnikova NA, Baturo AP, Locosova AK, et al. Enzyme characteristics of bacteria of the genera Citrobacter and Hafnia and their identification during laboratory diagnosis of intestinal infections[J].Zh Mikrobiol Epidemiol Immunobiol, 1974, (2): 106-109. .

51	Min B, Oh SR, Lee HK, et al. Sophoricoside analogs as the IL-5 inhibitors from <i>Sophora japonica</i> [J]. <i>Planta Med</i> , 1999, 65(5): 408-412. .
52	Kim H, Xia H, Li L, et al. Attenuation of neurodegeneration-relevant modifications of brain proteins by dietary soy[J]. <i>Biofactors</i> , 2000, 12(1-4): 243-250. .
53	File SE, Jarrett N, Fluck E, et al. Eating soya improves human memory [J]. <i>Psychopharmacology (Berl)</i> , 2001, 157(4): 430-436. .
54	Cai Q, Wei H. Effect of dietary genistein on antioxidant enzyme activities in SENCAR mice [J]. <i>Nutr Cancer</i> , 1996, 25(1): 1-7. .
55	Wei H. Photoprotective action of isoflavone genistein: models mechanisms, and relevance to clinical dermatology[J]. <i>J Am Acad Dermatol</i> , 1998, 39(2, pt1): 271-272. .
56	Strom BL, Schinnar R, Ziegler E, et al. Exposure to soy-based formula in infancy and endocrinological and reproductive outcomes in young adulthood[J]. <i>JAMA</i> , 2001, 286(5): 807-814. .
57	Kurzer MS. Hormonal effects of soy in premenopausal women and men[J]. <i>J Nutr</i> , 2002, 132(3): 570S-573S. .
58	Foth D, Cline JM. Effects of mammalian and plant estrogens on mammary glands and uteri of macaques[J]. <i>Am J Clin Nutr</i> , 1998, 68(6 Suppl): 1413S-1417S. .
59	Chang HC, Doerge DR. Dietary genistein inactivates rat thyroid peroxidase in vivo without an apparent hypothyroid effect[J]. <i>Toxicol Appl Pharmacol</i> , 2000, 168(3): 244-252. .
60	Yellayi S, Naaz A, Szewczykowski MA, et al. The phytoestrogen genistein induces thymic and immune changes: a human health concern[J]. <i>Proc Natl Acad Sci USA</i> , 2002, 99(11): 7616-7621. .

下列文章引用了该文(限本刊内):

1	大豆异黄酮对去卵巢大鼠骨组织骨保护素及其配体mRNA表达的影响	2006	3
2	大豆异黄酮对阿霉素致心衰大鼠心功能的影响	2004	4

ISSN 1672-1977 CN 31-1906/R CODEN ZJXHAY

·Copyright © 2003-2008 中西医结合学报杂志社 All Rights Reserved

·地址: 上海市长海路174号科技楼1105室 邮政编码: 200433

·联系电话(传真): 021-81873540

·电子邮件: [jcim@smmu.edu.cn](mailto:jcim@smmu.edu.cn)

