Capsicum

url: https://medlineplus.gov/druginfo/natural/945.html  
  
  
Capsicum  
What is it?  
Capsicum, also known as red pepper or chili pepper, is an herb. Its fruit is commonly applied to the skin for arthritis pain and other conditions.  
  
  
The fruit of the capsicum plant contains a chemical called capsaicin. Capsaicin is what seems to help reduce pain and swelling. A particular form of capsicum causes intense eye pain and other unpleasant effects when it comes in contact with the face. This form is used in self-defense pepper sprays.   
  
Capsicum is commonly used for nerve pain and other painful conditions. It is also used for many other purposes, including digestion problems, conditions of the heart and blood vessels, and many others, but there is no good scientific evidence for many of these uses.  
  
  
  
How effective is it?  
Natural Medicines Comprehensive Database rates effectiveness based on scientific evidence according to the following scale: Effective, Likely Effective, Possibly Effective, Possibly Ineffective, Likely Ineffective, Ineffective, and Insufficient Evidence to Rate.The effectiveness ratings for CAPSICUM are as follows:Likely effective for...  
Nerve pain in people with diabetes (diabetic neuropathy). A specific cream containing 0.075% capsaicin (Zostrix-HP, Link Medical Products Pty Ltd.) 4 times daily is approved for treating this condition. Another patch containing 8% capsaicin (Qutenza, NeurogesX, Inc.), which is available by prescription only, is also approved for treating this condition. Creams or gels that contain smaller amounts of capsaicin (less than 0.075%) don't seem to work.   
Chronic pain. Applying creams and lotions containing capsaicin, the active chemical in capsicum, can temporarily relieve chronic pain from several conditions. It's FDA approved for this use.  
Nerve damage caused by shingles (postherpetic neuralgia). Applying a patch containing 8% capsaicin (Qutenza, NeurogesX Inc.), the active chemical in capsicum, reduces pain over 24 hours in people with this condition. This capsaicin patch is available by prescription only.  
  
Possibly effective for...  
Back pain. Applying capsicum or capsaicin to the skin seems to help reduce back pain.  
Cluster headache. Applying capsaicin, the active chemical in capsicum, inside the nose can reduce the number and severity of cluster headaches. It's not clear if it helps treat cluster headaches.  
Runny nose not caused by allergies or infection (nonallergic rhinitis). Applying capsaicin, the active chemical in capsicum, inside the nose can reduce runny nose in people who do not have allergies or an infection. The benefits might last for 6-9 months.  
Osteoarthritis. Applying 0.025% capsaicin, the active chemical in capsicum, to the skin can improve symptoms of osteoarthritis.   
Acute pain. Applying capsaicin, the active chemical in capsicum, to the skin can reduce pain from trauma.   
Nausea and vomiting after surgery. Applying a plaster containing capsicum to specific points on the hand and forearm reduces nausea and vomiting after surgery.  
Pain after surgery. Applying a plaster containing capsicum to specific points on the hand and forearm reduces the need for painkillers within the first 24 hours after surgery.   
  
There is interest in using capsicum for a number of other purposes, but there isn't enough reliable information to say whether it might be helpful.  
  
  
  
Is it safe?  
When taken by mouth: Capsicum is likely safe when consumed in amounts typically found in food. Capsaicin, the active chemical in capsicum, is possibly safe when used short-term. Side effects can include stomach irritation, sweating, and runny nose. Capsicum is possibly unsafe to take in large doses or for long periods of time.   
When applied to the skin: Lotions and creams that contain capsicum extract are likely safe for most adults. Capsaicin is approved by the FDA as an over-the-counter medication. Side effects can include skin irritation and itching. Capsicum can also be very irritating to the eyes, nose, and throat. Don't use capsicum on sensitive skin or near the eyes.  
When used in the nose: Capsicum is possibly safe. But, application in the nose can be painful and cause burning pain, sneezing, watery eyes, and runny nose.   
  
  
Special precautions & warnings:  
Pregnancy: Capsicum is likely safe when applied to the skin during pregnancy. Capsicum is possibly safe when taken by mouth as a medicine during the second half of the second trimester and during the third trimester.  
Breast-feeding: If you are breast-feeding, using capsicum on your skin is likely safe. But it is possibly unsafe for your baby if you take capsicum by mouth. Skin problems (dermatitis) have been reported in breast-fed infants when mothers eat foods heavily spiced with capsicum peppers.  
Children: Applying capsicum to the skin of children under two years of age is possibly unsafe. There isn't enough reliable information to know if it is safe for children to use capsicum by mouth as a medicine. Stay on the safe side and stick with the amounts found in foods.  
Bleeding disorders: While conflicting results exist, capsicum might increase the risk of bleeding in people with bleeding disorders.  
Damaged skin: Don't use capsicum on damaged or broken skin.  
High blood pressure: Taking capsicum or eating a large amount of chili peppers might cause a spike in blood pressure. In theory, this might worsen the condition for people who already have high blood pressure.  
Surgery: Capsicum might increase bleeding during and after surgery. Stop using capsicum at least 2 weeks before a scheduled surgery.  
  
  
Are there interactions with medications?  
ModerateBe cautious with this combination.AspirinCapsicum might decrease how much aspirin the body can absorb. Taking capsicum along with aspirin might reduce the effects of aspirin.Ciprofloxacin (Cipro)Capsicum might increase how much ciprofloxacin the body can absorb. Taking capsicum along with ciprofloxacin might increase the effects and side effects of ciprofloxacin.Medications for diabetes (Antidiabetes drugs)Capsicum might lower blood sugar levels. Taking capsicum along with diabetes medications might cause blood sugar to drop too low. Monitor your blood sugar closely.Medications that slow blood clotting (Anticoagulant / Antiplatelet drugs)Capsicum might slow blood clotting. Taking capsicum along with medications that also slow blood clotting might increase the risk of bruising and bleeding.TheophyllineCapsicum can increase how much theophylline the body can absorb. Taking capsicum along with theophylline might increase the effects and side effects of theophylline.MinorBe watchful with this combination.Medications for high blood pressure (ACE inhibitors)Some medications for high blood pressure might cause a cough. There is one report of someone whose cough worsened when using a cream with capsicum along with these medications for high blood pressure. But it isn't clear if this interaction is a big concern.  
  
  
Are there interactions with herbs and supplements?  
Herbs and supplements that might lower blood sugarCapsicum might lower blood sugar. Taking it with other supplements with similar effects might lower blood sugar too much. Examples of supplements with this effect include aloe, bitter melon, cassia cinnamon, chromium, and prickly pear cactus.Herbs and supplements that might slow blood clottingCapsicum 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.IronThere is some concern that using capsicum might reduce how much iron the body can absorb.  
  
  
Are there interactions with foods?  
There are no known interactions with foods.  
  
  
How is it typically used?  
In adults, capsicum has been taken by mouth as extracts, chili, fermented red pepper, red pepper powder, lozenges, nectar, and capsaicin. In both adults and children, capsicum has been applied to the skin in creams, plasters, and gels. It's also used in nasal sprays and solutions. Speak with a healthcare provider to find out what type of product and dose might be best for a specific condition.  
  
  
Other names  
African Bird Pepper, African Chillies, African Pepper, Aji, Bird Pepper, Capsaicin, Capsa cine, Capsicum annuum, Capsicum baccatum, Capsicum chinense, Capsicum Fruit, Capsicum frutescens, Capsicum minimum, Capsicum Oleoresin, Capsicum pubescens, Cayenne, Cayenne Fruit, Cayenne Pepper, Chili, Chili Pepper, Chilli, Chillies, Cis-capsaicin, Civamide, Garden Pepper, Goat's Pod, Grains of Paradise, Green Chili Pepper, Green Pepper, Hot Pepper, Hungarian Pepper, Ici Fructus, Katuvira, Lal Mirchi, Louisiana Long Pepper, Louisiana Sport Pepper, Mexican Chilies, Mirchi, Oleoresin capsicum, Paprika, Paprika de Hongrie, Pili-pili, Piment de Cayenne, Piment Enrag , Piment Fort, Piment-oiseau, Pimento, Poivre de Cayenne, Poivre de Zanzibar, Poivre Rouge, Red Pepper, Sweet Pepper, Tabasco Pepper, Trans-capsaicin, Zanzibar Pepper, Zucapsaicin, Zucapsa cine.  
  
  
Methodology  
  
 To learn more about how this article was written, please see the Natural Medicines Comprehensive Database methodology.   
   
  
  
References  
Sch fer RC, Sohn A, Kersten A, Amr A, Held M, Wenger A. Quantification of Dermal Microcirculatory Changes after Topical Administration of Capsaicin: A Randomized Placebo-Controlled Study in 46 Subjects. J Invest Surg 2022;35:1673-1678. View abstract.  
Chao W, You-Qin M, Hong C, et al. Effect of Capsaicin Atomization on Cough and Swallowing Function in Patients With Hemorrhagic Stroke: A Randomized Controlled Trial. J Speech Lang Hear Res 2023;66:503-512. View abstract.  
Olusanya A, Yearsley A, Brown N, et al. Capsaicin 8% Patch for Spinal Cord Injury Focal Neuropathic Pain, a Randomized Controlled Trial. Pain Med 2023;24:71-78. View abstract.  
Sendel M, Dunst A, Forstenpointner J, H llemann P, Baron R. Capsaicin treatment in neuropathic pain: axon reflex vasodilatation after 4 weeks correlates with pain reduction. Pain 2023;164:534-542. View abstract.  
Grgic J, Memon AR, Chen S, et al. Effects of Capsaicin and Capsiate on Endurance Performance: A Meta-Analysis. Nutrients 2022;14:4531. View abstract.  
Trin K, Perino J, Allouchery M, G niaux H, Miremont G, Salvo F. Second-degree burn induced by high-concentration topical capsaicin with mobility sequelae: A case report. Pain Pract 2023;23:216-219. View abstract.  
Higashi T, Murata N, Fujimoto M, et al. Capsaicin May Improve Swallowing Impairment in Patients with Amyotrophic Lateral Sclerosis: A Randomized Controlled Trial. Acta Med Okayama 2022;76:179-186. View abstract.  
Yatsuhashi H, Takumi H, Terada Y, Kuriki T. Effects of Oral Supplementation with Paprika Xanthophylls on Human Skin Moisture. J Oleo Sci 2022;71:735-745. View abstract.  
Shirani F, Foshati S, Tavassoly M, Clark CCT, Rouhani MH. The effect of red pepper/capsaicin on blood pressure and heart rate: A systematic review and meta-analysis of clinical trials. Phytother Res 2021;35:6080-6088. View abstract.  
de Moura E Silva VEL, Cholewa JM, J ger R, et al. Chronic capsiate supplementation increases fat-free mass and upper body strength but not the inflammatory response to resistance exercise in young untrained men: a randomized, placebo-controlled and double-blind study. J Int Soc Sports Nutr 2021;18:50. View abstract.  
Amini MR, Talebyan A, Payandeh N, Sheikhhossein F, Mohtashaminia F, Gholami F. The effects of capsinoids and fermented red pepper paste supplementation on Glycaemic Control: A systematic review and meta-analysis of randomised controlled trials. Int J Clin Pract 2021;75:e14803. View abstract.  
Foshati S, Moradi S, Tavassoly M, Rouhani MH. Short- and long-term effects of capsaicin supplementation on glycemic control: a systematic review and meta-analysis of controlled trials. Food Funct 2021;12:5236-5246. View abstract.  
Kum V, Bell A, Fang W, VanWert E. Efficacy of topical capsaicin for cannabinoid hyperemesis syndrome in a pediatric and adult emergency department. Am J Emerg Med 2021;49:343-351. View abstract.  
Lee A, Coralic Z. Use of capsaicin cream in cannabinoid hyperemesis syndrome in patients presenting to the emergency department. Ann Pharmacother. 2021:10600280211018516. View abstract.  
Lv J, Qi L, Yu C, et al. Consumption of spicy foods and total and cause specific mortality: population based cohort study. BMJ. 2015;351:h3942. View abstract.  
Chopan M, Littenberg B. The association of hot red chili pepper consumption and mortality: A large population-based cohort study. PLoS One. 2017;12:e0169876. View abstract.  
Bonaccio M, Di Castelnuovo A, Costanzo S, et al. Chili pepper consumption and mortality in Italian adults. J Am Coll Cardiol. 2019;74:3139-3149. View abstract.  
Aniwan S, Gonlachanvit S. Effects of chili treatment on gastrointestinal and rectal sensation in diarrhea-predominant irritable bowel syndrome: A randomized, double-blinded, crossover study. J Neurogastroenterol Motil. 2014;20:400-6. View abstract.  
Opheim MN, Rankin JW. Effect of capsaicin supplementation on repeated sprinting performance. J Strength Cond Res. 2012;26:319-26. View abstract.  
Zebda D, Jiang ZY, Gibson MM, et al. Double-blinded randomized prospective trial of intranasal capsaicin treatment for nonallergic rhinitis. Int Forum Allergy Rhinol. 2021;11:24-30. View abstract.  
Van Gerven L, Steelant B, Cools L, et al. Low-dose capsaicin (0.01 mM) nasal spray is equally effective as the current standard treatment for idiopathic rhinitis: A randomized, double-blind, placebo-controlled trial. J Allergy Clin Immunol. 2021;147:397-400.e4. View abstract.  
Umigai N, Kozai Y, Saito T, Takara T. Effects of paprika carotenoid supplementation on bone turnover in postmenopausal women: a randomized, double-blind, placebo-controlled, parallel-group comparison study. Food Nutr Res. 2020;64. View abstract.  
Predel HG, Ebel-Bitoun C, Peil B, Weiser TW, Lange R. Efficacy and safety of diclofenac?+?capsaicin gel in patients with acute back/neck pain: A multicenter randomized controlled study. Pain Ther. 2020;9:279-296. View abstract.  
Pourmand A, Esmailian G, Mazer-Amirshahi M, Lee-Park O, Tran QK. Topical capsaicin for the treatment of cannabinoid hyperemesis syndrome, a systematic review and meta-analysis. Am J Emerg Med. 2021;43:35-40. View abstract.  
Padilha CS, Billaut F, Figueiredo C, et al. Capsaicin supplementation during high-intensity continuous exercise: A double-blind study. Int J Sports Med. 2020;41:1061-1066. View abstract.  
Lassen CL, Meyer K, Bredthauer A, Klier TW. Facial and oral cross-contamination of a 3-year-old child with high concentration capsaicin: A case report. A A Pract. 2020;14:e01258. View abstract.  
Langan SP, Grosicki GJ. Commercially available capsaicin supplement fails to enhance time-to-exhaustion during cycling. Int J Exerc Sci. 2020;13:225-233. View abstract.  
Kocak AO, Dogruyol S, Akbas I, et al. Comparison of topical capsaicin and topical piroxicam in the treatment of acute trauma-induced pain: A randomized double-blind trial. Am J Emerg Med. 2020;38:1767-1771. View abstract.  
Joseph MSc A, John PhD F, Thomas MSc JV, Sivadasan SDP, Maliakel PhD B, Mohan PhD R, I M K. Influence of a novel food-grade formulation of red chili extract (Capsicum annum) on overweight subjects: Randomized, double-blinded, placebo-controlled study. J Diet Suppl. 2020:1-19. View abstract.  
Jankovskis V, Selga G. Vitamin B and zinc supplements and capsaicin oral rinse treatment options for burning mouth syndrome. Medicina (Kaunas). 2021;57:391. View abstract.  
Jang HH, Lee J, Lee SH, Lee YM. Effects of Capsicum annuum supplementation on the components of metabolic syndrome: a systematic review and meta-analysis. Sci Rep. 2020;10:20912. View abstract.  
Dean DJ, Sabagha N, Rose K, et al. A pilot trial of topical capsaicin cream for treatment of cannabinoid hyperemesis syndrome. Acad Emerg Med. 2020;27:1166-1172. View abstract.  
Cui F, Yin Q, Wu C, et al. Capsaicin combined with ice stimulation improves swallowing function in patients with dysphagia after stroke: A randomised controlled trial. J Oral Rehabil. 2020;47:1297-1303. View abstract.  
Costa LA, Freitas MC, Cholewa JM, et al. Acute capsaicin analog supplementation improves 400 M and 3000 M running time-trial performance. Int J Exerc Sci. 2020;13:755-765. View abstract.  
Persson MSM, Stocks J, Walsh DA, Doherty M, Zhang W. The relative efficacy of topical non-steroidal anti-inflammatory drugs and capsaicin in osteoarthritis: a network meta-analysis of randomised controlled trials. Osteoarthritis Cartilage. 2018;26:1575-1582. View abstract.  
Wang Z, Wu L, Fang Q, Shen M, Zhang L, Liu X. Effects of capsaicin on swallowing function in stroke patients with dysphagia: A randomized controlled trial. J Stroke Cerebrovasc Dis. 2019;28:1744-1751. View abstract.  
Kulkantrakorn K, Chomjit A, Sithinamsuwan P, Tharavanij T, Suwankanoknark J, Napunnaphat P. 0.075% capsaicin lotion for the treatment of painful diabetic neuropathy: A randomized, double-blind, crossover, placebo-controlled trial. J Clin Neurosci. 2019;62:174-179. View abstract.  
de Freitas MC, Billaut F, Panissa VLG, et al. Capsaicin supplementation increases time to exhaustion in high-intensity intermittent exercise without modifying metabolic responses in physically active men. Eur J Appl Physiol. 2019;119:971-979. View abstract.  
Kolasinski SL, Neogi T, Hochberg MC, et al. 2019 American College of Rheumatology/Arthritis Foundation guideline for the management of osteoarthritis of the hand, hip, and knee. Arthritis Rheumatol. 2020 Feb;72:220-33. View abstract.  
de Freitas MC, Cholewa JM, Freire RV, et al. Acute capsaicin supplementation improves resistance training performance in trained men. J Strength Cond Res 2018;32:2227-32. doi: 10.1519/JSC.0000000000002109. View abstract.  
de Freitas MC, Cholewa JM, Gobbo LA, de Oliveira JVNS, Lira FS, Rossi FE. Acute capsaicin supplementation improves 1,500-m running time-trial performance and rate of perceived exertion in physically active adults. J Strength Cond Res 2018;32:572-7. doi: 10.1519/JSC.0000000000002329. View abstract.  
Cruccu G, Nurmikko TJ, Ernault E, Riaz FK, McBride WT, Haanp M. Superiority of capsaicin 8% patch versus oral pregabalin on dynamic mechanical allodynia in patients with peripheral neuropathic pain. Eur J Pain 2018;22:700-6. doi: 10.1002/ejp.1155. View abstract.  
Hansson P, Jensen TS, Kvarstein G, Str mberg M. Pain-relieving effectiveness, quality of life and tolerability of repeated capsaicin 8% patch treatment of peripheral neuropathic pain in Scandinavian clinical practice. Eur J Pain 2018;22:941-50. doi: 10.1002/ejp.1180. View abstract.  
Katz NP, Mou J, Paillard FC, Turnbull B, Trudeau J, Stoker M. Predictors of response in patients with postherpetic neuralgia and HIV-associated neuropathy treated with the 8% capsaicin patch (Qutenza). Clin J Pain. 2015 Oct;31:859-66. View abstract.  
Yuan LJ, Qin Y, Wang L, et al. Capsaicin-containing chili improved postprandial hyperglycemia, hyperinsulinemia, and fasting lipid disorders in women with gestational diabetes mellitus and lowered the incidence of large-for-gestational-age newborns. Clin Nutr. 2016 Apr;35:388-93. View abstract.  
Jorgensen MR, Pedersen AM. Analgesic effect of topical oral capsaicin gel in burning mouth syndrome. Acta Odontol Scand. 2017 Mar;75:130-6. View abstract.  
Van Avesaat M, Troost FJ, Westerterp-Plantenga MS, et al. Capsaicin-induced satiety is associated with gastrointestinal distress but not with the release of satiety hormones. Am J Clin Nutr. 2016 Feb;103:305-13. View abstract.  
Campbell CM, Diamond E, Schmidt WK, et al. A randomized, double-blind, placebo-controlled trial of injected capsaicin for pain in Morton's neuroma. Pain. 2016 Jun;157:1297-304. View abstract.  
Simpson DM, Robinson-Papp J, Van J, et al. Capsaicin 8% patch in painful diabetic peripheral neuropathy: a randomized, double-blind, placebo-controlled study. J Pain. 2017 Jan;18:42-53. View abstract.  
Mankowski C, Poole CD, Ernault E, et al. Effectiveness of the capsaicin 8% patch in the management of peripheral neuropathic pain in European clinical practice: the ASCEND study. BMC Neurol. 2017 Apr 21;17:80. View abstract.  
Derry S, Rice AS, Cole P, Tan T, Moore RA. Topical capsaicin (high concentration) for chronic neuropathic pain in adults. Cochrane Database Syst Rev. 2017 Jan 13;1:CD007393. View abstract.  
Van Nooten F, Treur M, Pantiri K, Stoker M, Charokopou M. Capsaicin 8% patch versus oral neuropathic pain medications for the treatment of painful diabetic peripheral neuropathy: a systematic literature review and network meta-analysis. Clin Ther. 2017 Apr;39:787-803.e18. View abstract.  
Whiting S, Derbyshire EJ, Tiwari B. Could capsaicinoids help to support weight management? A systematic review and meta-analysis of energy intake data. Appetite. 2014;73:183-8. View abstract.  
Silvestre FJ, Silvestre-Rangil J, Tamarit-Santaf C, et al. Application of a capsaicin rinse in the treatment of burning mouth syndrome. Med Oral Patol Oral Cir Bucal. 2012 Jan 1;17:e1-4. View abstract.  
Sandor B, Papp J, Mozsik G, et al. Orally given gastroprotective capsaicin does not modify aspirin-induced platelet aggregation in healthy male volunteers (human phase I examination). Acta Physiol Hung. 2014 Dec;101:429-37. View abstract.  
Pabalan N, Jarjanazi H, Ozcelik H. The impact of capsaicin intake on risk of developing gastric cancers: a meta-analysis. J Gastrointest Cancer. 2014;45:334-41. View abstract.  
Mou J, Paillard F, Turnbull B, et al. Efficacy of Qutenza (capsaicin) 8% patch for neuropathic pain: a meta-analysis of the Qutenza Clinical Trials Database. Pain. 2013;154:1632-9. View abstract.  
Mou J, Paillard F, Turnbull B, et al. Qutenza (capsaicin) 8% patch onset and duration of response and effects of multiple treatments in neuropathic pain patients. Clin J Pain. 2014;30:286-94. View abstract.  
Kulkantrakorn K, Lorsuwansiri C, Meesawatsom P. 0.025% capsaicin gel for the treatment of painful diabetic neuropathy: a randomized, double-blind, crossover, placebo-controlled trial. Pain Pract. 2013;13:497-503. View abstract.  
Kim DH, Yoon KB, Park S, et al. Comparison of NSAID patch given as monotherapy and NSAID patch in combination with transcutaneous electric nerve stimulation, a heating pad, or topical capsaicin in the treatment of patients with myofascial pain syndrome of the upper trapezius: a pilot study. Pain Med. 2014;15:2128-38. View abstract.  
Garc a-Menaya JM, Cordob s -Dur n C, Bobadilla-Gonz lez P, et al. Anaphylactic reaction to bell pepper (Capsicum annuum) in a patient with a latex-fruit syndrome. Allergol Immunopathol (Madr). 2014;42:263-5. View abstract.  
Copeland S, Nugent K. Persistent respiratory symptoms following prolonged capsaicin exposure. Int J Occup Environ Med. 2013;4:211-5. View abstract.  
Casanueva B, Rodero B, Quintial C, Llorca J, Gonz lez-Gay MA. Short-term efficacy of topical capsaicin therapy in severely affected fibromyalgia patients. Rheumatol Int 2013;33:2665-70. View abstract.  
Bleuel I, Zinkernagel M, Tschopp M, Tappeiner C. Association of bilateral acute anterior uveitis with a capsaicin patch. Ocul Immunol Inflamm 2013;21:394-5. View abstract.  
 Sausenthaler, S., Koletzko, S., Schaaf, B., Lehmann, I., Borte, M., Herbarth, O., von Berg, A., Wichmann, H. E., and Heinrich, J. Maternal diet during pregnancy in relation to eczema and allergic sensitization in the offspring at 2 y of age. Am J Clin Nutr 2007;85:530-537. View abstract.  
 Schmidt S, Beime B Frerick H Kuhn U Schmidt U. Capsicum Creme bei weichteilrheumatischen Schmerzen - eine randomisierte Placebo-kontrollierte Studie. Phytopharmaka und Phytotherapie 2004 - Forschung und Praxis 2004;26-28 February 2004, Berlin, 35  
 Reinbach, H. C., Martinussen, T., and Moller, P. Effects of hot spices on energy intake, appetite, and sensory specific desires in humans. Food Qual Prefer 2010;21:655-661.  
 Park, K. K., Chun, K. S., Yook, J. I., and Surh, Y. J. Lack of tumor promoting activity of capsaicin, a principal pungent ingredient of red pepper, in mouse skin carcinogenesis. Anticancer Res. 1998;18(6A):4201-4205. View abstract.  
 Busker, R. W. and van Helden, H. P. Toxicologic evaluation of pepper spray as a possible weapon for the Dutch police force: risk assessment and efficacy. Am.J.Forensic Med.Pathol. 1998;19:309-316. View abstract.  
 Teng, C. H., Kang, J. Y., Wee, A., and Lee, K. O. Protective action of capsaicin and chilli on haemorrhagic shock-induced gastric mucosal injury in the rat. J.Gastroenterol.Hepatol. 1998;13:1007-1014. View abstract.  
 Weisshaar, E., Heyer, G., Forster, C., and Handwerker, H. O. Effect of topical capsaicin on the cutaneous reactions and itching to histamine in atopic eczema compared to healthy skin. Arch.Dermatol.Res 1998;290:306-311. View abstract.  
 Caterina, M. J., Schumacher, M. A., Tominaga, M., Rosen, T. A., Levine, J. D., and Julius, D. The capsaicin receptor: a heat-activated ion channel in the pain pathway. Nature 10-23-1997;389:816-824. View abstract.  
 Jones, N. L., Shabib, S., and Sherman, P. M. Capsaicin as an inhibitor of the growth of the gastric pathogen Helicobacter pylori. FEMS Microbiol.Lett. 1-15-1997;146:223-227. View abstract.  
 Kang, J. Y., Teng, C. H., and Chen, F. C. Effect of capsaicin and cimetidine on the healing of acetic acid induced gastric ulceration in the rat. Gut 1996;38:832-836. View abstract.  
 Watson, W. A., Stremel, K. R., and Westdorp, E. J. Oleoresin capsicum (Cap-Stun) toxicity from aerosol exposure. Ann.Pharmacother. 1996;30(7-8):733-735. View abstract.  
 Rains, C. and Bryson, H. M. Topical capsaicin. A review of its pharmacological properties and therapeutic potential in post-herpetic neuralgia, diabetic neuropathy and osteoarthritis. Drugs Aging 1995;7:317-328. View abstract.  
 Herbert, M. K., Tafler, R., Schmidt, R. F., and Weis, K. H. Cyclooxygenase inhibitors acetylsalicylic acid and indomethacin do not affect capsaicin-induced neurogenic inflammation in human skin. Agents Actions 1993;38 Spec No:C25-C27. View abstract.  
 Knight, T. E. and Hayashi, T. Solar (brachioradial) pruritus--response to capsaicin cream. Int.J.Dermatol. 1994;33:206-209. View abstract.  
 Yahara, S., Ura, T., Sakamoto, C., and Nohara, T. Steroidal glycosides from Capsicum annuum. Phytochemistry 1994;37:831-835. View abstract.  
 Lotti, T., Teofoli, P., and Tsampau, D. Treatment of aquagenic pruritus with topical capsaicin cream. J.Am.Acad.Dermatol. 1994;30(2 Pt 1):232-235. View abstract.  
 Steffee, C. H., Lantz, P. E., Flannagan, L. M., Thompson, R. L., and Jason, D. R. Oleoresin capsicum (pepper) spray and "in-custody deaths". Am.J.Forensic Med.Pathol. 1995;16:185-192. View abstract.  
 Monsereenusorn, Y. and Glinsukon, T. Inhibitory effect of capsaicin on intestinal glucose absorption in vitro. Food Cosmet.Toxicol. 1978;16:469-473. View abstract.  
 Kumar, N., Vij, J. C., Sarin, S. K., and Anand, B. S. Do chillies influence healing of duodenal ulcer? Br.Med.J.(Clin.Res.Ed) 6-16-1984;288:1803-1804. View abstract.  
 Jancso, N., Jancso-Gabor, A., and Szolcsanyi, J. Direct evidence for neurogenic inflammation and its prevention by denervation and by pretreatment with capsaicin. Br.J.Pharmacol. 1967;31:138-151. View abstract.  
 Meyer-Bahlburg, H. F. Pilot studies on stimulant effects of capsicum spices. Nutr.Metab 1972;14:245-254. View abstract.  
 Chen, H. C., Chang, M. D., and Chang, T. J. [Antibacterial properties of some spice plants before and after heat treatment]. Zhonghua Min Guo.Wei Sheng Wu Ji.Mian.Yi.Xue.Za Zhi. 1985;18:190-195. View abstract.  
 Lundblad, L., Lundberg, J. M., Anggard, A., and Zetterstrom, O. Capsaicin pretreatment inhibits the flare component of the cutaneous allergic reaction in man. Eur.J.Pharmacol. 7-31-1985;113:461-462. View abstract.  
 Lundblad, L., Lundberg, J. M., Anggard, A., and Zetterstrom, O. Capsaicin-sensitive nerves and the cutaneous allergy reaction in man. Possible involvement of sensory neuropeptides in the flare reaction. Allergy 1987;42:20-25. View abstract.  
 Schuurs, A. H., Abraham-Inpijn, L., van Straalen, J. P., and Sastrowijoto, S. H. An unusual case of black teeth. Oral Surg.Oral Med.Oral Pathol. 1987;64:427-431. View abstract.  
 Tominack, R. L. and Spyker, D. A. Capsicum and capsaicin--a review: case report of the use of hot peppers in child abuse. J.Toxicol.Clin.Toxicol. 1987;25:591-601. View abstract.  
 Ginsberg, F. and Famaey, J. P. A double-blind study of topical massage with Rado-Salil ointment in mechanical low-back pain. J.Int.Med.Res 1987;15:148-153. View abstract.  
Lopez, H. L., Ziegenfuss, T. N., Hofheins, J. E., Habowski, S. M., Arent, S. M., Weir, J. P., and Ferrando, A. A. Eight weeks of supplementation with a multi-ingredient weight loss product enhances body composition, reduces hip and waist girth, and increases energy levels in overweight men and women. J Int Soc Sports Nutr 2013;10:22. View abstract.  
 Derry, S., Sven-Rice, A., Cole, P., Tan, T., and Moore, R. A. Topical capsaicin (high concentration) for chronic neuropathic pain in adults. Cochrane.Database.Syst.Rev. 2013;2:CD007393. View abstract.  
 Derry, S. and Moore, R. A. Topical capsaicin (low concentration) for chronic neuropathic pain in adults. Cochrane.Database.Syst.Rev. 2012;9:CD010111. View abstract.  
 Cho, J. H., Brodsky, M., Kim, E. J., Cho, Y. J., Kim, K. W., Fang, J. Y., and Song, M. Y. Efficacy of a 0.1% capsaicin hydrogel patch for myofascial neck pain: a double-blinded randomized trial. Pain Med. 2012;13:965-970. View abstract.  
 Bley, K., Boorman, G., Mohammad, B., McKenzie, D., and Babbar, S. A comprehensive review of the carcinogenic and anticarcinogenic potential of capsaicin. Toxicol.Pathol. 2012;40:847-873. View abstract.  
 Sayin, M. R., Karabag, T., Dogan, S. M., Akpinar, I., and Aydin, M. A case of acute myocardial infarction due to the use of cayenne pepper pills. Wien.Klin.Wochenschr. 2012;124(7-8):285-287. View abstract.  
 Warbrick, T., Mobascher, A., Brinkmeyer, J., Musso, F., Stoecker, T., Shah, N. J., Fink, G. R., and Winterer, G. Nicotine effects on brain function during a visual oddball task: a comparison between conventional and EEG-informed fMRI analysis. J Cogn Neurosci. 2012;24:1682-1694. View abstract.  
 Young, A. and Buvanendran, A. Recent advances in multimodal analgesia. Anesthesiol.Clin 2012;30:91-100. View abstract.  
 Yoneshiro, T., Aita, S., Kawai, Y., Iwanaga, T., and Saito, M. Nonpungent capsaicin analogs (capsinoids) increase energy expenditure through the activation of brown adipose tissue in humans. Am J Clin Nutr 2012;95:845-850. View abstract.  
 Georgalas, C. and Jovancevic, L. Gustatory rhinitis. Curr Opin.Otolaryngol.Head Neck Surg. 2012;20:9-14. View abstract.  
 Clifford, D. B., Simpson, D. M., Brown, S., Moyle, G., Brew, B. J., Conway, B., Tobias, J. K., and Vanhove, G. F. A randomized, double-blind, controlled study of NGX-4010, a capsaicin 8% dermal patch, for the treatment of painful HIV-associated distal sensory polyneuropathy. J Acquir.Immune.Defic.Syndr. 2-1-2012;59:126-133. View abstract.  
 Ludy, M. J., Moore, G. E., and Mattes, R. D. The effects of capsaicin and capsiate on energy balance: critical review and meta-analyses of studies in humans. Chem Senses 2012;37:103-121. View abstract.  
 Hartrick, C. T., Pestano, C., Carlson, N., and Hartrick, S. Capsaicin instillation for postoperative pain following total knee arthroplasty: a preliminary report of a randomized, double-blind, parallel-group, placebo-controlled, multicentre trial. Clin Drug Investig. 12-1-2011;31:877-882. View abstract.  
 Dulloo, A. G. The search for compounds that stimulate thermogenesis in obesity management: from pharmaceuticals to functional food ingredients. Obes.Rev. 2011;12:866-883. View abstract.  
 Barkin, R. L., Barkin, S. J., Irving, G. A., and Gordon, A. Management of chronic noncancer pain in depressed patients. Postgrad.Med. 2011;123:143-154. View abstract.  
 Rajput, S. and Mandal, M. Antitumor promoting potential of selected phytochemicals derived from spices: a review. Eur J Cancer Prev. 2012;21:205-215. View abstract.  
 Bernstein, J. A., Davis, B. P., Picard, J. K., Cooper, J. P., Zheng, S., and Levin, L. S. A randomized, double-blind, parallel trial comparing capsaicin nasal spray with placebo in subjects with a significant component of nonallergic rhinitis. Ann Allergy Asthma Immunol. 2011;107:171-178. View abstract.  
 Irving, G., Backonja, M., Rauck, R., Webster, L. R., Tobias, J. K., and Vanhove, G. F. NGX-4010, a capsaicin 8% dermal patch, administered alone or in combination with systemic neuropathic pain medications, reduces pain in patients with postherpetic neuralgia. Clin J Pain 2012;28:101-107. View abstract.  
 Kushnir, N. M. The role of decongestants, cromolyn, guafenesin, saline washes, capsaicin, leukotriene antagonists, and other treatments on rhinitis. Immunol.Allergy Clin North Am 2011;31:601-617. View abstract.  
 Lim, L. G., Tay, H., and Ho, K. Y. Curry induces acid reflux and symptoms in gastroesophageal reflux disease. Dig.Dis.Sci 2011;56:3546-3550. View abstract.  
 Gerber, S., Frueh, B. E., and Tappeiner, C. Conjunctival proliferation after a mild pepper spray injury in a young child. Cornea 2011;30:1042-1044. View abstract.  
 Webster, L. R., Peppin, J. F., Murphy, F. T., Lu, B., Tobias, J. K., and Vanhove, G. F. Efficacy, safety, and tolerability of NGX-4010, capsaicin 8% patch, in an open-label study of patients with peripheral neuropathic pain. Diabetes Res Clin Pract. 2011;93:187-197. View abstract.  
 Bortolotti, M. and Porta, S. Effect of red pepper on symptoms of irritable bowel syndrome: preliminary study. Dig.Dis.Sci 2011;56:3288-3295. View abstract.  
 Bode, A. M. and Dong, Z. The two faces of capsaicin. Cancer Res 4-15-2011;71:2809-2814. View abstract.  
 Greiner, A. N. and Meltzer, E. O. Overview of the treatment of allergic rhinitis and nonallergic rhinopathy. Proc.Am Thorac.Soc. 2011;8:121-131. View abstract.  
 Canning, B. J. Functional implications of the multiple afferent pathways regulating cough. Pulm.Pharmacol.Ther 2011;24:295-299. View abstract.  
 Campbell, C. M., Bounds, S. C., Simango, M. B., Witmer, K. R., Campbell, J. N., Edwards, R. R., Haythornthwaite, J. A., and Smith, M. T. Self-reported sleep duration associated with distraction analgesia, hyperemia, and secondary hyperalgesia in the heat-capsaicin nociceptive model. Eur J Pain 2011;15:561-567. View abstract.  
 Henning, S. M., Zhang, Y., Seeram, N. P., Lee, R. P., Wang, P., Bowerman, S., and Heber, D. Antioxidant capacity and phytochemical content of herbs and spices in dry, fresh and blended herb paste form. Int J Food Sci Nutr 2011;62:219-225. View abstract.  
 Ludy, M. J. and Mattes, R. D. The effects of hedonically acceptable red pepper doses on thermogenesis and appetite. Physiol Behav. 3-1-2011;102(3-4):251-258. View abstract.  
 Irving, G. A., Backonja, M. M., Dunteman, E., Blonsky, E. R., Vanhove, G. F., Lu, S. P., and Tobias, J. A multicenter, randomized, double-blind, controlled study of NGX-4010, a high-concentration capsaicin patch, for the treatment of postherpetic neuralgia. Pain Med. 2011;12:99-109. View abstract.  
 Diaz-Laviada, I. Effect of capsaicin on prostate cancer cells. Future.Oncol. 2010;6:1545-1550. View abstract.  
 Wolff, R. F., Bala, M. M., Westwood, M., Kessels, A. G., and Kleijnen, J. 5% lidocaine-medicated plaster vs other relevant interventions and placebo for post-herpetic neuralgia (PHN): a systematic review. Acta Neurol.Scand. 2011;123:295-309. View abstract.  
 Webster, L. R., Tark, M., Rauck, R., Tobias, J. K., and Vanhove, G. F. Effect of duration of postherpetic neuralgia on efficacy analyses in a multicenter, randomized, controlled study of NGX-4010, an 8% capsaicin patch evaluated for the treatment of postherpetic neuralgia. BMC.Neurol. 2010;10:92. View abstract.  
 McCormack, P. L. Capsaicin dermal patch: in non-diabetic peripheral neuropathic pain. Drugs 10-1-2010;70:1831-1842. View abstract.  
 Webster, L. R., Malan, T. P., Tuchman, M. M., Mollen, M. D., Tobias, J. K., and Vanhove, G. F. A multicenter, randomized, double-blind, controlled dose finding study of NGX-4010, a high-concentration capsaicin patch, for the treatment of postherpetic neuralgia. J Pain 2010;11:972-982. View abstract.  
 Dahl, J. B., Mathiesen, O., and Kehlet, H. An expert opinion on postoperative pain management, with special reference to new developments. Expert.Opin.Pharmacother. 2010;11:2459-2470. View abstract.  
 Reuter, J., Merfort, I., and Schempp, C. M. Botanicals in dermatology: an evidence-based review. Am J Clin Dermatol 2010;11:247-267. View abstract.  
 Wolff, R. F., Bala, M. M., Westwood, M., Kessels, A. G., and Kleijnen, J. 5% lidocaine medicated plaster in painful diabetic peripheral neuropathy (DPN): a systematic review. Swiss.Med.Wkly. 5-29-2010;140(21-22):297-306. View abstract.  
 Niemcunowicz-Janica, A., Ptaszynska-Sarosiek, I., and Wardaszka, Z. [Sudden death caused by an oleoresin capsicum spray]. Arch.Med.Sadowej.Kryminol. 2009;59:252-254. View abstract.  
 Govindarajan, V. S. and Sathyanarayana, M. N. Capsicum--production, technology, chemistry, and quality. Part V. Impact on physiology, pharmacology, nutrition, and metabolism; structure, pungency, pain, and desensitization sequences. Crit Rev.Food Sci.Nutr. 1991;29:435-474. View abstract.  
 Astrup, A., Kristensen, M., Gregersen, N. T., Belza, A., Lorenzen, J. K., Due, A., and Larsen, T. M. Can bioactive foods affect obesity? Ann N.Y.Acad.Sci 2010;1190:25-41. View abstract.  
 Vadivelu, N., Mitra, S., and Narayan, D. Recent advances in postoperative pain management. Yale J Biol Med. 2010;83:11-25. View abstract.  
 van Boxel, O. S., ter Linde, J. J., Siersema, P. D., and Smout, A. J. Role of chemical stimulation of the duodenum in dyspeptic symptom generation. Am J Gastroenterol. 2010;105:803-811. View abstract.  
 Backonja, M. M., Malan, T. P., Vanhove, G. F., and Tobias, J. K. NGX-4010, a high-concentration capsaicin patch, for the treatment of postherpetic neuralgia: a randomized, double-blind, controlled study with an open-label extension. Pain Med. 2010;11:600-608. View abstract.  
 Akcay, A. B., Ozcan, T., Seyis, S., and Acele, A. Coronary vasospasm and acute myocardial infarction induced by a topical capsaicin patch. Turk.Kardiyol.Dern.Ars 2009;37:497-500. View abstract.  
 Oyagbemi, A. A., Saba, A. B., and Azeez, O. I. Capsaicin: a novel chemopreventive molecule and its underlying molecular mechanisms of action. Indian J Cancer 2010;47:53-58. View abstract.  
 Katz, J. D. and Shah, T. Persistent pain in the older adult: what should we do now in light of the 2009 American geriatrics society clinical practice guideline? Pol.Arch.Med.Wewn. 2009;119:795-800. View abstract.  
 Benzon, H. T., Chekka, K., Darnule, A., Chung, B., Wille, O., and Malik, K. Evidence-based case report: the prevention and management of postherpetic neuralgia with emphasis on interventional procedures. Reg Anesth.Pain Med. 2009;34:514-521. View abstract.  
 Ziegler, D. Painful diabetic neuropathy: advantage of novel drugs over old drugs? Diabetes Care 2009;32 Suppl 2:S414-S419. View abstract.  
 Blanc, P., Liu, D., Juarez, C., and Boushey, H. A. Cough in hot pepper workers. Chest 1991;99:27-32. View abstract.  
 Derry, S., Lloyd, R., Moore, R. A., and McQuay, H. J. Topical capsaicin for chronic neuropathic pain in adults. Cochrane.Database.Syst.Rev. 2009;:CD007393. View abstract.  
 Azevedo-Meleiro, C. H. and Rodriguez-Amaya, D. B. Qualitative and quantitative differences in the carotenoid composition of yellow and red peppers determined by HPLC-DAD-MS. J Sep.Sci. 2009;32:3652-3658. View abstract.  
 O'Connor, A. B. and Dworkin, R. H. Treatment of neuropathic pain: an overview of recent guidelines. Am J Med. 2009;122(10 Suppl):S22-S32. View abstract.  
 Jensen, T. S., Madsen, C. S., and Finnerup, N. B. Pharmacology and treatment of neuropathic pains. Curr Opin.Neurol. 2009;22:467-474. View abstract.  
 Pagano, L., Proietto, M., and Biondi, R. [Diabetic peripheral neuropathy: reflections and drug-rehabilitative treatment]. Recenti Prog Med. 2009;100(7-8):337-342. View abstract.  
 Garroway, N., Chhabra, S., Landis, S., and Skolnik, D. C. Clinical inquiries: What measures relieve postherpetic neuralgia? J Fam.Pract. 2009;58:384d-384f. View abstract.  
 Babbar, S., Marier, J. F., Mouksassi, M. S., Beliveau, M., Vanhove, G. F., Chanda, S., and Bley, K. Pharmacokinetic analysis of capsaicin after topical administration of a high-concentration capsaicin patch to patients with peripheral neuropathic pain. Ther Drug Monit. 2009;31:502-510. View abstract.  
 Tanaka, Y., Hosokawa, M., Otsu, K., Watanabe, T., and Yazawa, S. Assessment of capsiconinoid composition, nonpungent capsaicinoid analogues, in capsicum cultivars. J Agric.Food Chem. 6-24-2009;57:5407-5412. View abstract.  
 Oboh, G. and Ogunruku, O. O. Cyclophosphamide-induced oxidative stress in brain: Protective effect of hot short pepper (Capsicum frutescens L. var. abbreviatum). Exp.Toxicol Pathol. 5-15-2009; View abstract.  
 Tesfaye, S. Advances in the management of diabetic peripheral neuropathy. Curr Opin.Support.Palliat.Care 2009;3:136-143. View abstract.  
 Reinbach, H. C., Smeets, A., Martinussen, T., Moller, P., and Westerterp-Plantenga, M. S. Effects of capsaicin, green tea and CH-19 sweet pepper on appetite and energy intake in humans in negative and positive energy balance. Clin Nutr. 2009;28:260-265. View abstract.  
 Chaiyasit, K., Khovidhunkit, W., and Wittayalertpanya, S. Pharmacokinetic and the effect of capsaicin in Capsicum frutescens on decreasing plasma glucose level. J Med.Assoc.Thai. 2009;92:108-113. View abstract.  
 Smeets, A. J. and Westerterp-Plantenga, M. S. The acute effects of a lunch containing capsaicin on energy and substrate utilisation, hormones, and satiety. Eur J Nutr 2009;48:229-234. View abstract.  
 Kim, K. S., Kim, K. N., Hwang, K. G., and Park, C. J. Capsicum plaster at the Hegu point reduces postoperative analgesic requirement after orthognathic surgery. Anesth.Analg. 2009;108:992-996. View abstract.  
 Scheffler, N. M., Sheitel, P. L., and Lipton, M. N. Treatment of painful diabetic neuropathy with capsaicin 0.075%. J.Am.Podiatr.Med.Assoc. 1991;81:288-293. View abstract.  
 Patane, S., Marte, F., La Rosa, F. C., and La, Rocca R. Capsaicin and arterial hypertensive crisis. Int J Cardiol. 10-8-2010;144:e26-e27. View abstract.  
 Gupta, P. J. Consumption of red-hot chili pepper increases symptoms in patients with acute anal fissures. Ann.Ital.Chir 2008;79:347-351. View abstract.  
 Snitker, S., Fujishima, Y., Shen, H., Ott, S., Pi-Sunyer, X., Furuhata, Y., Sato, H., and Takahashi, M. Effects of novel capsinoid treatment on fatness and energy metabolism in humans: possible pharmacogenetic implications. Am.J.Clin.Nutr. 2009;89:45-50. View abstract.  
 Ciabatti, P. G. and D'Ascanio, L. Intranasal Capsicum spray in idiopathic rhinitis: a randomized prospective application regimen trial. Acta Otolaryngol. 2009;129:367-371. View abstract.  
 Basha, K. M. and Whitehouse, F. W. Capsaicin: a therapeutic option for painful diabetic neuropathy. Henry.Ford.Hosp.Med.J. 1991;39:138-140. View abstract.  
 Salgado-Roman, M., Botello-Alvarez, E., Rico-Martinez, R., Jimenez-Islas, H., Cardenas-Manriquez, M., and Navarrete-Bolanos, J. L. Enzymatic treatment to improve extraction of capsaicinoids and carotenoids from chili (Capsicum annuum) fruits. J.Agric.Food Chem. 11-12-2008;56:10012-10018. View abstract.  
 Islam, M. S. and Choi, H. Dietary red chilli (Capsicum frutescens L.) is insulinotropic rather than hypoglycemic in type 2 diabetes model of rats. Phytother.Res. 2008;22:1025-1029. View abstract.  
 Gupta, P. J. Consumption of red-hot chili pepper increases symptoms in patients with acute anal fissures. A prospective, randomized, placebo-controlled, double blind, crossover trial. Arq Gastroenterol. 2008;45:124-127. View abstract.  
 Patane, S., Marte, F., Di Bella, G., Cerrito, M., and Coglitore, S. Capsaicin, arterial hypertensive crisis and acute myocardial infarction associated with high levels of thyroid stimulating hormone. Int.J Cardiol. 5-1-2009;134:130-132. View abstract.  
 Kobata, K., Tate, H., Iwasaki, Y., Tanaka, Y., Ohtsu, K., Yazawa, S., and Watanabe, T. Isolation of coniferyl esters from Capsicum baccatum L., and their enzymatic preparation and agonist activity for TRPV1. Phytochemistry 2008;69:1179-1184. View abstract.  
 Gupta, P. J. Red hot chilli consumption is harmful in patients operated for anal fissure - a randomized, double-blind, controlled study. Dig.Surg. 2007;24:354-357. View abstract.  
 Kim, I. K., Abd El-Aty, A. M., Shin, H. C., Lee, H. B., Kim, I. S., and Shim, J. H. Analysis of volatile compounds in fresh healthy and diseased peppers (Capsicum annuum L.) using solvent free solid injection coupled with gas chromatography-flame ionization detector and confirmation with mass spectrometry. J Pharm.Biomed.Anal. 11-5-2007;45:487-494. View abstract.  
 Shin, K. O. and Moritani, T. Alterations of autonomic nervous activity and energy metabolism by capsaicin ingestion during aerobic exercise in healthy men. J.Nutr.Sci.Vitaminol.(Tokyo) 2007;53:124-132. View abstract.  
 Tandan, R., Lewis, G. A., Krusinski, P. B., Badger, G. B., and Fries, T. J. Topical capsaicin in painful diabetic neuropathy. Controlled study with long-term follow-up. Diabetes Care 1992;15:8-14. View abstract.  
 Final report on the safety assessment of capsicum annuum extract, capsicum annuum fruit extract, capsicum annuum resin, capsicum annuum fruit powder, capsicum frutescens fruit, capsicum frutescens fruit extract, capsicum frutescens resin, and capsaicin. Int.J.Toxicol. 2007;26 Suppl 1:3-106. View abstract.  
 Inoue, N., Matsunaga, Y., Satoh, H., and Takahashi, M. Enhanced energy expenditure and fat oxidation in humans with high BMI scores by the ingestion of novel and non-pungent capsaicin analogues (capsinoids). Biosci.Biotechnol.Biochem. 2007;71:380-389. View abstract.  
 Reilly, C. A. and Yost, G. S. Metabolism of capsaicinoids by P450 enzymes: a review of recent findings on reaction mechanisms, bio-activation, and detoxification processes. Drug Metab Rev. 2006;38:685-706. View abstract.  
 Sharpe, P. A., Granner, M. L., Conway, J. M., Ainsworth, B. E., and Dobre, M. Availability of weight-loss supplements: Results of an audit of retail outlets in a southeastern city. J Am.Diet.Assoc. 2006;106:2045-2051. View abstract.  
 De Marino, S., Borbone, N., Gala, F., Zollo, F., Fico, G., Pagiotti, R., and Iorizzi, M. New constituents of sweet Capsicum annuum L. fruits and evaluation of their biological activity. J Agric.Food Chem. 10-4-2006;54:7508-7516. View abstract.  
 Kim, K. S., Kim, D. W., and Yu, Y. K. The effect of capsicum plaster in pain after inguinal hernia repair in children. Paediatr.Anaesth. 2006;16:1036-1041. View abstract.  
 de Jong, N. W., van der Steen, J. J., Smeekens, C. C., Blacquiere, T., Mulder, P. G., van Wijk, R. G., and de Groot, H. Honeybee interference as a novel aid to reduce pollen exposure and nasal symptoms among greenhouse workers allergic to sweet bell pepper (Capsicum annuum) pollen. Int.Arch.Allergy Immunol. 2006;141:390-395. View abstract.  
 Kim, K. S. and Nam, Y. M. The analgesic effects of capsicum plaster at the Zusanli point after abdominal hysterectomy. Anesth.Analg. 2006;103:709-713. View abstract.  
 Ahuja, K. D., Robertson, I. K., Geraghty, D. P., and Ball, M. J. The effect of 4-week chilli supplementation on metabolic and arterial function in humans. Eur.J.Clin.Nutr. 2007;61:326-333. View abstract.  
 Ahuja, K. D. and Ball, M. J. Effects of daily ingestion of chilli on serum lipoprotein oxidation in adult men and women. Br.J Nutr. 2006;96:239-242. View abstract.  
 Grossi, L., Cappello, G., and Marzio, L. Effect of an acute intraluminal administration of capsaicin on oesophageal motor pattern in GORD patients with ineffective oesophageal motility. Neurogastroenterol.Motil. 2006;18:632-636. View abstract.  
 Ahuja, K. D., Kunde, D. A., Ball, M. J., and Geraghty, D. P. Effects of capsaicin, dihydrocapsaicin, and curcumin on copper-induced oxidation of human serum lipids. J Agric.Food Chem. 8-23-2006;54:6436-6439. View abstract.  
 Ahuja, K. D., Robertson, I. K., Geraghty, D. P., and Ball, M. J. Effects of chili consumption on postprandial glucose, insulin, and energy metabolism. Am.J.Clin.Nutr. 2006;84:63-69. View abstract.  
 De Lucca, A. J., Boue, S., Palmgren, M. S., Maskos, K., and Cleveland, T. E. Fungicidal properties of two saponins from Capsicum frutescens and the relationship of structure and fungicidal activity. Can.J Microbiol. 2006;52:336-342. View abstract.  
 Milke, P., Diaz, A., Valdovinos, M. A., and Moran, S. Gastroesophageal reflux in healthy subjects induced by two different species of chilli (Capsicum annum). Dig.Dis. 2006;24(1-2):184-188. View abstract.  
 Jamroz, D., Wertelecki, T., Houszka, M., and Kamel, C. Influence of diet type on the inclusion of plant origin active substances on morphological and histochemical characteristics of the stomach and jejunum walls in chicken. J Anim Physiol Anim Nutr.(Berl) 2006;90(5-6):255-268. View abstract.  
 Gagnier, J. J., van Tulder, M., Berman, B., and Bombardier, C. Herbal medicine for low back pain. Cochrane.Database.Syst.Rev. 2006;:CD004504. View abstract.  
 Mori, A., Lehmann, S., O'Kelly, J., Kumagai, T., Desmond, J. C., Pervan, M., McBride, W. H., Kizaki, M., and Koeffler, H. P. Capsaicin, a component of red peppers, inhibits the growth of androgen-independent, p53 mutant prostate cancer cells. Cancer Res 3-15-2006;66:3222-3229. View abstract.  
 Kang, S., Kang, K., Chung, G. C., Choi, D., Ishihara, A., Lee, D. S., and Back, K. Functional analysis of the amine substrate specificity domain of pepper tyramine and serotonin N-hydroxycinnamoyltransferases. Plant Physiol 2006;140:704-715. View abstract.  
 Schweiggert, U., Kammerer, D. R., Carle, R., and Schieber, A. Characterization of carotenoids and carotenoid esters in red pepper pods (Capsicum annuum L.) by high-performance liquid chromatography/atmospheric pressure chemical ionization mass spectrometry. Rapid Commun.Mass Spectrom. 2005;19:2617-2628. View abstract.  
 Chanda, S., Mould, A., Esmail, A., and Bley, K. Toxicity studies with pure trans-capsaicin delivered to dogs via intravenous administration. Regul.Toxicol.Pharmacol. 2005;43:66-75. View abstract.  
 Misra, M. N., Pullani, A. J., and Mohamed, Z. U. Prevention of PONV by acustimulation with capsicum plaster is comparable to ondansetron after middle ear surgery: [La prevention des NVPO par acustimulation avec un emplatre de Capsicum est comparable a celle de l'ondansetron apres une operation a l'oreille moyenne]. Can.J.Anaesth. 2005;52:485-489. View abstract.  
 Calixto, J. B., Kassuya, C. A., Andre, E., and Ferreira, J. Contribution of natural products to the discovery of the transient receptor potential (TRP) channels family and their functions. Pharmacol.Ther. 2005;106:179-208. View abstract.  
 Reilly, C. A. and Yost, G. S. Structural and enzymatic parameters that determine alkyl dehydrogenation/hydroxylation of capsaicinoids by cytochrome p450 enzymes. Drug Metab Dispos. 2005;33:530-536. View abstract.  
 Westerterp-Plantenga, M. S., Smeets, A., and Lejeune, M. P. Sensory and gastrointestinal satiety effects of capsaicin on food intake. Int J Obes.(Lond) 2005;29:682-688. View abstract.  
 Fragasso, G., Palloshi, A., Piatti, P. M., Monti, L., Rossetti, E., Setola, E., Montano, C., Bassanelli, G., Calori, G., and Margonato, A. Nitric-oxide mediated effects of transdermal capsaicin patches on the ischemic threshold in patients with stable coronary disease. J.Cardiovasc.Pharmacol. 2004;44:340-347. View abstract.  
 Pershing, L. K., Reilly, C. A., Corlett, J. L., and Crouch, D. J. Effects of vehicle on the uptake and elimination kinetics of capsaicinoids in human skin in vivo. Toxicol.Appl.Pharmacol. 10-1-2004;200:73-81. View abstract.  
 Kuda, T., Iwai, A., and Yano, T. Effect of red pepper Capsicum annuum var. conoides and garlic Allium sativum on plasma lipid levels and cecal microflora in mice fed beef tallow. Food Chem.Toxicol. 2004;42:1695-1700. View abstract.  
 Park, H. S., Kim, K. S., Min, H. K., and Kim, D. W. Prevention of postoperative sore throat using capsicum plaster applied at the Korean hand acupuncture point. Anaesthesia 2004;59:647-651. View abstract.  
 Lee, Y. S., Kang, Y. S., Lee, J. S., Nicolova, S., and Kim, J. A. Involvement of NADPH oxidase-mediated generation of reactive oxygen species in the apototic cell death by capsaicin in HepG2 human hepatoma cells. Free Radic.Res 2004;38:405-412. View abstract.  
 Yoshioka, M., Imanaga, M., Ueyama, H., Yamane, M., Kubo, Y., Boivin, A., St Amand, J., Tanaka, H., and Kiyonaga, A. Maximum tolerable dose of red pepper decreases fat intake independently of spicy sensation in the mouth. Br.J.Nutr. 2004;91:991-995. View abstract.  
 Maoka, T., Akimoto, N., Fujiwara, Y., and Hashimoto, K. Structure of new carotenoids with the 6-oxo-kappa end group from the fruits of paprika, Capsicum annuum. J.Nat.Prod. 2004;67:115-117. View abstract.  
 Petruzzi, M., Lauritano, D., De Benedittis, M., Baldoni, M., and Serpico, R. Systemic capsaicin for burning mouth syndrome: short-term results of a pilot study. J.Oral Pathol.Med. 2004;33:111-114. View abstract.  
 Chaiyata, P., Puttadechakum, S., and Komindr, S. Effect of chili pepper (Capsicum frutescens) ingestion on plasma glucose response and metabolic rate in Thai women. J.Med.Assoc.Thai. 2003;86:854-860. View abstract.  
 Crimi, N., Polosa, R., Maccarrone, C., Palermo, B., Palermo, F., and Mistretta, A. Effect of topical application with capsaicin on skin responses to bradykinin and histamine in man. Clin.Exp.Allergy 1992;22:933-939. View abstract.  
 Weller, P. and Breithaupt, D. E. Identification and quantification of zeaxanthin esters in plants using liquid chromatography-mass spectrometry. J.Agric.Food Chem. 11-19-2003;51:7044-7049. View abstract.  
 Baraniuk, J. N. Sensory, parasympathetic, and sympathetic neural influences in the nasal mucosa. J Allergy Clin Immunol. 1992;90(6 Pt 2):1045-1050. View abstract.  
 Medvedeva, N. V., Andreenkov, V. A., Morozkin, A. D., Sergeeva, E. A., Prokof'ev, IuI, and Misharin, A. I. [Inhibition of oxidation of human blood low density lipoproteins by carotenoids from paprika]. Biomed.Khim. 2003;49:191-200. View abstract.  
 McCarthy, G. M. and McCarty, D. J. Effect of topical capsaicin in the therapy of painful osteoarthritis of the hands. J.Rheumatol. 1992;19:604-607. View abstract.  
 Hiura, A., Lopez, Villalobos E., and Ishizuka, H. Age-dependent attenuation of the decrease of C fibers by capsaicin and its effects on responses to nociceptive stimuli. Somatosens.Mot.Res 1992;9:37-43. View abstract.  
 Lejeune, M. P., Kovacs, E. M., and Westerterp-Plantenga, M. S. Effect of capsaicin on substrate oxidation and weight maintenance after modest body-weight loss in human subjects. Br.J.Nutr. 2003;90:651-659. View abstract.  
 Materska, M., Piacente, S., Stochmal, A., Pizza, C., Oleszek, W., and Perucka, I. Isolation and structure elucidation of flavonoid and phenolic acid glycosides from pericarp of hot pepper fruit Capsicum annuum L. Phytochemistry 2003;63:893-898. View abstract.  
 Fett, D. D. Botanical briefs: Capsicum peppers. Cutis 2003;72:21-23. View abstract.  
 Lee, C. Y., Kim, M., Yoon, S. W., and Lee, C. H. Short-term control of capsaicin on blood and oxidative stress of rats in vivo. Phytother.Res. 2003;17:454-458. View abstract.  
 Rashid, M. H., Inoue, M., Bakoshi, S., and Ueda, H. Increased expression of vanilloid receptor 1 on myelinated primary afferent neurons contributes to the antihyperalgesic effect of capsaicin cream in diabetic neuropathic pain in mice. J Pharmacol.Exp.Ther. 2003;306:709-717. View abstract.  
 Reilly, C. A., Ehlhardt, W. J., Jackson, D. A., Kulanthaivel, P., Mutlib, A. E., Espina, R. J., Moody, D. E., Crouch, D. J., and Yost, G. S. Metabolism of capsaicin by cytochrome P450 produces novel dehydrogenated metabolites and decreases cytotoxicity to lung and liver cells. Chem.Res Toxicol. 2003;16:336-349. View abstract.  
 Kim, K. S., Koo, M. S., Jeon, J. W., Park, H. S., and Seung, I. S. Capsicum plaster at the korean hand acupuncture point reduces postoperative nausea and vomiting after abdominal hysterectomy. Anesth.Analg. 2002;95:1103-7, table. View abstract.  
 Han, S. S., Keum, Y. S., Chun, K. S., and Surh, Y. J. Suppression of phorbol ester-induced NF-kappaB activation by capsaicin in cultured human promyelocytic leukemia cells. Arch.Pharm.Res. 2002;25:475-479. View abstract.  
 Hail, N., Jr. and Lotan, R. Examining the role of mitochondrial respiration in vanilloid-induced apoptosis. J.Natl.Cancer Inst. 9-4-2002;94:1281-1292. View abstract.  
 Iorizzi, M., Lanzotti, V., Ranalli, G., De Marino, S., and Zollo, F. Antimicrobial furostanol saponins from the seeds of Capsicum annuum L. var. acuminatum. J.Agric.Food Chem. 7-17-2002;50:4310-4316. View abstract.  
 Kahl, U. [TRP channels--sensitive for heat and cold, capsaicin and menthol]. Lakartidningen 5-16-2002;99:2302-2303. View abstract.  
 De Lucca, A. J., Bland, J. M., Vigo, C. B., Cushion, M., Selitrennikoff, C. P., Peter, J., and Walsh, T. J. CAY-I, a fungicidal saponin from Capsicum sp. fruit. Med.Mycol. 2002;40:131-137. View abstract.  
 Naidu, K. A. and Thippeswamy, N. B. Inhibition of human low density lipoprotein oxidation by active principles from spices. Mol.Cell Biochem. 2002;229(1-2):19-23. View abstract.  
 Olajos, E. J. and Salem, H. Riot control agents: pharmacology, toxicology, biochemistry and chemistry. J.Appl.Toxicol. 2001;21:355-391. View abstract.  
 Barnouin, J., Verdura, Barrios T., Chassagne, M., Perez, Cristia R., Arnaud, J., Fleites, Mestre P., Montoya, M. E., and Favier, A. Nutritional and food protection against epidemic emerging neuropathy. Epidemiological findings in the unique disease-free urban area of Cuba. Int.J.Vitam.Nutr.Res. 2001;71:274-285. View abstract.  
 Yoshitani, S. I., Tanaka, T., Kohno, H., and Takashima, S. Chemoprevention of azoxymethane-induced rat colon carcinogenesis by dietary capsaicin and rotenone. Int.J.Oncol. 2001;19:929-939. View abstract.  
 Tolan, I., Ragoobirsingh, D., and Morrison, E. Y. The effect of capsaicin on blood glucose, plasma insulin levels and insulin binding in dog models. Phytother.Res. 2001;15:391-394. View abstract.  
 Stephens, D. P., Charkoudian, N., Benevento, J. M., Johnson, J. M., and Saumet, J. L. The influence of topical capsaicin on the local thermal control of skin blood flow in humans. Am.J.Physiol Regul.Integr.Comp Physiol 2001;281:R894-R901. View abstract.  
 Babakhanian, R. V., Binat, G. N., Isakov, V. D., and Mukovskii, L. A. [Forensic medical aspects of injuries inflicted with self-defense capsaicin aerosols]. Sud.Med.Ekspert. 2001;44:9-11. View abstract.  
Stam, C., Bonnet, M. S., and van Haselen, R. A. The efficacy and safety of a homeopathic gel in the treatment of acute low back pain: a multi-centre, randomised, double-blind comparative clinical trial. Br Homeopath J 2001;90:21-28. View abstract.  
 Rau, E. Treatment of acute tonsillitis with a fixed-combination herbal preparation. Adv.Ther. 2000;17:197-203. View abstract.  
 Calixto, J. B., Beirith, A., Ferreira, J., Santos, A. R., Filho, V. C., and Yunes, R. A. Naturally occurring antinociceptive substances from plants. Phytother.Res. 2000;14:401-418. View abstract.  
 Vesaluoma, M., Muller, L., Gallar, J., Lambiase, A., Moilanen, J., Hack, T., Belmonte, C., and Tervo, T. Effects of oleoresin capsicum pepper spray on human corneal morphology and sensitivity. Invest Ophthalmol.Vis.Sci. 2000;41:2138-2147. View abstract.  
 Brown, L., Takeuchi, D., and Challoner, K. Corneal abrasions associated with pepper spray exposure. Am.J.Emerg.Med. 2000;18:271-272. View abstract.  
 Yoshioka, M., St Pierre, S., Drapeau, V., Dionne, I., Doucet, E., Suzuki, M., and Tremblay, A. Effects of red pepper on appetite and energy intake. Br.J.Nutr. 1999;82:115-123. View abstract.  
 Rodriguez-Stanley, S., Collings, K. L., Robinson, M., Owen, W., and Miner, P. B., Jr. The effects of capsaicin on reflux, gastric emptying and dyspepsia. Aliment.Pharmacol.Ther. 2000;14:129-134. View abstract.  
 Krogstad, A. L., Lonnroth, P., Larson, G., and Wallin, B. G. Capsaicin treatment induces histamine release and perfusion changes in psoriatic skin. Br.J.Dermatol. 1999;141:87-93. View abstract.  
 Molina-Torres, J., Garcia-Chavez, A., and Ramirez-Chavez, E. Antimicrobial properties of alkamides present in flavouring plants traditionally used in Mesoamerica: affinin and capsaicin. J.Ethnopharmacol. 1999;64:241-248. View abstract.  
 Nakamura, A. and Shiomi, H. Recent advances in neuropharmacology of cutaneous nociceptors. Jpn.J.Pharmacol. 1999;79:427-431. View abstract.  
Wiesenauer, M. Comparison of solid and liquid forms of homeopathic remedies for tonsillitis. Adv Ther 1998;15:362-371. View abstract.  
 Hursel, R. and Westerterp-Plantenga, M. S. Thermogenic ingredients and body weight regulation. Int J Obes.(Lond) 2010;34:659-669. View abstract.  
 Hendrix, C. R., Housh, T. J., Mielke, M., Zuniga, J. M., Camic, C. L., Johnson, G. O., Schmidt, R. J., and Housh, D. J. Acute effects of a caffeine-containing supplement on bench press and leg extension strength and time to exhaustion during cycle ergometry. J Strength.Cond.Res 2010;24:859-865. View abstract.  
Friese KH, Kruse S, Ludtke R, and et al. The homoeopathic treatment of otitis media in children--comparisons with conventional therapy. Int J Clin Pharmacol Ther 1997;35:296-301. View abstract.  
Cruz L, Casta eda-Hern ndez G, Navarrete A. Ingestion of chilli pepper (Capsicum annuum) reduces salicylate bioavailability after oral asprin administration in the rat. Can J Physiol Pharmacol. View abstract.  
Wanwimolruk S, Nyika S, Kepple M, et al. Effects of capsaicin on the pharmacokinetics of antipyrine, theophylline and quinine in rats. J Pharm Pharmacol. 1993;45:618-21. View abstract.  
Sumano-L pez H, Guti rrez-Olvera L, Aguilera-Jim nez R, et al. Administration of ciprofloxacin and capsaicin in rats to achieve higher maximal serum concentrations. Arzneimittelforschung. 2007;57:286-90. View abstract.  
Simpson DM, Brown S, Tobias J; NGX-4010 C107 Study Group. Controlled trial of high-concentration capsaicin patch for treatment of painful HIV neuropathy. Neurology 2008;70:2305-2313. View abstract.  
Tuntipopipat, S., Zeder, C., Siriprapa, P., and Charoenkiatkul, S. Inhibitory effects of spices and herbs on iron availability. Int.J Food Sci.Nutr. 2009;60 Suppl 1:43-55. View abstract.  
Shalansky S, Lynd L, Richardson K, et al. Risk of warfarin-related bleeding events and supratherapeutic international normalized ratios associated with complementary and alternative medicine: a longitudinal analysis. Pharmacotherapy. 2007;27:1237-47. View abstract.  
Chrubasik S, Weiser W, Beime B. Effectiveness and safety of topical capsaicin cream in the treatment of chronic soft tissue pain. Phytother Res 2010;24:1877-85. View abstract.  
Keitel W, Frerick H, Kuhn U, et al. Capsicum pain plaster in chronic non-specific low back pain. Arzneimittelforschung 2001;51:896-903. View abstract.  
Frerick H, Keitel W, Kuhn U, et al. Topical treatment of chronic low back pain with a capsicum plaster. Pain 2003;106:59-64. View abstract.  
Gagnier JJ, van Tulder MW, Berman B, Bombardier C. Herbal medicine for low back pain. A Cochrane review. Spine 2007;32:82-92. View abstract.  
Marabini S, Ciabatti PG, Polli G, et al. Beneficial effects of intranasal applications of capsaicin in patients with vasomotor rhinitis. Eur Arch Otorhinolaryngol 1991;248:191-4. View abstract.  
Gerth Van Wijk R, Terreehorst IT, Mulder PG, et al. Intranasal capsaicin is lacking therapeutic effect in perennial allergic rhinitis to house dust mite. A placebo-controlled study. Clin Exp Allergy 2000;30:1792-8. View abstract.  
Baudoin T, Kalogjera L, Hat J. Capsaicin significantly reduces sinonasal polyps. Acta Otolaryngol 2000;120:307-11. View abstract.  
Sicuteri F, Fusco BM, Marabini S, et al. Beneficial effect of capsaicin application to the nasal mucosa in cluster headache. Clin J Pain 1989;5:49-53. View abstract.  
Lacroix JS, Buvelot JM, Polla BS, Lundberg JM. Improvement of symptoms of non-allergic chronic rhinitis by local treatment with capsaicin. Clin Exp Allergy 1991;21:595-600. View abstract.  
Bascom R, Kagey-Sobotka A, Proud D. Effect of intranasal capsaicin on symptoms and mediator release. J Pharmacol Exp Ther 1991;259:1323-7. View abstract.  
Kitajiri M, Kubo N, Ikeda H, et al. Effects of topical capsaicin on autonomic nerves in experimentally-induced nasal hypersensitivity. An immunocytochemical study. Acta Otolaryngol Suppl 1993;500:88-91. View abstract.  
Geppetti P, Tramontana M, Del Bianco E, Fusco BM. Capsaicin-desensitization to the human nasal mucosa selectively reduces pain evoked by citric acid. Br J Clin Pharmacol 1993;35:178-83. View abstract.  
Marks DR, Rapoport A, Padla D, et al. A double-blind placebo-controlled trial of intranasal capsaicin for cluster headache. Cephalalgia 1993;13:114-6. View abstract.  
Fusco BM, Fiore G, Gallo F, et al. "Capsaicin-sensitive" sensory neurons in cluster headache: pathophysiological aspects and therapeutic indication. Headache 1994;34:132-7. View abstract.  
Fusco BM, Marabini S, Maggi CA, et al. Preventative effect of repeated nasal applications of capsaicin in cluster headache. Pain 1994;59:321-5. View abstract.  
Levy RL. Intranasal capsaicin for acute abortive treatment of migraine without aura. Headache 1995;35:277. View abstract.  
Blom HM, Van Rijswijk JB, Garrelds IM, et al. Intranasal capsaicin is efficacious in non-allergic, non-infectious perennial rhinitis. A placebo-controlled study. Clin Exp Allergy 1997;27:796-801. View abstract.  
Stjarne P, Rinder J, Heden-Blomquist E, et al. Capsaicin desensitization of the nasal mucosa reduces symptoms upon allergen challenge in patients with allergic rhinitis. Acta Otolaryngol 1998;118:235-9. View abstract.  
Rapoport AM, Bigal ME, Tepper SJ, Sheftell FD. Intranasal medications for the treatment of migraine and cluster headache. CNS Drugs 2004;18:671-85. View abstract.  
Blom HM, Severijnen LA, Van Rijswijk JB, et al. The long-term effects of capsaicin aqueous spray on the nasal mucosa. Clin Exp Allergy 1998;28:1351-8. View abstract.  
Ebihara T, Takahashi H, Ebihara S, et al. Capsaicin troche for swallowing dysfunction in older people. J Am Geriatr Soc 2005;53:824-8. View abstract.  
Hakas JF Jr. Topical capsaicin induces cough in patient receiving ACE inhibitor. Ann Allergy 1990;65:322-3.  
O'Connell F, Thomas VE, Pride NB, Fuller RW. Capsaicin cough sensitivity decreases with successful treatment of chronic cough. Am J Respir Crit Care Med 1994;150:374-80. View abstract.  
Yeo WW, Higgins KS, Foster G et al. Effect of dose adjustment on enalapril-induced cough and the response to inhaled capsaicin. J Clin Pharmacol 1995;39:271-6. View abstract.  
Yeo WW, Chadwick IG, Kraskiewicz M, et al. Resolution of ACE inhibitor cough: changes in subjective cough and responses to inhaled capsaicin, intradermal bradykinin and substance-P. Br J Clin Pharmacol 1995;40:423-9. View abstract.  
Bortolotti M, Coccia G, Grossi G, Miglioli M. The treatment of functional dyspepsia with red pepper. Aliment Pharmacol Ther 2002;16:1075-82. View abstract.  
Zollman TM, Bragg RM, Harrison DA. Clinical effects of oleoresin capsicum (pepper spray) on the human cornea and conjunctiva. Ophthalmology 2000;107:2186-9. View abstract.  
Williams SR, Clark RF, Dunford JV. Contact dermatitis associated with capsaicin: Hunan hand syndrome. Ann Emerg Med 1995;25:713-5. View abstract.  
Wang JP, Hsu MF, Teng CM. Antiplatelet effect of capsaicin. Thromb Res 1984;36:497-507. View abstract.  
Hogaboam CM, Wallace JL. Inhibition of platelet aggregation by capsaicin. An effect unrelated to actions on sensory afferent neurons. Eur J Pharmacol 1991;202:129-31. View abstract.  
Bouraoui A, Brazier JL, Zouaghi H, Rousseau M. Theophylline pharmacokinetics and metabolism in rabbits following single and repeated administration of Capsicum fruit. Eur J Drug Metab Pharmacokinet 1995;20:173-8. View abstract.  
Surh YJ, Lee SS. Capsaicin in hot chili pepper: carcinogen, co-carcinogen or anticarcinogen? Food Chem Toxicol 1996;34:313-6. View abstract.  
Schmulson MJ, Valdovinos MA, Milke P. Chili pepper and rectal hyperalgesia in irritable bowel syndrome. Am J Gastroenterol 2003;98:1214-5.  
Cichewicz RH, Thorpe PA. The antimicrobial properties of chile peppers (Capsicum species) and their uses in Mayan medicine. J Ethnopharmacol 1996;52:61-70. View abstract.  
Mason L, Moore RA, Derry S, et al. Systematic review of topical capsaicin for the treatment of chronic pain. BMJ 2004;328:991. View abstract.  
Kang JY, Yeoh KG, Chia HP, et al. Chili - protective factor against peptic ulcer? Dig Dis Sciences 1995;40:576-9. View abstract.  
Surh YJ. Anti-tumor promoting potential of selected spice ingredients with antioxidative and anti-inflammatory activities: a short review. Food Chem Toxicol 2002;40:1091-7. View abstract.  
Stander S, Luger T, Metze D. Treatment of prurigo nodularis with topical capsaicin. J Am Acad Dermatol 2001;44:471-8.. View abstract.  
Hoeger WW, Harris C, Long EM, Hopkins DR. Four-week supplementation with a natural dietary compound produces favorable changes in body composition. Adv Ther 1998;15:305-14. View abstract.  
McCarty DJ, Csuka M, McCarthy G, et al. Treatment of pain due to fibromyalgia with topical capsaicin: A pilot study. Semin Arthr Rheum 1994;23:41-7.  
Cordell GA, Araujo OE. Capsaicin: identification, nomenclature, and pharmacotherapy. Ann Pharmacother 1993;27:330-6. View abstract.  
Visudhiphan S, Poolsuppasit S, Piboonnukarintr O, Timliang S. The relationship between high fibrinolytic activity and daily capsicum ingestion in Thais. Am J Clin Nutr 1982;35:1452-8. View abstract.  
Locock RA. Capsicum. Can Pharm J 1985;118:517-9.  
Sharma A, Gautam S, Jadhav SS. Spice extracts as dose-modifying factors in radiation inactivation of bacteria. J Agric Food Chem 2000;48:1340-4. View abstract.  
Millqvist E. Cough provocation with capsaicin is an objective way to test sensory hyperreactivity in patients with asthma-like symptoms. Allergy 2000;55:546-50. View abstract.  
Electronic Code of Federal Regulations. Title 21. Part 182 -- Substances Generally Recognized As Safe. Available at: https://www.accessdata.fda.gov/scripts/cdrh/cfdocs/cfcfr/CFRSearch.cfm?CFRPart=182  
Graham DY, Anderson SY, Lang T. Garlic or jalapeno peppers for treatment of Helicobacter pylori infection. Am J Gastroenterol 1999;94:1200-2. View abstract.  
Paice JA, Ferrans CE, Lashley FR, et al. Topical capsaicin in the management of HIV-associated peripheral neuropathy. J Pain Symptom Manage 2000;19:45-52. View abstract.  
Cooper RL, Cooper MM. Red pepper-induced dermatitis in breast-fed infants. Dermatol 1996;93:61-2. View abstract.  
Covington TR, et al. Handbook of Nonprescription Drugs. 11th ed. Washington, DC: American Pharmaceutical Association, 1996.