The Aloe extract and/or its different ingredients were investigated and were found efficient for many different diseases.

### Here are some references of summaries that were published in the PubMed - The U.S National Library of Medicine

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The references are organized in tables – a separate table for each subject.

To go straight to the Table of contents click here.

You can make your own search in PubMed by putting the relevant words into the search window, for example:

For summaries about cancer diseases: cancer and aloe or cancer and aloe and human

For summaries about bowel diseases: aloe and bowel and disease

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#### Aloe & Cancer

References in PubMed - The U.S National Library of Medicine	Diseases and therapeutic activities where treatment with Aloe or its' ingredients were found efficient
http://www.ncbi.nlm.nih.gov/pubmed/19368145 In Vivo. 2009 Jan-Feb;23(1):171-5 A randomized study of chemotherapy versus biochemotherapy with chemotherapy plus Aloe arborescens in patients with metastatic cancer.	A study was planned to include <b>240 patients</b> with metastatic solid tumor who were randomized to receive chemotherapy with or without Aloe. This study seems to suggest that Aloe may be successfully associated with chemotherapy to increase its efficacy in terms of both tumor regression rate and survival time.
http://www.ncbi.nlm.nih.gov/pubmed/15037218 Int Immunopharmacol. 2004 Mar;4(3):411-8 Mannan from Aloe saponaria inhibits tumoral cell activation and proliferation.	In conclusion, <b>mannan (aloe polysaccharide)</b> has a dual beneficial effect when applied to normal and tumoral cells at the same time by inhibiting the activation of cancer cells and improving that of normal ones.
http://www.ncbi.nlm.nih.gov/pubmed/12587212 Zhong Yao Cai. 2001 May;24(5):350-3 Study on antitumor effect and mechanism of aloe polysaccharides.	Aloe polysaccharides have the effects of antitumor, enhancing the antitumor activity of chemotherapy drugs and lessening their side-effects.
http://www.ncbi.nlm.nih.gov/pubmed/12794753 http://www.ncbi.nlm.nih.gov/pubmed/12175703 http://www.ncbi.nlm.nih.gov/pubmed/11803275	We demonstrated that the expression of p38 is an important determinant of apoptotic death induced by <b>aloe-emodin</b> We observed that aloe-emodin inhibited cell proliferation and induced apoptosis in both examined cell lines, but with different antiproliferative mechanisms. Aloe emodin has been reported to be nontoxic for
http://www.ncbi.nlm.nih.gov/pubmed/19941474 Curr Med Chem. 2010 Jan;17(2):129-38 Antitumor properties and modulation of antioxidant enzymes' activity by Aloe vera leaf active principles isolated via supercritical carbon dioxide extraction	neuroectodermal tumor cells. Acute myeloid leukemia / AML Lymphocytes leukemia / ALL Colon cancer
isolated via supercritical carbon dioxide extraction. <u>http://www.ncbi.nlm.nih.gov/pubmed/20032398</u> Anticancer Res. 2009 Nov;29(11):4503-11 Aloe-emodin induces cell death through S-phase arrest and caspase-dependent pathways in human tongue squamous cancer SCC-4 cells	Human <b>tongue</b> squamous carcinoma
http://www.ncbi.nlm.nih.gov/pubmed/18443957 Cancer Invest. 2008 May;26(4):369-74. Suppression of C-myc expression associates with anti-proliferation of aloe-emodin on gastric cancer cells.	Gastric cancer

http://www.ncbi.nlm.nih.gov/pubmed/18031614 Acta Pharmacol Sin. 2007 Dec;28(12):1991-5. Anticancer effect of aloe-emodin on cervical cancer cells involves G2/M arrest and induction of differentiation.	Cervical cancer
http://www.ncbi.nlm.nih.gov/pubmed/17726368 Cancer Biol Ther. 2007 Aug;6(8):1200-5. Epub 2007 May 4 Antitumor effects of a natural anthracycline analog (Aloin) involve altered activity of antioxidant enzymes in HeLaS3 cells.	Human <b>uterine</b> carcinoma
http://www.ncbi.nlm.nih.gov/pubmed/17698970 Carcinogenesis. 2007 Sep;28(9):1937-45. Epub 2007 Aug 14. Critical role of oxidative stress and sustained JNK activation in aloe-emodin-mediated apoptotic cell death in human hepatoma cells.	Human <b>hepatoma</b> cells
http://www.ncbi.nlm.nih.gov/pubmed/17643413 Eur J Pharmacol. 2007 Nov 14;573(1-3):1-10. Epub 2007 Jul 12. Chaperones are the target in aloe-emodin-induced human lung nonsmall carcinoma H460 cell apoptosis.	Human <b>lung</b> nonsmall carcinoma
http://www.ncbi.nlm.nih.gov/pubmed/16300878 Cancer Lett. 2006 Jul 28;239(1):55-63. Epub 2005 Nov 21 Aloe-emodin induced DNA damage through generation of reactive oxygen species in human lung carcinoma cells.	Human <b>lung</b> carcinoma
http://www.ncbi.nlm.nih.gov/pubmed/16406939 J Urol. 2006 Jan;175(1):343-7. Aloe-emodin induces apoptosis in T24 human bladder cancer cells through the p53 dependent apoptotic pathway.	Human <b>bladder</b> cancer
http://www.ncbi.nlm.nih.gov/pubmed/16357514 Cancer Biol Ther. 2006 Jan;5(1):97-103. Epub 2006 Jan 22. Cytotoxicity of a natural anthraquinone (Aloin) against human breast cancer cell lines with and without ErbB-2: topoisomerase lialpha coamplification.	Human <b>breast</b> cancer
http://www.ncbi.nlm.nih.gov/pubmed/16314733 Melanoma Res. 2005 Dec;15(6):489-94 Effect of inhibition of aloe-emodin on N- acetyltransferase activity and gene expression in human malignant melanoma cells (A375.S2).	Melanoma
http://www.ncbi.nlm.nih.gov/pubmed/14654928 Oncol Rep. 2004 Jan;11(1):213-7 Combined effect of aloe-emodin and chemotherapeutic agents on the proliferation of an adherent variant cell line of Merkel cell carcinoma.	Merkel cell carcinoma
http://www.ncbi.nlm.nih.gov/pubmed/1910624 Mol Biother. 1991 Jun;3(2):79-87 Decreased mortality of Norman murine sarcoma in mice treated with the immunomodulator, Acemannan.	Sarcoma
http://www.ncbi.nlm.nih.gov/pubmed/10850417 Cancer Res. 2000 Jun 1;60(11):2800-4 Aloe-emodin is a new type of anticancer agent with selective activity against neuroectodermal tumors.	Neuroectodermal tumors

http://www.ncbi.nlm.nih.gov/pubmed/15531293 Int Immunopharmacol. 2004 Dec 20;4(14):1775-84 Aloe-emodin modulates PKC isozymes, inhibits proliferation, and induces apoptosis in U-373MG glioma cells. http://www.ncbi.nlm.nih.gov/pubmed/17897641 Eur J Pharmacol. 2007 Dec 22:577(1-3):58-63. Enub 2007 Sep 11	Glioma
Neuroprotective effects of emodin-8-O-beta-D- glucoside in vivo and in vitro.	brain tissue.
http://www.ncbi.nlm.nih.gov/pubmed/18464074 J Asian Nat Prod Res. 2008 May-Jun;10(5-6):383-90 Inhibitory effect of aloe-emodin on metastasis potential in HO-8910PM cell line. http://www.ncbi.nlm.nih.gov/pubmed/10464713 J Exp Clin Cancer Res. 1999 Jun;18(2):233-9 Establishment of a highly metastatic human ovarian cancer cell line (HO-8910PM) and its characterization.	Ovarian cancer
http://www.ncbi.nlm.nih.gov/pubmed/2503472 Jpn J Cancer Res. 1989 Jun;80(6):513-20. Epidemiologic survey on lung cancer with respect to cigarette smoking and plant diet.	17 major dietary plants and/or herbs: Suggesting that the aloe may prevent human carcinogenesis at various sites.
http://www.ncbi.nlm.nih.gov/pubmed/17363492 Mol Cancer Ther. 2007 Mar;6(3):987-94. Emodin has a cytotoxic activity against human multiple myeloma as a Janus-activated kinase 2 inhibitor.	Myeloma
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Table no. 2 / Back to Table of contents		
Aloe &Gastric ulcer		
References in PubMed - The U.S National Library of Medicine	Diseases and therapeutic activities where treatment with Aloe or its' ingredients were found efficient	
http://www.ncbi.nlm.nih.gov/pubmed/16610053 World J Gastroenterol. 2006 Apr 7;12(13):2034-9 Effects of Aloe vera and sucralfate on gastric microcirculatory changes, cytokine levels and gastric ulcer healing in rats.	Aloe vera treatment can reduce leukocyte adherence and TNF-alpha level, elevate IL-10 level and <b>promote gastric ulcer healing</b> .	
http://www.ncbi.nlm.nih.gov/pubmed/16899957 Clin Hemorheol Microcirc. 2006;35(3):359-66 Anti-inflammatory effects of Aloe vera on leukocyte- endothelium interaction in the gastric microcirculation of Helicobacter pylori-infected rats.	Treatment with A. vera reduced the leukocyte adhesion, and TNF-alpha significantly	
http://www.ncbi.nlm.nih.gov/pubmed/9525111 Planta Med. 1998 Mar;64(2):176-8 Aloe-emodin effects on arylamine N- acetyltransferase activity in the bacterium Helicobacter pylori.	aloe-emodin elicited dose-dependent growth inhibition in Helicobacter pylori cultures. The report is the first finding of aloe-emodin inhibition of arylamine NAT activity in a strain of Helicobacter pylori.	
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Aloe & Diabetes / Cholesterol / Lipidemia	
References in PubMed - The U.S National Library of Medicine	Diseases and therapeutic activities where treatment with Aloe or its' ingredients were found efficient
http://www.ncbi.nlm.nih.gov/pubmed/12020931 J Ethnopharmacol. 2002 Jun;81(1):81-100 Medicinal plants of India with anti-diabetic potential.	Allium cepa, Allium sativum, <b>Aloe vera</b> , Cajanus cajan, Coccinia indica, All plants have shown varying degree of hypoglycemic and anti-hyperglycemic activity.
http://www.ncbi.nlm.nih.gov/pubmed/10885091 Br J Gen Pract. 1999 Oct;49(447):823-8 Aloe vera: a systematic review of its clinical effectiveness.	They suggest that oral administration of aloe vera might be a useful adjunct for lowering blood glucose in diabetic patients as well as for reducing blood lipid levels in patients with hyperlipidaemia.
http://www.ncbi.nlm.nih.gov/pubmed/3096865 Horm Res. 1986;24(4):288-94 The antidiabetic activity of aloes: preliminary clinical and experimental observations.	During the ingestion of aloes, half a teaspoonful daily for 4-14 weeks We conclude that aloes contains a hypoglycaemic agent which lowers the blood glucose by as yet unknown mechanisms.
http://www.ncbi.nlm.nih.gov/pubmed/2864002 Angiology. 1985 Aug;36(8):485-92 Prevention of atheromatous heart disease.	Five thousand patients of atheromatous heart disease, presented as angina pectoris, were studied over a period of five years. After adding the 'Husk of Isabgol' and 'aloe vera' (an indigenous plant known as ghee-guar-ka-paththa) to the diet, a marked reduction in total serum cholesterol, serum triglycerides, fasting and post prandial blood sugar level in diabetic patients, total lipids and also increase in HDL were noted.
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Aloe vera in dermatology		
References in PubMed - The U.S National Library of Medicine	Diseases and therapeutic activities where treatment with Aloe or its' ingredients were found efficient	
http://www.ncbi.nlm.nih.gov/pubmed/19218914 G Ital Dermatol Venereol. 2009 Feb;144(1):85-91 Aloe vera in dermatology: a brief review.	It can be effective for genital herpes, psoriasis, human papilloma virus, seborrheic dermatitis, aphthous stomatitis, xerosis, lichen planus, frostbite, burn, wound healing and inflammation. It can also be used as a biological vehicle and an anti-microbial and antifungal agent and also as a candidate for photodynamic therapy of some kinds of cancer.	
http://www.ncbi.nlm.nih.gov/pubmed/10885091 Br J Gen Pract. 1999 Oct;49(447):823-8 Aloe vera: a systematic review of its clinical effectiveness.	It might be effective for genital herpes and psoriasis.	
http://www.ncbi.nlm.nih.gov/pubmed/19686327 J Eur Acad Dermatol Venereol. 2010 Feb;24(2):168-72. Epub 2009 Aug 14 A prospective, randomized clinical trial comparing topical aloe vera with 0.1% triamcinolone acetonide in mild to moderate plaque psoriasis.	After 8 weeks of treatment Aloe-Vera cream may be more effective than 0.1% TA cream in reducing the clinical symptoms of psoriasis; however, both treatments have similar efficacy in improving the quality of life of patients with mild to moderate psoriasis.	
http://www.ncbi.nlm.nih.gov/pubmed/8765459 Trop Med Int Health. 1996 Aug;1(4):505-9 Management of psoriasis with Aloe vera extract in a hydrophilic cream: a placebo-controlled, double- blind study.	The study was scheduled for 16 weeks with 12 months of follow-up on a monthly basis. By the end of the study, the Aloe vera extract cream had cured 25/30 patients (83.3%) compared to the placebo	
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Table no. 5/ Back to Table of contents		
Aloe & Candida / Antifungal activity		
References in PubMed - The U.S National Library of Medicine	Diseases and therapeutic activities where treatment with Aloe or its' ingredients were found efficient	
http://www.ncbi.nlm.nih.gov/pubmed/19505552 J Ethnopharmacol. 2009 Jul 30;124(3):404-8. Epub 2009 Jun 6 Antimicrobial, anti-inflammatory and mutagenic investigation of the South African tree aloe (Aloe barberae).	Antibacterial, antifungal and anti-inflammatory activities	
http://www.ncbi.nlm.nih.gov/pubmed/20606782 Afr J Tradit Complement Altern Med. 2009 Jul 3;6(4):592-5 The efficacy of crude extract of Aloe secundiflora on Candida albicans.	The findings from this study suggest that the crude extract of Aloe secundiflora can inhibit the growth of Candida albicans.	
http://www.ncbi.nlm.nih.gov/pubmed/10967452 J Ethnopharmacol. 2000 Sep;72(1-2):43-6 Antifungal activity of anthraquinone derivatives from Rheum emodi.	exhibited antifungal activity against Candida albicans	
http://www.ncbi.nlm.nih.gov/pubmed/9278177 Int J Immunopharmacol. 1997 Feb;19(2):75-82 Upregulation of phagocytosis and candidicidal activity of macrophages exposed to the immunostimulant acemannan.	The results of the present study indicate that short term exposure of MO to acemannan (of aloe) upregulates the RB, phagocytosis and candidicidal activity	
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Aloe & Crohn's disease and ulcerative colitis		
References in PubMed - The U.S National Library of Medicine	Diseases and therapeutic activities where treatment with Aloe or its' ingredients were found efficient	
http://www.ncbi.nlm.nih.gov/pubmed/16422993 Aliment Pharmacol Ther. 2006 Feb 1;23(3):341-9 Review article: complementary and alternative therapies for inflammatory bowel disease.	There is limited controlled evidence indicating efficacy of traditional Chinese medicines, <b>aloe</b> <b>vera gel</b> , wheat grass juice, Boswellia serrata and bovine colostrum enemas in ulcerative colitis. Encouraging results have also been reported in small studies of acupuncture for <b>Crohn's disease</b> <b>and ulcerative colitis.</b>	
http://www.ncbi.nlm.nih.gov/pubmed/15043514 Aliment Pharmacol Ther. 2004 Apr 1;19(7):739-47 Randomized, double-blind, placebo-controlled trial of oral aloe vera gel for active ulcerative colitis.	AIM: To perform a double-blind, randomized, placebo-controlled trial of the efficacy and safety of aloe vera gel for the treatment of mildly to moderately active <b>ulcerative colitis</b> . Oral aloe vera taken for 4 weeks produced a clinical response more often than placebo; it also reduced the histological disease activity and appeared to be safe.	
http://www.ncbi.nlm.nih.gov/pubmed/14987320 Aliment Pharmacol Ther. 2004 Mar 1;19(5):521-7 Anti-inflammatory effects of aloe vera gel in human colorectal mucosa in vitro.	The anti-inflammatory actions of aloe vera gel in vitro provide support for the proposal that it may have a therapeutic effect in <b>inflammatory bowel disease.</b>	
http://www.ncbi.nlm.nih.gov/pubmed/10029372 Eur J Surg Suppl. 1998;(582):90-8 Medical therapy of inflammatory bowel disease for the 21 <sup>st</sup> century.	Many other investigational agents in disparate pharmaceutical categories have been employed in <b>IBD therapy</b> ; and some of these also show varying degrees of promise, including the <b>aloe</b> <b>vera derivative acemannan</b>	
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## Aloe & Antibacterial, Antifungal and Anti-inflammatory Activities

References in PubMed - The U.S National Library of Medicine	Diseases and therapeutic activities where treatment with Aloe or its' ingredients were found efficient
http://www.ncbi.nlm.nih.gov/pubmed/19505552 J Ethnopharmacol. 2009 Jul 30;124(3):404-8. Epub 2009 Jun 6 Antimicrobial, anti-inflammatory and mutagenic investigation of the South African tree aloe (Aloe barberae).	Antibacterial, antifungal and anti-inflammatory activities
http://www.ncbi.nlm.nih.gov/pubmed/20679979 Br J Community Nurs. 2010 Jun;15(6):280-2 Oral Aloe vera as a treatment for osteoarthritis: a summary.	Osteoarthritis
http://www.ncbi.nlm.nih.gov/pubmed/3941379 J Am Podiatr Med Assoc. 1986 Feb;76(2):61-6 Antiarthritic activity of anthraquinones found in aloe for podiatric medicine.	Antiarthritic activity of anthraquinones
http://www.ncbi.nlm.nih.gov/pubmed/9121170 J Ethnopharmacol. 1996 Dec;55(1):69-75 Antiinflammatory activity of extracts from Aloe vera gel.	These results demonstrated that the extracts of Aloe vera gel have <b>antiinflammatory activity</b> and suggested its inhibitory action on the arachidonic acid pathway via cyclooxygenase.
http://www.ncbi.nlm.nih.gov/pubmed/18701259 Int J Antimicrob Agents. 2008 Oct;32(4):355-9. Epub 2008 Aug 13 Aloe-emodin is an interferon-inducing agent with antiviral activity against Japanese encephalitis virus and enterovirus 71.	The antiviral activity of aloe-emodin against Japanese encephalitis virus (JEV) and enterovirus 71 (EV71) was evaluated using dose- and time-dependent plaque reduction assays in HL-CZ cells and TE-671 cells. Aloe-emodin showed clearly potent virus inhibitory abilities and achieved high therapeutic indices
http://www.ncbi.nlm.nih.gov/pubmed/20361311 Arch Pharm Res. 2010 Mar;33(3):451-6. Epub 2010 Mar 30 In vivo evidence of the immunomodulatory activity of orally administered Aloe vera gel.	Immunity system
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