

RMA Polysaccharides

"Inhibition of Herpesvirus Replication by Marine Algae Extracts" E. Frank Deig et al Naval Biomedical Research Laboratory, School of Public Health, University of California,

Link:

<http://aac.asm.org/cgi/reprint/6/4/524?maxtoshow=&HITS=10&hits=10&RESULTFORMAT=&titleabstract=red+marine+algae&searchid=1&FIRSTINDEX=0&resourcetype=HWCIT>

"Antiretroviral activity in a marine red alga: reverse transcriptase inhibition by an aqueous extract of *Schizymenia pacifica*" Journal of Cancer Research Clinical Oncology 113: 413-16. 1987 Nakashima et. al. "Red marine alga has been shown to have significant inhibitory effects against herpes." Phytomedicine 2001 Jan;8(1):53-8: Duarte ME, et al From the Glyconutrients Center: "Further research in the family of Dumontiaceae produced two patents where clinical efficacy for herpes I and II was clearly shown. The treatment was effective for treating subjects (e.g. human patients) both prior to and subsequent to herpes infection."

Link: <http://www.glyconutrients-center.org/red-algae.php>

U. Cal. Dept. of Biological Sciences, w. Neushul Mariculture: "Both the herpes virus (containing DNA) and human immunodeficiency virus (containing RNA) are inhibited by sulfated polysaccharides that act within the cell as well as externally to it."

Link: <http://www.springerlink.com/content/q5un41974173g970/>

There is more good information on RMA at the following site, a seller of RMA.

Link: <http://www.vibranthealth.us/gig.html>

Zinc Sulfate

University Study: "Zinc Salts Inactivate Clinical Isolates of Herpes Simplex Virus In Vitro" Arens and Travis, The Edward Mallinckrodt Department of Pediatrics, Washington University School of Medicine and St. Louis Children's Hospital, St. Louis, Missouri 63110 Journal of Clinical Microbiology.

Link: <http://www.pubmedcentral.nih.gov/articlerender.fcgi?artid=86580>

University Study: **Results: A 60% reduction in recurrences!** "A Randomized Double-Blind Placebo-Controlled Clinical Trial of Two Strengths of Topical Zinc Sulfate Solution Against Recurrent Herpes Simplex." Fariba Iraj MD, Gita Faghihi MD Department of Dermatology, Isfahan University of Medical Sciences "Conclusion – Topical zinc sulfate 0.05% was an effective therapeutic modality against recurrent herpes simplex compared with either a lower concentration or placebo."

Link: <http://www.ams.ac.ir/AIM/0261/0261013.htm>

"Irreversible Inhibition of Herpes Simplex Virus Replication in BSC-1 Cells by Zinc Ions" J. Gordon Yitzhak et al.

Link: <http://aac.asm.org/cgi/reprint/8/3/377.pdf>

Cutis (Medical Journal): Finnerty EF. **"Topical zinc in the treatment of herpes simplex."** Cutis 1986;37:130–1. British Journal of Dermatology: "Topical treatment of recurrent herpes simplex and post-herpetic erythema multiforme with low concentrations of zinc sulphate solution. I Brodie et al. British Journal of Dermatology, 1981;104:191–4. Medical Hypotheses (Medical Journal): "Use of topical zinc to prevent recurrent herpes simplex infection: review of literature and suggested protocols." Eby GA, Halcomb WW. Med Hypotheses 1985;17:157–65

Prunella Vulgaris



WebMD: “Herb May Be Alternative Herpes Treatment” Source: American Society for Microbiology, Washington, D.C. Excerpt: “An experimental herpes Formula derived from an herb known as Prunella vulgaris may one day help prevent and treat both types of the herpes virus that cause cold sores and genital herpes.”

Link: <http://www.webmd.com/genital-herpes/news/20030519/herb-may-be-alternative-herpes-treatment>

BBC News: Herb treatment for herpes “A common herb may provide a new and effective treatment for the sexually transmitted infection herpes.”

Link: <http://news.bbc.co.uk/2/hi/health/3039489.stm>

Journal of Ethnopharmacology: “A polysaccharide fraction from medicinal herb Prunella vulgaris downregulates the expression of herpes simplex virus antigen in Vero cells.” Journal of Ethnopharmacology. July 2004; 93(1):63-8. Excerpt: “Results from this study show that Prunella vulgaris is effective against both the Herpes simplex virus-1 and Herpes simplex virus-2 infections.”

International Journal of Molecular Medicine: “Immune modulatory effects of Prunella vulgaris L.”

International Journal of Molecular Medicine. March 2005; 15(3):491-6. Excerpt: “Prunella vulgaris has a wide array of biological effects exhibiting numerous therapeutic potentials. Its anti-microbial effects including anti-viral and anti-bacterial effects are, presently, receiving increasing attention.”

L-Lysine

The Journal of Antimicrobial Chemotherapy: “Subjective response to lysine in the therapy of herpes simplex” David E. Walsh, et al. Research Department, General Nutrition Corporation; Department of Medicine, Indiana University School of Medicine Department of Computer Science, University of California at Santa Barbara Excerpt: “To test the effect of lysine supplementation on herpes infection, 1543 subjects were surveyed by questionnaire after a six-month trial period. The study included subjects with cold sores, cankersores, and genital herpes. Of these, 54% had been diagnosed and treated by a physician. The results showed that the average dosage used was 936 mg of lysine daily. Eighty-four percent of those surveyed said that lysine supplementation prevented recurrence or decreased the frequency of herpes infection. Whereas 79% described their symptoms as severe or intolerable without lysine, only 8% used these terms when taking lysine. Without lysine, 90% indicated that healing took six to 15 days, but with lysine 83% stated that lesions healed in five days or less. Overall, 88% considered supplemental lysine an effective form of Formula for herpes infection.” PMID: 6423612 [PubMed - indexed for MEDLINE]

Link: <http://jac.oxfordjournals.org/cgi/content/abstract/12/5/489>

From “Alternative Medicine and Health”: “In my experience, the most effective aid in the relief of herpes

is the amino acid L-lysine.”

Link: <http://alternative-medicine-and-health.com/conditions/herpes.htm>

From “Diagnose-Me.com”, concerning l-lysine supplementation (as contained in Herpaflör® Caps): “The [amino acid lysine](#) often controls herpes. . . results of a six-month trial involving more than 50 people indicate that lysine is far more effective than a placebo in preventing cold sores. Participants given a placebo had more than twice as many such infections as those taking lysine. Moreover, the herpes sores that did develop in the lysine group tended to be milder, and to heal faster, than the outbreaks in the placebo group. Lysine supplements may even prevent HSV outbreaks in chronic sufferers.”

Link (scroll down to “Recommendations and Formulas”):

Link: <http://www.diagnose-me.com/cond/C150130.html>

From Advance-Health.com: “Tissue culture studies have demonstrated that lysine inhibits viral replication. . . experiments using Lysine supplements have shown that the intensity and frequency of outbreaks is reduced and quicker resolution of lesions is achieved.”

Link: <http://www.advance-health.com/lysineherpes.html>

From EarthClinic.com (Scroll down to the section called: “#1 Remedy for Cold Sores: L-Lysine Supplements”): Link: <http://www.earthclinic.com/CURES/herpes.html>

Apparently, L-Lysine even controls herpes in animals! (and yes, we DO have customers who give Herpaflör®™ Caps to their pets, not only for herpes-related infections and conjunctivitis, but for general immune system support; we suggest 2 capsules per day for maintenance, 4 per day for an active infection). May be opened and mixed into food.

Links: <http://www.vetinfo.com/cherpes.htm> and <http://www.cockatoo.com/lysine/index.htm>

Opuntia Streptacantha

“Antiviral properties of extract of Opuntia streptacantha” “An extract of the cactus plant Opuntia streptacantha inhibited intracellular virus replication and inactivated extracellular virus.” Antiviral Research; 1996;30:75–85”)

Link: http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?db=PubMed&cmd=Retrieve&list_uids=8783800

Viral inhibition (Herpes Simplex Virus) in the oral cavity by Opuntia Streptacantha “The present study indicates that an extract of 35% Opuntia Streptacantha regularly reduces the signs and symptoms of a Herpes Simplex Virus infection if diagnosed early.”

Link: [http://www.eapd.gr/Journal/2000v1/Vol 1\(3\) Bergen Abstracts 121-150.htm](http://www.eapd.gr/Journal/2000v1/Vol 1(3) Bergen Abstracts 121-150.htm)

U.S. Pharmacist: “Glycyrrhiza has been shown in vitro and in vivo to be effective against viruses. Further studies are being done with HIV, hepatitis A, B, C and herpes viruses. The mechanism for this effect is both a direct inhibitory action on viral replication and stimulation of interferon production by T-cells.” Combest, Wendell L, Ph.D. “Licorice”. U.S. Pharmacist. (April, 1998):126-127. National Institutes of Health: Extract: “Laboratory studies have found that DGL may hinder the spread and infection of herpes simplex virus.”

Link: <http://www.nlm.nih.gov/medlineplus/druginfo/natural/patient-licorice.html>

Magazine: “Glycyrrhizic acid inhibits virus growth and inactivates virus particles” Pompei R, Flore O, Marccialis MA, et al.. Nature 1979;281:689–90 BBC News: Licorice stops 'herpes' cancer

“A compound in licorice may help to stop people with a herpes virus from developing cancer, research suggests.” <http://news.bbc.co.uk/1/hi/health/4307907.stm> Answers.com: “An ointment made with glycyrrhizinic acid, a component of licorice (Glycyrrhiza glabra), seems to inactivate the virus.”

<http://www.answers.com/topic/genital-herpes> [Alternative Medicine Review](#): (Sept, 2005 Issue): Extract:

“Studies show licorice and its constituents, specifically glycyrrhizin, have antiviral activity against Herpes simplex and are capable of irreversibly inactivating the virus.”

[Licorice root](#) (Glycyrrhiza glabra) contains antiviral substances and ointments containing related substances are effective in treating herpes infections.

Link: <http://healthlink.uhseast.com/library/healthguide/en-us/Cam/topic.htm?hwid=hn-1218009>Cedars-Sinai Hospital: <http://healthinfo.cedars-sinai.edu/library/healthguide/en-us/Cam/topic.htm?hwid=hn-2122006>

Glycyrrhiza(from Licorice Root)

U.S. Pharmacist:

“Glycyrrhiza has been shown in vitro and in vivo to be effective against viruses. Further studies are being done with HIV, hepatitis A, B, C and herpes viruses. The mechanism for this effect is both a direct inhibitory action on viral replication and stimulation of interferon production by T-cells.”

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National Institutes of Health:

Extract: “Laboratory studies have found that DGL may hinder the spread and infection of herpes simplex virus.”

<http://www.nlm.nih.gov/medlineplus/druginfo/natural/patient-licorice.html>

Nature Magazine:

“Glycyrrhizic acid inhibits virus growth and inactivates virus particles”

Pompei R, Flore O, Marccialis MA, et al.. Nature 1979;281:689-90

BBC News:

Liquorice stops 'herpes' cancer

“A compound in liquorice may help to stop people with a herpes virus from developing cancer, research suggests.”

<http://news.bbc.co.uk/1/hi/health/4307907.stm>

Answers.com:

“An ointment made with glycyrrhizinic acid, a component of licorice (*Glycyrrhiza glabra*), seems to inactivate the virus.”

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Alternative Medicine Review:

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HealthLink:

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<http://healthlink.uhseast.com/library/healthguide/en-us/Cam/topic.htm?hwid=hn-1218009>

Cedars-Sinai Hospital:

<http://healthinfo.cedars-sinai.edu/library/healthguide/en-us/Cam/topic.htm?hwid=hn-2122006>

Sage

Herpes-Coldsores.com: “Sage:moderately strong antiseptic; kills most viruses that it comes in contact with.” “Herbs for Treating Herpes Zoster Infections” [Eric Yarnell](#), [Kathy Abascal](#) Alternative & Complementary Therapies. Jun 2005, Vol. 11, No. 3: 131-134

Lemon Balm (Melissa Officinalis)



(Lemon Balm is widely sold in Europe as a treatment for cold sores and genital herpes.) MedHerb.com: “Melissa: Lemon balm as a topical treatment for herpes simplex virus” “Clinical research has shown lemon balm exerts potent antiviral activity against herpes simplex when used topically.”

Link: http://www.medherb.com/Materia_Medica/Melissa-Topical_Treatment_for_Herpes_Simplex_Virus.htm

Phytomedicine: “Local therapy of herpes simplex with dried extract from *Melissa officinalis*.” Wolbling RH, Leonhardt K. *Phytomedicine*. 1994;1:25–31. More commonly known in the United States as lemon balm, *Melissa officinalis* is widely sold in Europe as a topical cream for the Formula of genital and oral herpes. One [double-blind, placebo-controlled](#) study followed 66 people who were just starting to develop a cold sore (oral herpes).⁴ Formula with melissa cream produced significant benefits on day 2, reducing intensity of discomfort, number of blisters, and the size of the lesion. (The researchers specifically looked at day 2 because, according to them, that is when symptoms are most pronounced.) Another double-blind study followed 116 individuals with oral or genital herpes.³ Participants used either melissa cream or placebo cream for up to 10 days. The results showed that use of the herb resulted in a significantly better rate of recovery than those given placebo.

Link: <http://healthlibrary.epnet.com/GetContent.htm?token=2e7354b6-ae71-4dab-90df-c7026eb1c66f&chunkid=21570>

ALTNATURE.COM: “Lemon Balm can help significantly in the treatment of cold sores and combat the herpes simplex virus.” Suite101.com, “Auto Immune Diseases” (July 10, 2006): “The polyphenol tannins in lemon balm make it an effective antiviral treatment. Lemon balm is a first-line herbal treatment for herpes outbreaks.”

Link: http://autoimmunedisease.suite101.com/article.cfm/lemon_balm_in_autoimmune_disease

Reishi Mushroom

Drugs.com

“Polysaccharides isolated from reishi have been proven effective against [herpes simplex](#) viruses.” <http://www.drugs.com/npc/reishi-mushroom.html> About.com – “Alternative Medicines” “Reishi has been found to inhibit the spread of the herpes virus.”

<http://altmedicine.about.com/cs/supplements/a/ColdSores.htm> Health on the Net Foundation: “The mycelium of Reishi contains high levels of polysaccharides, which have been shown in research to induce the production of interferon. Interferon is a protein produced inside cells to fight viral infection. Polysaccharides are also tumor fighters and help stimulate the immune system.”

<http://www.hon.ch/Library/Theme/HepB/comp.html> Healthy.net: “For 4,000 years, the Chinese and Japanese have called upon reishi to treat liver disorders, hypertension, arthritis, and other ailments. Recent test-tube and human studies have demonstrated antiallergic, anti-inflammatory, antibacterial, and antioxidant effects. <http://www.healthy.net/scr/Article.htm?Id=437>

Tea Tree Essential Oil

University study: "Antiviral activity of Australian tea tree oil and eucalyptus oil against herpes simplex virus in cell culture." Department of Virology, Hygiene Institute, University of Heidelberg, Germany.

http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=PubMed&list_uids=11338678&dopt=Abstract

University study: "Melaleuca alternifolia (tea tree) oil gel (6%) for the Formula of recurrent herpes labialis" C. F. Carson^{a,*}, L. Ashton^b, L. Drya, D. W. Smith^b and T. V. Riley^{a,b} a Department of Microbiology, The University of Western Australia, Queen Elizabeth II Medical Centre, Nedlands, WA 6009; b Division of Microbiology and Infectious Diseases, The Western Australian Centre for Pathology & Medical Research, Locked Bag 2009, Nedlands, WA 6909, Australia "Proof of the in vitro antiviral activity of TTO opens up the possibility that TTO may be a potentially useful topical Formula for cutaneous viral infections such as cold sores, caused by HSV."

<http://jac.oxfordjournals.org/cgi/content/full/48/3/450>

Clinical Review of Microbiology: Clin Microbiol Rev. 2006 January; 19(1): 50–62. doi:

10.1128/CMR.19.1.50-62.2006. American Society for Microbiology

<http://www.pubmedcentral.nih.gov/articlerender.fcgi?artid=1360273>

Pharmazie: Antiviral activity of Australian tea tree oil and eucalyptus oil against herpes simplex virus in cell culture. Pharmazie. 2001;56(4):343-347. Schnitzler P, Schon K, Reichling J. Antimicrobial

Chemotherapy: Tea Tree Oil: a Review of Antimicrobial and Other Medicinal Properties C. F. Carson,¹ K. A. Hammer,¹ and T. V. Riley^{1,2,*} Excerpt: "In a randomized, placebo-controlled pilot study of tea tree oil

in the Formula of herpes cold sores, tea tree oil was found to have similar degree of activity as 5% acyclovir" (Source: Journal of Antimicrobial Chemotherapy, May 2001, page 450) Tea tree oil's

antifungal, antiviral and antibacterial activity in cases of herpes are also discussed in the following abstract:

[Adverse and beneficial effects of plant extracts on skin and skin disorders](#). Adverse Drug React Toxicol

Rev. 2001 Jun;20(2):89-103.

Spirulina

PDR Health: "A sulfated polysaccharide called calcium spirulan isolated from Spirulina platensis (Arthrospira platensis) was found to inhibit a number of membraned viruses. The viruses inhibited by the polysaccharide included herpes simplex virus 1 (HSV-1), cytomegalovirus, measles virus, mumps virus and HIV-1. Calcium spirulan appears to inhibit the penetration of these viruses into host cells. These studies were performed in vitro."

http://www.pdrhealth.com/drug_info/nmdrugprofiles/nutsupdrugs/spi_0239.shtml University Study:

"Antiviral activity of Spirulina maxima against herpes simplex virus type 2" Source: [Antiviral Research](#), Volume 56, Number 3, December 2002, pp. 279-285(7) Hernandez-Cornona et al Departamento de Microbiologia; a, Escuela Nacional de Ciencias Biologicas, IPN, Carpio y Plan de Ayala S/N Casco de Santo Tomas, Apartado Postal 102, Mexico, DF 11340, Mexico. PMID: 12406511 [PubMed - indexed for MEDLINE] Phytotherapy Research (Medical Journal): "An extract from spirulina is a selective inhibitor of herpes simplex virus Type 1 Penetration into HeLa Cells." Hayashi et al. 1993. Pub. in Phytotherapy Research, Vol. 7. 76-80. Japan. "The water soluble extract of spirulina achieved a dose-dependent inhibition of the replication of herpes simplex virus type 1 (HSV-1) in HeLa cells within the concentration range of 0.08-50 mg/mL."

Oregano Essential Oil

Medical Sciences Research (Medical Journal): Evidence that oregano essential oil can actually dissolve the outer membrane of and destroy the herpes virus: "Effect of essential oils on the enveloped viruses: antiviral activity of oregano oils on herpes simplex virus type I and Newcastle disease virus," Siddiqui, Y.M., et al. Medical Sciences Research 24(3):185-186, 1996. Journal of Agricultural Food Chemicals: Sivropoulou, Afroditi, et al. "Antimicrobial and cytotoxic activities of Origanum essential oils," J Agric Food Chem 44:1202-1205, 1996. From "The Sunday Times", 2 September 2001 "Studies at Cornell University found it killed 30 different germs, and the Salonika study showed it helped to destroy the viruses that cause shingles, cold sores and genital herpes." Full article: <http://www.health-on-sunday.co.uk/> Baseline of Health Foundation (JonBarron.org): "Numerous studies have shown wild mountain oregano oil (not to be confused with the oregano found in your kitchen) to be a potent antimicrobial. It has been proven useful as an antiviral, antibacterial, and antifungal agent rivaling even pharmaceutical antibiotics such as streptomycin, penicillin, vancomycin, nystatin, and amphotericin in its ability to eliminate microbes.

Remarkably it accomplishes this without promoting the development of drug resistant strains and other problems often attributed to the use of standard antibiotics.”

Rosemary Essential Oil

For Herpes Simplex (cold sores): “a one-time application of true rose oil or true melissa (rosemary) oil is also recommended.” <http://library.thinkquest.org/24206>

Peppermint Essential Oil

Phytomedicine: (Issue Number): 2003;10(6-7):504-10. “Virucidal effect of peppermint oil on the enveloped viruses herpes simplex virus type 1 and type 2 in vitro.” Schuhmacher A, Reichling J, Schnitzler P. “. . . this essential oil is capable to exert a direct virucidal effect on HSV.” “Peppermint oil exhibited high levels of virucidal activity against HSV-1 and HSV-2 in viral suspension tests.” Department of Virology, Hygiene Institute, Faculty of Medicine, University of Heidelberg, Heidelberg, Germany. See: PMID: 13678235 [PubMed - indexed for MEDLINE] Journal of American Academic Dermatology: Bernstein, et al. Topical capsaicin treatment of chronic postherpetic neuralgia. J Am Acad Dermatol 1989;21:265-70. Clinical Journal of Pain: Davies SJ, Harding LM, Baranowski AP. A novel treatment of postherpetic neuralgia using peppermint oil. Clin J Pain 2002;18:200-2.

Chaparral (*Larrea tridentata*)



Chaparral has received some bad press over the years due to cases of side effects from INTERNAL CONSUMPTION. There have been very few indications of side effects from its topical use, other than rare reports of dermatitis (rash). It should also be noted that Chaparral has been used for hundreds of years by many societies, including Native Americans, as a healing aid. Therefore we include chaparral in our Topical product, but NOT in our Caps (for internal consumption). An entire book has been written about the use of Chaparral in treating herpes, at this link: <http://64.233.167.104/search?q=cache:LA5rressWGjcJ:66.221.141.235/Books/TreatingHerpesNaturally.pdf+chaparral+herpes&hl=en&ct=clnk&cd=27&gl=us>. The book’s author, W. D. Clark, PhD, also published the following technical paper: “Anti-herpetic activity of the creosote bush (*Larrea tridentata*)” Phytochemical Society of North America and Phytochemical Society of Europe, the Netherlands Clark, W.D. et al. 1997 (Conference Extracts)

Aloe Vera

Antimicrobial Agents Chemotherapy (as quoted in Health Science Report, a research site for healthcare providers): “Anti-viral properties of Aloe vera.” Aloe was mixed with the following viruses: herpes, chickenpox, rabies, and flu. Aloe killed these viruses in 15 minutes. Electron microscopic exam demonstrated that the structures surrounding the viruses were torn apart, thus showing how aloe kills certain viruses in vitro. Antimicrob Agents Chemotherapy 1991 Dec;35(12):2463-6: University of Maryland Dept. of Microbiology: “Inactivation of enveloped viruses by anthraquinones extracted from plants.” Sydiskis RJ, et al. Department of Microbiology, University of Maryland, Baltimore <http://www.health-science-report.com/alotek/topics4/article301/>

Journal of Dermatology Treatment: “Management of genital herpes in men with 0.5% Aloe vera extract in a hydrophylic cream: a placebo-controlled, double-blind study.” Syed TA, et al. J Dermatol Treat 1997;8:99–102. “All but 3 of 22 persons in the study who showed healing with the aloe cream had no

recurrences 15 months after stopping treatment.” “Effect of Aloe Vera on Herpes simplex and herpes virus (strain Zoster)” (Aloe Vera of American Archives) Sims P Ruth M, Zimmerman ER (1971a). Aloe Vera of American Archives, 1, 239-240 General Dentistry (as quoted in Medical News Today): “New reports prove that the aloe vera plant, which has been used to heal skin for more than 2,000 years, can also treat many oral health problems including canker sores, cold sores, herpes simplex viruses, lichen planus and gingivitis according to the January/February issue of [General Dentistry](#) , the Academy of General Dentistry's (AGD) clinical, peer-reviewed journal.”

<http://www.medicalnewstoday.com/medicalnews.php?newsid=21615>

<http://www.herpaflor.com/products.asp>
