This document has been written for clinicians. The content was developed by the Integrative Medicine Program, Department of Family Medicine, University of Wisconsin-Madison School of Medicine and Public Health in cooperation with Pacific Institute for Research and Evaluation, under contract to the Office of Patient Centered Care and Cultural Transformation, Veterans Health Administration.

Information is organized according to the diagram above, the *Components of Proactive Health and Well-Being*. While conventional treatments may be covered to some degree, the focus is on other areas of Whole Health that are less likely to be covered elsewhere and may be less familiar to most readers. There is no intention to dismiss what conventional care has to offer. Rather, you are encouraged to learn more about other approaches and how they may be used to complement conventional care. The ultimate decision to use a given approach should be based on many factors, including patient preferences, clinician comfort level, efficacy data, safety, and accessibility. No one approach is right for everyone; personalizing care is of fundamental importance.
WHOLE HEALTH: CHANGE THE CONVERSATION
Herpes Simplex Virus (HSV) 1 & 2 Infection
Clinical Tool

Background

Herpes Simplex is a viral disease that can lead to painful sores on the lips and mouth (oral herpes) and anogenital area (generally referred to as “herpes”). Historically, Herpes Virus (HSV) Type 1 was responsible for the former and Type 2 for the latter; however, oral sexual practices have made HSV-1 and HSV-2 culprits in either disease. Transmission of the infection is usually through close contact with a person who is shedding the virus—that individual may or may not have an active lesion—typically at a mucosal surface or in genital or oral secretions. Infection occurs if the virus is in contact with susceptible surfaces such as the oropharynx, cervix, conjunctiva or through small cracks (perhaps even microscopic) in the skin. Kissing and sexual activity are very common forms of transmission. HSV is easily inactivated at room temperature and by drying so transmission through the air or fomites is rare. Certain occupations that have increased likelihood of contact with oral secretions (dentists, respiratory care unit personnel, etc.) have increased risk of infection on other skin areas. Transmission of HSV can occur in infants born to mothers who are shedding the virus at delivery. Keeping the immune system healthy may impact likelihood of infection and reactivation.

This clinical tool outlines a Whole Health approach for preventing and managing HSV infections. The focus is on approaches not typically classed as conventional.

Surroundings

Physically, there are a number of considerations in terms of prevention of herpes infection and reactivation. Maintaining the integrity of skin and mucosal barriers can decrease the vulnerability of the tissue to viral infection. Avoiding injury to the face, lips, eyes or mouth—including chapped lips—can decrease risk of reactivation. Lip balm, especially that which contains the ingredient zinc sulfate, can be helpful. (See more on zinc oxide below). Also, wind, ultraviolet light and sunlight are triggers, so taking appropriate precautions to avoid overexposure is logical. Avoidance of tight-fitting clothes or seam lines that cause minor local trauma/irritation may help decrease risk of recurrent genital lesions.

Sexual health and intimacy are important aspects of our overall well-being. Even in non-sexual relationships, physical acts such as kissing can be important expressions of caring. As some of the major modes of transmission of the herpes virus are contact with oral mucosa and sexual activity, avoidance of these activities, especially during active outbreaks, can help prevent spread. Condom use does decrease transmission, but condoms do not completely prevent skin contact and are, therefore, not 100% protective. Regular
use of Universal Precautions for those whose jobs require close contact with infected tissue or secretions which could be shedding virus is a wise standard practice.

**Food and Drink**

In general, a healthy diet supports a healthy immune system. An anti-inflammatory and low glycemic index diets offer many health benefits in this area. See [The Anti-Inflammatory Diet](#) and [Glycemic Index](#) clinical tools for more information.

There has been some debate in the literature as to the effectiveness of diets that limit arginine and increase lysine. Studies in tissue cultures have shown decreased viral replication in environments where the arginine/lysine amino acid ratio favors lysine and increased replication when arginine is more prevalent. Foods rich in arginine, which should be avoided (within reason), include:

- Chocolate
- Peanuts
- Almonds
- Cashews
- Sunflower seeds
- Gelatin.

Foods rich in lysine, which can be increased in the diet (within reason), include:

- Vegetables
- Beans
- Fish
- Turkey
- Chicken.

How foods are cooked can affect the lysine content. Boiling and poaching preserve lysine, while grilling, broiling and frying seem to destroy it. If not enough lysine can be found in the diet or if arginine restriction is not desired or possible, another option is lysine supplementation. Studies have shown that taking lysine orally at 1000 mg daily can reduce recurrences and reduce severity and healing time of herpes labialis infections.

**Recharge**

Sleep deprivation from poor sleep habits or lifestyle factors can increase a person’s chance of herpes recurrence. While direct studies aren’t available, this relationship is logical in that sleep strengthens the immune response. Most immune cells’ response to challenges (e.g., viral infections) peak at night. Adequate sleep appears to be about 7-8 hours per night.
Family, Friends and Co-Workers

Stresses such as marital disruption and care-giving for a relative with Alzheimer’s disease have been associated with both decreased in vitro function of immune cells and qualitative immune function changes such as frequency of herpes outbreaks. There is some evidence to suggest that quality interpersonal relationships can be protective against these types of immune changes.5

Power of the Mind

Psychosocial stress has been found to be a significant risk factor for HSV recurrence. Depressive symptoms increase the risk of an outbreak and cognitive behavioral therapy has been found to improve markers indicative of recurrence. It is, therefore, reasonable to employ other techniques that have been shown to help with stress reduction, such as relaxation training and meditation.1 See the Power of the Mind module for additional mind-body tool ideas.

Dietary Supplements

Note: Please see the module on Dietary Supplements for more information about how to determine whether or not a specific supplement is appropriate for a given individual. Supplements are not regulated with the same degree of oversight as medications, and it is important that clinicians keep this in mind. Products vary greatly in terms of accuracy of labeling, presence of adulterants, and the legitimacy of claims made by the manufacturer.

Aloe

There is fairly good evidence that applying a 0.5% aloe extract cream to HSV lesions three times daily, five days per week for up to two weeks can decrease the mean healing time from 12 to 5 days.6 Topical aloe is generally quite safe as long as the latex portion is not used (as is the case with leaf extracts) due to risk of allergic reaction. Of note, aloe may delay healing in deep, open wounds, such as surgical wounds.7

Propolis

Propolis is a resinous material from poplar and conifer buds used by bees for maintaining their hives. It is from beehives that it is usually harvested. A product containing propolis has been studied for HSV oral and genital lesions. Its brand names are Herstat or ColdSore-FX, both by Afexa. Applying this 3% propolis ointment five times daily at the earliest onset of symptoms has been shown to decrease sore duration by three to four days. There is some evidence that it may even lead to faster healing than the use of topical acyclovir. Orally, it can cause allergic reactions and acute oral mucositis from the use of propolis-containing lozenges. Adverse reactions may be more likely in those allergic to bees.8
**Siberian ginseng** (*Eleutherococcus senticosus*)
Taking a specific Siberian ginseng extract, standardized to contain eleutheroside 0.3% (Elagen), orally can reduce the frequency, severity and duration of HSV 2 infections. The dose used has been 400 milligrams per day.⁹

**Lemon Balm**
Lemon balm is an herb known for its calming properties. It is considered safe. A lip balm containing 1% lemon balm extract seems to decrease duration and symptom severity of HSV recurrences if applied at the early stages of infection.¹⁰

**Sage** (*Salvia officinalis*) and **Rhubarb** (*Rheum officinale and Rheum palmatum*)
Evidence shows that a cream containing sage and rhubarb may be as effective as acyclovir cream in treating HSV cold sores in terms of both duration and severity of symptoms. The combination seems to be more effective than creams with sage alone.¹¹,¹²

**Zinc**
Some research indicates that topical zinc oxide (0.3%) in combination with glycine cream can reduce symptom duration and severity of HSV facial and oral lesions when applied at earliest onset of symptoms every two hours. Super Lysine Plus is a specific product containing zinc oxide and L-lysine. It has shown similar results when dosed at the same frequency of zinc oxide.¹³

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**Whole Health: Change the Conversation Website**

Interested in learning more about Whole Health?  
Browse our website for information on personal and professional care.

http://projects.hsl.wisc.edu/SERVICE/index.php

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**References**

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