



## Colostrum and Herpes

**Dear consumer,**

Your inquiry regarding the use of high quality bovine colostrum in association with recurrent herpes infection has been forwarded to me. I am a business and technology consultant with extensive knowledge regarding the formation and composition of bovine colostrum and its health-related applications in humans and animals.

It is not clear from your inquiry whether your brother has an annual recurrence of a genital or oral herpes infection. However, since the event seems to be seasonally-related, I presume that it is genital herpes since oral herpes recurrences usually happen more randomly. In either case, the responsible virus is the same or is related.

Various herpes viruses infect man, including herpes zoster, which causes chicken pox and shingles; herpes keratitis, which infects the eye and can cause blindness; and herpes simplex, which infects the oral cavity and the nose (fever blisters) or the genitals. There are two closely-related types of the herpes simplex virus, so-called types 1 and 2. Type 1 is responsible for about 90% of oral infections and approximately 10% of those affecting the genitals, while type 2 is responsible for about 90% of genital infections and 10% of oral infections. Both of these viruses are sequestered during asymptomatic periods, type 1 being harbored in a nerve ganglion at the base of the brain and type 2 being harbored in a nerve ganglion at the base of the spine. Individuals that have been infected harbor the virus for life and may shed and transmit it even during asymptomatic periods, but do so most frequently through contact with infected secretions. It is estimated that more than 50% of genital herpes infections are asymptomatic and that 1 in 6 infected individuals shed the virus without symptoms. It is also estimated that an uninfected individual has about a 75% chance of contracting herpes during intimate contact with someone who is shedding the virus. Infected individuals should also be aware that they can spread the virus to other parts of their own body by touching an area shedding virus and then touching, scratching or rubbing another susceptible part of the body. Towels are especially conducive to this type of transfer and self-inoculation. Infection with herpes simplex is generally not dangerous, but it is a nuisance and can be emotionally traumatic, particularly since there is no known cure.

I doubt that anything that might be suggested will rid your brother of his herpes infection, but there are things that he can do that will minimize the impact on his body and help it to keep the virus in check.

First, it is important to understand that, because the virus is sequestered within cells in the body, the immune system does not have an opportunity to mount a humoral response against it. Therefore, the immune system of infected individuals does not make antibodies against the virus like it does against most pathogens. Instead, the immune system defends the body against this type of infection via cell-mediated immunity, where the defense is almost exclusively through

various types of white blood cells.

The problem is that at about age 13, the body's health support mechanisms began to deteriorate. Before puberty, the very foundation of your immune system was being established by a small gland-like structure in the upper chest, the thymus. It is within this structure that the cells mature that will determine the appropriate type of response that your immune system should mount after an insult and then cells from the same source will regulate the quality and intensity of that response. Cells from this gland also scan the blood for abnormal cells and remove them. After puberty, the thymus begins to shrink and ultimately almost disappears by age 50-60. So, although the immune system develops more immunologic memory with time, it gradually loses the ability to efficiently and effectively orchestrate and direct the actual immune response itself.

When dealing with any type of infection and, particularly one where the defense is based almost wholly on cell-mediated immunity, it is wise to recognize that the best defense is founded on a good offense. Scientific studies have shown that insulin-like growth factor (IGF-1), a major component of high quality bovine colostrum, and the IGF superfamily of proteins can restore and maintain a fully functional thymus, even in adults. In addition, colostrum contains the alpha and beta chains of the hormone thymosin that act independently and in concert to regulate the functions of the thymus. Further, the proline-rich peptide (PRP) in colostrum is known to down-regulate the immune system and keep the response to a foreign substance under control. Other studies have shown that including only small amounts of colostrum in the daily diet of adult animals significantly enhances the ability of their white blood cells to respond to infection and destroy invading bacteria and viruses.

Thus, routine dietary supplementation with a high quality first milking colostrum, like that from Immune-Tree, will strengthen and support the immune system and help your brother to keep the herpes virus in check or, at a minimum, reduce the impact of the active infection periods. I would suggest that he routinely consume 5-6 500 mg capsules or the equivalent powder daily and that he attempt to increase this to 8-10 capsules daily during the summer months when he ordinarily would experience a relapse.

I hope that the above information gives you a better understanding of your brother's condition and the benefits that can be realized by routinely supplementing your diet with colostrum.

### **References:**

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To your good health - always.

Sincerely,  
**Alfred E. Fox, Ph.D.**

*Dr. Alfred E. Fox holds a Ph.D. from Rutgers University in Microbiology (Immunochemistry) and has more than 25 years of senior management experience at Carter-Wallace, Baxter Dade Division and Warner-Lambert, where he was responsible for research and development and regulatory affairs. He was also the founder and president of two biotechnology companies focused on agribusiness and environmental monitoring, respectively. For the past 15 years, Dr. Fox has been the President of Fox Associates, a business and technology consulting firm serving small- to mid-size companies in the human and animal healthcare fields. He focuses primarily on marketing and regulatory issues and for the past 10 years has continuously consulted to bovine colostrum manufacturers, where he has gained regulatory approval for their products, been a technical advisor, helped design and develop marketing strategies and served as an expert witness in legal matters.*

