

## Colostrum and Celiac Disease

Dear consumer,

Your inquiry on Celiac's disease and whether or not colostrum contains gluten, has been forwarded to me. I am a business and technology consultant with extensive knowledge regarding the formation of bovine colostrum and its applications in humans and animals.

A search of the archives of the National Library of Medicine failed to find any reports of the presence of gluten in bovine colostrum. However, since it is a wheat protein, gluten or its major byproduct, gliadin, could appear in colostrum if large amounts of wheat or wheat products were present in the diet of the cows. There is no way of really knowing exactly what they are fed since many, many cows on many different farms are used as a resource for the colostrum.

There are several publications that address the issue of the presence of antibodies (IgA) to gluten and gliadin in human colostrum as a result of the development of food sensitivity in the mother. The implications are significant in relation to celiac disease, a deficiency in pancreatic enzymes that impairs the ability to digest some food proteins, like gluten or those from whole milk.

There is nothing in the literature that shows that cows develop a similar sensitivity, but if they did, the antibodies would appear in all fluids, including colostrum. There also were no papers evidencing that cows develop celiac disease, which may prove very beneficial. The science however, is still pending.

I hope you find this information beneficial.

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.