



## FACT SHEET

# MILK AND HORMONES



**Hormones are naturally present in many foods of either plant or animal origin, including milk. Bovine somatotropin (bST) is a naturally-occurring protein hormone in cows. A trace amount of this hormone is present in all milk, including organic products, and is digested when humans eat it, just like other proteins.**

### **The Use of Recombinant Bovine Somatotropin (rbST)**

Dairy companies have responded to consumer requests for choices in the dairy aisle, and most now offer milk made from cows not supplemented with artificial hormones. This decision is a result of market demand and is not related to any health or safety issue. All milk is wholesome, safe and nutritious.

Historically, some dairy farmers chose to use a supplemental hormone, recombinant bovine somatotropin (rbST), as a means of increasing their herd's milk production and ensuring a plentiful supply of milk. rbST is not added to the milk itself but is administered to cows in some herds. This use of rbST was approved by the Food and Drug Administration (FDA) in 1993 after extensive review. The safety of milk from rbST-supplemented cows has been reaffirmed since its release.

### **Safety of Milk**

Scientific studies have concluded there is no difference between milk from cows that are given rbST and milk from cows that are not. Regulatory agencies in 50 countries, including Canada and the European Union, have also affirmed the safety of milk and meat from cows supplemented with rbST.

Separate reviews of the data, with the same safety conclusions, have been conducted by the National Institutes of Health (NIH), the World Health Organization (WHO), and the Office of the Inspector General of the Department of Health and Human Services. Such findings have appeared in the Journal of the American Medical Association, Pediatrics and the Journal of the American Dietetic Association.

An NIH expert panel, among others, concluded that the use of rbST has no effect on hormone levels in the milk itself.<sup>1</sup>

In 2008, the Journal of the American Dietetic Association published findings from research that tested whole milk samples obtained from retail stores across the U.S. with three label claims related to farm practices: 1) conventional, 2) from cows not treated with rbST and 3) USDA-certified organic. The research concluded that all three types of milk are virtually identical in terms of quality, safety and nutritional composition. Concentrations of bST in milk were the same regardless of milk label.<sup>2</sup>

**Dairy products are among the most tested and regulated foods in this country, and American dairy products are among the safest in the world.**

The industry supports consumer choices in the dairy case, and some farmers, manufacturers and retailers will support different types of production that may or may not include the use of rbST. But it's important to understand that carton to carton, bottle to bottle, all milk is wholesome, safe and nutritious. All milk contains the same combination of nutrients that makes dairy products an important part of a healthy diet.



#### ADDITIONAL RESOURCES:

FDA'S POSITION ON THE SAFETY OF RBST: [HTTPS://WWW.FDA.GOV/ANIMAL-VETERINARY/PRODUCT-SAFETY-INFORMATION/REPORT-FOOD-AND-DRUG-ADMINISTRATIONS-REVIEW-SAFETY-RECOMBINANT-BOVINE-SOMATOTROPIN](https://www.fda.gov/animal-veterinary/product-safety-information/report-food-and-drug-administrations-review-safety-recombinant-bovine-somatotropin)

1. USDHHS/NIH. 1991. NIH TECHNOLOGY ASSESSMENT CONFERENCE STATEMENT ON BOVINE SOMATOTROPIN. J AM MED ASSOC 265:1423-5.

2. VICINI, J, ET AL. 2008. SURVEY OF RETAIL MILK COMPOSITION AS AFFECTED BY LABEL CLAIMS REGARDING FARM-MANAGEMENT PRACTICES. J AM DIET ASSOC 108:1198-1203.

FOR MORE INFORMATION OR TECHNICAL REFERENCES, VISIT [WWW.DAIRYDISCOVERYZONE.COM](http://WWW.DAIRYDISCOVERYZONE.COM).