

Essay on bovine somatotropin

[Law](#), [Security](#)



It's Safety to Human Consumption of Milk.

BOVINE SOMATROTROPIN

Bovine somatotropin abbreviated as bST is a hormone found in the cattle. It is a growth hormone that is produced by the pituitary glands of the cattle.

The hormone is important in the functionality of the body as it is mainly concerned with growth and development of the body. This hormone is used by cattle keepers to increase the milk production in dairy cows where the dairy cows are injected with the hormone regularly. Biotechnology has made it possible to manufacture the hormone which its gene is extracted from the cow and then prepared with the bacterium *E. coli*. (Brennard and Bagley)

The usage of this hormone has been surrounded with a lot of controversy with some agencies stating that it is unsafe to consume milk from cattle treated with bST. Some agencies stated that this hormone was carcinogenic and so harmful for human consumption. However from studies done in 1994, rats were treated with an oral administration dose of the hormone. There were no incidences of cancer or death. This made the FDA rule out any negative opinions about the usage of the hormone.

Scientists have argued that the complex protein, Bovine somatotropin, is broken down in the digestive tract. The digested proteins, amino acids, are inactive in the human's body functioning. (Tucker H)

A study done to analyze the effect of the hormone was done in 1993, whereby children suffering from hypo pituitary dwarfism were injected with large doses of the hormones. There was no effect on the health of the children. This can be explained with the fact that bST unlike the human

somatotropin as it can not bind with the latter's receptors and so it can not evoke any biological response. (Tucker H)

REFERENCES

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