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About Bovine Leukemia
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In September 1981 Dr. J. F. Ferrer and his associates reported in the journal, *Science*, that infectious bovine leukemia virus (BLV) is frequently present in cow's milk. This finding generated immediately the question of whether the presence of BLV in milk poses a public health hazard. Dr. Ferrer has never stated or implied that BLV infects human beings, and in fact, in the report in *Science* he states that the available evidence fails to show that BLV infects humans or contributes to the causation of human leukemia. Dr. Ferrer does caution that studies to date do not entirely rule out the possibility of human infection and that a definite answer to this question must await the development of a molecular probe which is fully representative of the BLV genome. Such a probe is necessary in order to thoroughly explore the possibility that segments of BLV genetic material are present in the cells of human leukemia patients or of people exposed to BLV.

Dr. Ferrer states that while pasteurization apparently inactivates BLV particles, we do not know whether the genetic material of the virus, which is incorporated into infected milk cells, is inactivated at pasteurization temperatures.

Dr. Ferrer and his colleagues have never recommended that people stop or curb their consumption of milk. While man has probably been drinking milk from BLV-infected cows for a very long time, human leukemia is a relatively rare disease. It is also important to take into account the enormous nutritional value derived from drinking milk and this appears to outweigh the very small possible risk. However, Dr. Ferrer does believe that infants should not be fed raw milk from BLV-infected cows and suggests that people who may wish to drink raw milk can have tests done to make sure that their cows are uninfected.

Beyond the public health question, BLV infection (at least 20% of the American dairy cattle population is infected) is perhaps the greatest single threat to the large American cattle export business. Many countries do not allow the importation of BLV-infected cattle or semen from infected bulls. Indeed, some countries even forbid importation of cattle testing negative for BLV, but which originate from herds where any level of infection is present. West Germany, a country with an official BLV eradication program, is already displacing the United States in the cattle export business.

These facts indicate that there is urgent need for an intensive research effort to settle, once and for all, the issue of whether or not BLV poses a potential threat to human health and to move ahead on the development of a full-scale eradication program, including the development of an effective vaccine against BLV infection. That development of such a vaccine is feasible has already been demonstrated by Dr. Ferrer in recent experiments at New Bolton Center.

Dr. Ferrer and his group are continuing their research in order to obtain more information on many important aspects of bovine leukemia including modes of transmission, methods of control and development of a vaccine. *Bellwether* will update this work as new data becomes available.