

NASTS

117 Willard Building University Park, Pennsylvania 16802 814/865-9951 FAX: 814/865-3047 BITNET: EJB2@PSUVM

May 24, 1990

Maxine F. Singer Carnegie Institution of Washington 1530 P Street, NW Washington, D.C. 20005-1910

Board of Directors

Carolyn Graham, Pres. Assoc, Science Ed NY State Education Dept

Stephen Cutcliffe, Vice Pres.
Dir STS Program
Lehigh University

George Bugliarello, Past Pres. Pres Polytechnic Univ of NY

> Rustum Roy, Corp Chair Dir STS, Penn State

> > Glen Aikenhead IOSTE Univ Saskatchewan

Susan Cozzens

STS Dept, RPI
Paul Durbin
Prof Philosophy

Prof Philosophy Univ of Delaware

Steven Goldman STS Program Lehigh University

Jon Harkness K-12 Science Specialist Wausau West High School

Robert C. Hutchins Exec Dir Opportunity Academy Mgmt Training

Irma Jarcho Teachers Clearinghouse for Science & Society Ed, NY

> James Johnson Exec Scientist, 3M (ret)

Melvin Kranzberg
Prof Emeritus
Georgia Institute of Tech

Alice Moses
Prog Dir, Instructional
Materials Develop, NSF

Julianne Prager Community Service Executive 3M

> James Salmon Treas, Maryland Province Society of Jesus

Morris Shamos Prof Emeritus Physics, NYU M.H. Shamos & Assoc, NY Dear Dr. Singer:

Dr. Roy passed along your letter of May 15 to me as Member Services Director of NASTS for our Conference Planning file. Thank you for responding promptly to our invitation to speak; we appreciate your busy schedule forces you to decline yet another time. However, we do hope to persuade a distinguished scientist such as yourself to enter into STS discussions on topics you find compelling.

You note that Ben and Jerry's Ice Cream, one of our Conference funders (they gave us ice cream for our members' reception), is leading the effort, in Vermont, to stop the use of bovine growth hormone to improve milk production. You go on to say that "the arguments used are not very scientific and suggest that the company could benefit from some scientific literacy."

BGH is a quintessential STS issue. In this sense. issues go beyond mere science and include the impact of BGH on It is not a simple issue of science phobia. Obvious-BGH increases milk production. Consequently, production will go up in the short run, driving the smaller dairy farmer ofbusiness. Concentration in the dairy industry further. Price supports will aid those larger dairy farms. The taxpayer pays more -- in the price of milk and the cost of price supports.

If we were to regard as good what science has produced in this instance, then we are benefitting the already well-off well-positioned bio-tech industry, and its scientist bio-tech researchers universities, $\mathbf{a}\mathbf{t}$ and agro-chemical and agro-biological producers. the small farmers are forced out of business, hand, and now must employment at some distance from their home-based milk?" "drinking more Surely, our research scientific personnel can be turned to something more socially pressing.

Second, the science I have read about has determined that BGH shortens the life of cows on it. In short, all we buy is "speed." In addition to amphetemines and autos, I suggest we can add relentless economic growth and its unthinking pursuit

as another kind of speed included in the phrase, "Speed Kills."

Third, in rejecting BGH, Ben and Jerry's have seized upon an emerging consumer consenses: consumers do not want still another "chemical" in their diet. That's it, plain and simple.

Thus, when you state that Ben and Jerry's arguments are not very scientific, I would go even further: in a democracy, their arguments do not have to be at all based on science to be valid. On the contrary, it seems to me that the lines of reasoning I have put forth lay the basis for choice in a way that mere scientific evidence cannot: by considering impacts on society, on individuals in it, and through expression of closely held values.

Finally, you have chosen to assert that bovine growth <a href="improves" milk production" Improves" suggests a "betterness" to this production that slides over potential issues. I'm sure you will agree that science is not value free, and you value improved milk production. I might have said, "increases milk production" and left it at that.

The association of "improve" with an economic commodity, namely milk, signifies the tight bond between science and growth economics. At a time when worldwide destruction of the rainforest, the ozone hole, acid rain, and other environmental disasters are forcing many to question the kind of economics that requires growth to sustain it, the term "improve" conveys just the wrong image.

I don't think Ben and Jerry's Ice Cream requires any helpful educational effort from NASTS. John Robbins, a strict vegetarian and heir to the Baskin-Robbins fortune, might think otherwise (see his <u>Diet For a New America</u>). Here Robbins documents vividly the conditions under which milk and other agro-industrial products, including milk, are manufactured.

In closing, I have attempted to lay out another perspective on what at first may appear to be a pure "science" issue. This is what STS is all about. I would even suggest that you reconsider the possibility of presenting your own case for BGH and enter into a dialogue on the issue, which has become the hallmark of STS.

Respectfully,

Gene Bazan,

Member Services Director