

**IS BIGGER BETTER?**

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Recently, Jeremy Rifkin was on the Penn State Campus to deliver a lecture on "The Decline of the Global Economy."

That is not the topic of this article but rather one of Mr. Rifkin's previous causes — the use of biotechnology in agriculture.

His primary goal was to prevent the use of biotechnology-derived products such as the use of BST to enhance milk production in dairy cows.

A similar theme will be discussed at the conference sponsored by the Agricultural Directorate of the European Commission. The intent of this conference is to review the use of growth-promoting substances in animal husbandry.

The above conference will deal

very little with poultry since steroids and hormones are not used to enhance the performance of poultry. That's the good news. The bad news is that we don't need growth-enhancing substances due to the success of our genetic selection programs.

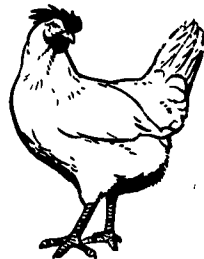
This point is apparent in a recent report from North Carolina State University. These researchers determined the relative contribution of genetic selection and advances in nutrition on the performance of broilers.

Contemporary feeding programs and broiler strains were compared with those in use 35 years ago. Improved nutrition accounted for an increase of 18 percent in performance. On the other hand, genetic selection resulted in birds that grew three and one-half times faster than those of 35 years ago.

This emphasizes the fact that the poultry industry has been able to make great strides in improving performance through genetic selection. One of the reasons that

growth-enhancing drugs are not used is that they are not very effective or useful to the poultry industry. Further, the downside of the progress attained by genetic selection has been the increase in the incidence of metabolic disorders associated with rapid growth rate.

For example, in the North Carolina study, the "old fashioned" chicken had an incidence of tibial dyschondroplasia of 1.2 percent. This is in contrast to 49 percent incidence of the "modern" chicken fed modern diets. Half of this increase in tibial dyschondroplasia could be attributed to the "improved" nutrition associated with modern broiler feed.



The above observation brings me to the final point of this discussion. Although the poultry industry does not rely on drugs and hormones to enhance performance, it is beginning to be attacked for the success of its genetic selection programs.

Animal welfare activists would like to see restrictions on selection for growth rate coupled with increased emphasis on selection

for the absence of metabolic diseases such as tibial dyschondroplasia and ascites. In fact, slow-growing broilers are now being marketed in France and the United Kingdom for consumers with welfare and culinary concerns.

It will be interesting to see whether this trend will be adopted by the poultry industry in the United States where it has been a tradition that "bigger is better."



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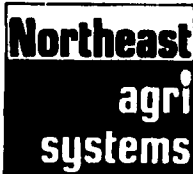
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