

WHAT DO WE MEAN BY "GOOD FOOD QUALITY"?

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This paper deals with three of the major topics of this conference: "Food Animal Products-- Human Food Safety and Nutritional Concepts, Handling and Housing Cattle-- Welfare Considerations and The Environment and Food Animal Production". The discussion centers on recent developments in Sweden, where a consumers' movement has led farmers to reconsider the definition of "good food quality" and how it may relate to the welfare of animals.

When veterinary scientists refer to "good food" or "safe food" it usually means that the food is uncontaminated by toxic substances. Such toxins can occur in food through the use of agricultural chemicals, or through natural processes involving bacteria, parasites and viruses.

There are, however, important considerations in the definition of good food that are difficult to measure in any scientific sense. To a muslim or a jew, for example, pork is definitely not good food. This has nothing to do with health considerations-- rather, with fundamental beliefs and cultural values.

We are now living in a period of growing awareness that the earth's resources are finite, and that human survival demands respect for nature. It is in this context that problems associated with the industrial production of animal products are starting to be discussed with increasing frequency and intensity, in Sweden and other countries. One such problem is the release of ammonia into the atmosphere and nitrogen into groundwater that results from keeping too many animals in too little space. Other examples: the large ungulate herds that accelerate erosion of Australian soil, and the destruction of rain forest for the sake of a few years' cheap hamburger production.

Humans learned early in their history not to eat meat from sick animals. This created an incentive for ensuring environments in which animals would remain healthy. With the spread of antibiotics and other medicines in the middle of this century, it was no longer essential for farmers to concern themselves with providing naturally healthy environments to the same extent as previously. With the use of modern veterinary medicines, it became possible to cram hens, pigs and cattle into areas which-- from the point of view of their evolved behavior patterns-- are inadequate.

Nature requires, for example, that if a sow is to remain healthy and properly take care of its young, it must be able to live and move about freely. Our ancestors understood this. Today, we try to get around nature by giving the sow various medicines at parturition, and to the piglets when they are weaned.

Before the spread of antibiotics in the world market, it was not possible to crowd large numbers of young ruminants from different locations into the same space; since they are equipped only with specific antibodies against the infectious diseases associated with their mothers' barns, they tended to experience high mortality when thrown together.

When the industrial production of animal products began to expand, many veterinarians reacted negatively. Anyone familiar with animals could see that these "assembly line" animals were behaving in very strange ways. They were afflicted with various diseases that caused distress and discomfort. They had very little space in which to move, and nothing to keep them occupied. With the knowledge gathered by ethologists, it is now possible to analyze the deviations from natural behavior which follow from industrial production.

Residents of the industrialized world are becoming increasingly concerned with what they eat. Most of them are anxious not to eat anything that might injure them in the short or long run. There is also a small but growing movement toward avoidance of meat-eating, on the grounds of perceived maltreatment of domestic animals. Modern "animal factories" produce in many people an instinctive negative reaction, a sense that there is something very wrong with such operations. Some become vegetarians, because they think it is the most effective way to protest against abuse of animals. Some go so far as to attempt to liberate animals from such "factories" with violence.

But it is not necessary to go to such extremes in order to make significant improvements in the conditions and methods of industrialized animal production. In any event, it is clear that the human digestive system was designed to process a certain proportion of animal products. If nature had meant otherwise, we would have been equipped with a rumen as in cows, or a cecum as in horses.

THE CONSUMER AND THE PRODUCER IN SWEDEN.

In the mid-1980s, there began a rather intense public debate in Sweden over industrialized animal production. It was initiated in 1985 by Astrid Lindgren, the much-admired author of children's books. With a series of didactic "fairy tales" in a leading newspaper, she explained to the general public how animal foods sold in the market were being produced, and the kinds of problems which resulted. One of her main themes was that the industry had lost sight of the fact that animals are living creatures, not mere things or "production units".

Astrid Lindgren's criticism was not directed at farmers, but rather at the entire production system, including government, which had forced or induced farmers to mistreat animals in order to satisfy consumer demand for cheap food. She urged consumers not to purchase food products from "tortured" animals, and pointed out the absurdity, for example, in not allowing ruminants to be ruminants just because there happened to be a grain surplus that made it economically feasible to feed cows as though they were pigs. She has also described how the nation's pastures are disappearing because animals are no longer grazing in them. Unnecessarily cruel slaughtering methods have been another prominent issue.

The campaign that Astrid Lindgren led resulted in a new animal rights law, which was enacted in 1988. It stipulate among many other things:

Article 4: "Animals raised or kept for production of food products, wool, leather or furs shall be cared for and maintained in a sound animal environment, and such a way as to promote their health and provide opportunities for natural behavior."

Of course, animals in Sweden do not enjoy unlimited opportunity to express their natural behaviors. But greater consideration is now given to their needs, and attempts are being made to adapt technology to the animals rather than vice versa. The new animal rights law prohibits, for example, the physical restraint of sows except under very exceptional circumstances. Piggens must be provided with some kind of straw. Egg-laying hens may not be kept in small cages. Dairy cows and other mature female ruminants must be let out to graze during the summer months. Etc., etc.

During the debate that led up to the new law, it would appear that the greatest responsibility was assumed by those farmers who were already applying humane methods. The other farmers, those who tended to look upon their animals as mere "production units" reacted vociferously against the sort of animal ethic for which Astrid Lindgren was pleading. They were especially eager to water down the new legislation and, to some extent, succeeded. But reality has passed them by, so to speak. Those farmers who had always sought to promote the welfare of their animals were encouraged by the debate to pressure their trade associations into initiating improvements, with or without specific legal prescriptions. Many felt that such steps were essential in order to maintain consumer confidence in their products.

In short, the ongoing public debate seems to have accomplished more than the law it gave rise to. One passage in the new law that has been the source of much discussion relates to cows' rights to summer pasture grazing. Many farmers have gone futher on their own initiative, for example by letting young calves out to pasture-- a sight that had not been seen in Sweden for many years. It may well be that farmers are beginning to realize that the best public relations for their products is the sight of beautiful animals in natural setting.

In addition to the above, Sweden also has a law that prohibits the use of antibiotics and hormones in fodder for the purpose of stimulating growth. The two laws together have contributed a great deal to creating better conditions for the country's domestic animals.

The debate which began in the 1980s has had the effect of making people more aware of the reality behind the plastic-wrapped steak in the food market. Increasing numbers are prepared to pay a little extra in order to avoid cheap meats from maltreated animals. There is also a growing sentiment against highly rationalized, assembly-line slaughtering processes that cause unnecessary pain and distress.

Beef, pork, milk and eggs from animals that have been able to live a more decent life probably do not taste so very different than the same products from less fortunate animals. But Swedes are traditionally an animal-loving people, and prefer food from healthy animals that have been well-treated during their short lifetimes, and have not been the cause or excuse for environmental destruction.

The debate over animal rights has often been polarized--at one extreme, militant animal liberationists, and at the other, insensitive "animal industrialists" who show no respect or consideration for the creatures whose lives they control.

Veterinarians have a potentially useful role to play in reducing the conflict between producers and consumers of animal food products, by making their special knowledge more generally available.

That might mean nothing more drastic than simply informing the producers that animals do have a need for certain living conditions, depending on the species.

Veterinarians also know that there is a scientific basis for the insight that animals experience pain, anxiety and fear in ways very similar to humans. That is the underlying assumption for the extrapolation of experimental results-- on analgetics and other medicines, for example-- from rats to humans. Possessions of such knowledge implies an ethical obligation to ensure that animals do not suffer unnecessary disease, pain or distress as a result of living conditions that are unsuitable for their particular species.

Veterinarians can inform everyone who works with animals that animals do experience pain, fear and discomfort--that it really does hurt when electric prods are applied to various parts of their bodies, when calves are branded, or when bulls are castrated without anesthetic. It is also important to inform people that pigs are just as intelligent as dogs, and no less vulnerable to stress and pain.

But veterinarians can also educate consumers about the ways in which other animals differ from human beings--for instance, that although animals do suffer pain and stress, they probably have no conception of death and therefore do not experience any anxiety about dying. We can also provide useful information about nutrition, such as the fact that veal's pale color is the result of iron deficiency, and therefore less nutritious than meat from a healthy calf.

These are just a few examples of the kinds of information that veterinarians can provide to producers and consumers regarding the special characteristics and basic needs of various domestic animal species. The more widely such knowledge is shared, the more likely that animals will be treated with the fundamental decency they deserve -- especially in consideration of the uses to which their brief lives are put for the benefit of human beings.

What distinguishes humans from all other species is that they have the capacity to put themselves in other creatures' situations, and act accordingly. There is a growing consensus in Sweden and in many other parts of the world that there is an ethical dimension to the concept of "good food quality" and that maltreatment of animals is incompatible with human dignity.

SUMMARY: "Good food quality" is for scientists working in the field "Food Animal Products- Human Food Safety" a product free from substances (both natural and unnatural) dangerous for man. For some people, however, it is more important to know how the food has been produced. They put environmental and animal welfare aspects on the way the food is produced. Beside the wish of "safe" food they want the food they eat not to be a contribute to the abuse of animal and earth. The consumers want to know how the animals have been handled, housed and slaughtered. Food quality has become a matter of ethics. The farmers organisations in Sweden have been forced by the public opinion to change their advise to the farmers concerning the handling, housing and slaughtering routines for cattle, pigs and poultry. Sweden has got a new animal protection law and a fodderlaw that, for example, forbid farmers to use antibiotics and hormones as growth promoters.

RÉSUMÉ: Pour les savants qui travaillent avec "Food Animal Products- Human Food Safety", l'expression "Good food quality" veut dire un produit sans des substances (naturelles et dénaturées) qui sont dangereuses pour homme. Pour certain personnes, c'est plus important de savoir comment la nourriture est produit. Ils approchent cette chose avec des questions de l'environnement et de la prospérité de les animaux. En outre de le désir que le bifteck doit être "in-offensif" ils ne veulent pas que la production contribue pour abuser les animaux et la terre. Les consommateurs veulent savoir comment les animaux vivaient, et comment ils a été abattus. La qualité de la nourriture a été un chose d'éthique. La Suède a eu une nouvelle loi qui protège les animaux, et une loi de fourrage qui, par exemple dis que les agriculteurs ne peuvent pas additionner des antibiotiques et des hormones au fourrage pour améliorer l'accroissement.

ZUSAMMENFASSUNG: Guter Lebensmittelqualität heisst für Wissenschaftler, Lebensmittel ohne Stoffe (natürliche und unnatürliche) die schädliche für Menschen sind. Für andere Menschen bedeute gute Lebensmittelqualität Etwas ganz anderes. Man meint das die Produkten nicht zum Folge haben darf, das die Ressourcen der Erde unnötigerweise verbraucht werden. Die Verbraucher haben sich darüber eine Meinung gebildet, wie die Tiere behandelt werden. Der Begriff Lebensmittelqualität hat eine neue Dimensionen erhalten. Man hat ihm Ethische Aspekte gegeben. Man hat in Schweden ein neues Tierschüttsgesetz beschlossen und es gibt ausserdem ein gesetz nach dem Antibiotika und Hormone als wachstumsstimulierende Mittel verboten sind.

REFERENCES:

ANIMAL STRESS. Ed.: Gary P. Moberg, American Physiological Society, Bethesda, Maryland, 1985, ISBN 0-683-06101-1.

Drake, L. and H. Holm: Konsumenternas attityder till alternativt producerat kött. (The attitude of the consumers to meat produced with consideration taken to animal welfare.) Uppsala 1989, Swedish University of Agricultural Science Research Information Centre. Reports: Allmänt 147. Page 15-23.

FEAR, in animals and man. Ed.: W. Sluckin, Van Nostrand Reinhold Co. Ltd., New York, N Y. 10020, U.S.A., ISBN 0-442-30164-2.

Recueil de Medecine Veterinaire, 162 (1986) :12.

The Swedish animal protection law and its regulations. SFS 1988:534, SFS 1988:539.