FOOD SAFETY: GLOBAL CHALLENGES TO A SAFE FOOD SUPPLY

0295 Introduction—Global challenges to a safe food supply. R. J. Harmon*, University of Kentucky, Lexington.

As we move forward in meeting the global food demands of 2050, food safety will continue to be a high priority. Consumers have an increased interest in how their food is produced, where it is produced and is it safe and healthy for their families. In contrast, we have movements that seem to be counter to providing a safe and wholesome product to consumers, such as the raw milk movement. This symposium proposes to address several issues related to a safe global food supply, including new regulatory approaches to safe animal feeds (and thus food), raw milk issues and safety, and the retail perspective on food safety in international markets. All of these areas, and more, play important roles in assuring a safe global food supply for the future.

Key Words: food safety, raw milk, animal feed

0296 Raw milk—Is it safe? B. Jayarao* and E. Hovingh, *Penn State University, University Park.*

Over the last 20 yr, several surveys in the United States have detected food borne pathogens in raw bulk tank milk and many of the milkborne disease outbreaks have been traced to consumption of raw milk. In contrast, for the same period, fewer milkborne disease outbreaks were associated with consumption of pasteurized milk. These milkborne disease outbreaks following consumption of raw milk and milk products have raised serious public health concerns nationwide. The sale of raw milk has become more relevant than ever before due to the emergence of antimicrobial resistance in food borne pathogens such as Salmonella and Escherichia coli. Consumption of raw milk is widely prevalent among dairy farm families and their employees. In recent years, the "post baby boom" generation, comprised of a small but growing subset of urban/ suburban population that consumes raw milk and raw milk products may account for the rise in the sale of raw milk. There are few reports that suggest urban/suburban consumers of raw milk believe that raw milk has more health benefits than pasteurized milk and these benefits outweigh the risks associated with foodborne pathogens in raw milk. In 1987, the FDA banned the interstate sale of raw milk; however, the sale of raw milk within state boundaries falls under the jurisdiction of each state's government. Nonetheless, in states where sale of raw milk is legal, the farms with permits to sell raw milk have to meet set bacteria count standards, periodic testing of raw milk for the presence of pathogens, and labeling of raw milk offered for sale. The Penn State Veterinary Extension and Field Investigation Team recently undertook a study involving 40 permitted raw milk producers in Pennsylvania. The study collected milk samples on a monthly basis to determine the presence or absence of pathogens, as well as various milk quality parameters. In addition to assessing farm management and milk hygiene practices, a survey of the farms' customers was also conducted. The findings of the study are as follows; 1) raw milk sale is largely driven by consumer demand, 2) farm hygiene level and presence of pathogen are not correlated, 3) most producers are cognizant of pathogens in raw and strive to address the issue of product safety, and, 4) critical points in the raw milk production continuum are yet to be clearly identified.

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