FATS AND PROTEINS RESEARCH FOUNDATION, INC.

Director's Digest

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SALMONELLA REVISITED

During our daily activities we often hear two golden gems - that "History repeats itself" and "A person's problems are best understood by the questions they ask." Both of these quotations are quite applicable to the rendering industry today, as we again are faced with the challange of reducing the level of Salmonella recontamination in our animal protein products.

Today's conscientious renderer is asking two basic questions, "Why should I be concerned with reduction of Salmonella recontamination of my animal protein products?" and "What new methods, procedures or chemicals are available today, that were not available fifteen (15) years ago to assist in reducing Salmonella recontamination of animal proteins?" The National Renderers Association was made aware of impending questions concerning Salmonellosis by Center of Veterinary (CVM) personnel in May and June, 1983.

The impetus leading to this new Salmonellosis concern of CVM personnel was the Salmonella reduction program implemented by Agriculture Canada in 1982 and continued pressure and questioning of the United States Salmonella program by Salmonella researchers.

Following telephone conversations with CVM personnel and a Salmonella Task Force Committee meeting in mid 1983, NRA informed CVM that we would work with government agencies on a voluntary program in an effort to reduce Salmonella recontamination of animal protein products. As is quite obvious, it is always better to work with Federal Agencies on voluntary programs instead of having mandatory program guidelines written by these various agencies for the industry.

The National Renderers Association's Salmonella Task Force spent considerable time reviewing and analyzing Salmonella research papers and discussing the Salmonella problem with distinguished scientists in the government, academic and private sectors. No new technology has been found that will assist renderers with their Salmonella recontamination problems.

In spite of this fact, it is obvious that renewed efforts must be made to reduce Salmonella recontamination levels.

During our review process, we were able to bring into stronger focus, our experience with this ubiquitous organism for the past twenty-five years. A major effort was made by industry and the Animal and Plant Health Inspection Service (APHIS) of U.S.D.A. with the 1969 publication and implementation of the "Uniform Methods and Rules for the Elimination of Salmonella in Animal By-Products intended for use in Animal Feed". This U.S.D.A. - state-industry program provided for periodic plant inspections and criteria for negative and positive plants, based on testing animal proteins for Salmonella.

The U.S Government, states and industry spent millions of dollars in this original Salmonella reduction program. Participation in this program included NRA members, packer renderers, protein blenders and poultry rendering operations. This program was well organized and supervised by outstanding government personnel with excellent industry cooperation. Even with a lot of hard work, an extensive educational program, utilization of terminal heaters and expensive plant renovations under this program, the industry was only able to reduce the Salmonella incidence level to fifteen percent. This program was discontinued in 1972 due to a lack of urgency and funding by USDA/APHIS and/or CVM/FDA.

Due to the expressed concern of CVM personnel and Salmonella researcher's around the United States relative to Salmonella recontamination levels of animal proteins, many industry producers and users of animal proteins evaluated their incidence level of Salmonella recontamination during the past several years. This incidence level (30%) was found to be very close to the recontamination level observed at the start of the original Salmonella reduction program in 1967. Thus, the NRA Salmonella Task Force felt it necessary to implement a voluntary industry-wide program in an effort to reduce Salmonella recontamination of animal protein products to a more acceptable level.

The Animal Protein Producers Industry (APPI) Committee represents all segments of the rendering industry. These segments being: (1) National Renderers Association, (2) Packer Renderers, (3) Poultry Processors, (4) Protein Blenders and Brokers, and (5) Independent Renderers, who are not members of the National Renderers Association. Following an industry meeting in September, 1984 to discuss the problem and appointment of committee members, the committee met in December to establish this voluntary industry Salmonella recontamination reduction program.

As was indicated previously, the APPI program will be conducted under the Center of Veterinary Medicines' (CVM) voluntary compliance program, headed by Dr. William Bixler. Silliker Laboratories, Chicago Heights, IL., was selected by the Committee to test all samples during this program, to eliminate laboratory testing variables. The laboratory methodology utilized in sample analysis will be that recommended by the Bureau of Veterinary Medicine. (BAM Method) except that 75 gram instead of 25 gram samples will be utilized.

Industry Salmonella recontamination benchmark figures will be established by the voluntary APPI program available to all rendering facilities in the United States. Those plants that decide to take part in the program will be put in touch will Silliker Laboratories who will provide all necessary materials and instructions for sample preparation and processing at cost.

Benchmark figures will be determined within each participating group by each participating plant submitting ten (10) samples each month for three month periods for laboratory analysis. Results of individual plant sample analysis will be reported only to that plant, but overall summary data from this testing program by participating group and participating area will be provided to the APPI Committee. Once benchmark levels have been established, Salmonella recontamination reduction target levels will be established.

The second phase of this reduction program will include special training programs and materials. This program will be designed to assist all employees of the rendering operation in ways of avoiding or reducing the incidence of Salmonella recontamination. This phase of the program will include posters, brochures, tape/slide and video presentations, color coding equipment and areas along with other informational materials that are pertinent. It will also include, at a nominal cost, assistance from special consultants who will work on specific problems, when requested, within a plant.

The third phase of the APPI project will be research work. The research program will evaluate the utilization of antagonists, disinfectants, organic acids, irradiation, pelleting and other means to reduce Salmonella recontamination of animal proteins. The research efforts with antagonists and organic acids will center on products that are generally recognized as safe, and are economical to utilize, retard or inhibit the spread of Salmonella on animal protein products. There also will be work on plant disinfectants that will retard or kill Salmonella in the rendering operation. Pelleting of finished feed products will continually be evaluated to determine recontamination levels of such products.

As I have stated, no technology is available today that wasn't available fifteen (15) years ago to aid in overcoming this pesky Salmonella organism. Thus, WHAT IS YOUR INCENTIVE TO PARTICIPATE in the APPI Voluntary Salmonella Recontamination Reduction Program? First, it is a voluntary program and not a Government Regulatory Program. Secondly, this voluntary program should definitely reduce the Salmonella recontamination level and eliminate Govenment Regulatory Programs and thirdly, this should provide significant assistance in maintaining the utilization of animal protein products in livestock feeding programs.

The United States rendering industry has always played a vital role in reducing bacterial contaminations in the environment by their daily procuring and processing of ninety-one million pounds of inherently contaminated raw animal by-products. This large mass of material is an excellent media for micro-organisms and would pose a potential public health problem if it was not quickly recycled into many useful commodities.

Each year approximately eight billion pounds of United State inedible fats and proteins are used by domestic and overseas feed manufacturers.

Therefore, we must all work together during this period of Salmonella Revisited to lower the incidence of this ubiquitous organism recontamination of animal protein products.

Only through concerted efforts can an ongoing voluntary program be developed and maintained to improve animal protein quality, utilization, keep the rendering plants operating and The Government from overseeing the Salmonella recontamination situation.

In order to prevent a Government Regulatory Program in the future, the time is NOW for everyone to work together on the Animal Protein Producing Industries Salmonella Recontamination Reduction Program.

DON'T LET

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STRIKE YOU!

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