Extension)'' is corrected to read ''Premarket Notification for a New Dietary Ingredient—21 CFR 190.6 (OMB Control Number 0910–0330—Extension)''

Dated: April 29, 1999.

William K. Hubbard,

Associate Commissioner for Policy Coordination.

[FR Doc. 99–11454 Filed 5–6–99; 8:45 am]

BILLING CODE 4160–01–F

DEPARTMENT OF HEALTH AND HUMAN SERVICES

Food and Drug Administration

[Docket No. 99N–1076]

Risk Assessment of the Public Health Impact of Foodborne Listeria Monocytogenes; Request for Comments and for Scientific Data and Information

AGENCY: Food and Drug Administration, HHS.

ACTION: Notice; request for comments and for scientific data and information.

SUMMARY: The Food and Drug Administration (FDA), in consultation with the U.S. Department of Agriculture's Food Safety and Inspection Service (USDA/FSIS), is announcing plans to conduct a risk assessment (RA) to determine the prevalence and extent of exposure of consumers to foodborne *Listeria monocytogenes* and to assess the resulting public health impact of such exposure. The agencies request comments on certain aspects of their approach to the RA and request that scientific data and information relevant to the conduct of the RA be submitted.

DATES: Written comments and scientific data and information by July 6, 1999.

ADDRESSES: Submit written comments and scientific data and information to the Dockets Management Branch (HFA–305), Food and Drug Administration, 5630 Fishers Lane, rm. 1061, Rockville, MD 20852.

FOR FURTHER INFORMATION CONTACT: Richard C. Whiting, Center for Food Safety and Applied Nutrition (HFS–300), Food and Drug Administration, rm. 3822, 200 C St. SW., Washington, DC 20204, 202–260–0511, FAX 202–260–9653, or e-mail ''rwhiting@bangate.fda.gov''.

SUPPLEMENTARY INFORMATION:

I. Background

L. monocytogenes is a bacterium that occurs widely in both the agricultural (soil, plants, and water) and food processing environment. The bacterium is resistant to various environmental conditions such as high salt or acidity (Ref. 1). *L. monocytogenes* grows at low oxygen conditions and refrigeration temperatures, and survives for long periods of time in the environment, on foods, in processing plants, and in household refrigerators. Although frequently present in raw foods of both plant and animal origin, it also can be present in cooked foods due to post-processing contamination. *L. monocytogenes* has been isolated in such foods as: Raw and pasteurized fluid milk, cheeses (particularly soft-ripened varieties), ice cream, raw vegetables, fermented raw meat sausages, raw and cooked poultry, raw meats (all types), and raw and smoked fish (Refs. 1, 2, and 3). Even when L. monocytogenes is initially present at a low level in a contaminated food, the organism can multiply during storage, including storage at refrigeration temperatures. A survey of a wide variety of foods from the refrigerators of listeriosis patients in the United States found 11 percent of the samples contained L. monocytogenes (Ref. 4).

It is well established that ingestion of *L. monocytogenes* can cause serious human illness, listeriosis (Refs. 1, 2, 5, 6, and 7). In 1997, the Centers for Disease Control and Prevention (CDC) Foodborne Diseases Active Surveillance Network (FoodNet) showed that of all foodborne illnesses, the rate of hospitalization was highest for persons infected with *L. monocytogenes* (88 percent). Similarly, of all of the foodborne pathogens tracked by CDC, *L. monocytogenes* had the highest case fatality rate in that 20 percent of persons infected died. CDC also found that the incidence of listeriosis is 0.5 per 100,000 population, compared to a combined rate of 51.2 per 100,000 for all 9 of the foodborne illnesses surveyed (Ref. 8). Thus, although serious, listeriosis is a relatively rare foodborne illness. Most cases of listeriosis occur in pregnant women or individuals with a predisposing disease (such as alcoholism, diabetes, or cirrhosis of the liver) or an impaired immune system resulting from either a disease (such as AIDS) or immunosuppressive treatment for a malignancy or an organ transplant. (Refs. 1 and 6).

Listeriosis has a long incubation time (up to 5 weeks) and a range of symptoms. Infection of a pregnant woman may result in flu-like symptoms with fever, muscular pain, or headache, or the listeriosis infection may be asymptomatic. Importantly, however, when a pregnant woman contracts listeriosis, the fetus or newborn infant is likely to suffer severe consequences from the maternal infection, including: Spontaneous abortion, fetal death, stillbirth, neonatal septicemia, or meningitis. In nonpregnant adults, septicemia and meningitis are the most common result of a listeriosis infection, although organ infections and mild gastroenteritis can also occur.

Although the consequences of listeriosis may be severe, an estimated 2 to 6 percent of the healthy population harbors *L. monocytogenes* in their intestinal tract without signs of illness (Refs. 1 and 6). Because the documented prevalence of *L. monocytogenes* in people and in commonly eaten foods is much higher than the documented incidence of listeriosis, some experts believe that the ingestion of low levels of *L. monocytogenes* may not result in illness and thus, may not constitute a general public health hazard (Refs. 9 and 10).

Since 1990, CDC has documented a decrease in the incidence of listeriosis. Although not certain, this decrease may be attributed to government and industry programs directed at improved sanitation and process control. Listeriosis is typically characterized by sporadic cases. However, a recent multi-State listeriosis outbreak associated with the consumption of processed meats, with at least 73 illnesses and 16 deaths, has reaffirmed concerns that more preventative efforts are needed.

Historically, FDA has had a policy of ''zero tolerance'' for *L. monocytogenes* based on the absence of the microorganism in a 25-gram sample of a given production lot. In other words, FDA's position has been that the detection of any *L. monocytogene* in a 25-gram sample renders the food adulterated within the meaning of the Federal Food, Drug, and Cosmetic Act (21 U.S.C. 342(a)(1)). As recently as 1995, FDA affirmed this policy, as reflected in the decision in *United States* v. *Union Cheese Co.*, 902 F. Supp. 778, 784, 786 (N.D. Ohio 1995). In that litigation, FDA's expert witness testified that the *L. monocytogenes* bacterium grows at refrigerator temperatures and that the level of *L. monocytogenes* required to cause illness is unknown (902 F. Supp at 784). FSIS (which regulates meat and poultry) likewise has historically had a zero tolerance policy for *L. monocytogenes*.

Other countries, including certain major trading partners of the United States, take a slightly different approach to *L. monocytogenes* contamination. Relying upon their interpretation of the existing scientific data, countries such as Canada and Denmark have a ''non-zero tolerance'' for *L. monocytogenes* for some classes of foods (Refs. 10 and 11).

For example, in Canada, ready-to-eat foods that have not been associated with an outbreak and do not allow any growth of *L. monocytogenes* during a 10-day period of refrigerated storage may contain up to 100 *L. monocytogenes* organisms per gram without being considered unlawful (Ref. 12). Denmark has six classes of foods that have to meet various criteria for *L. monocytogenes*. In raw, ready to eat foods, for example, 2 of 5 samples can contain between 10 and 100 organisms per gram, and no sample can exceed 100 organisms per gram. Although the course taken by other countries concerning *L. monocytogenes* contamination is not determinative of the U.S. approach, the policies of certain major trading partners provides further context to any reexamination of current U.S. policy.

Quantitative RA has recently been identified as a useful tool for evaluating the public health impact of microbial contamination. USDA/FSIS and FDA recently completed a quantitative RA of *Salmonella* Enteritidis in shell eggs and egg products (Ref. 13). This RA is being used to review and evaluate Federal regulatory approaches to ensuring the safety of these products.

As noted, although the incidence of listeriosis is relatively low, the consequences of such infection are quite serious. A quantitative RA of the prevalence and extent of exposure of *L. monocytogenes* will provide a structured approach to synthesize and evaluate the available data and information. To the extent that U.S. policy regarding *L. monocytogenes* contamination requires reexamination, such a RA can serve as a foundation for such reconsideration.

II. Objectives of the Risk Assessment

As noted previously, FDA and USDA/FSIS are jointly planning to conduct an assessment of the risk posed by *L. monocytogenes* to American consumers. A RA is a systematic and comprehensive collection of information and analysis of such information that promotes an understanding of the interactions of various factors in a complex situation and provides a basis for making decisions. The goal of this RA is to provide FDA and FSIS with the information needed to review current programs relating to the regulation of *L. monocytogenes* contamination in foods to ensure that such programs provide maximum public health protection.

III. Risk Assessment Plan

The RA will seek and analyze three types of information: Information concerning the epidemiology of foodborne listeriosis, information concerning the level of *L. monocytogenes* contamination of foods and consumption levels of such foods (i.e., an exposure assessment), and information regarding the human health consequences of such exposure (i.e., a dose-response analysis).

1. The RA will analyze epidemiological evidence concerning the foods implicated both in documented outbreaks and in sporadic cases of listeriosis, the numbers of *L. monocytogenes* consumed, the populations which became ill, and the severity of their illnesses.

2. The exposure assessment component of the RA will determine the frequency of occurrence of *L. monocytogenes* in different classes of foods, particularly the ready-to-eat foods that are intended for consumption without additional heating. Ready-to-eat foods are represented by numerous types of dairy, seafood, meat, and plant products. The RA also will collect and analyze information on the number of viable organisms associated with these foods at the time of consumption. When data are collected at processing stages prior to consumption, the RA will utilize models for growth, survival, or thermal inactivation to estimate actual exposure of the consumer to *L. monocytogenes*. The RA also will utilize food consumption databases to assess the amount of these foods that are consumed. The RA will use the information about the frequency of occurrence and numbers of *L. monocytogenes* and food consumption to estimate the number of *L. monocytogenes* cells consumed.

3. The RA will include an evaluation of the dose-response relationship, which will describe the health effects from consuming specific numbers of *L. monocytogenes* organisms. The information that will form the basis of the dose-response relationship element of the RA may come from epidemiological, animal, or in vitro studies. FDA and FSIS recognize that the frequency and severity of illness may be affected by the food matrix, characteristics of specific strains of the organism, and variability in human susceptibility.

The RA will examine a number of issues, including: What foods contribute most to the consumption of *L. monocytogenes*, what are the numbers of organisms when a food is contaminated, how frequently are foods heavily contaminated, are some strains of *L. monocytogenes* more virulent that others, what is the extent of organism growth during storage (including storage at refrigeration temperatures), and what is the likelihood of illness to various subpopulations from consuming different numbers of *L. monocytogenes*. All assumptions and uncertainties in the RA will be identified and documented. The RA process will also include an evaluation of the adequacy of current scientific knowledge, data, and information. This will suggest where future research could be directed to reduce any uncertainty in the risk estimate that prevents a clear understanding of the causes and impact of listeriosis.

IV. Data and Information Requested

FDA and FSIS request comments on the risk assessment approach outlined previously and the submission of any information relevant to this RA. The agencies specifically request scientifically valid data on the quantitative levels of *L. monocytogenes* in foods and data relating to rate of consumption of foods likely to contain high levels of *L. monocytogenes*.

FDA believes that the credibility and validity of the RA require that the process for the conduct of the RA be transparent, and thus, all the data and information evaluated in the context of the RA and utilized in the RA must be publically available. Accordingly, any data or information submitted in response to this notice should be in a form that permits public disclosure. Submitters of data and information should not mark any information as ''Confidential'' and should fully expect that any data or information submitted will be made available to the public. Questions regarding the public availability of data and information submitted in response to this notice should be directed to the contact person above.

As noted, the purpose of this request for data is to gather relevant information to facilitate a valid RA of *L. monocytogenes* with the larger goal of providing a sound scientific basis for the agencies' policies regarding the regulation of *L. monocytogenes* contamination in food. Although FDA would seek to remove from the market any existing food product known to be adulterated, FDA does not intend to utilize the submitted data and information to support future enforcement activity against the manufacturers submitting the data. Accordingly, it is acceptable that data submitted in response to this notice be ''blinded'' in the sense that the data need not identify the particular manufacturer or processor that was the source of the samples underlying the results.

The RA team plans to present a summary of available literature to the National Advisory Committee on Microbiological Criteria for Foods at a meeting scheduled for May 26 through 28, 1999, in Chicago, IL. A copy of the literature summary will be available prior to that meeting on the Internet at ''http://vm.cfsan.fda.gov''. Comments and data submitted in response to this notice or at that meeting will be incorporated into the RA process, and the completed RA will be publically presented in September 1999.

Two copies of comments and scientific data and information are to be submitted, except that individuals may submit one copy. Comments and scientific data and information should be addressed to the Dockets Management Branch (address above) and identified with the docket number found in brackets in the heading of this document. Received materials may be seen in the Dockets Management Branch between 9 a.m. and 4 p.m., Monday through Friday.

V. References

The following references have been placed on display in the Dockets Management Branch (address above) and may be seen by interested persons between 9 a.m. and 4 p.m., Monday through Friday.

1. Ryser, E. T. and E. H. Marth, *Listeria, listeriosis, and food safety*, Dekker, NY, 1991.

2. Farber, J. M. and P. I. Peterkin, ''Listeria monocytogenes, a Food-borne Pathogen,'' *Microbiology Review*, 55:476–511, 1991.

3. FDA, *Bad Bug Book* (Foodborne Pathogenic Microorganisms and Natural Toxins), 1999, Internet address: ''http://vm.cfsan.fda.gov/mow/intro.html''.

4. Pinner, R. W., A. Schuchat, B. Swaminathan, P. S. Hayes, K. A. Deaver, R. E. Weaver, B. D. Plikaytis, M. Reeves, C. V. Broome, and J. D. Wenger, ''Role of Foods in Sporadic Listeriosis. 2. Microbiologic and Epidemiologic Investigation,'' *Journal of the American Medical Association*, 267:2046–2050, 1992.

5. CAST, ''Foodborne Pathogens,'' Council for Agricultural Science and Technology, Task Force Report 122, Ames, IA, 1994.

6. Rocourt, J. and P. Cossart, ''Listeria monocytogenes,'' In *Food Microbiology, Fundamentals and Frontiers*, edited by M. P. Doyle, L. R. Beuchat, and T. J. Montville, ASM Press, Washington, DC, 1997.

7. Miller, A. L., J. L. Smith, and G. A. Somkuti, ''Foodborne Listeriosis,'' Soc. Indust. Microbiol., Elsevier, NY, 1990.

8. CDC, *Morbidity and Mortality Weekly Report*, ''Incidence and Foodborne Illnesses–Foodnet,'' 47(37);782, 1997.

9. Farber, J. M., W. H. Ross, and J. Harwig, '' Health Risk Assessment of *Listeria monocytogenes* in Canada,'' *International Journal of Food Microbiology*, 30:145–156, 1996.

10. ICMSF, ''Choice of Sampling Plan and Criteria for Listeria monocytogenes,'' *International Journal of Food Microbiology*, 22:83–96, 1994.

11. IFST, Microbiological Criteria for Retail Foods, Professional Food Microbiology Group, Inst. Food Science and Technology, Lett. Appl. Microbiol, 20:331–332, 1995.

12. Health Canada, Compliance Guide/Policy on *Listeria monocytogenes* in Ready-to-Eat Foods, 1994.

13. FSIS, *Salmonella* Enteritidis Risk Assessment, Shell Eggs and Egg Products, USDA, FSIS, Washington, DC, 1998.

Dated: April 29, 1999.

William K. Hubbard,

Acting Director Commissioner for Policy.

[FR Doc. 99–11319 Filed 05–06–99; 8:45 am]

BILLING CODE 4160–01–F

DEPARTMENT OF HEALTH AND HUMAN SERVICES

Food and Drug Administration

[Docket No. 99N–1168]

Public Health Impact of Foodborne Listeria Monocytogenes

AGENCY: Food and Drug Administration, HHS.

ACTION: Notice of public meeting; request for comments.

SUMMARY: The Food and Drug Administration (FDA), Center for Food Safety and Applied Nutrition, in conjunction with the Risk Assessment Working Group of the National Advisory Committee on Microbiological Criteria for Foods, and in cooperation with the Food Safety and Inspection Service, the U.S. Department of Agriculture, is announcing a public meeting to discuss issues related to risk assessment models being developed to examine the relationship between *Listeria monocytogenes* and human health. The agency invites comments on issues related to the public meeting.

DATES: The public meeting will be held on Thursday, May 27, 1999, from 8 a.m. to 5 p.m. Registration must be submitted by May 20, 1999. Submit written comments by June 30, 1999.

ADDRESSES: The public meeting will be held at the Ambassador West Hotel, 1300 North State Pkwy., Chicago, IL. Submit written comments to the Dockets Management Branch (HFA–305), Food and Drug Administration, 5630 Fishers Lane, rm. 1061, Rockville, MD 20852. Two copies of any comments are to be submitted, except that individuals may submit one copy. Comments are to be identified with the docket number found in brackets in the heading of this document.

FOR FURTHER INFORMATION CONTACT: Catherine M. DeRoever, Executive Operations Staff (HFS–22), Center for Food Safety and Applied Nutrition, Food and Drug Administration, 200 C St. SW., Washington, DC 20204, 202–205–4251, FAX 202–205–4970, or e-mail ''cderoeve@bangate.fda.gov''.

Interested persons should send registration information (including name, title, firm name, address, telephone number, and fax number), written material with an outline of their presentation, and requests to make oral presentations to the contact person by May 20, 1999.

There is no registration fee for this public meeting, but advance registration is suggested because space may be limited.

SUPPLEMENTARY INFORMATION: This purpose of the public meeting is to provide an opportunity for an open discussion on the issues related to risk assessment models under development that will be used to examine the relationship between *L. monocytogenes* and human health.

The agenda will include presentations on such topics as: (1) Introduction to the risk assessment, (2) epidemiology of *L. monocytogenes* outbreaks, (3) presence of *L. monocytogenes* in foods, (4) consumption patterns of foods containing *L. monocytogenes*, and (5) characteristics of *L. monocytogenes* dose-response.

The sponsoring agencies encourage individuals with relevant scientific data or information, (i.e., information concerning the epidemiology, exposure, and dose-response relationship of *L. monocytogenes*) to present such information at the meeting or in written comments.

Transcripts of the public meeting may be requested in writing from the Freedom of Information Office (HFI–35), Food and Drug Administration, 5600 Fishers Lane, rm. 12A–16, Rockville, MD 20857, approximately 15 working days after the meeting at 10 cents per page. The transcript of the public meeting and submitted comments will be available for public examination at the Dockets Management Branch (address above) between 9 a.m. and 4 p.m., Monday through Friday.

Dated: April 29, 1999.

William K. Hubbard,

Acting Deputy Commissioner for Policy.

[FR Doc. 99–11317 Filed 05–06–99; 8:45 am]

BILLING CODE 4160–01–F