

January 30, 2002

**Establishment of a National Advisory Committee on Microbiological Criteria for Foods
Work Group Assignment:**

**Requisite Scientific Parameters for Establishing Safety-Based Use-By Dates for
Refrigerated Ready-to-Eat Foods**

Working Group Chair: R. Buchanan

Working Groups Members:

D. Acheson	M. Neill
D. Bernard	B. Swaminathan
D. Englejohn	K. Swanson
S. Garrett	B. Tompkin
M. Kunduru	C. Donnelly
J. Luchansky	

The U.S. Department of Health and Human Services' (DHHS) "Healthy People 2010" reflects the Federal government's public health goals for the next decade. Reducing the incidence of foodborne listeriosis by 50% is one of the priority public health goals identified in that report. Subsequent to the publication of "Healthy People 2010," President Clinton directed Federal food safety agencies to meet this goal by 2005. As a means of focusing their efforts and using the best science available, the DHHS/Food and Drug Administration (FDA) and the U.S. Department of Agriculture (USDA)/Food Safety and Inspection Service (FSIS) undertook the development of a quantitative microbial risk assessment entitled, "The Relative Risk to Public Health from Foodborne *Listeria monocytogenes* Among Selected Categories of Ready-to-Eat (RTE) Foods." The results of the draft risk assessment reinforced the critical interrelation between the temperature and time of refrigerated storage on the microbiological safety of refrigerated RTE foods. In particular, the risk assessment suggests that maintaining proper refrigeration temperatures throughout the shelf life of the product, i.e., production, distribution, retail storage, and in the home, in combination with limiting the duration of shelf life for refrigerated RTE foods that support the growth of *L. monocytogenes* may be an important means of reducing the consumers' risk of foodborne listeriosis.

Currently, food packages contain dating information which may refer to "best if used by," "best if purchased by," "consume by," etc. Such date labeling is typically oriented toward quality attributes, even though it has been suggested that some consumers view the label date as a "safe to consume" date. As a result of the risk assessment, FDA and FSIS are evaluating the usefulness of establishing safety-based "use-by" dates in reducing the risk of foodborne listeriosis. As identified in the FDA/USDA *Listeria monocytogenes* Risk Management Action Plan, the agencies would like to assure that the best scientific information currently available is considered in safety-based shelf life determinations. Thus, we are seeking the advice of the National Advisory Committee on Microbiological Criteria for Foods (NACMCF) on the requisite scientific parameters for establishing safety-based use-by dates for refrigerated RTE foods to help reduce the incidence of foodborne listeriosis. This includes the identification of the

critical parameters that influence the growth and survival of *Listeria monocytogenes* in this category of products. The questions before the NACMCF are:

What are the scientific parameters for establishing safety-based "use-by" date labels for refrigerated RTE foods?

Should safety-based "use-by" dates for refrigerated RTE foods be established using mathematical modeling techniques? If so, what modeling approaches are best suited to the development of safety-based "use-by" date labels for refrigerated RTE foods?

What data needs to be acquired to scientifically validate and verify the adequacy of a proposed safety-based "use-by" date label for a refrigerated RTE food?

What affect do the multiple factors that influence the growth and survival of *L. monocytogenes*, i.e., strain differences, food matrices, production and distribution systems, consumer susceptibility, etc., have on the establishment of safety-based "use-by" date labels for refrigerated RTE foods?

What impact would safety-based "use-by" date labels likely have on the control of other foodborne pathogens in RTE foods?

These questions are broad in their scope. The FDA and FSIS recognize that there are related issues that must be considered before the questions appearing above can be fully addressed. Consequently, a supplemental background paper is provided which explores some of these issues.