

Written Testimony of Dr. Donald Zink  
to the State of Connecticut Committee on Public Health  
Regarding Raised Bill No. 5419  
March, 2010

I am the Senior Science Advisor for the U.S. Food and Drug Administration's Center for Food Safety and Applied Nutrition, the part of US FDA that regulates the safety of food and cosmetics. I am an expert in food safety and canned food processing with 27 years of combined experience in the canned food industry and the US FDA. I would like to provide comments in opposition to Raised Bill No. 5419, a bill that would allow for the unregulated production of certain acidified foods in residential farm kitchens.

The U. S. Food and Drug Administration is the federal agency responsible for regulating the safety of acid, acidified, and low-acid canned foods, other than meat and poultry. The regulations that pertain specifically to the processing of these foods are contained in the Code of Federal Regulations (CFR), Chapter 21, Parts 108, 113, and 114. The regulations that pertain to current good manufacturing practice for foods, in general, are contained in 21 CFR Part 110.

FDA regulations establish the minimum standards necessary to produce safe low-acid canned foods and acidified foods and prevent illness due to the consumption of such foods that are contaminated with the toxins of *Clostridium botulinum*, commonly known as botulism. These regulations apply to any low-acid canned food or acidified food that is sold in interstate commerce or that is produced from ingredients and components that have moved in interstate commerce.<sup>1</sup> Therefore, since many of the raw ingredients used in foods originate from out-of-state suppliers, these regulations apply to many foods that are sold only within the State of Connecticut. If the State of Connecticut were to exempt certain acidified foods from state regulation, the producers of these foods might not realize that they must still comply with the registration requirements of 21 CFR Part 108 and additional provisions of 21 CFR Parts 110, 113, and 114. Additionally, this would create an inconsistency in state and federal food safety regulations. Furthermore, even if such foods were made with ingredients grown solely in the State of Connecticut, FDA may maintain regulatory authority over such activity.

Botulism is a serious disease that is often fatal or requires many months of hospitalization and therapy, including advanced life-support for several weeks up to many months. In the United States, an average of 145 cases of botulism are reported each year and approximately 15% of these cases are the result of

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<sup>1</sup> US FDA Compliance Policy Guide, Section 100.200.  
<http://www.fda.gov/ICECI/ComplianceManuals/CompliancePolicyGuidanceManual/ucm073820.htm>

foodborne exposure. The majority of cases of foodborne botulism are due to the consumption of improperly processed canned foods that are made in the home.<sup>2</sup> Therefore, it is critically important that consumers who process acidified and low-acid canned foods in the home have an understanding of the food safety principles and processing requirements that are unique to canned foods.

The proper processing of low-acid canned foods and acidified foods, is not a simple matter. There are time-tested home canning recipes that were established using scientific principles; however, we find that home canners often deviate from these recipes. Many homes are not ordinarily equipped with the tools to accurately measure acidity and temperature, and home canners often lack the expertise to understand the principles of salt and acid diffusion, heat penetration, and the microbiology of canned foods. The time for acid to penetrate and reduce the pH of low-acid components is critical in the safe preparation of acidified foods, and this depends on a number of factors that require stringent controls. I have no doubt that, without compliance with the FDA standards for acidified foods, we will see occasional process failures with resultant cases of botulism. I would like to emphasize that there is history of botulism cases due to improperly processed acidified foods including pickles, salsa, chili peppers, olives, and some fermented foods.

I hope that the Committee will consider these comments and oppose Raised Bill No. 5419.



Don L. Zink, Ph.D.  
Senior Science Advisor  
U.S. Food and Drug Administration  
Center for Food Safety and Applied Nutrition

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<sup>2</sup> Centers for Disease Control and Prevention. 2010.  
[http://www.cdc.gov/nczved/dfbmd/disease\\_listing/botulism\\_gi.html](http://www.cdc.gov/nczved/dfbmd/disease_listing/botulism_gi.html)