

**Conference for Food Protection
2012 Issue Form**

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Council Recommendation:	<input type="checkbox"/> Accepted as Submitted	<input type="checkbox"/> Accepted as Amended	<input type="checkbox"/> No Action	<input type="checkbox"/>
Delegate Action:	<input type="checkbox"/> Accepted	<input type="checkbox"/> Rejected	<input type="checkbox"/>	

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Title:

Improving Ground Beef Food Safety in Restaurants and Food Service

Issue you would like the Conference to consider:

The Food and Drug Administration's (FDA) Food Code Consumer Advisory provision was implemented to assure that all consumers are informed about the increased risk to especially vulnerable populations of eating raw or undercooked animal foods. The Consumer Advisory is intended to apply to all food establishments where raw or undercooked animal foods or ingredients are sold or served for human consumption in a raw or undercooked form. This includes all types of food establishments whenever there is a reasonable likelihood that the food will be consumed without subsequent, thorough cooking - such as restaurants, raw bars, quick-service operations, carry-outs, and sites where groceries are obtained that have operations such as deli's or seafood departments. Although a variety of statements regarding this issue are currently standard on restaurant menus, the American Association of Meat Processors (AAMP) believes these statements do not provide a sufficient level of protection against foodborne pathogens at food service and restaurants. The meat industry, regardless of facility size (e.g., very small, small, and large), has worked aggressively to do what they can to prevent this harmful *E. coli* O157:H7 pathogen from contaminating meat products. Meat processors rely on numerous interventions intended to specifically address *E. coli* O157:H7 and other harmful meat-related pathogens. Unfortunately, science and historical data indicates that the meat industry cannot guarantee that all ground beef produced is completely free of the *E. coli* O157:H7 pathogen and/or other non-*E. coli* O157 Shiga Toxin-producing *Escherichia coli* (commonly referred to as non-O157 STECs). See the attachment, *Background Information*, for more details.

Therefore, a risk still exists that consumer may get extremely ill by consuming undercooked ground beef products. The consumer advisory statement may protect the food service or restaurant establishment from financial liability and/or lawsuits, but does very little to actually protect the consumer. The allowance of such dangerous food preparation practices is in complete opposition to U.S. Department of Agriculture (USDA) and FDA cooking recommendations.

AAMP is currently recommending that changes be made to the FDA Food Code for the Consumer Advisory statement on menus and that proper preparation of ground beef be mandated at the food service and restaurants. Specifically, AAMP recommends:

- Amend the FDA Food Code to add a statement that disallows food service/restaurants from serving undercooked ground beef products to consumers. This change would need to include a minimal cooking temperature for ground beef items (e.g., ground beef, hamburgers, etc.) of 160°F to ensure that it has been properly cooked to eliminate the chances for the potential presence of *E. coli* O157:H7.
- Amend the FDA Food Code to allow ground beef or blade tenderized steaks to be cooked at a temperature lower than 160°F, if, and only if that ground beef or blade tenderized steaks has been irradiated.
- Amend the FDA Food Code to add a statement that disallows food service/restaurants from serving undercooked blade tenderized or moisture enhanced steaks. This change would need to include a minimal cooking temperature for blade tenderized or moisture enhanced steaks of 160°F to ensure that it has been properly cooked to eliminate the chances for the potential presence of *E. coli* O157:H7.

The importance of the change is to help alter the mindset of consumers to avoid consuming undercooked ground beef products, since these products carry increased risk of *E. coli* O157:H7 and other non-O157 STECs. When consumers begin to understand the reasons why they are not able to eat/order an undercooked ground beef patty at the food service and restaurant level, then ideally this understanding of food safety will likely transfer to at-home use of the product. The Consumer Advisory statement in its current form also is somewhat of a release of liability for restaurants, who have not in the past taken the responsibility for properly cooking products served to consumers. Instead, the blame is placed back onto the ground beef processor/supplier. With the current structure of the meat industry and the technology available, many of these ground beef processors/suppliers are simply receiving raw materials to produce ground beef and have very little control on potential *E. coli* O157:H7 contamination. Furthermore, the effectiveness of antimicrobial interventions against *E. coli* O157:H7 at the processors level have limitations.

Public Health Significance:

Escherichia coli O157:H7 (commonly referred to as *E. coli* O157:H7) has been a major concern in the meat industry for decades and has increasing concerns with the development of new processing techniques. *E. coli* O157:H7 has been associated with food since 1982, but *E. coli* O157 is naturally found in the intestinal tract of cattle and in cattle feces. A potential cascade effect of *E. coli* O157:H7 contamination can be seen during the slaughter and production process. *E. coli* O157:H7 in the feces of cattle can be transferred to the hide. The feces on the hide are transferred to the carcasses during the de-hiding process and from the carcass the knives and saws become a vector to transfer *E. coli* O157:H7 onto other cuts of meat. The contaminated cuts of meat are then ground and added to other animal's cuts of meat. This is a possible cascade of events that can lead to massive amounts of ground products contaminated with *E. coli* O157:H7.

E. coli is a common kind of bacteria that lives in the intestines of animals and people, and there are many strains of the pathogen. Most are relatively harmless, but *E. coli* O157:H7 is a strain that produces a powerful toxin that makes those affected very ill. *E. coli* can be found in meat, unpasteurized milk, raw fruits and vegetables, and contaminated water sources. Bloody diarrhea and stomach pain are the most common signs of *E. coli* O157:H7 sickness. Some of the population, especially children under 5 and the elderly, can become

very sick from *E. coli* O157:H7. The infection damages the body's red blood cells and kidneys, and can cause hemolytic uremic syndrome. The Centers for Disease Control and Prevention (CDC) estimates that every year at least 2000 Americans are hospitalized, and about 60 die as a direct result of *E. coli* O157:H7 infections and its complications. A study published in the Journal of Food Protection in 2005 by the Emerging Infections Program FoodNet Working Group, estimated the annual cost of *E. coli* O157:H7 illnesses to be \$405 million (in 2003 dollars), which included \$370 million for premature deaths, \$30 million for medical care, and \$5 million for lost productivity. Visit

<http://www.ncbi.nlm.nih.gov/pubmed/16355834#> to view the abstract of the study, Economic Cost of Illness Due to *Escherichia coli* O157 Infections in the United States.

According to the U.S. Department of Agriculture's Food Safety and Inspection Service (USDA/FSIS) data, in 2011 there were 11 *E. coli* recalls of beef products. In 2010, there were 9 *E. coli* O157:H7 recalls of beef products. According to CDC FoodNet data, the illness rate associated with *E. coli* O157:H7 was 0.9 in 2010. Although the incidence of STEC O157 infection has declined to reach the 2010 national health objective target of less than one case per 100,000, this still does not justify the undercooking of potentially harmful products.

USDA/FSIS and the meat industry instituted a testing program for the pathogen that focused on components used in the production of ground beef products as well as end-product sampling programs for ground beef. The goal is to keep contaminated product from reaching consumers and to spur industry focus towards pathogen reduction and HACCP-associated verification programs to reduce the risk of this pathogen in beef products. The USDA/FSIS policy is currently reflected in FSIS Directive 10,010.1. Visit

<http://www.fsis.usda.gov/OPPDE/rdad/FSISDirectives/10010.1Rev3.pdf> to download a copy of the document. This testing is random and sporadic and still allows the potential for contaminated product to reach the consumer.

On September 13, 2011, USDA's Under Secretary for Food Safety, Dr. Elisabeth Hagen, announced that six additional serogroups of pathogenic *E. coli* were declared as adulterants in non-intact raw beef. As a result of this action, if the *E. coli* serogroups O26, O103, O45, O111, O121, and O145 (commonly referred to as non-O157 STECs) are found in raw ground beef or its precursors, those products will be prohibited from entering commerce. FSIS will begin testing for these six serogroups of STEC and enforcing the new policy on March 5, 2012.

Over the past two years, FSIS has announced several new measures to safeguard the food supply, prevent foodborne illness, and improve consumers' knowledge about the food they eat. These initiatives support the three core principles developed by the President's Food Safety Working Group (FSWG). When President Obama came into office, he said that "protecting the safety of our food and drugs is one of the most fundamental responsibilities government has." He pledged to strengthen our food safety laws and to enhance the government's food safety performance. As part of its multi-faceted approach to prevent foodborne illness, USDA also launched Food Safe Families, a consumer education campaign with the Ad Council, the FDA, and the CDC. Changing the Food Code to disallow food service/restaurants to serve undercooked ground beef products to consumers is consistent with the goals of the FSWG and would be another tool to protect public health from *E. coli*.

Ground beef makes up the largest market share of beef consumption in the U.S. Billions of hamburgers are consumed annually. Approximately 26.4 billion pounds of beef was

consumed in 2010, and approximately 50% of this amount was in the form of ground beef. Most Americans buy the product at least two times a week, and ground beef accounts for more than half of all beef sales, as well as a quarter of all the meat sold in North America. Consumers eat about 28 pounds of ground beef annually. Because of the amount of ground beef consumed, the concern over *E. coli* O157:H7 and other non-O157 STECs is taken very seriously by the beef industry, USDA/FSIS, and other stakeholders.

The language amendments recommended in this Issue would be more descriptive of products that are currently recognized by USDA/FSIS as foods that are regularly associated with potential *E. coli* O157:H7 contamination. The Food Code was previously amended to disallow the sale of under cooked ground beef (*i.e.*, comminuted meat) when it is selected from a children's menu. The *E. coli* O157:H7 pathogen is non-discriminatory and can potentially affect all people, regardless of age and immune system.

As the meat industry endeavors to prevent the occurrence of *E. coli* O157:H7 and other pathogen contamination, it is our hope that the food preparers and consumers will continue to practice proper food handling and cooking techniques in their kitchens in an effort to prevent food borne illnesses

AAMP doesn't believe that the recommended 160°F internal product temperature will create an unpalatable product for consumers. The National Cattlemen's Beef Association (NCBA), through funding from Beef Check-off dollars, has also developed an approach to teach the public that through proper cooking methods, beef is safe when cooked to 160°F and is also savory to eat when cooked to that temperature. The promotion attempts to educate the public to not ruin the hamburger by cutting into the hamburgers to check the color, but instead they are encouraged to use a meat thermometer to cook the hamburger to 160°F. NCBA has pointed out that the keys to a *Safe and Savory* hamburger are:

- Cook ground beef to an internal temperature of 160°F.
- Don't use visual appearance to determine doneness of the hamburger. An instant-read meat thermometer is the only way to ensure that the ground beef is cooked to the proper temperature of 160°F. Consumers cannot rely on color and juiciness.
- Check the internal temperature of the hamburger by inserting the meat thermometer into the center of the hamburger.

Because proper cooking is the most uniform method that can guarantee ground beef products are safe from *E. coli* O157:H7, AAMP believes that this change is very important to help improve food safety. It is our hope that this change would also improve consumer education on cooking ground beef, as well as the public's understanding of this pathogen. The change in the Food Code would ensure that all restaurants are required to cook their ground beef products to the proper temperature, and remove one more area of risk from the beef industry's concerns.

The American Association of Meat Processors is recommending that the members of the 2012 Conference for Food Protection support the identified changes of the FDA Food Code that will further help protect consumers from potential *E. coli* O157:H7 and/or non-O157 STEC illness.

Recommended Solution: The Conference recommends...:

that a letter be sent to the FDA requesting the 2009 Food Code (as modified by the Supplement issued in 2011) be amended as follows (new language shown with underline and deleted language shown with strike-through):

1. §3-401.11 (Raw Animal Foods) (D)

A raw animal food such as raw egg, raw fish, raw-marinated fish, raw molluscan shellfish, or steak tartare; or a partially cooked food such as lightly cooked fish, soft cooked eggs, or rare meat other than whole-muscle, intact beef steaks as specified in ¶(C) of this section, may be served or offered for sale upon consumer request or selection in a ready-to-eat form if:

- (1) *As specified under ¶¶ 3-801.11(C)(1) and (2), the food establishment serves a population that is not a highly susceptible population;*
- (2) *The food, if served or offered for service by consumer selection from a children's menu, does not contain comminuted meat; ^{Pf} and*
- (3) *The consumer is informed as specified under § 3-603.11 that to ensure its safety, the food should be cooked as specified under ¶(A) or (B) of this section; or*

Revise subparagraph (D)(3) to read as follows:

~~The consumer is informed as specified under § 3-603.11 that to ensure its safety, the food should be cooked as specified under ¶(A) or (B) of this section. The food, if is beef or contains beef which is comminuted beef meat (e.g., ground beef), blade tenderized beef meat, or moisture-enhanced beef meat; it must be cooked to a minimal internal temperature of 160°F unless the food has been irradiated or guaranteed not to contain *E. coli* O157:H7 or other non-O157 STECs; or~~

2. §3-603.11 (Consumption of Animal Foods that are Raw, Undercooked, or Not Otherwise Processed to Eliminate Pathogens)

(A) Except as specified in ¶ 3-401.11(C) and Subparagraph 3-401.11(D)(4) and under ¶ 3-801.11(C), if an animal food such as beef, eggs, fish, lamb, milk, pork, poultry, or shellfish is served or sold raw, undercooked, or without otherwise being processed to eliminate pathogens, either in ready-to-eat form or as an ingredient in another ready-to-eat food, the permit holder shall inform consumers of the significantly increased risk of consuming such foods by way of a disclosure and reminder, as specified in ¶¶ (B) and (C) of this section using brochures, deli case or menu advisories, label statements, table tents, placards, or other effective written means. ^{Pf}

(B) Disclosure shall include:

- (1) A description of the animal-derived foods, such as "oysters on the half shell (raw oysters)," "raw-egg Caesar salad," and "hamburgers (can be cooked to order)"; ^{Pf} or

Revise subparagraph (B)(1) to read as follows:

A description of the animal-derived *foods*, such as "oysters on the half shell (raw oysters)," "raw-egg Caesar salad," and "hamburgers (can be cooked to order); or

These amendments would be more descriptive of products that are currently recognized by USDA/FSIS as foods that are regularly associated with potential *E. coli* O157:H7 contamination. The Food Code was previously amended to disallow the sale of undercooked ground beef (*i.e.*, comminuted meat) when it is selected from a children's menu. The *E. coli* O157:H7 pathogen is non-discriminatory and can potentially affect all people, regardless of age and immune system.

Submitter Information:

Name: Jay B. Wenther, Ph.D.

Organization: The American Association of Meat Processors

Address: 1 Meating Place

City/State/Zip: Elizabethtown, PA 17022

Telephone: 717-367-1168

Fax:

717-367-9096

E-mail: jay@aamp.com

Attachments:

- "Background Information"
- "Microbiological Results of Raw Ground Beef Products for E. coli O157:H7"

It is the policy of the Conference for Food Protection to not accept issues that would endorse a brand name or a commercial proprietary process.