



Listeriosis Food Safety Messages and Delivery Mechanisms for Pregnant Women

Presented at **Thinking Globally — Working Locally:
A Conference on Food Safety
Education**

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Purpose

- Evaluation study funded by USDA, FSIS
- Test and refine existing FSIS food safety messages on listeriosis
- Identify effective delivery mechanisms for the refined messages
- Collect information on participants' concerns about foodborne illness, their general food safety knowledge, and their food safety practices during pregnancy



Study Design

- 8 focus groups in 4 locations (63 participants)
- High school and college-educated
- At least 12 weeks pregnant
- First-time pregnancies and women with other children




Key Findings

- Food safety concerns and knowledge
- Food safety practices during pregnancy
- Evaluation of FSIS listeriosis brochure



Key Findings: Concerns and Knowledge

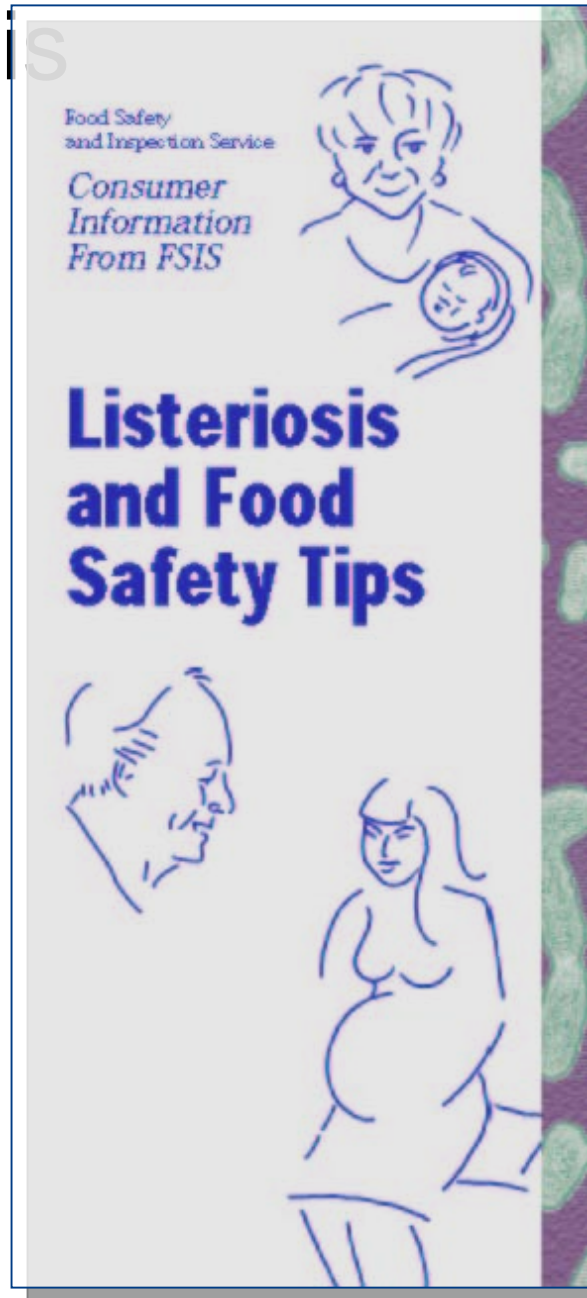
- Concerns about foodborne illness
 - Somewhat or not very concerned about getting foodborne illness at home
 - Confident that meat and poultry they prepare is safe
- Food safety knowledge
 - Somewhat knowledgeable
 - Not familiar with *Lm*
 - Not aware that pregnant women are at high risk



Key Findings: Food Safety Practices during Pregnancy

- Limited food safety information from health care providers
- Some information from other sources
- No changes in food handling since becoming pregnant
- Some eat high-risk foods
- Do not reheat lunchmeats
- Most follow proper storage practices

FSIS Listeriosis Brochure





Key Findings: Evaluation of FSIS Listeriosis Brochure

- Liked the brochure
- Were not familiar with information on *Lm* and listeriosis
- Were surprised and concerned
- Wanted more information about *Lm*
- Found effective:
 - statistics on illnesses and deaths
 - “miscarriage” and “stillbirth”



Reaching Pregnant Women with *Lm* Messages

- Present pregnant women with effective *Lm* messages
- Partner with health care providers
- Disseminate information via prenatal care information sources
- Inform the general population about *Lm*



Present Pregnant Women with Effective *Lm* Messages

- Use materials targeted specifically to pregnant women
- Use a warning tone
- Emphasize the risks to pregnant women and fetuses
- Describe how *Lm* contamination occurs
- Provide guidelines for high-risk foods
- Provide recommended storage times for RTE meats



Partner with Health Care Providers

- Partner with health care providers to inform patients
 - Include *Lm* brochure in package of prenatal information
 - Providers give brochure to patients and discuss
- Partner with medical associations to educate providers
 - “Diagnosis and Management of Foodborne Illnesses: A Primer for Physicians” (AMA)



Disseminate *Lm* Information via Prenatal Care Information Sources

- Books
- Magazines
- Web sites
- Other settings



Inform the General Population about *Lm*

- *Lm* awareness still low
- Increase awareness of *Lm* via the media
- Educate consumers about recommended storage times for RTE meats

FSIS Listeriosis Education Campaign

Listeriosis and Pregnancy: What is Your Risk?

Safe Food Handling for a Healthy Pregnancy

When you're expecting, it's natural to be concerned about your health – and that of your unborn baby. Maintaining a healthful diet, drinking plenty of liquids, and taking prenatal vitamins are all important for the health of the expectant mother and her baby. Food safety is also very important. This information will help you make safe decisions when selecting and preparing food for yourself and/or your family.

Sometimes, what we eat can make us sick. Food contaminated by harmful bacteria can cause serious illness. One type of bacteria, *Listeria monocytogenes* (pronounced *lis-TIR-oo-yis mon-o-si-TAH-gin-eez*), can cause an illness called listeriosis. The Centers for Disease Control and Prevention (CDC) estimates that 2,500 people become seriously ill with listeriosis each year in the United States. Of these, one in five die from the disease. Listeriosis can be particularly dangerous for pregnant women and their unborn babies. Foodborne illness caused by *Listeria* in pregnant women can result in premature delivery, miscarriage, fetal death, and severe illness or death of a newborn from the infection.

What is Listeria?

Listeria is a type of bacteria found everywhere – in soil and ground water and on plants. Animals and people can carry *Listeria* in their bodies without becoming sick. Despite being so widespread, most infections in humans result from eating contaminated foods.

Most people are not at increased risk for listeriosis. However, there are some people who are considered "at risk" because they are more susceptible to listeriosis. In addition to pregnant women and their unborn babies and newborns, other "at-risk" groups include older adults and people with weakened immune systems caused by cancer treatments, AIDS, diabetes, kidney disease, etc. By carefully following food safety precautions, persons at risk for listeriosis can substantially reduce their chances of becoming ill.

Why is listeriosis especially dangerous for me and my child?

Hormonal changes during pregnancy have an effect on the mother's immune system that lead to an increased susceptibility to listeriosis in the mother. According to the

CDC, pregnant women are about 20 times more likely than other healthy adults to get listeriosis. In fact, about one-third of listeriosis cases happen during pregnancy. Listeriosis can be transmitted to the fetus through the placenta even if the mother is not showing signs of illness. This can lead to premature delivery, miscarriage, stillbirth, or serious health problems for her newborn.

Is Listeria transmitted from the mother to the baby through breast milk?

While there is a theoretical possibility that *Listeria monocytogenes* could be transmitted via mother's milk, this has never been proven.

How will I know if I have listeriosis?

Because the symptoms of listeriosis can take a few days or even weeks to appear and can be mild, you may not even know you have it. This is why it's very important to take appropriate food safety precautions during pregnancy.

In pregnant women, listeriosis may cause flu-like symptoms with the sudden onset of fever, chills, muscle aches, and sometimes diarrhea or upset stomach. The severity of the

Information provided by:

Association of Women's Health, Obstetric and Neonatal Nurses (AWHONN)

Informational Food Information Council (IFIC) Foundation

U.S. Department of Agriculture (USDA)

U.S. Department of Health and Human Services (DHHS)

symptoms may vary. If the infection spreads to the nervous system, the symptoms may include headache, stiff neck, confusion, loss of balance, or convulsions. Consult your doctor or healthcare provider if you have these symptoms. A blood test can be performed to find out if your symptoms are caused by listeriosis.

What is the treatment for listeriosis?

During pregnancy, antibiotics are given to treat listeriosis in the mother. In most cases, the antibiotics also prevent infection of the fetus or newborn. Antibiotics are also given to babies who are born with listeriosis.

What steps can I take to prevent listeriosis?

USDA's Food Safety and Inspection Service (FSIS) and the U.S. Food and Drug Administration (FDA) provide the following advice for pregnant women and all "at-risk" consumers:

