Food Safety and Labelling Requirements for Nuts in Ontario

OMAFRA's Food Safety Monitoring Program

Food Safety Inspection Delivery Branch

March 2020

Ontario

Outline

Ontario Regulation 119/11

Major Hazards

Good Agricultural Practices

Good Manufacturing Practices

Food Safety Monitoring Program

Ontario Regulation 119/11

Regulates the packaging, labelling, transporting and advertising, and sale of any regulated commodity in Ontario.

Regulated commodities include:

- Produce
  - fruit and vegetables (fresh)
  - sprouts
  - culinary herbs (fresh)
  - **nuts (in-shell)**
  - edible fungi (mushrooms - whole)
- Honey
- Maple Products

How are nut growers affected by O. Reg. 119/11?

- In-shell nuts and peanuts are regulated, but shelled nuts are not (still subject to Federal Regulations)
- The regulation contains food safety provisions.
- There are no grade requirements for nuts.
- There is a package suitability requirement but no standardized size requirements.
- There are requirements for labelling, retail display signs and advertisements for in-shell nuts.
- There are prohibitions against misrepresentation.

Labelling

- O. Reg. 119/11 requires in-shell nuts to be identified with specific information for labelling, signage and advertising.
- Labels on packages or master containers must include:
  - Name and full address of producer or packer
  - Country or province of origin (i.e. Product of Ontario)
  - The common name of the product if it cannot be easily identified through the packaging

Retail Display Sign Requirements

- Retail display signs must be on or immediately over the display
- Must include:
  - Country or province of origin
  - Price per unit of weight in metric, if sold by weight
  - Print size – readily discernable and in reasonable proportions to the size of the sign

O. Reg. 119/11 - Food Safety

- O. Reg. 119/11 prohibits:
  - Selling, packing or transporting contaminated nuts.

Food Safety News

Breaking news for everyone's consumption

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Nuts: Restoring Shaken Confidence

BY GRETCHEN GOETZ | MARCH 25, 2011

The apple that fell on Newton's head led him to develop the theory of gravity, but hazelnuts falling from trees in Oregon this autumn came loaded with a different message – that the nuts could be dangerous.

For the first time, hazelnuts were implicated in a foodborne illness outbreak, making at least seven people sick from E. coli O157:H7. Unshelled nuts, or filberts, were found to be contaminated, and it is thought that consumers transferred E. coli bacteria from the shell to the nut meat as they cracked open the nuts.

There have been other food poisoning outbreaks associated with nuts – notably almonds, pistachios and peanuts. Since 1990, whole nuts (both shelled and unshelled) have been confirmed as the source of six outbreaks, according to the Centers for Disease Control and Prevention Outbreak Database.

spokesman from the Oregon Department of Agriculture said Friday afternoon that the

Ontario

Three Major Food Safety Hazards

Chemical

- From crop protection, food allergens and aflatoxin.

Biological

- Microorganism contamination from bacteria
- (e.g., E. coli, Salmonella, Listeria), yeasts and moulds.

Physical

- Foreign materials such as stones, glass and metal.

Chemical Hazard: Aflatoxin

- Toxic compound produced by mould
- Causes acute or chronic effects on humans and animals (carcinogen - cancer causing)
- Usually comes from crop debris and soil, but harvest/post-harvest practices can significantly increase aflatoxin levels (improper storage)
- Health Canada limit for the edible portion of the nut is 15 parts per billion (ppb).
- Prevention is key:
    - Dry nuts as much as possible to limit water activity (i.e., limit water available to support microbial growth)
    - Keep/store nuts at the right moisture levels
    - Avoid postharvest rehydration
    - Follow good agricultural practices (manure and irrigation practices)

Microbiological Hazards

- Salmonella and E. coli have been linked to illness from consumption of tree nuts.
    - Both can cause illness even at very low levels.
- There is evidence that Salmonella can live for days to weeks and E. coli O157:H7 can live up to 3 months or more on in-shell nuts.
- Potential sources: orchard ground, contaminated irrigation water (or water introduced during further processing), moisture in storage facility.
- Preventing cross-contamination is important, starts with Good Agricultural Practices (GAPs), continues with Good Manufacturing Practices (GMPs).

Good Agricultural Practices (GAPs)

- Harvest, storage and transportation practices
  - Orchard floor management
  - Clean and sanitize harvest equipment and ensure clean dry storage area
- Cleaning and sanitation program
- Employee training
  - Worker hygiene
  - GAP principles
- Water quality
  - Irrigation and wash water
- Documentation
  - Should have traceability program

Good Manufacturing Practices (GMPs)

- Process controls to prevent contamination during production
- Receiving and handling practices
- Cleaning and sanitation of building, equipment, utensils, containers
- Sanitary design of facility to prevent cross contamination (separating the clean and dirty side)
    - Preventative maintenance
- Pest control
- Personnel
    - Personal hygiene and health requirements
    - Cleaning and sanitation training
- Storage/transportation practices

OMAFRA's Food Safety Monitoring (FSM) Program - Sampling of in Shell Tree Nuts

FSM Program Description

- Samples of Ontario grown, foods of plant origin are collected from various points of sale across the province. Samples include:
  - Fruit and vegetables
  - Edible fungi
  - Sprouts
  - Honey
  - Maple syrup
  - Nuts

- Commodities considered are selected based on risk.

Sample Collection

- Samples are collected by Inspectors appointed under the Food Safety and Quality Act, 2001.
- Inspectors randomly collect samples of Ontario grown in-shell edible tree nuts.
- Five individual samples are collected.
- Each of these samples are 400 grams totalling 2 kg.
- Varieties of nuts collected may include;
    - Hazelnuts
    - Chestnuts
    - Heartnuts
    - Walnuts
    - Pecans

Lab Analysis

- Samples are tested for E.coli, Salmonella and Aflatoxins at the University of Guelph, Agriculture and Food Laboratory.
- Producer are mailed lab results.
- Producer are notified immediately if food safety concerns are detected.
- OMAFRA staff will conduct a follow up visit to help identify cause and suggest corrective actions to mitigate food safety risk.

2020 Season

- FSM Program has been sampling in-shell nuts since 2015.
- No adverse samples have been detected.
- Approx. 20 samples will be collected in the fall of 2020.

Industry Benefits

- Increased confidence in product.
- Contribute to improving food safety for Ontarians.
- Compliance with Food Safety Legislation.

Questions

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