



## Laboratory Guidebook Notice of Change

Chapter **new**, revised, or archived: MLG 10 Appendix 8.00

Title: Characteristics of Normal and Abnormal Perishable Canned Meat/Poultry Products

Effective Date: 01/10/22

Description and purpose of change(s):

This table outlines the characteristics of normal and abnormal perishable canned meat/poultry products and was issued in association with MLG 10 Examination of Heat Processed, Hermetically Sealed (Canned) Meat and Poultry Products.

**United States Department of Agriculture  
Food Safety and Inspection Service, Office of Public Health Science**

MLG 10 Appendix 8.00		Page 1 of 1
Title: Characteristics of Normal and Abnormal Perishable Canned Meat/Poultry Products		
Revision: Original	Replaces: NA	Effective: 01/10/22

**Characteristics of Normal and Abnormal Perishable Canned Meat/Poultry Products**

<b>Condition of Cans</b>	<b>Odor</b>	<b>Appearance</b>	<b>pH</b>	<b>Smear</b>	<b>Cultures</b>	<b>Probable Cause</b>
Flat Cans (0 to Normal Vacuum)	Normal	Normal	Normal	Negative to occasional organisms	0 to low # APC, APT agar count	Normal product
0 to various degrees of swelling	Sour to off odor	Normal to mushy, possible gel liquification	Slightly to definitely below normal	Mixed culture of rods & enterococci	Low # mesophiles, high # psychrophilic non-spore formers (enterococci, lactobacilli)	1. Prolonged storage at low temperatures 2. Abnormal high levels in raw materials 3. Substandard process
Swell	Sour or off odor, possibly putrid	Normal to mushy, possible gel liquification	Slightly to definitely below normal	Mixed culture of rods, cocci	High # mesophilic spore formers and non-sporeformers	Product held without refrigeration
Swell	Normal to sour	Normal	Below normal	Cocci, rods or both	Enterococci, rods or both	Leakage if shell higher than core. Underprocessing if core higher than shell
Swell	Off odor	Normal to off color	Below normal	Rods	Psychrotrophic clostridia (rarely occurs in U.S.).	Low brine levels
Swell	Normal to putrid, depending on length of storage.	Ranges from uncooked appearance to digested	Normal to low, depending on length of storage.	Vary	Vary	Missed processing cycle. Most of these are detected soon after distribution.