



Implementation Approach for Revised Cheese Compositional Standards

Dairy and Food Industry Stakeholders,

The purpose of this notice is to advise you of the implementation approach that the Canadian Food Inspection Agency (CFIA) will use to assess the compliance of cheese, as per the amendments to the *Food and Drug Regulations* (FDR) and the *Dairy Products Regulations* (DPR), which come into effect on December 14, 2008. The amendments can be accessed at <http://canadagazette.gc.ca/partII/2007/20071226/pdf/q2-14126.pdf>.

Scope

All cheese is included in these Regulations, except for those with separate compositional standards – cream cheese, whey cheese, cottage cheese. The casein content requirement does not apply to Feta cheese. Cheese used as an ingredient in any other food, must meet the compositional standard for cheese. CFIA will assess compliance with the revised FDR and DPR requirements of domestic cheese produced in federally registered establishments and imported cheese.

Compliance Objectives

- The food industry is responsible for meeting regulatory requirements and demonstrating that products are in compliance.
- CFIA will assess compliance through review and verification of documentation.
- CFIA will focus verification efforts based on priority and risk.

Cheese Importers

The CFIA will assess the compliance of imported cheese from licensed cheese importers as part of the Importer Verification activity (distributed July 2008 for December implementation, to assess the importer's controls to meet various regulatory requirements). Acceptable documentation that importers could provide includes specification sheets for each cheese and if necessary, supporting documentation (i.e. attestations based on the compliance formula) that the cheese meets the revised regulatory requirements.

Federally Registered Establishments producing Cheese

The CFIA will perform a verification activity to monitor and assess the compliance of domestically produced cheese based on the establishment's current and available vat and laboratory records. For each inspection, the inspector will randomly select a cheese variety and several of its vat records over a one month period. Corresponding laboratory reports/invoices for protein levels in milk (used for milk payment purposes) and supporting documentation or analyses for cheese protein values will be inserted into the formula (indicated below) to validate compliance. CFIA will periodically sample and analyze the cheese variety selected to confirm its total protein value.

Imported and Domestic Prepared Foods

The food industry is required to meet regulatory requirements and be able to demonstrate compliance. CFIA will respond to complaints related to foods that contain cheese and review and verify appropriate documentation to assess the compliance of the cheese used as an ingredient in other food.



Methods to Validate Compliance

1. The CFIA will randomly assess whether the cheese whey protein to casein ratio requirement is met by reviewing vat records and performing analytical testing of the cheese, if required.

2. The Regulations state that specific cheese varieties must have a casein content that is derived from milk¹ or from ultrafiltered milk¹, partly skimmed milk¹, ultrafiltered partly skimmed milk¹, skim milk¹, ultrafiltered skim milk¹ or cream¹, rather than from other milk products, that meets at least the stated percentage of the total protein content² of the cheese.

² Total Protein: total nitrogen x 6.38 (Kjeldahl method – recognized method included in CODEX STAN 234-1999 for protein analysis in cheese)

This can be expressed as the following formula:

$$\% \text{ Casein derived from milks} =$$

$$\frac{\text{Quantity of milks}^1 \times \text{Protein of milks} \times \text{Casein number}^3 \times \text{Retention coefficient}^4}{\text{Protein content of cheese}^2 \times \text{Quantity of cheese}}$$

$$\% \text{ CDM} = \frac{Qm \times Pm \times CN \times RC}{Pc \times Qc}$$

Although milk composition can vary depending on time of year, breed and feed, to facilitate more standardized cheese formulations and to enable uniform implementation, the following constant values will be used:

- ³Casein number:
 - for milk use constant value: 0.776,
(derived from research performed by AAFC, averaging specific milk values over a 48 week period)
 - for cream (xx% BF): $0.776 \times (P - .002 \times BF)/P$
(considering 2mg MFGM protein is associated to each g fat. (MFGM = milk fat globule membrane))
 - for UF milk: $CN = (P - 0.15) \times 0.813/P$.
(value is estimated from protein concentration (P))
- ⁴Retention coefficient - use constant value: 0.96
(constant value from the Van Slyke equation representing the amount of casein retained in cheese)

The CFIA will use this formula during inspections at federally registered cheese establishments and cheese importers are to provide it to foreign suppliers to enable attestations of imported cheese varieties.

Enforcement Approach

The CFIA has the flexibility to select the appropriate enforcement response based on the gravity of the non-compliance, considering factors such as the potential or actual harm, the compliance history of the regulated party and the intent. There are a range of activities that the CFIA may utilize that provide for a graduated enforcement approach and results in a compliance and enforcement continuum - promoting compliance, assessing compliance and responding to non-compliance.