

MEASUREMENT OF RADIOACTIVE CONTAMINANTS IN FOOD



**PROFICIENCY TESTING
PROGRAM**

GLHK1201

FINAL REPORT

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Measurement of Radioactive Contaminants in Food
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Summary of Results

1. The purpose of this proficiency testing program is to demonstrate the qualitative measurement capability of participating laboratories in identifying radionuclides in food using their Contamination Monitoring Systems (CMS).
2. Two milk powder samples were prepared. The blank sample was prepared from milk powder free from radioactive contamination. The positive sample containing about 67 Bq/kg of ^{137}Cs was prepared by mixing a milk powder reference material (IAEA-152) from International Atomic Energy Agency (IAEA) with an appropriate amount of blank milk powder. Both samples were packed in 1-L Model 133 Marinelli breakers. The samples were distributed to participants in sequence for measurement. Participants were not informed of the source of the samples.
3. A total of 19 participants registered for the program. The sample was sent to participants in sequence. All participants returned their results to the organizer.
4. Participants' performance was assessed by their reported results on both samples and their quoted screening limits, if reported, against the target results as obtained by GL and the common minimum detectable activity of CMS (~15 Bq/kg).
5. The following is a summary of participants' results:

<i>Performance Assessment</i>	<i>No. of Participants</i>
Satisfactory	9
Unsatisfactory	
False Positive:	7
False Negative:	3