

# HANDLING OF FOOD SAMPLES

LIM P. Y.

## I COLLECTION, TRANSPORT AND STORAGE OF SAMPLES

- a) Samples shall be transported to the laboratory as soon as possible after sampling, and shall reach the laboratory within 24 hours of sampling.
- b) Samples shipped frozen should be frozen when received by the laboratory. Fresh perishable samples should register a temperature from 0°C to 4°C.
- c) Ideally, samples should be examined immediately upon receipt by the laboratory. Practically however, initiation of analysis may have to be postponed. Store frozen samples at -20°C until they are to be examined. Fresh or refrigerated products are stored between 0° and 4°C for not longer than 24 hours. Store non-perishable, canned, or low-moisture food at room temperature until ready for analysis.

## II CONDITION OF SAMPLES CONTAINER

Checking sampling containers for gross physical defects. Carefully inspect plastic bags and bottles for tears, pinholes and puncture marks. Any cross-contamination resulting from one or more of the above defects would invalidate the sample. Samples should be adequately sealed and labelled.

## III THAWING

When necessary to thaw the sample, use aseptic technique (e.g. in laminar flow chamber) throughout the handling of the product. If the sample is frozen, thaw it in the original container or in the container in which it was received in the laboratory. Whenever possible, avoid transferring the sample to a second container for thawing. If the sample can be easily handled without thawing, e.g. ice cream, proceed directly to the next step. If the frozen sample must be thawed, do it in a manner that minimizes destruction or proliferation of the sample microflora. Normally, the sample can be thawed at 2-5°C within 18 hours. If rapid thawing is desired, thaw the sample at less than 45°C for not more than 15 mins. When thawing a sample at elevated temperatures, agitate the sample frequently, or preferably, continuously. Such rapid thawing is best carried out in a controlled temperature water-bath.