

color so as to produce the desired appearance and appeal of the finished product. The flavor of the ingredients used shall be natural and represent the intended flavor and intensity desired in the finished product. Such ingredients shall be clean, wholesome, of uniformly good quality, free from mold, rancid or decomposed particles. Vegetables used in cottage cheese may first be soaked for 15 to 20 minutes in a cold 25 to 50 ppm chlorine solution to appreciably reduce the bacterial population. After soaking, the vegetables shall be drained and used soon thereafter.

OPERATIONS AND OPERATING
PROCEDURES

§ 58.521 Pasteurization and product flow.

(a) The skim milk used for the manufacture of cottage cheese shall be pasteurized not more than 24 hours prior to the time of setting by heating every particle of skim milk to a temperature of 161 °F. for not less than 15 seconds or by any other combination of temperature and time giving equivalent results. All skim milk must be cooled promptly to setting temperature. If held more than two hours between pasteurization and time of setting, the skim milk shall be cooled and held at 45 °F. or lower until set.

(b) Cream or cheese dressing shall be pasteurized at not less than 150 °F. for not less than 30 minutes or at not less than 166 °F. for not less than 15 seconds or by any other combination of temperature and time treatment giving equivalent results. Cream and cheese dressing shall be cooled promptly to 40 °F. or lower after pasteurization to aid in further cooling of cottage cheese curd for improved keeping quality.

(c) Reconstituted nonfat dry milk for cottage cheese manufacture need not be re-pasteurized provided it is reconstituted within two hours prior to the time of setting using water which is free from viable pathogenic or otherwise harmful microorganisms as well as microorganisms which may cause spoilage of cottage cheese. Skim milk separated from pasteurized whole milk need not be re-pasteurized provided it is separated in equipment from which all traces of raw milk from previous

operations have been removed by proper cleaning and sanitizing.

§ 58.522 Reconstituting nonfat dry milk.

Nonfat dry milk shall be reconstituted in a sanitary manner.

§ 58.523 Laboratory and quality control tests.

(a) Quality control tests shall be made on samples as often as necessary to determine the shelf-life and stability of the finished product. Routine analyses shall be made on raw materials and finished product to assure satisfactory composition, shelf-life and stability.

(b) *Frequency of sampling*—(1) *Microbiological*. Samples of raw milk for testing shall be taken as prescribed in § 58.135. Representative samples shall be taken of finished cottage cheese and from each lot or batch of product used as an ingredient. For keeping quality tests representative samples shall be taken of finished cottage cheese;

(2) *Chemical*—(i) *Milkfat and Moisture*. Representative samples shall be taken of cottage cheese; dry cottage cheese shall be tested for moisture only.

(ii) *pH*. Representative samples shall be taken of finished cottage cheese.

(c) *Test methods*—(1) *Microbiological*. Microbiological determinations shall be made for coliform, psychrotrophic and yeasts and molds. These tests shall be made in accordance with the methods described in the latest edition of Standard Methods for the Examination of Dairy Products, published by the American Public Health Association.

(2) *Chemical*. Chemical analysis shall be made in accordance with the methods described in the latest edition of Official Methods of Analysis of the Association of Official Analytical Chemists, published by the Association of Official Analytical Chemists, the latest edition of Standard Methods for the Examination of Dairy Products, or by other methods giving equivalent results.

§ 58.524 Packaging and general identification.

(a) *Containers*. Containers used for packaging cottage cheese shall be any commercially acceptable multiple use