



United States
Department of
Agriculture

Agricultural
Marketing
Service

Dairy
Programs

USDA Specifications for Dry Whey Protein Concentrate

Effective April 18, 2003

USDA Specifications for Dry Whey Protein Concentrate ¹

1.0 **Scope**

The USDA Specifications for Dry Whey Protein Concentrate includes Dry Whey Protein Concentrate containing 25 % to 89.9 % protein.

2.0 **Plant Requirements**

Dry Whey Protein Concentrate shall be manufactured and packaged in plants inspected by the AMS, Dairy Grading Branch and eligible for listing in the “Dairy Plants Surveyed and Approved for USDA Grading Service” publication.

3.0 **Regulatory**

Dry Whey Protein Concentrate shall comply with all applicable Federal regulations including the U.S. Food and Drug Administration’s regulations contained in 21 CFR Part 184.1979c for Whey Protein Concentrate.

4.0 **Composition Requirements**

Protein Content

Dry Whey Protein Concentrate shall contain not less than 25 percent or more than 89.9 percent protein.

Note: The percent of protein shall be declared on the label of the package. The percent protein may be the actual percent protein in the product or may be declared in 5 % increments (expressed as multiples of 5), provided the declared percent protein is not greater than the actual protein content.

Milkfat

Dry Whey Protein Concentrate shall contain not more than 10 percent milkfat.

Moisture

Dry Whey Protein Concentrate shall contain not more than 5.0 percent moisture.

¹ Compliance with these specifications does not excuse failure to comply with the provisions of the Federal Food, Drug and Cosmetic Act.

pH

Dry Whey Protein Concentrate shall not have a pH exceeding 7.0.

5.0 Quality Requirements

Flavor

Reconstituted Dry Whey Protein Concentrate shall have a bland, clean, flavor free from undesirable flavors but may possess the following flavors to a slight degree: sweet, acid, bitter, and utensil; and the following flavors to a definite degree: feed and weedy. It shall not possess objectionable flavors such as fermented, sour, chalky, lipase, or chemical.

Physical Appearance

Dry Whey Protein Concentrate shall possess uniform white to light cream color. It shall be reasonably free flowing, free from lumps except those that readily break up with slight pressure and be practically free from visible dark particles. It shall be free from foreign material.

Scorched particles content

Dry Whey Protein Concentrate shall contain not more than 15.0 mg. scorched particles.

6.0 Microbial Requirements

Bacterial Estimate – not more than 30,000 per gram standard plate count.

Coliform count – not more than 10 coliforms per gram.

7.0 Test Methods

All test methods, except the methods for determining scorched particles content and flavor, shall be made in accordance with test methods published in the latest revision of the “Official Methods of Analysis of the Association of Official Analytical Chemists,” methods published in the latest revision of “Standard Methods for the Examination of Dairy Products,” or methods published by the International Dairy Federation. The scorched particle content and flavor shall be determined by the methods contained in the latest revision of 918-RL, Laboratory Methods and Procedures, USDA/AMS/Dairy Programs, Dairy Grading Branch.

8.0 **Official Identification**

Dry Whey Protein Concentrate that is officially inspected and found to meet these requirements may be identified with the official USDA Quality Approved Inspection Shield.