

The activity of Tnuva Dairies is accompanied by analytical services of the chemical and microbiological laboratories located in any one of the sites of the dairies.

The laboratories accompany all the activity carried out in the dairy, from the initial stage of receiving the raw materials (which also includes receiving the milk from dairy farms that market milk to Tnuva), through the production and filling process and until the product is packaged, and at the end of its shelf life.

The tests performed in the laboratories are based upon Israeli standards, the appropriate international standards, or test kits which have been approved by such designated bodies as AOAC.

In November 2009, the laboratory in the Rehovot Dairy received ISO 17025 accreditation, an international standard which deals with the requirements incumbent upon laboratories which perform measurements, calibrations and inspections.

The following is the list of testing methods and standards upon which are based the key tests, which are performed in the laboratory :

Chemical Tests

Fat, Protein and Lactose – Tested with Milkoscan which is based on FTIR spectroscopy in the MIR range – in house method based on IDF 141C Standard.

Fat –in house method based on Israeli Standard No. 450

Protein - in house method based on ISO 8968-3 / IDF 20-3 Standard

Acidity – in house method based on Israeli Standard No. 493

Added Water – in house method based on ISO 5764 / IDF 108 Standard

Pasteurization efficiency (Phosphatase activity) – in house method based on ISO 11816-1 / IDF 115-1 Standard

Dry matter in Milk and milk Powders – in house method based on ISO 6731 / IDF 21 Standard

Dry matter in the Cheeses – in house method based on ISO 5534 / IDF 4 Standard

Fat in the Cheeses – in house method based on ISO 4833 Standard

Chlorides – in house method based on ISO 5943 / IDF 88 Standard

Chemical Tests in HPLC

Vitamin D in Dairy Products – in house method based on ISO 14892 / IDF 177 Standard

Vitamin A in Dairy Products – in house method based on IDF 142 Standard

Preservatives in Dairy Products – in house method based on IDF 139 Standard

Drug Residuals

Presence of Beta-Lactams Antibiotics – Tested with a CHARM MRL Test Kit (manufactured by CHARM Science)

Presence of drug residues and inhibitory substances – Tested with a DELVOTEST SP-NT Test Kit (manufactured by DSM)

Microbiological Tests

Total viable Count – in house method based on Israeli Standard No. 526

Coliforms – in house method based on Israeli Standard No. 550

Molds and Yeasts – in house method based on Israeli Standard No. 1242

Sterilization Control – in house method based on Israeli Standard No. 641

