

Physico-chemical characterisation of some samples of fresh milk and milk powder

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Abstract. Milk consumption is important in the diet of all age groups because it provides important nutrients that are essential for humans. Children are the largest consumers of milk, thus, it's very important that milk is free of toxic compounds that can be harmful for humans. Aim of the study was to determine the physico-chemical characteristics of some samples of milk powder for different stage of baby growing and for some samples of fresh milk: raw cow's milk, milk trade and UHT type. The following physico-chemical properties: density, pH, acidity, the presence of acetone, enzymes, antiseptics, dry substance, the ash, total fat, saponification and peroxide index, total nitrogen and protein content were determined. Comparing the values of acidity for analyzed samples it can be concluded that the powder milk acidity value is much lower than the fresh milk. The presence of antiseptics and acetone was not identified, and amylase and peroxidase were found only in raw cow's milk. The highest protein content was found for milk powder (27.22%).

Keywords: fresh milk, milk powder, acidity, protein, peroxide index.

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