

Cheese as an important calcium source and its possible use in osteoporosis prophylaxis and therapy

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Rationale: Some guidelines describe the amount of calcium in different foods, based on the calcium content of Italian cheeses and French, Belgian and German cheeses; however, there is no data on the amount of calcium in different types of the same national popular products, such as Latvian cheeses. Therefore, this research would help physicians to provide advice to patients on how to choose calcium-rich cheese products as an important part of a diet plan for osteoporosis prophylaxis and therapy.

Methods: Data about the amount of calcium in the cheeses produced in Latvia were collected for descriptive analysis. Calcium levels in the laboratory were determined using the inductively coupled plasma-mass spectrometry method (BIOR-T-012-148-2013; PB-223/ICP ed. II of 12.01.2015). Data analysis was performed using IBM SPSS 26.0.

Results: We identified cheeses manufacturers in Latvia and specially developed questionnaires were sent to 84 manufacturers and we get 49 answers (58%). 55 manufacturers were not included in the study. Data from 28 Latvian cheese manufacturers on 35 cheese products were collected. The mean amount of calcium in all cheeses was 529.76 mg/100g, with the highest amount of calcium in hard cheeses and the lowest amount of calcium in goat cheeses.

Conclusions: Cheese products are widely available in all parts of Latvia and have become one of the most consumed milk products in the last 20 years. Cheese is an important source of calcium for patients with osteopenia and osteoporosis, which can be used in the prophylaxis and therapy of these conditions, as well as in the prophylaxis of falls and patients with osteoporotic fractures. The first-time data on the amount of calcium in different types of cheese produced in Latvia allow physicians to use these in the prophylaxis and therapy of various diseases, as well as inpatient education and raising the awareness of the general population about a healthy lifestyle.

Disclosure of Interest: None Declared

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