

Abstract

Phosphates containing food and their implications for osteoporosis

Phosphates are salts of phosphoric acid resulting from the secession of three acidic hydrogen from it. Phosphates are found in natural foods such as nuts, legumes, cereals, meat and offal. Phosphorus is also being added to foods industrially for its' various chemical properties. From more than 1 500 "E's" I found 16 that contain phosphates and thus significantly increase the supply of phosphorus in the body. Usual daily intake of phosphorus is about 1 g. Increased intake of phosphorus forms an acidic environment in the kidney and calcium phosphate complexes, and thus leads to calcium removing from the body and bone demineralization. "E's" containing phosphates are frequently found in meat products, processed cheese, confectionery, bakery products, cola beverages, frozen and instant foods. Most commonly used additive is E-338 phosphoric acid. Osteoporosis is a systemic skeletal disease characterized by a small amount of bone mass and deterioration of bone micro-architecture resulting in increased fragility and fracture risk. The Czech Republic declares to have 600 000 patients treated for osteoporosis.