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A review phytic acid: As antinutrient or nutraceutical

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Abstract
Phytic acid is a substance found in many types of plant foods, such as grains, legumes (including peanuts and soybeans), nuts, and seeds. It is the storage form of phosphorus, an important mineral used in the production of energy as well as the formation of structural elements like cell membranes (Jacela *et al.*, 2010). These foods, are getting a bad reputation due to phytic acid content (Navert, *et al.*,1985) and its ability to bind to essential minerals such as iron, zinc, calcium, and magnesium in the digestive tract and inhibit their absorption by the body (Weaver &Kannan, 2002). Recent studies indicate despite being somewhat demonized for its ability to reduce mineral absorption, phytic acid actually has some potentially beneficial properties. On the plus side, phytic acid can act as antioxidant, exhibits anti-cancer properties, and may have a positive impact on cholesterol and blood sugar (Omni *et al.*, 2004). Preparation methods can reduce the phytic acid content in food, as well as adjusting meal times and food choices (Sade., 2009), can help to have better mineral absorption.

Keywords: phytic acid, mineral absorption, beneficial properties, Preparation methods.

Introduction
Phytic acid (PA; myo-inositol [MI] hexaphosphoric acid) is anabundant plant constituent and, based on weight, comprises1% to 5% of the edible legumes, cereals, oil seeds, and nuts that serve as major sources of human and animal sustenance (Reddy *et al.*, 1982) ^[43]. The amount of phytate in grains, nuts, legumes and seeds is highly variable; the levels that researchers find when they analyze a specific food probably depends on growing conditions, harvesting techniques, processing methods, testing methods and even the age of the food being tested. Phytic acid will be much higher in foods grown using modern high-phosphate fertilizers than those grown in natural compost. Numerous studies show that PA forms insoluble complexes

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