

Phytic Acid: Boon or Curse

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Abstract

Phytic acid in its phytate form has been shadowed over the years as being advantageous or vice-versa. At one hand, where it is extremely helpful in several ways, its major drawback of being a chelating agent cannot be overlooked. Quantity of nutrients delivered by any eatable is what defines its beneficial quality. The pro-and-cons of phytic acid are essential to understand in order to develop the quality of a grain, food and vegetable.

Keywords: Phytate; Hemochromatosis; Cancer; Nutrition; Minerals; Anti-nutrients; Chelating agent

Introduction

The quality of a food, vegetable or grain depends upon the nutrients made available while human intake. There are several food varieties which are highly nutritious when tested for the quality checkup during its production but a serious question arises that does the nutrition present in the food reaches and is absorbed by the human body upon its intake. There are several barriers existing which inhibit this highly important process. One among the barrier is Phytate, which influences the nutritional quality of the food.

Phytate, an "anti-nutrient", is a form of phytic acid when it bounds with the nutrients in the seed. Seeds like those of grains, varieties of nuts, and edible seeds stores phosphorus as Phytic acid. The reason why phytate is considered as anti-nutrient is since it is binded with the minerals, it inhibits minerals availability to human body while its intake. However and hence in the bran while in others, it is present in the cotyledon layer of the seed [1].

Phosphorus storage (in seed) = Phytic acid

Phytic Acid + Minerals = Phytate (In seed)

Phytic Acid: A Boon

As a general fact, Phytic acid is the principal form of Storage of Phosphorus when in seed stage. Other than being a storage for phosphorus, its also proven that certain amount of phytic acid is essential for the developmental stages of the seeds, including the seedling.

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to increase their knowledge and understanding about the food and their role in maintaining and optimizing health, as the generation is getting more involved with their healthy diet it becomes the responsibility of the researcher and the health organizations to deliver what they seek for [4].

The opinion expressed in the article is those of the author only, and these may not necessarily be the views of the institution/organization.

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