

Title Inositol phosphate content and trypsin inhibitor activity in ready-to-eat cruciferous sprouts
Author Juana Frias, Henryk Zieliński, Mariusz K. Piskula, Halina Kozłowska and Concepción Vidal-Valverde
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Abstract

Four cruciferous seeds (small radish, radish, white mustard and rapeseed) were germinated in order to study the fate of inositol hexaphosphate (IP-6, phytic acid) and activity of trypsin inhibitor (TIA). Reduction in the content of phytic acid depended on the time of germination. After four days of germination, when sprouts were ready-to-eat, the amount of this compound was about 50% lower in three out of the four seeds evaluated. Next, a sharp reduction in phytic acid occurred during thermal treatments (pasteurization and sterilization) of germinated rapeseed and radish sprouts. In thermal processes, a decrease in inositol hexaphosphate content was accompanied by the appearance of lower forms of inositol phosphates: IP-5, IP-4 and IP-3.

The analysis of TIA, in rapeseed and radish seeds, in four-day sprouts and in these sprouts after thermal treatment, showed that only thermal processes caused complete disappearance this activity.