

## Interaction drug/nutrient of drugs used by patients with primary immunodeficiency

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**Introduction:** The primary immunodeficiencies (PID) are a group of diseases of more than 150 genetically determined conditions that feature a heightened susceptibility to infections. Recurrent or unusual infections lead to the use of medicines that may interact with food/nutrients that impair the absorption and utilization of nutrients, or even interfere with the action of the drug.

**Objective:** To evaluate the possible drug-nutrient interactions of drugs used by patients with PID, such as common variable immunodeficiency (CVID) and ataxia-telangiectasia (AT). **Methods:** A retrospective cross-sectional study was conducted, which evaluated 31 patients with CVID and AT of both sexes, aged 3-52 years old who were follow-up at Clinical Immunology reference center. Data collection was performed through direct consultation to the medical records using a standardized questionnaire to collect personal data, diagnosis and medications administered. **Results:** Of 31 patients followed, 17 (54,8%) had CVID and 14 had AT; the mean age was 21,5 years old, and 61,2% were male. The average number of any medications taken by these patients was 1,97/day. Of the 30 prescription drugs, 11 (36,6%) had possible interactions with food/nutrients, totaling 20 interaction, the prednisolone and ciprofloxacin stand out as one of the main drugs with potential drug-nutrient interactions (20%). The prednisolone interferes mainly in the intestinal absorption of calcium, whereas the presence of food slows down the range of serum concentrations of ciprofloxacin. **Conclusion:** The high number of possible interactions between drug and food/nutrients observed in this study shows the importance of pharmaceutical care for patients with PID. Simple information such as “take the medicine on an empty stomach”, “take the medicine with a glass of water”, is an important precaution that minimizes a series of interactions between food/nutrients and medicines.

**Keywords:** Primary immunodeficiency, Drug-nutrient interactions, Common variable immunodeficiency, Ataxia telangiectasia.