

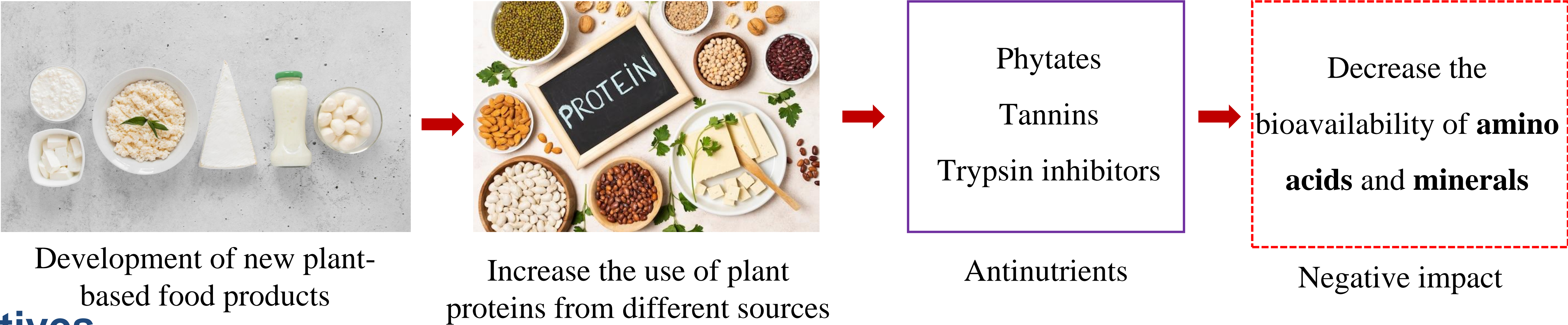
# Antinutritional factors in flours and protein concentrates of different varieties of chickpeas

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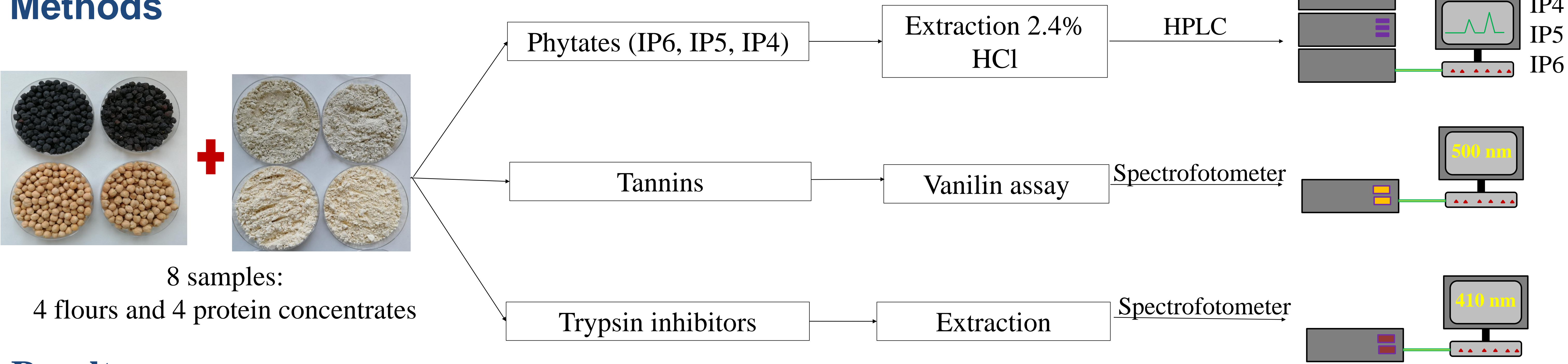
## Introduction



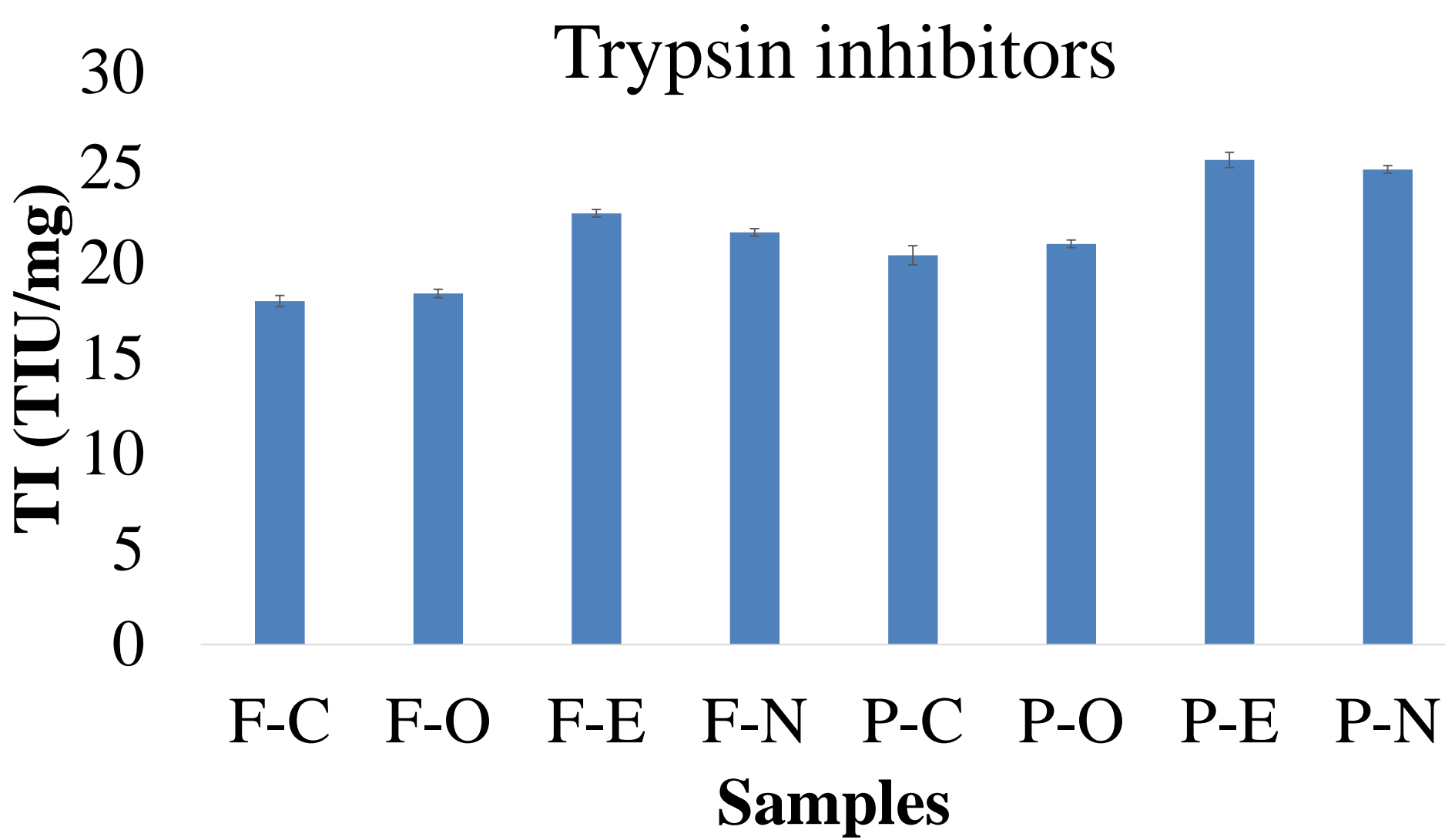
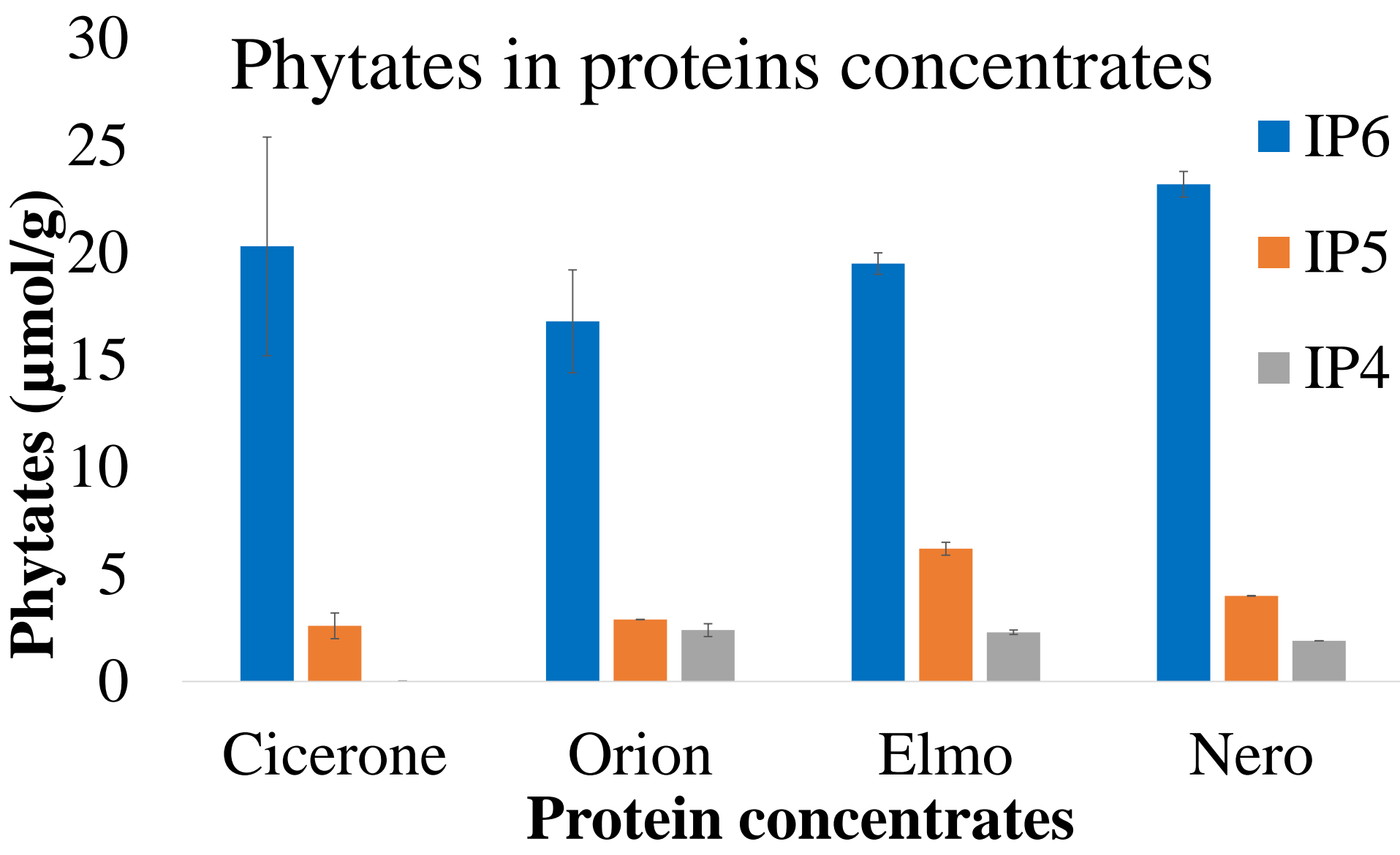
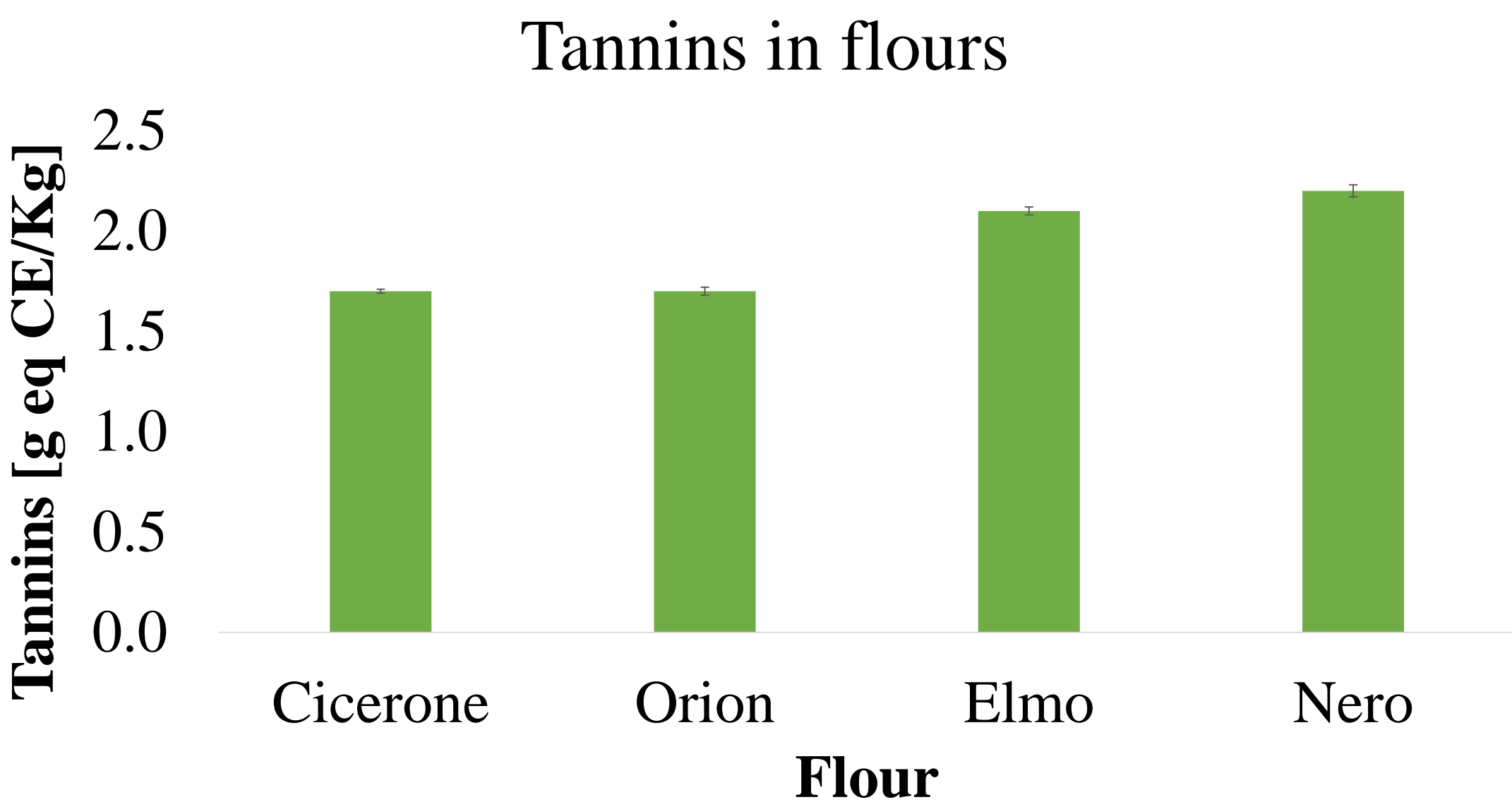
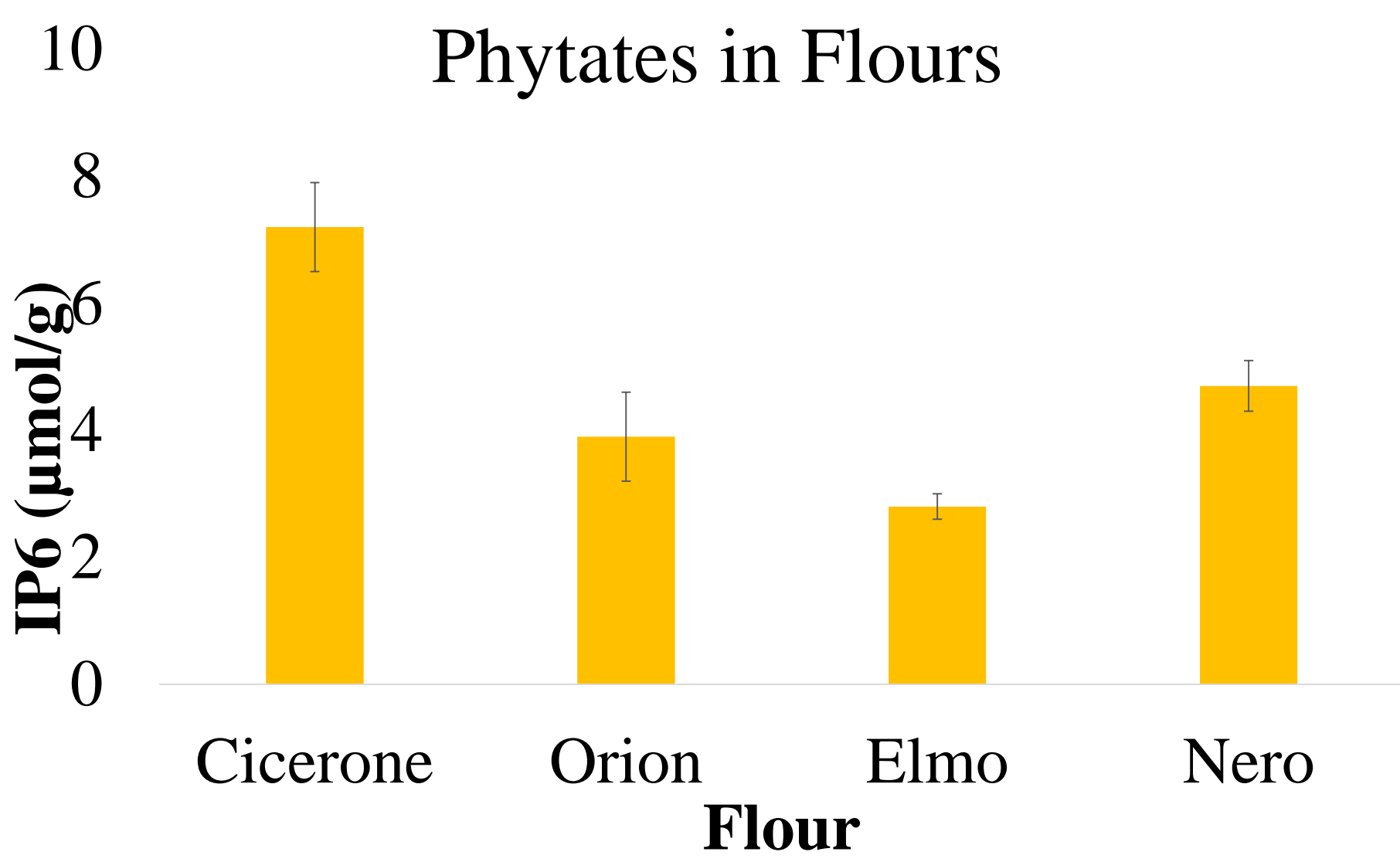
## Objectives

We evaluated the presence of antinutrients such as phytates, tannins and trypsin inhibitors (TI) in flours and protein concentrates (PC) of four varieties of chickpeas.

## Methods

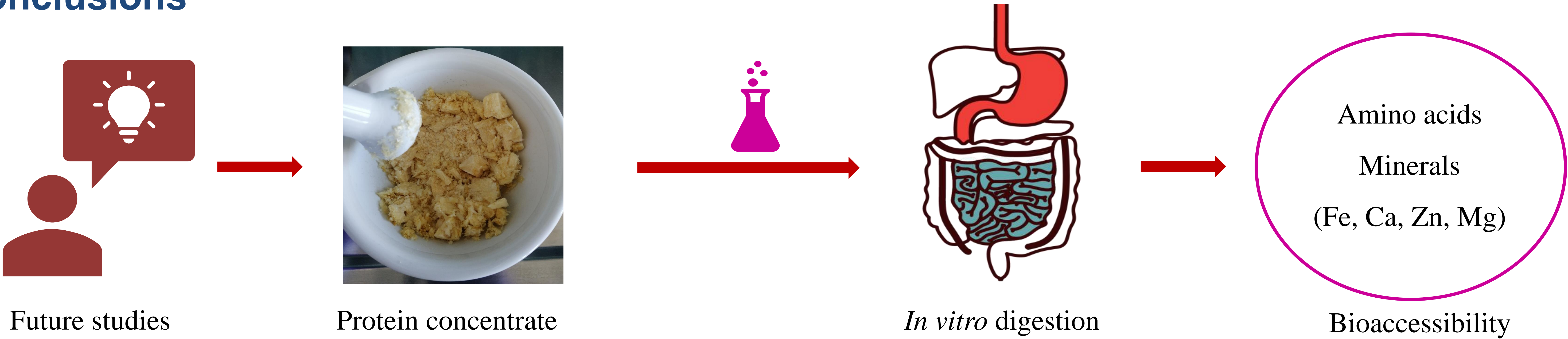


## Results



- ✓ Phytates: IP5, IP4 and IP3 were not detected in the flours.
- ✓ IP3 was not present in the protein concentrates.
- ✓ Tannins were found only in the chickpeas flours.
- ✓ The protein extraction method applied did not co-extract tannins.
- ✓ The protein extraction method increased the amount of trypsin inhibitor in the final samples.

## Conclusions



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