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CHEMICAL COMPOSITION AND ANTIOXIDANT POTENTIAL OF WALNUT (*JUGLANS REGIA*) STONE LEAVES

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Introduction

Walnut leaves represent a sustainable plant resource rich in nutrients and antioxidant bioactive compounds. Their phytochemical profile supports potential applications as natural ingredients in functional foods, nutraceuticals, feed additives and antioxidant formulations.

Material and method

The analytical determinations were carried out using standard chemical analyses to evaluate proximate composition and specific analytical methods for mineral elements (Ca, P, Cu, Fe, Mn, Zn) and bioactive compounds (carotenoids and vitamin E), total polyphenols content and antioxidant capacity (DPPH).

POTENTIAL APPLICATIONS



Functional
foods



Nutraceuticals
and natural
supplements



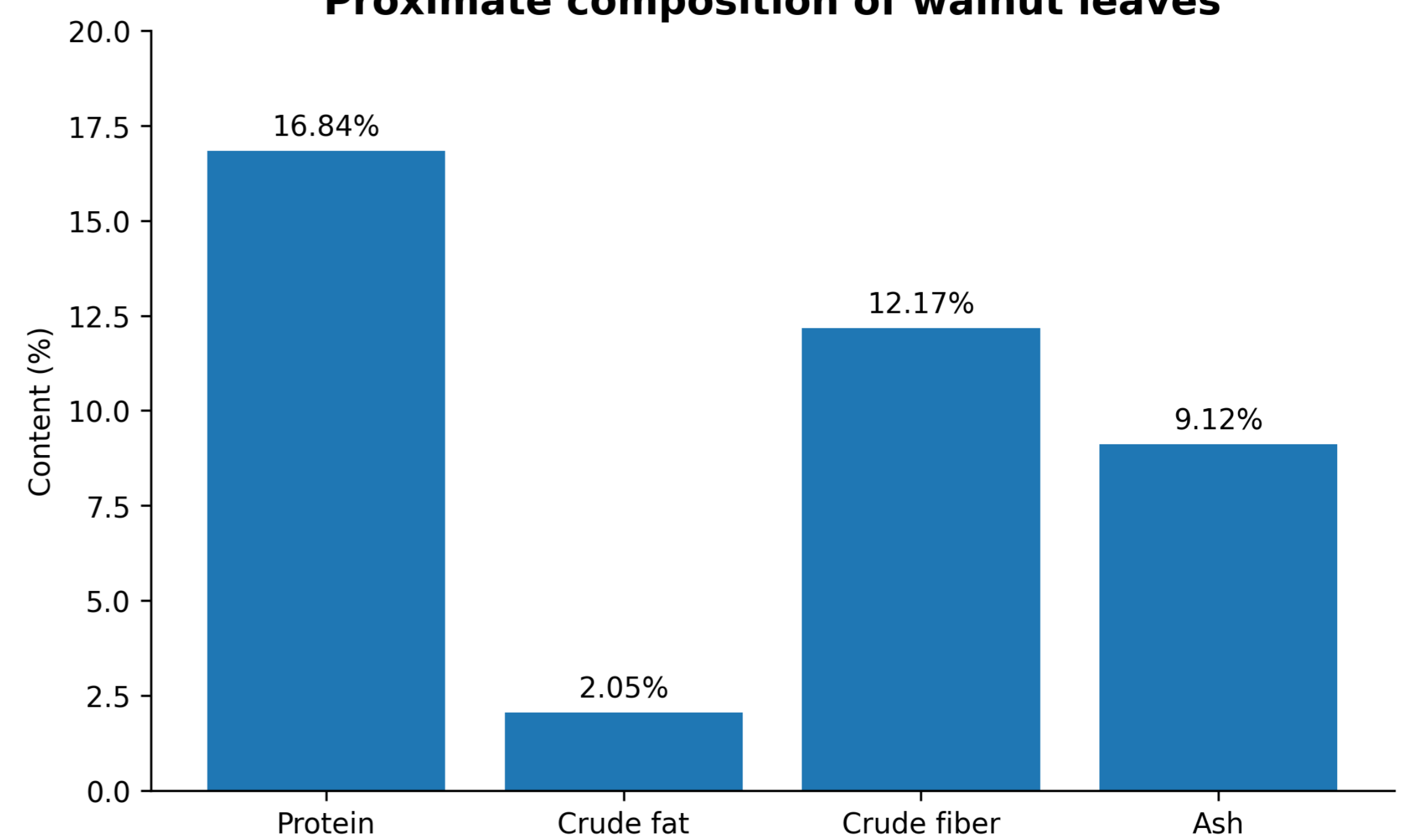
Feed
additives



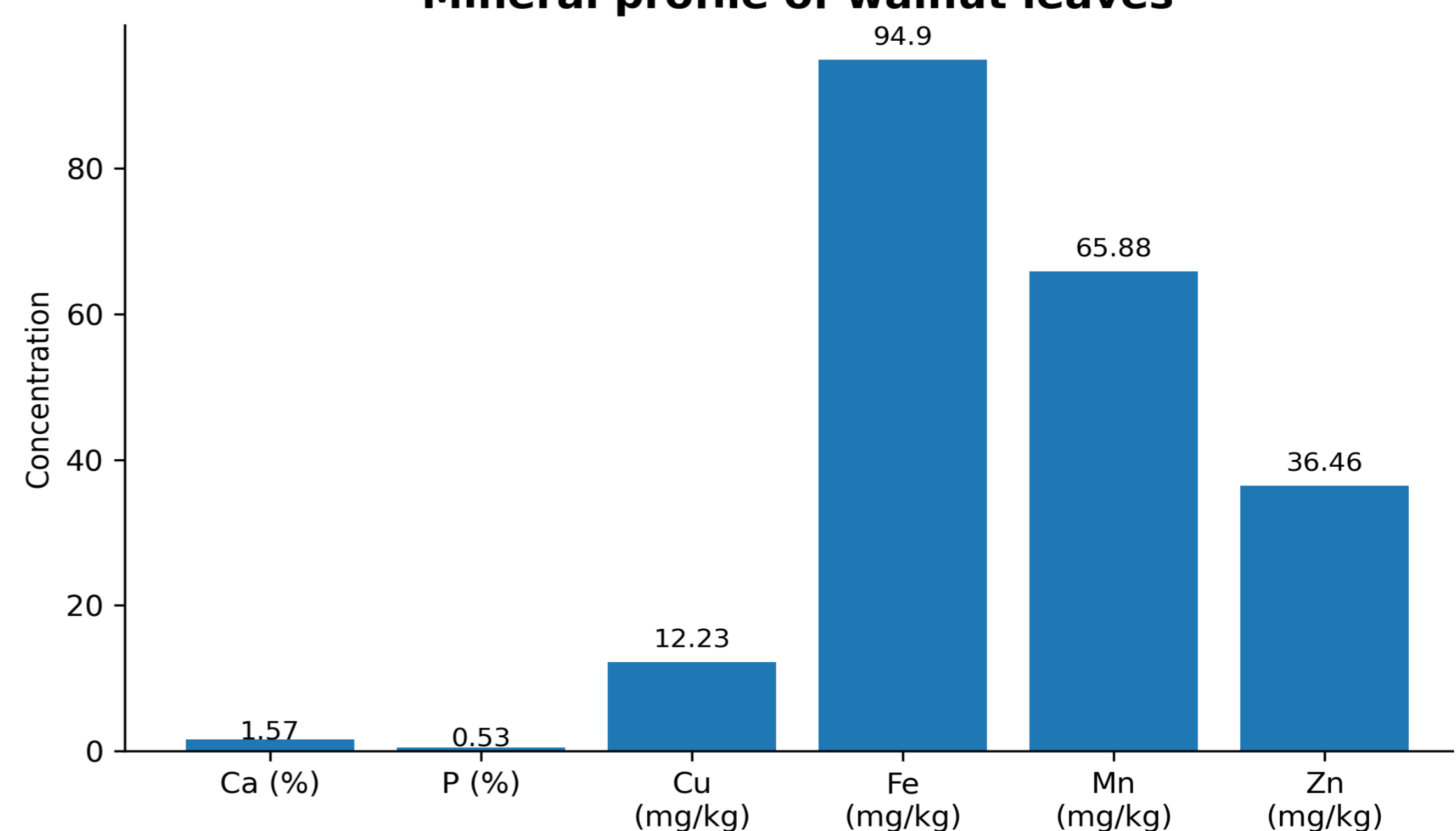
Natural
antioxidant
formulations

Results and discussions

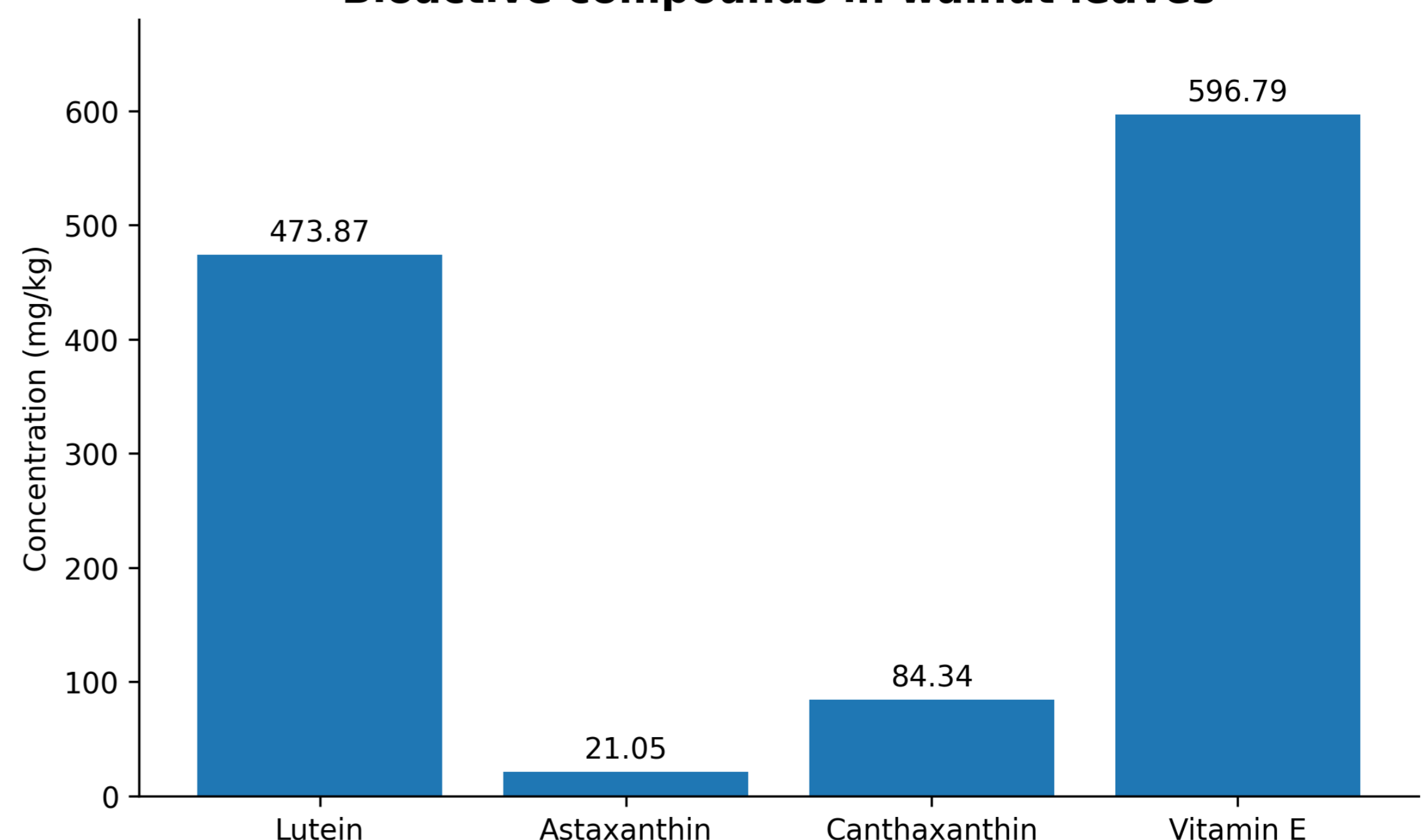
Proximate composition of walnut leaves



Mineral profile of walnut leaves



Bioactive compounds in walnut leaves



Conclusions

These results highlight their relevance use as raw material in the development of functional products and natural supplements, while also highlighting the need for further studies on bioavailability and biological effects.

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