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Título	Enzyme-assisted modification of flavonoids from <i>Matricaria chamomilla</i> : antioxidant activity and inhibitory effect on digestive enzymes
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Resumo	<i>Matricaria chamomilla</i> L. contains antioxidant flavonoids that can have their bioactivity enhanced by enzymatic hydrolysis of specific glycosyl groups. This study implements an untargeted metabolomics approach based on ultra-performance liquid chromatography coupled with electrospray ionisation quadrupole time-of-flight mass spectrometry technique operating in MS ^E mode (UPLC-QTOF-MS ^E) and spectrophotometric analysis of chamomile aqueous infusions, before and after hydrolysis by hesperidinase and β -galactosidase. Several phenolic compounds were altered in the enzymatically treated infusion, with the majority being flavonoid derivatives of apigenin, esculetin, and quercetin. Although enzymatically modifying the infusion only led to a small increase in antioxidant activity (DPPH• method), its inhibitory effect on pancreatic lipase was of particular interest. The enzymatically treated infusion exhibited a greater inhibitory effect (EC ₅₀ of 35.6 μ M) than unmodified infusion and kinetic analysis suggested mixed inhibition of pancreatic lipase. These results are of great relevance due to the potential of enzymatically treated functional foods in human health.
Fomento	