

## APPLE POMACE AQUEOUS EXTRACT AS A FOOD INGREDIENT

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The present work aimed to assess the potential of apple pomace (AP) as a low priced source of food ingredients rich in bioactive compounds.

In order to determine its safety, AP was evaluated regarding Total Aerobic Mesophiles (TAM), Yeasts and Moulds (YM) and *Enterobacteriaceae* (ENT). A hot water extract of AP was investigated concerning total phenolic content (TPC) by the Folin-Ciocalteu method and its antioxidant capacity by the hydroxyl scavenging (OH<sup>•</sup>) and ABTS<sup>•+</sup> methods. The extract was incorporated into a yoghurt and its microbiological parameters, antioxidant activity and sensorial acceptability were evaluated.

AP had very acceptable microbial levels respecting the TAM, YM and ENT, potentiating its valuation as a source of food ingredients. The AP extract presented a TPC of  $\approx 11$   $\mu\text{g}$  of GAE/g, which resulted in the capability to inhibit OH<sup>•</sup> radical and the ABTS<sup>•+</sup> radicals. These properties were reflected by an increased antioxidant activity of the yoghurts fortified with the extract, reaching more than twice of the controls. This was achieved without affecting the native yoghurt lactic acid bacteria and sensorial acceptance.

Although the present strategy proves to be very promising for the valuation of AP, further studies are required in order to better elucidate the extracts' bioactivity.

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