Antiradical and reducing potential of commercial beers

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The antioxidant properties of commercial beers and their changes during storage were investigated. The relationship between the antioxidant capacity and total polyphenol contents of a range of commercial beers were evaluated. The results show that the antiradical and reducing potential varies depending on the type of beer and the processing steps involved in its production. Higher antiradical potential and polyphenol content in dark beers than in lager, dealcoholised and wheat beers were determined. A strong relationship was found between the total polyphenol content and both antiradical activity and reducing power, as measured by DPPH and FRAP assays. When any decrease in antioxidant activity as a result of storage was observed, it occurred mainly after the initial 4-week storage period. The total polyphenol content dropped more sharply than the antiradical and reducing ability over the same time periods.

Keywords:

antioxidants; beer; DPPH; FRAP; polyphenols

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