Plants are rich source of many bioactive compounds like polyphenols, carotenoids and fiber. Each of the compounds has specific impact on the consumer’s health, that is why it would be demanded to design functional food products preventing or slowing down the aging processes leading to many degenerative diseases like diabetes or cardiovascular disease. Tea *Camellia sinensis* as one of widely consumed beverage is well known for its health promoting potential. Many research showed high antiradical activity of tea components, with high importance in anticancer and anti-inflammatory investigations.

Research aimed on the designing bakery products enriched with different levels of substances originated from tea leaves, cocoa, buckwheat and cranberry. Biscuits freshly prepared and stored were characterized by the total phenolics content, DPPH and ABTS radical’s scavenging method. Additionally biscuits were also subject of sensorial evaluation by the consumer’s panel, which evaluated: taste, aroma, color, crispness and overall acceptance of a product.

Conducted research showed high antiradical potential of biscuits in presence of DPPH and ABTS radicals, also polyphenols content was in high amount. Consumer’s sensory analysis showed good acceptance of products enriched with plants constituents. Concluding remarks: it was confirmed that plant substances enriched cookies could be an important source of dietary phenolics, that everyday consumption would probably benefit human wellbeing.

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