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Development of novel methods for the determination of food colorants

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Color is added to our food since many centuries. Today, the health concerns about the food colorants lead the food industry to focus on natural colorants. Colorants are basically divided into two main groups as synthetic and natural food colorants. As a result of the toxic and carcinogenic effects of some synthetic food colorants, their utilization is limited by the regulations defined by the governments. Synthetic colorants are preferred for their stability and low-cost in food processes. But their misuse may cause damage in human health. When choosing the right colorant, the regulations should guide. The aim of this study is to determine the synthetic colorants used as the food additives by fast, accurate and applicable methods by developing and investigating novel methods for the determination of synthetic food colorants, analyzing synthetic colorant content of food products and providing food control by informing consumers about the limitations of these substances. Aiming the issues above, spectrophotometric CUPRAC assay was adapted for the determination of synthetic food colorants. Proposed method results were correlated with HPLC findings and combination of in-vitro antioxidant assays with HPLC technique (application of online HPLC- CUPRAC technique) were performed. The results proved that the methods used for the determination of synthetic food colorants are accurate, applicable and are in good correlation.

Biography

F Ayca Ozdemir Olgun completed his PhD from Istanbul Technical University and is pursuing her Post-doctoral studies at the same University. She also works as a Professor in Istanbul Aydin University, Health Services, Vocational School of Education. She has published 5 papers in reputed journals and has served as a reviewer of more than 15 manuscripts submitted in reputed journals.

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