Functional Snacks Bars: A Healthy Alternative to a Poor Diet Quality

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Abstract: In last years, eating habits have changed, and snacking has become more common. Snacking habits, including eating whole fruit, vegetables and crackers, were found to contribute to better overall diet quality, while consuming snacks such as cookies, pastries, sweets, milk desserts and soft drinks was associated with poorer diet quality. The nutritional quality of the snack is very important and choosing nutritious foods as snacks can be beneficial for our health. For this reason, the development of functional snacks bars represents a necessity for this niche market. The aim of this work was to develop some formulations of energizing snack bars with high dietary fibers and antioxidant activity. Snack bars contain both fruits with antioxidant activity and components (cereals and seeds) rich in carbohydrates and polyunsaturated fats that provide energy during sports activities, physical and mental stress. Three types of samples were prepared and stored in refrigerated conditions at 40°C for 30 days. The first sample (S1) contains wheat germs, raw pumpkin seeds, toasted oat flakes, flaxseeds flour, cinnamon honey, raw sunflower seeds, sea buckthorn, amaranth flour, cinnamon and olive oil. The second sample (S2) has the same composition as the first, less flour and cinnamon flour and the honey used was ginger, honey. The third sample (S3) is like the first less amaranth flour and the honey used was buckthorn sea honey. The physicochemical, antioxidant activity, polyphenolic and flavonoid content and sensorial characteristics of the samples were investigated. Results showed that snacks bars had important level of extracted phenolics, flavonoids, fibers, proteins, carbohydrates and fats. Therefore, snack bars may be a convenient functional food, offering an important source of flavonoids and polyphenols, a healthy alternative to a poor diet quality, with balanced nutritional and sensory characteristics that recommend it in the diet of all consumers concerned with maintaining health. Acknowledgment: This study has been founded by the Francophone University Agency, Project Réseau régional dans le domaine de la santé, la nutrition et la sécurité alimentaire (SaIN), No. at Dunarea de Jos University of Galati 21899/06.09.2017

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