

Abstract

The Perspective of Nectarine Fruit as a Functional Ingredient of Puddings Prepared with Corn and Rice Starch [†]

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Abstract: It has long been recognized that fruits are healthy diet compounds since they are excellent sources of health beneficial bioactive components (polyphenols, minerals, vitamins, organic acids, etc.). The diversification of the consumer's taste calls for an expansion of food options and novel ingredients. The excessive refined sugar intake in recent years demands for the incorporation of sugar alternatives in popular dessert recipes, and high calorie obesogenic foods in general. Puddings are a well-known food choices introduced in the human diet at a very early age because of its easy and high digestion. Four formulations with two types of starch (corn and rice) were selected as objects of analysis. Nectarines were incorporated as a purée and lyophilized powder. The nectarine variety "Gergana" is a local variety used for preparations with proven beneficial properties. The study aimed to analyze the physical (moisture, ash, color, water-holding capacity, water activity, density, and syneresis), rheological (firmness, gumminess, cohesiveness, springiness, and chewiness), nutritional, and sensory characteristics of the nectarine-enriched puddings. The outcomes obtained from this study provide significant information about the possible application of the formulations in the children's daily menus. All four formulations had distinct peachy aroma. The formulations prepared with nectarine purée resulted in better sensory perception, better texture, and better water holding capacity. The formulations prepared with lyophilized fruit had similar CIELAB color values. The same trend was observed in the nectarine purée formulations. At this point, the formulation prepared with lyophilized fruit and rice starch showed the most promising results. Sufficient evidence leads to further exploration of the perspective of fruit-enriched puddings in order to improve their technological and health-promoting properties.

Keywords: nectarines; starch; puddings; nutrition; diet



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