

## **FORTIFICATION OF YOGHURT WITH DRIED NUTS RICH IN BIOACTIVE COMPOUNDS**

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Health benefits of yoghurt are related with the presence of living microorganisms. However, yoghurts are not accepted as including high amounts of bioactive compounds. In this study, we evaluated the potential of using different nuts such as walnut, hazelnut, almond and pistachio for the production of functional yoghurt that is rich in bioactive compounds. By this way, we aimed to enrich yoghurt product with omega 3, omega 6, folic acid, alpha-tocopherol and selenium, which have beneficial health effects. To investigate the effects of nuts three different batches were produced and supplemented with nuts which were broken into small pieces with an Ultra-Turrax blender. Walnut, hazelnut, almond and pistachio were added in a ratio of 5% during the stirring stage of production. To determine the properties of yoghurt samples, water binding capacity, pH-value, titratable acidity (SH<sup>o</sup>), dry matter (%), fat content (%), total aerobic mesophilic bacteria, total yeast and mold count and sensory properties were detected during the storage period on the days of 1, 8, 15 and 22. According to the results, the addition of nuts generally changes the pH-value, fat and dry matter contents of yoghurt samples. Storage period was found as effective on water binding capacity, pH-value and titratable acidity. Walnut added yoghurt samples showed the highest water binding capacity value and the almond added yoghurts samples showed the highest fat content. In the scope of microbiological analyses, an increase was detected in the total aerobic mesophilic bacteria and total yeast and mold counts during storage.

Keywords: Yoghurt, nuts, bioactive compounds

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