**Evaluation of Bread Made with Carob Flour by Sensory Analysis**

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**Aims and objectives:** Carob is grown in our country, in regions with a Mediterranean climate. Carob flour is known to reduce cholesterol thanks to the soluble fibers in it. In this study, it was aimed to compare bread made with carob flour to bread made with whole wheat flour in terms of both nutritional content and sensory properties and to recommend it as an alternative bread type for heart patients.

**Material and methods:** 33 individuals aged 19 and over participated in the study as panelists. Starting with carob flour, 15% carob flour and 85% whole wheat flour are added to the bread; 100% wheat flour was used for whole wheat bread. A sensory analysis questionnaire was applied by producing both of the breads prepared. Gender and age of the respondents in the survey; The general structure (symmetry, volume) of the breads, the opinions of the participants about the breads (the color of the inside, the crust color, the pore structure, the smell, the flavor, the aroma, the hardness rate, the impression they leave in the mouth, the general appearance) and the taste of the participants were questioned. Participants were asked to fill out the questionnaire on both types of bread. Nutritional value analysis of breads were made using BEBİS 8 program. Statistical data of the study were analyzed using SPSS 22 program.

**Results**: In the study, 51.5% of the participants are women (17 people), 48.5% are men (16 people). The age range of 20-29 constituted the majority of the participants in the study. When the sensory analysis of breads are compared; while the symmetry, volume, inner color, crust color, pore structure and smell categories of bread are similar (p>0.05); the results of the carob flour bread were superior to the whole wheat bread in terms of taste, aroma and hardness of the bread but it was not statistically significant (p>0.05). In general evaluation; both types of bread are very popular. When looking at the results of energy and nutrients per 100 grams of breads; while energy (140 kcal) and carbohydrate values ​​(24.7 g) of carob bread were lower than whole wheat bread (respectively: 157 kcal, 28.5 g); Fiber (9.5 g) and calcium values ​​(62 mg) were found higher than whole wheat bread (5 g, 16.2 mg, respectively); but it was not statistically significant (p>0.05). Sodium, potassium, magnesium and iron values ​​were similar (p> 0.05).

**Conclusion:** As a result of the sensory analysis, the bread made with carob flour is superior in terms of flavor and aroma compared to the bread we made with whole wheat flour, its fiber and calcium content is higher, its energy value is lower. It is thought that bread with carob flour can be consumed as an alternative to whole wheat bread, which is recommended for heart patients and is a healthy food. More comprehensive studies should be included to recommend bread made with carob flour for heart patients.

**Key words:** Carob flour, bread, heart disease, sensory analysis

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