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RELATIONSHIP OF LECTIN PROTEINS AND HEALTH: STUDIES ON PRODUCT DEVELOPMENT WITHOUT LECTIN

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ABSTRACT

Foods that contain lectin protein prevent the body from reaching the required nutritional content, thus not completely benefit, when consumed. In the literature, it is reported that people with lectin sensitivity could have health problems. Among those are insulin resistance, obesity, leptin sensitivity, gastrointestinal system disorders due to various toxic effects. Germination, soaking, fermentation and cooking processes are important processes in reducing the amount of lectin in foods. In some studies, it has been reported that lectin-free diet shows improvement in autoimmune diseases. While there are many studies in the literature aimed at decreasing the lectin level, research on developing the lectin-free product is ongoing. The aim of our study was to develop alternative food and snack formulas free of lectin protein. Therefore, traditional cookies, pretzels and cakes were used as the basis as the commonly consumed snacks. In the formulas, instead of white flour, Almond and Coconut flour without lectin protein was used. The differences in perceptions between consuming lectin and non-lectin products were evaluated according to descriptive statistics methods. In conclusion, a significant difference was found between perception of the lectin-free snacks and the lectin-containing snacks. When examined according to gender with regards to the taste and interest; while women were more interested in gluten-free and lectin-free products than men, p <0.05), there was no difference in flavor scores (p> 0.05).