

COATED CHICKEN PRODUCTION FOR THE CONSUMPTION OF CELIAC

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Wheat flour play major role in the production of coated products because it contains starch and gluten. Gluten provides a unique texture, porosity and structure of coated material. The main objective of this study was to production of gluten-free coated chicken product for the Celiac. Batter formulations contained corn flour, gluten-free wheat flour, salt and baking soda. The effects of cellulose, egg powder, whey powder, pectin and combination of them in equal proportion on the quality of coated chicken product were studied. As control groups, batter with and without gluten wheat flour was used. Samples were pre-fried at 180°C for 30 sec. and stored at 4°C for 21 days. When the coating pick-up values of samples by different formulations were compared, it was seen that gluten has a significant effect on coating pick-up ($p<0,05$). Batter without gluten has 30.7% pick-up value while batter with wheat flour has 52.5% value. Also addition of whey powder to batter resulted in increased pick up values. When the compared to the preventing degrees of oxidation of coating materials during the storage, the lowest TBARS values were detected in the batter with wheat flour and whey powder groups ($p<0.05$) at the end of the storage. However, batter group without gluten has the highest TBARS values at the end of the storage ($p<0.05$). All treatment groups except that gluten-free wheat flour group provided similar L^* , a^* and b^* values. Treatments without gluten have lower hardness value than group with gluten ($p<0.05$).

Keywords: Coated chicken, gluten-free, celiac

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