INFLUENCE OF SOME CHEMICAL, MINERAL, HEAVY METAL, RHEOLOGY CHARACTERISTICS, COLOR VALUES AND SENSORIAL ACCEPTABILITY OF ADDING FRUIT MARMALADES TO TRADITIONAL TURKISH YOGURTS

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The effect of kiwi, cherry laurel, loquat fruit marmalade on some chemical characteristics, mineral and heavy metal values of yogurt was examined. Stirred yogurts with 20% of kiwi, cherry laurel, loquat fruit marmalade were manufactured. The dry matter, pH, fat, and ash contents among yogurts added marmalade and control yogurt were found significantly different ($P<0.05$). Significant differences were found between the control and flavored yogurts with respect to syneresis and viscosity characteristics ($P<0.05$). The all addition marmalade types in yogurt resulted in a decrease in syneresis and $L^*$, $b^*$ values of yogurt color. However, marmalade types increased significantly ($P<0.05$) the values for $a^*$ colour and viscosity.

The different heavy metals were determined in yogurts by Inductively Coupled Plasma Optical Emission Spectrometer (ICP–OES). There were significant differences in Ca, P, Na, S, Mg, Co, Cr, Al, B, Mn, Mo and Cd content of yogurt ($P<0.05$). Fe, Cu and Zn contents of analyzed samples were not significantly different ($P>0.05$). Ca, P, Na, content of the yogurts decreased with the addition of marmalade, but Mg, Fe Ni and Cd contents increased. In conclusion, yogurts containing kiwi, cherry laurel, loquat fruit marmalade were acceptable found to be with respect to overall acceptability.