Designing an Automatic Mechanical System to Prevent Cancers Caused by Drinks

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Abstract : In this paper with designing and proposing a compound of a heating and cooling system has been tried to show effect of this system on preventing esophagus cancer that can be caused by hot and cold drinks such as tea, coffee and ice water. This system has been simulated mechanically by fluent software and also has been validated by experimental way and a comprehensive result has been presented. Both of solution ways show that this system can reduce or increase temperature of drink to safe very dramatically and it can be a huge step toward consuming drinks safely and also it can be efficient about time issues. The system consists of a temperature sensor and an electronic controller that has a computer program to act automatically this task. Also this system has been presented after many different simulations and has been tried to find the best one in the point view of velocity of heating and cooling.

Keywords: fluent, heat transfer, controller, esophagus cancer

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