

The thermo-pack equipment and its evaluation for measuring temperature of material during hot air puffing of rice-soy cold extrudate

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■ **ABSTRACT** : The thermo-pack equipment was developed and used to measure temperature of rice-soy cold extrudate during hot air puffing. The theoretically calculated and experimentally obtained co-efficients of equation for temperature ratio with puffing time were close enough to show that the method and equipment used for measurement of product temperature during hot air puffing were appropriate with fairly high correlation co-efficients at all the temperatures as 200 to 240^oC during puffing. During puffing time upto 10 to 15 s, the predicted product temperatures were highly deviating from experimentally measured product temperatures indicating phase of initiation of puffing. Thus, theoretical equations of temperature ratio with puffing time adopted for measuring surface, average and centre temperature of puffing material during hot air puffing are well acceptable.

■ **KEY WORDS** : Puffing, Temperature, Thermo-pack, RTE foods

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