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**Development of curing drum with sandwich structure for dried ginger production**

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Curing ginger in the form of whole rhizomes by sun-drying needs a minimum of seven days. This method is not cost effective as it results in a poor quality product. The objective of this study was to develop a new drying technique to reduce duration and to improve the quality of cured ginger. The system possesses a rotating type drying plate to sandwich rhizomes and an electrical heat source to supply hot air for drying. The new system was tested against sun drying and electrical tray drying systems. Ginger rhizomes (Rangoon variety) at a maturity stage of eight months, were dipped for 2 minutes in 1 % Sodium hydroxide solution, followed by blanching for ten minutes. Rhizomes were peeled and dipped for ten minutes in 4 % Calcium oxide solution. Drained rhizomes were sandwiched in drying plates and curing was done. Soaking of semidried rhizomes in the Calcium oxide solution and re-drying was carried out until the colour of the final product turned to white. Significant improvement was shown in the new system by four to five times reduction in drying duration compared to sun drying. The sandwich structure and rotation of drying plates produced market-attractive flat rhizomes with the original shape, resulting in a lower packing volume than when sun-drying or electrical tray drying. No significant difference in duration was seen between the new system and electrical drying. The new curing system could be scaled up for commercial production. Further studies are being carried out to shift the system towards heat recovery via incorporation of exhaust air-recirculation, preventing short-circuit of the drying air and partly utilizing solar energy. Therefore, the economic analysis has not been carried out under the present study.