

RESEARCH ARTICLE

Evaluation of sensory attributes of cauliflower slices under various pre-treatment and tray drying and microwave power drying condition

■ Vipin Kumar Verma, Devendra Kumar, Rupendra Singh, Pankaj Kumar and Devendra Singh

SUMMARY

Cauliflower is one of the most important winter vegetable crop of India. Dehydrated cauliflower can be used to enhance the taste and nutritional value of various products such as vegetable soup, canned and extruded products etc. Experimental study was conducted to evaluate cauliflower slices using tray drying and microwave power drying techniques. Pre-treatment of cauliflower slices as unblanched, blanched and blanched with KMS and dried at different temperature (45, 55 and 65°C) and microwave at different power level (20 W, 40 W and 60 W). The physio-chemical characteristics were evaluated just after preparation of cauliflower slices. Sensory characteristics (colour, flavour, taste, texture and overall acceptability) were evaluated for pre-treated cauliflower slices which dehydrated in tray dryer at 45, 55 and 65°C temperature and in microwave power dryer at 20, 40 and 60 W power. Sensory evolution was done using hedonic rating test method to measure the consumer acceptability. Results showed that highest score was obtained as 7.9 for colour at 65°C in KMS balanced condition where as highest score for taste was obtained as 7.9 at 65°C in balanced condition in tray dryer. The maximum value of flavour (8.0) was obtained at 65°C in blanched condition where as highest value of texture (7.9) at 65°C in blanched condition in tray dryer in microwave dryer, the highest values of colour (7.9) was obtained at 60W in KMS blanched condition where as highest value of taste (7.9) at 60 W in unblanched conditions. The highest score of flavour (8.1) and texture (7.9) were found at 60 W in KMS blanched condition in microwave power drying. Overall acceptability score was highest (7.92) in microwave power drying than tray drying (7.85) in KMS blanched sample at 60 W power and 65°C temperature drying, respectively. Microwave power drying was found most suitable for KMS blanched cauliflower slices at 60 W power level.

Key Words : Cauliflower slices, Microwave, Tray dryer, Colour, Taste, Flavour, Texture, Overall acceptability

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