

Assessment of Physiological Stress Parameters of Female Workers Engaged in Selected Cooking Activities

H. Bhatt, M. Sidhu, P. Sandhu and R. Bakhshi

*Department of Family Resource Management, Punjab Agricultural University,
Ludhiana, Punjab, India*

KEYWORDS Cooking Activities. Ergonomics. Grip Strength. Physiological Parameters. Pinch Strength

ABSTRACT The present study was undertaken to assess the different physiological stress parameters of female workers engaged in selected cooking activities in-terms of ergonomic standards. Study was conducted in Ludhiana city on purposively selected sixteen respondents having similar physical and physiological parameters and were performing kitchen activities in routine. For experiment, the most commonly performed five activities were selected. Results revealed that energy expenditure ranged from 7.0 to 10 kJ/min, TCCW was between 200.81 to 364.30 beats, PCW was 12.82 to 26.26 bmin⁻¹; maximum for grating activity and minimum for rolling of chapattis. The percent increase in heart rate was also found maximum for grating, that is, 38.56 per cent and minimum for rolling chapattis, that is, 16.20 per cent. Reduction in grip and pinch strength of right hand was found more as compared to the left hand. The percent deviation in thoracic and in lumbar region was maximum during kneading and minimum during rolling.