

Research Paper :

## Health status of farm women

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### ABSTRACT

The main thrust of the project was to determine the physical fitness status of selected farm women. One hundred and sixty farm women each in the age group of 25-35 and 35-45 years, free from respiratory or any serious health problems were selected for the study. Study revealed that height of the farm women ranged between 138-164 cm, weight from 34-62 kg and  $VO_2$  from 25-50 ml.kg<sup>-1</sup>.min. All the younger age group women *i.e.* 25-35 yrs were in the good category of aerobic capacity where older women were on average and low average categories. It was observed that age was negatively correlated with  $VO_2$  (ml.kg<sup>-1</sup>.min.) indicating that increase of age,  $VO_2$  tends to decrease. On the basis of BMI classification majority of farm women were found in ectomorph category indicating poor developed body. Results showed that maximum farm women were found in high average PFI score. Very few per cent of women were in very good PFI score category. Though all the selected parameters of physical fitness, over all health status of women was found average.

**Key words :** Physical fitness index(PFI),  $VO_2$ , Body mass index (BMI)

The contribution of farm women in Indian agriculture is estimated to be 50-60% (Anonymous, 1981). Women at any stage are ever busy with household chores, children and family. They continue in their traditionally designed 'work' roles at home as well as in field, much longer than men. They hail from an area lacking in social inputs like primary and secondary education, drinking water and health services for physical development and social progress. The over burdened and under nourished rural women performing agricultural operations as well as household and allied activities involved physical exertion. To ensure the better health and safety, it is important to have good relationship between their occupational load, physical fitness and the food which they regularly eat. Hence, the present study was carried out with objectives to study the health status of selected farm women involved in farm activities.

### METHODOLOGY

#### Selection of subjects:

A sample of 160 rural farm women in the age group of 25-35 and 35-45 years free from respiratory or any serious health problems were selected for the study. In order to avoid errors in the experimental data, suitability of the subject was ascertained by measuring the physiological parameters:

- Body temperature for three minutes – Not above 99%
- Blood pressure – 120/80 ± 10
- Heart rate – 70 - 90 b.min<sup>-1</sup>

The subjects who met the above said conditions were selected for the experiment.

#### Physical fitness of the selected subject:

Physical fitness of the selected subjects was measured by standardized simple step stool test method (Varghese *et al.*, 1996).

Specifications of the step stool test were as follows:

Dimensions of stool:

Length - 45 cms

Breadth -30 cms

Height-24 cm

Duration of stepping activity - max. 5 min.

Stepping rate - 30 steps/min (controlled with metronome)

The selected subject was given enough rest and then her resting heart rate was measured with the help of heart rate monitor (Polar Sport TM). After complete rest, the subject was asked to do the stepping activity on the wooden stool ergometer specially made for the purpose. During stepping activity, heart rate of the subject was recorded for the entire stepping period with an interval of one minute each.

After 5 minutes of stepping activity, the subject was asked to sit on resting chair and her recovery pulse rate for 5 minutes at an interval of one minute each was again recorded. The physical fitness score was calculated by using the following formula :