SUMMARY AND CONCLUSION
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India is a major developing country of the world. The per capita per annum income of Maharashtra (Rs.6,929) is less than the per capita per annum income of India. Breast feeding and weaning are the two major nutritional aspects, hence, a study of 250 mothers was done to assess the breast feeding and weaning practices prevalent in different families of different socioeconomic groups as well as varied maternal literacy levels. The data collected revealed that feeding colostrum and feeding the baby on breast from 1\textsuperscript{st} day of delivery was observed in highly educated mothers as well as mothers of socio-economically higher groups. Various reasons were quoted for not feeding the baby from 1\textsuperscript{st} day onward. The common reasons mentioned were that, it was dirty, thick yellow, indigestible etc. Highly educated and higher income group mothers those who did not feed colostrum were from caeserean section. Offering prelacteal feeds was found to be very common in Maharashtra State as it is common practice throughout India, and elsewhere. Honey and Castor oil were the common prelacteal feeds in less educated and lower socio-economic all poor families whereas, it was 41.17 and 26.47 per cent, respectively in highly educated mothers. However, similar trends were observed with the economic status of family. Mothers tend to continue breast feeding for unduly prolonged period. The results of the present study indicated that material literacy levels have a profound influence on the duration of breast feeding. The average duration was found to be more than 18.09 ± 9.23 months, whereas lower class mothers were found to feed babies beyond 24 months age. The investigation lead to a conclusion that trends of earlier introduction of supplementary foods were mostly governed by the maternal literacy level. The data also revealed that, infants were weaned earlier in upper, upper middle, middle
and lower middle classes. It may be inferred that maternal literacy level and economic status of family have profound influence on infant feeding practices, viz age of weaning, introduction of liquids, semisolids and solid suplements. Ghuti (which is composed of Ayurvedic medicines) and the part of some dry fruits were found to be advocated to infants for the period of 0 to 3 months, which is one of the custom followed in the country.

The study also revealed that the most of the mothers were found to consume some special foods which exhibit galactogogues activity with the belief that they help in promoting enhancement in lactation. However, it is not clear, how far these special foods are responsible in enhancing breast milk. Certain foods from blant and animal origin are avoided post partum, are governed by economic status as well as maternal literacy level.

For developing weaning food formulation, jowar, wheat and rice were selected from common staples and pulses such as green gram and/or moth bean used for processing. The proximate analysis of these raw materials is performed in the laboratory. So also amino acid composition was determined since the selected cereals and pulses were to be processed. The steeping and germination period for each type of grain was standardized to avoid dry matter loss. The optimum soaking period was same (10 hrs) for all grains and legumes except sorghum (20 hrs). Optimum germination of sorghum found to be 48 hours at 20°C, whereas for wheat 96 hours at 25°C, and for rice it was found to be 72 hours at 35°C. Both the legume were germinated for 48 hours at 20°C for minimal dry matter losses.

These germinated grains and legumes were analysed for nutritional composition. The decrease in the protein content of the experimental cereals during germination was correlated to apparent enhancement in proteolytic activity during
germination. The results showed considerable increase in lysine, threonine, methionine and tryptophan in germinated wheat and jowar. The decrease in the total carbohydrates of jowar, wheat and rice during germination was correlated with concomitant increase in the $\alpha$-amylase activity in the cereals. However, the non significant decrease in the crude fibre and lipid content during germination was observed in cereals.

Similarly, protein content of green gram and moth bean was found to decrease. The essential amino acid contents of both the legumes were found to increase slightly. And this may be due to absence of net biosynthesis. Nevertheless, the essential amino acid make up of the legumes was found to improve by germination. Out of these two legumes, the essential amino acid profile was better in green gram than moth bean.

It is clear from the results that verbascose and stachyose were comparatively more than raffinose in both the legumes. During 24 hours of germination, maximum degradation of verbascose followed by stachyose and and raffinose was observed in both the legumes. Sucrose was found to increase significantly during germination in both the legumes.

Germinated grains and legumes were further roasted and found nonsignificant decrease in protein, fats, ash content etc. The four weaning food formulations were developed with moth bean and green gram. Home made weaning formulations prepared out of green gram was found to contain more essential amino acids. Digestibility of developed home made weaning food formulations was found to improve considerably. The nutrient composition of sample C was comparable to ISI specifications as well commercial non milk weaning foods. Also the viscosity of the home made weaning food formulation developed was acceptable and found to exhibit permitted limits of viscosity.
Storage study revealed that plastic bags and plastic containers are better storage media. Organoleptic evaluation of developed weaning food formulation done by Home Scientists and mothers lead to a conclusion that sample C (20:20:20:40, wheat:jowar:rice:green gram) is well accepted organoleptically. Also mothers of experimental group children, approved the preparation method, and taste of developed formulation.

Growth assessment resulted in significant increase in weight, crown heel length and chest circumference. The children in normal nutrition phase were increased after a feeding period of three months. Cost analysis and economic feasibility studies revealed that the Home made weaning food formulation is cheaper than the commercially available weaning foods formulation.

The breast feeding and weaning practices prevailed in the country in general and Marathwada region of Maharashtra state in particular have been investigated in detailed in the present study. The results revealed that the educational and socioeconomical status of mothers were found to play an important role in breast feeding and weaning practices. Nevertheless, the nutritional awareness, ignorance, poverty, misinformation and misbeliefs/fad, and religious misconceptions have profound effect on these practices.

It is well documented that the breast milk alone cannot suffices quantitatively the nutritional requirement by the infants and, therefore, an early advocation of weaning seems appropriate. And, therefore, it seemed worthwhile to formulate home made weaning food formulation in the laboratory.

Thus, the home made weaning formulation "C" was developed from locally and abundantly available staples viz. rice, wheat and jowar and, a pulse green gram.
in the proportion of 1:1:1.2 (w/w) using traditional, appropriate and simple intermediate processing technology (viz. steeping, germination and roasting). The said formulation was found to be nutritious, cheap, microbiological safe having low viscosity with high caloric density and organoleptically acceptable.

Thus, it may be concluded in the light of the results obtained in the present investigation, the home made weaning formulation can either be successfully prepared by rural and urban women at home or can be manufactured on commercial scale and may be made available to the mothers from the market. This will certainly help in catering the nutritional requirements of infants in the country in general and Marathwada region of Maharashtra state in particular.