CHAPTER 1

INTRODUCTION

BACKGROUND AND RATIONALE:

Supplementary feeding program are perhaps the oldest and most wide spread type of human nutrition intervention in developing countries. The necessity for targeting nutrient delivery especially from six to thirty six month old children is due to their particular nutritional vulnerability. Rapid growth at this time increases per kilogram nutrient requirements to levels well above those of adults. Furthermore, their increased susceptibility to infections make adequate nutrition even more important as a means of combating such afflictions, which are the major childhood killer. In effect, one is trying through supplementary feeding to give a "nutritional immunization" that will get a child through this critical vulnerable period. After 36 months, or even 24 months, survival rates increase dramatically. (1)

In International conference on nutrition in Rome 1992, some focusing points among declaration was promotion of sound weaning practices, including timely introduction of

supplementary foods, adequate quantity and quality of weaning foods and improve feedings practices, such as more frequent and supervised feedings.(2)

Poor nutrition affects activity, growth, health, learning capacity, work performance and overall quality of life. In addition, malnutrition weakens the immune system and increases the prevalence and severity of diarrhoea, measles and acute respiratory infections. (3)

A population weakened by malnutrition and disease can not have the energy to overcome it's poverty and is helpless to improve it's own condition. The malnutrition usually stems from poverty and from ignorance of what are the right foods to eat. (4)

Several international health agencies - most notable WHO and UNICEF have set specific goal for the 1990's aimed at reducing and finally eliminating malnutrition in children, mothers, and everyone else. Effective community intervention programs are essential for this process, and qualified personnel are required to carry out these tasks. (5)

A growing body of evidence, moreover, is showing direct links between nutrition/health problems and education

and it's outcomes. This linkage is near conclusive in some cases (protein energy malnutrition, iron, and iodine deficiency) and strongly suggestive in others like parasitic infections. (6)

Supplementary feeding can be best used to meet immediate, short run nutritional needs while simultaneously supporting other actions aimed at achieving more permanent solution. One of the major attention of supplementary feeding is their directness in attacking the malnutrition problem. (1)

Promote support of care givers to preserve their physical and mental health and enhance their skills and knowledge to improve nutrition. (2) Women is important care giver and food is usually controlled by women, who process, prepare, cook and dispense it. (7)

In Thailand nutrition and health status of the children is far better in comparison of other developing countries. Child mortality rate has been declining by better medical and nutrition management. In Thailand various supplementary feeding strategies have been attempted. The country adopted the primary health care strategy and village based supplementary food processing was introduced as a self help and self-reliance scheme. The available food served both

as food assistance to the poor or malnourished children, and need promotion for normal children (8).

The child does not live in isolation. The child and her/his mother are part of the family and the family is an integral part of the community to which it belongs. All interact in an dynamic process that makes up the nation. The needs of the child are varied and the response to those needs cut across the family, community and national context (9).

In the eight year plan (1992 - 1997), His majesty Government of Nepal (HMG), National Planning commission Nepal focuses to supplementary food supply program, dissemination of information about the appropriate food preparation at the community and village levels, and also to develop baby food locally. One of the target of the plan is to reduce the infant and child mortality rate, extending programs maintaining inter-coordination among the food, health and educational sectors. (10)

Nepal is one of the least developing country in the world. Infant Mortality Rate (IMR) is 102 /1000 live birth and under five year mortality rate is 165 /1000 live birth (1992) which are highest in the world. It is estimated that 50 % of the children under 5 suffer from severe or moderate

malnutrition. Their lack of assess of health care services result in deaths from respiratory infection, diarrhoeal diseases, or vaccine preventable illnesses. Needs vary at different stages in the child's life and they have to be explored, particularly in relation to women, who are the nurturers and main advocates for young children (9). But unfortunately with the literacy rate of 25 %, very few of those women are literate in Nepal. Therefore, although female population is covering more than 50 % of total population, they could not be utilized well.

Total population of Nepal is 18.5 million, with total 5.8 fertility rate. Under 14 years children population is 7.9 million, with 42.7 % of total population. And female population is 9.2 million, which gives more than 50 % of total population. Various studies in Nepal have estimated that 40-60 % of the population are below absolute poverty line. According to UNDP 1996 per capita income of Nepal is in US \$ 216. (10)

Table 1. Population status of Nepal

Year	Population		
1991	Total population	18. 5 million	
1991	Under 14 years children	7 . 9 million	
1991	Female population	9 . 2 million	

Nepal data from eight year plan

Above table shows that total population of Nepal is 18.5 million, increasing with fertility rate 2.8. So, the population of child in Nepal is very high, covering 42.7 % of total population. With increasing number of children, automatically there will be more necessities of health care facilities. More attention should be payed towards their nutrition in terms of growth and development. Female population is 9.2 % which is more than 50 % of total population.

Table 2. Eight year plan, Nepal has under taken a health policy with following targets by the end of 1997.

Indicators	Present situation	Target at the end of 1997
1. Life expectancy	54	61
2. Infant mortality rate3. Under five year	102 per 1000	80 per 1000
mortality rate	165 per 1000	130 per 1000
4. Malnutrition	50 %	25 %

Nepal data, Eight year plan, Nepal.

Above table show that children in Nepal are suffering with disease and poverty. A step has been taken in eight year plan. In order to achieve target, a lot of efforts has to be given to the child well being by the Governmental and Non-governmental health agencies. Child nutrition should be focused to improve health status of children.

In Nepal, children below five years of age are subject to diarrhoeal problem. The eight plan aim at reducing the under five mortality by diarrhoea 32 % and decreasing number of diarrhoea cases by 20 %. (10)

Nepal has one of the poorest child health status in the world. Malnutrition is the most contributing factor but ignorance is also a major cause of poor feeding practices and food wastage. Traditionally at "Rice Feeding" ceremony, girls at 5 months and boys at 6 months of age are introduced solid food symbolically. But mother will only feed if child shows interest (11).However if the infant did enthusiastically swallow it's first bite, he/she is not encouraged to eat solids. Therefore, often no solid foods are given until 12 months of age. Many food taboos related to illness and children eating twice a day with adult Nepali eating pattern resulted into slow down growth rate after 6 months of age (12). So it indicates that with the age of supplementary feeding slowly children's health starts declining because of malpractice of supplementary feeding.

Poor nutrition in early childhood is often the predisposing factor that leads to much of the morbidity and mortality in this age group in Nepal. However, child entering his or her second year is susceptible to a wider range of hazards as a result of food shortage, weaning and diseases. Nepal nutrition found that 52 % of children of 6 months to 6 years are stunted, nearly 3 % wasted, another 4 % suffering from both wasting and stunting. (4)

Main purpose of the study is to collect information for an educational function which will contribute to the solution of the problem regarding child nutrition. There are some studies done in other countries. But as far as I know studies in Nepal on supplementary feeding rarely cover it's important aspect regarding maternal knowledge and practice.