Introduction &
Aim of Study
INTRODUCTION

School children constitute a significant and important sector of the population who are constantly growing and developing. This basic dynamic character accounts for their increased vitality and vulnerability and requires specific health promotion in relation to seeking health and using various resources to attain optimum health (Green et al., 2001).

In Egypt, with a population of 61 million, children are 14.5 million, constituting nearly one-fourth of the total population, 90% of them are enrolled at schools (Statistical Yearbook, 1998). Many Egyptian studies revealed that poor growth is prevalent among Egyptian children. Poor attention and scholastic achievement, behavioral alterations, apathy and lethargy are the main complications of malnutrition during school age. Moreover, anemia was found among 41.5% of school children (Nutrition Institute, 1998).

Malnutrition is one of the most important health problems, especially in developing countries. Nearly one in five people in the developing world is chronically undernourished, and this includes one-third of the world's children. About 55,000 people die of hunger each day, two third of them are children. At least 350,000 children are permanently blinded each year from lack vitamin A and about 25% of them in the world have iron deficiency anemia (Wardlaw and Kessel, 2002).
Introduction and Aim of the Study

Food is probably the most environmental factor affecting health. It is necessary to sustain life, especially for children at the period when rapid growth and development occur. Food intake in early childhood is causally linked to health related problems later in life. Environmental and societal factors affect the nutritional health of children, assisted by the contribution of several other factors such as the media, poverty, cultural and family attitude (Kennedy, 1998 and Insel et al., 2002).

Health promotion is the process of fostering awareness, influencing attitudes and identifying alternatives, so that individuals can make informed choices and change their behavior to achieve an optimal level of physical and mental health and improve their physical and social environment (Ewles and Sinnett, 1999, Allender and Walton 2001).

Nutrition education for primary school children have positive results, as children aged 6-12 years are at a receptive period to achieve greater probability of success for change of improper food attitudes and habits (FAO, 1998). Pollock and Middleton (1999) noted that nutrition education enables each individual to make wise decisions when choosing food throughout his life. Such education should be integrated at all levels and must be started at an early age in order to achieve a greater impact on the individual's behavior.

School is a place for health education that is most likely to lead to long term results in children themselves, in their homes and most importantly in the next generation (Green and Ottoson, 1997; and Allender
and Walton, 2001). According to Cook and Joan (1996), school is seen as an important context for health promotion, principally because it reaches to a large proportion of populations for many years. Edelman et al. (1998) added that school age children are capable of playing an active role in personal health care and need to be motivated to seek health and use various resources to attain and maintain optimal health.

Nurses who work with school-age children are able to maintain the children's normally healthy status. This is done through a variety of health promotion mechanisms such as health management, health counseling, health education, program planning and community liaison (Leifer, 1999 and Hunt, 2001).

Nurses, as educators with sufficient professional background, can plan and conduct nutritional educational programs for school children and their mothers to help them acquire healthy nutritional concepts and establish positive attitudes concerning food and nutrition (Bowden and Smith, 2003).

Mothers are the most care providers who play an important role in formulating their children's nutritional patterns and attitudes toward food and nutrition. They are mainly responsible for leading and serving meals for their children (CAPMAS and UNICEF, 1994; Wardlaw and Kessel, 2002).
**Magnitude of the current problem**

The school children constitute about one-fourth of the total population in Egypt. As regard primary school children, iron deficiency anemia is prevalent among 57-73% of these school children (Nutrition Institute, 1998). Moreover, WHO (1997) stated that the three major nutritional problems of these school children are protein energy malnutrition, micronutrient deficiencies and short-term hunger. In addition, food-borne diseases constitute a serious public health problem.
AIM OF STUDY

The aim of the present study is to:

1- Assess the knowledge and attitude of primary school children and their mothers, regarding nutritional needs.

2- Design and implement a health promotion nutritional educational program for the primary school children and their mothers.

3- Evaluate the impact of the health promotion nutritional educational program on the primary school children and their mothers.