

Preparation and nutrient analysis of low cost supplementary recipe for children 2.5-3 years

PREETI RATHI AND RENU MOGRA

Nutritional status in children is most vulnerable during the weaning stages when both macro and micro nutrients may be insufficient to maintain growth and development. The pattern of supplementary feeding during the first year of life is increasingly recognized as important determinants of malnutrition. The presented study on development of low cost nutritive supplementary food for children 2.5-3 years' was conducted leading the objective to fulfill the nutritional requirement of children in early years of life as it is the growing period of physical as well as mental development of children. The main point to be considered while planning is that one serving should fulfill 1/6 nutritional requirement. The nutrient comparison between calculated value (A) and analyzed value (B) of the recipe showed that analyzed value of moisture, protein, fat were 6.038, 5.01g, 10.2g, respectively. The carbohydrate and energy content were 30.56 g, 228.04 kcal, respectively. Nutrition composition of recipe (B) showed that the analyzed value of moisture, protein, fat were 6.1, 9.19g, 11.2g, respectively. The carbohydrate and energy content were 37.69g, 220.92 kcal, respectively. Both planned recipes were low cost as the price for one serving was less than Rs. 5/-. The nutrient analysis shows that recipes were having a good amount of nutrients specially energy protein, fat which are essential for growth and development of children.

Key Words : Nutrient analysis, Low cost supplementary recipe, Carbohydrate, Energy content

How to cite this article : Rathi, Preeti and Mogra, Renu (2012). Preparation and nutrient analysis of low cost supplementary recipe for children 2.5-3 years. *Food Sci. Res. J.*, 3(2): 198-201.

INTRODUCTION

A dietary supplement, also known as food supplement or nutritional supplement, is a preparation intended to supplement the diet and provide nutrients, such as vitamins, minerals, fiber, fatty acids, or amino acids, that may be missing or may not be consumed in sufficient quantities in a person's diet. Some countries define dietary supplements as foods, while in others they are defined as drugs or natural health products. Study on age of infant age at time of introducing supplementary foods and age of the mother, adolescent mothers added cereal significantly earlier ($P \leq 0001$), but there was no significant difference by age of mother. Mehta *et al.* (2008) conducted a prospective study about

introducing solid foods early (3 to 4 months) and later (6 months) and the use of commercial foods *versus* parents' choices of solid foods for their infant. There were no significant differences in body composition or anthropometric measurements associated with earlier or later introduction of foods or with commercial foods *versus* parent's choice of solid foods. In a study by Bruin *et al.* (2008) a comparison of energy utilization and growth in exclusively breast-fed and formula-fed infants (≥ 4 months) showed no significant difference by mode of feeding with respect to length, weight and head circumference of infants in the first year of life. Findings of several investigators indicate that some mothers add supplementary foods earlier than the recommended four to six months. Therefore, an attempt has been made to prepare and standardize the recipe and to analyze its nutrient content.

METHODOLOGY

Weaning is a process by which foods other than breast milk are introduced gradually into the baby's diet, first to replace it and adopt the child to the adult diet (WHO, 1981). Considering supplementary feeding the recipe was planned that was simply

MEMBERS OF RESEARCH FORUM

Author for correspondence :

PREETI RATHI, Department of Food and Nutrition, College of Home Science, Maharana Pratap University of Agriculture and Technology, UDAIPUR (RAJASTHAN) INDIA
Email: rathi.preeti5@gmail.com

Associate Authors' :

RENU MOGRA, Department of Food and Nutrition, College of Home Science, Maharana Pratap University of Agriculture and Technology, UDAIPUR (RAJASTHAN) INDIA