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# Knowledge of consumption about supplementary nutrition for future mother and child

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#### Abstract

Puberty is a period of several years in which rapid physical growth and psychological changes occur, culminating in sexual maturity. The average onset of puberty is at 10 for girls and age 12 for boys. Every person's individual timetable for puberty is influenced primarily by heredity, although environmental factors, such as diet and exercise, also exert some influence. These factors can also contribute to precocious puberty and delayed puberty.

Keywords: Knowledge, consumption, supplementary, nutrition

#### Introduction

Adolescent girls should be encouraged to develop a good regimen of personal health and hygiene to prevent diseases, build up health reserves and help maintain a fit and decent appearance. Such a regimen should include personal cleanliness, dental and gum care, cleanliness of dress and surroundings, getting sufficient hours of sleep, recreation and exercise and routine medical care and immunization. It is difficult to overestimate importance of correct, proper nutrition for pregnant woman. Useful substances derived from food should be enough not only to a future mother, but also for baby. Direct distribution of supplementary foods has been employed widely by UNICEF through governments of various countries for the prevention of malnutrition among children. The supplementary food should correct the major deficiencies in the diet and should be capable of being manufactured locally for continued distribution to the vulnerable sections of the population e.g. infants, pre-school children, school children and expectant and nursing mothers. The protein foods which can be manufactured in the developing countries are those based on oilseed meals and fish flour. Several products based on different oilseed meals have been successfully used for this purpose in some countries.

#### Objectives

- 1. To study the socio-economic status of adolescent girl.
- 2. To find out the consumption of nutrients and supplementary nutrition and access their impact on haemoglobin.

#### Methodology

The study was conducted in Kanpur and Farrukhabad districts. Ten schools (five from Kanpur and five from Farrukhabad district) were selected in this study. Total 300 girls were selected in this study. Dependent and independent variables were used such as age, caste, education, B.M.I., etc. The statistical tools such as S.D., weight mean and correlation coefficient etc. were used.

# Results

Education is an important factor in acquiring knowledge for gain knowledge of better health and nutrients intake.

Education	Kanpur (n=150)	Farrukhabad (n=150)	Total (n=300)	
8th standard	20 (13.3)	25 (16.7)	45 (15.0)	
9th standard	30 (20.0)	26 (17.3)	56 (18.7)	
10th standard	29 (19.3)	33 (22.0)	62 (20.7)	
11th standard	35 (23.3)	26 (17.3)	61 (20.3)	
12th standard	36 (24.0)	40 (26.7)	76 (25.3)	
Total	150 (100.0)	150 (100.0)	300 (100.0)	
(Figures in parenthesis indicate percentage of respective values)				

 Table 1: Distribution of adolescent girls according to education

(Figures in parenthesis indicate percentage of respective values)

Table 2: Distribution of adolescent girls according to monthly family income

Monthly income	Kanpur (n=150)	Farrukhabad (n=150)	Total (n=300)
Rs. 5000 to Rs. 10,000	58 (38.7)	64 (42.7)	122 (40.7)
Rs. 10,000 to Rs. 15,000	58 (38.7)	51 (34.0)	109 (36.3)
Rs. 15,000 & above	34 (22.6)	35 (23.3)	69 (23.0)
Total	150 (100.0)	150 (100.0)	300 (100.0)

High economic status families may avail all facilities and they are able to complete his desire but in medium class income group families can not take up desires fully. So income also plays an important role in better early childhood and growth and development in health.

	Kanpur		Farrukhabad	
Supplementary food	Pre (Control group) (N=30)	Post (Experimental group) (N=120)	Pre (Control group) (N=30)	Post (Experimental group) (N=120)
Skim milk powder	4 (13.3)	20 (16.7)	3 (10.0)	18 (15.0)
Soft chikki	6 (20.0)	41 (34.2)	6 (20.0)	44 (36.7)
Jowar diet	3 (10.0)	18 (15.0)	3 (10.0)	12 (10.0)
Nutro crisp sweet	3 (10.0)	18 (15.0)	2 (6.7)	18 (15.0)
Nutro-crisp spicy	2 (6.7)	12 (10.0)	1 (3.3)	9 (7.5)
Surichi meeth	1 (3.3)	12 (10.0)	1 (3.3)	12 (10.0)
A ready to eat	3 (10.0)	18 (15.0)	2 (6.7)	7 (5.8)
Bal Ahar	8 (26.7)	56 (46.7)	7 (23.3)	62 (51.7)
Toned milk	2 (6.7)	10 (8.3)	1 (3.3)	12 (10.0)

Table 3: Knowledge of adolescent g	girls about supplementary food
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(Figures in parenthesis indicate percentage of respective values)

Low cost nutrient supplement food improve the nutrition status.

#### Table 4: Knowledge and awareness about to increase haemoglobin in adolescents

	Kanpur		Farrukhabad	
Foods item	Pre (Control group) (N=30)	Post (Experimental group) (N=120)	Pre (Control group) (N=30)	Post (Experimental group) (N=120)
Vitamin B12	12 (40.0)	86 (71.7)	16 (53.3)	88 (73.3)
Folate	8 (26.7)	59 (49.2)	8 (26.7)	61 (50.8)
Groscherries	8 (26.7)	66 (55.0)	9 (30.0)	67 (55.8)
Tomatoes	22 (73.3)	120 (100.0)	19 (63.3)	111 (92.5)
Apple juice	7 (23.3)	94 (78.3)	9 (30.0)	91 (75.8)
Carrots	18 (60.0)	103 (85.8)	20 (66.7)	101 (84.2)
Green vegetables	20 (66.7)	110 (91.7)	23 (76.7)	92 (76.7)
Broccoli	5 (16.7)	72 (60.0)	8 (26.7)	81 (67.5)
Organ meats	6 (20.0)	63 (52.5)	6 (20.0)	60 (50.0)
Black gram	15 (50.0)	66 (55.0)	12 (40.0)	61 (50.8)
Soybean	12 (40.0)	92 (76.7)	14 (46.7)	90 (75.0)
Peas	21 (70.0)	84 (70.0)	13 (43.3)	81 (67.5)
Puffed rice	23 (76.7)	106 (88.3)	10 (33.3)	102 (85.0)
Methi leaves	17 (56.7)	102 (85.0)	11 (36.7)	110 (91.7)
Jaggery	21 (70.0)	112 (93.3)	20 (66.7)	101 (84.2)
Turnip	17 (56.7)	108 (90.0)	15 (50.0)	92 (76.7)
Collards	4 (13.3)	60 (50.0)	6 (20.0)	62 (51.7)
Egg yolk	5 (16.7)	92 (76.7)	6 (20.0)	96 (80.0)
Red meat	9 (30.0)	62 (51.7)	10 (33.3)	60 (50.0)
Beaf	2 (6.7)	12 (10.0)	6 (20.0)	46 (38.3)
Lentil	22 (73.3)	104 (86.0)	20 (66.7)	102 (85.0)
Almonds	13 (43.3)	92 (76.7)	14 (46.7)	86 (71.7)
Raisins	12 (40.0)	81 (67.5)	11 (36.7)	78 (65.0)

(Figures in parenthesis indicate percentage of respective values)

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To counter this malady she need to increase haemoglobin levels in her blood. Include plenty of vegetables like gooseberries, tomatoes, apples, carrots, broccoli and green leafy vegetables like spinach, lettuce and fenugreek in her diet. Dates, beet and raisins are rich in irons that promote increase in haemoglobin levels. increases protein intake to enhance haemoglobin levels.

# Conclusion

Dietary decisions made in adolescence may have lasting health effects. Eating meals and snacking away from home puts the responsibility for good food choices rich be low in both fat and added sugar. Some healthful snack ideas include fresh fruit, sliced very low-fat string cheese, peanut butter and crackers, baked chips, granola bars, and graham can usually very high in calories from natural or added sugar, so they should be consumed in more appropriate guide for adolescents' food choices, even when snacking.

# Recommendations

- 1. At certain times, girls and women have heightened nutritional requirements. During these times, they should follow the above recommendations plus those listed below. During adolescence and before pregnancy increase food intake to accommodate the adolescent "growth spurt" and to establish energy reserves for pregnancy and lactation.
- 2. Use the lactational amenorrhea method (LAM) and other appropriate family planning methods to protect lactation, space births and extend the recuperative period. During the interval between stopping lactation and the next pregnancy.

# References

- 1. Kapoor D, *et al.* Detecting iron deficiency anaemia among children (9-36 months of age) by implementing a screening programme in an urban slum. Nutrition Society of India XXXIII Annual Meeting, Scientific Programme and Abstracts; c2000. p. 47.
- Kumar D, Sinha AK. Study on the awareness of RTI, STI and HIV/AIDS in Jharkhand. In: Sharma KKN, editor. Reproductive and Child Health Problems in India. Delhi: Academic Excellence; c2005. p. 429-441.
- 3. Recent Developments in Maternal Nutrition and Their Implications for Practitioners. Am J Clin Nutr. 2007;59(2):437s-545s.
- Yaya S, Wang R, Tang S, Ghose B. Intake of supplementary food during pregnancy and lactation and its association with child nutrition in Timor Leste. PeerJ. 2018 Nov 15;6:e5935.
- 5. Debela BL, Demmler KM, Rischke R, Qaim M. Maternal nutrition knowledge and child nutritional outcomes in urban Kenya. Appetite. 2017 Sep 1;116:518-526.