

# Food preferences among adolescent girls (11-13 yrs) in Allahabad city

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A study was conducted on a sum of 100 adolescent (11-13 yrs) girls, randomly selected with the objective to assess the food habits and food preferences among adolescent girls. The collection of data was done through interview schedules and dietary survey methods. The schedule follows preference test of seven point hedonic scale. The study reveals that 56 per cent girls were vegetarian, 31 per cent girls were non-vegetarian and 13 per cent girls were egg vegetarian. From the study it was clear that commercial food products were an instant hit among the upcoming generation showing the preference sequence of is like very much (40.2%), like moderately (28.75%), like extremely (28%), neither like nor dislike (4.65%), dislike moderately (0.00%), dislike very much (0.00%) and dislike extremely (0.00%).

**Key Words :** Adolescents, Schedule, Hedonic scale, Commercial foods, Nutritional awareness

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## INTRODUCTION

Humans only have two basic food preferences that we are born with; a liking for sweet foods, and a dislike for bitter foods. At birth, sweet taste is preferred and sour and bitter are rejected; as for preference for salt, it emerges by approximately 4 months of age. Another food preference of young children is that for high-fat foods. This preference is possibly due to fat's pleasant feeling of satiety in response to hunger and its association in many foods containing sugar and salt, both of which are preferred tastes among children. This also highlights another point for food preference, children tend to like or dislike foods according to post ingestive feeling, meaning a food that lead to nausea or discomfort will be thereon avoided, where as

food associated with pleasant feelings will be liked and chosen subsequently. All other preferences are learned, either culturally or by personal experience which may cause us to associate certain tastes or foods with unpleasant or pleasant moments. Adolescence (11-18) is a time of newly discovered independence and freedom of choice. This puts adolescents in a group susceptible to external influences, particularly from the media, school and their peers. Adapting a mental image of one's unique body (the body image) is a basic feature of adolescent development. Body image distortion is a core characteristic of anorexia nervosa and bulimia nervosa. Thus, these disorders are commonly seen in adolescence, the period when young people are vulnerable to body image problems. Whether as cause or effects, progress in adopting adult body image is interrupted for the teenager with an eating disorder (Eoni, 2001).

Along with a dramatic decrease in physical activity, dietary habits are the cause of what is now known as this century's epidemic: obesity. What is more alarming is that this epidemic is now affecting younger age groups with increasing proportion of infants and children being in the overweight zone compromising their health as children and future adults. Food choices are one major culprit in this situation, the ready availability and low cost of high fat, high simple sugar foods

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with no real nutrient value makes them an attractive food option, both for their palatability and relative low cost. To further highlight this point, results from a recent survey of more than 3000 children and teenagers showed that almost half of children's total energy intake came from non-essential sugar and fat and that the intake of only 1 per cent of children met all dietary guidelines. In other words, children consume too much energy rich non-nutritive foods and not enough low-energy nutrient-rich foods (Sharma, 1994). There are many other factors noted to influence the food choices and nutritional intake in this age group, including general nutrition knowledge, socioeconomic status, urban or rural residence, family composition, cultural and religious events, participation in sport and food advertising (Lifshitz *et al.*, 1991). Peer influence through increased social activity also affects food choices of adolescents (Stang *et al.*, 2005). However, the living situation during adolescence is noted as an important influence on food choice during this period, with families serving as role models that reinforce and support the acquisition and maintenance of eating behaviour. Loss of appetite or refusing to consume food, overeating, eating whatever is available and eating convenience or junk foods are some of the food-related responses to the stress of teenage lifestyle. Food preferences contribute a lot in nutritional balance of diets of adolescent girls. Adolescents experience periods of rapid growth associated with hormonal, cognitive and emotional changes thus ignoring proper nutrition may lead to many deficiency diseases such as anemia, spectrum of vitamin B deficiency etc. These were often confounded by lifestyle changes, such as leaving home, changing schools or starting work (Carlisle, 1980). Also, it is known that children tend to prefer foods that are familiar and tend to reject any new food, a process termed neophobia or fear of the new, this happens independently of the foods' sensory characteristics.

## METHODOLOGY

### Selection of sample :

Selection of sample is important in data collection. Three stage sampling procedure was adopted for collection of data.

### Selection of study area:

Trans Yamuna area of Allahabad district of U.P. India was selected purposively for the study. It has a good number of schools from where it was possible to collect the required data. Further, it was convenient to carry out the research.

### Selection of school:

A few visits were made to well known schools namely Bethany Convent School and Little Heart Academy situated in trans Yamuna, keeping in mind the objectives of the study.

### Selection of respondent:

A sum of 100 adolescent (11-13 yrs) girls which were

randomly from each school 46 and 54, respectively were selected for the study.

### Collection of data:

The collection of data was done through interview schedules and dietary survey methods. The aims and objectives of the investigation were explained to the respondents and the schedules were handed over to respondents. They were being helped in recording their answers. The schedule follows preference test of seven point hedonic scale (Srilakshmi, 2007).

### Analysis of data:

Tables were prepared on the basis of data collected and per cent average was calculated to interpret the data.

## OBSERVATIONS AND ASSESSMENT

The data obtained from schedules received from 100 respondent girls of age group 11-13 were as follows:

Table 1 reveals that 56 per cent girls were vegetarian, 31 per cent girls were non-vegetarian and 13 per cent girls were egg vegetarian.

**Table 1.** Percentage of food habits among adolescent (11-13 yrs) girls

Vegetarian	Non-vegetarian	Egg vegetarian
56	31	13

As depicted in Table 2, preference sequence for non-vegetarian foods followed like very much (17.5%), like extremely (5.75%), like moderately (3%), neither like nor dislike (0.25%), dislike moderately (0.00%), dislike very much (0.00%) and dislike extremely (0.00%).

According to data presented in Table 3, preference for cereal products laid in sequence of like moderately (30.37%), neither like nor dislike (25.75%), like very much (22.5%), dislike moderately (10%), like extremely (9.416%), dislike very much (1.916%) and dislike extremely (0.33%).

Preference for pulses laid in sequence of like moderately (35%), like very much (24.25%), neither like nor dislike (24%), dislike moderately (9%), like extremely (5%), dislike very much (2.583%), dislike extremely (0.166%).

Preference sequence for vegetables was neither like nor dislike (22.888%), dislike moderately (22.555%), like moderately (16.444%), dislike very much (13.111%), dislike extremely (8.888%), like very much (8.444%) and like extremely (6.555%). Salad preference laid in order of dislike moderately (25.4%), neither like nor dislike (24.2%), like moderately (18.6%), like very much (18.4%), dislike very much (12.6%), dislike extremely (2.8%) and like extremely (0.00%). Milk and milk products preference followed the sequence of like moderately (31.33%), like very much (26.2%), neither like nor dislike (24.66%), like extremely (10.66%), dislike moderately (7%), dislike extremely (2.33%) and dislike very

**Table 2.** Average values of food preferences for nonvegetarian (31) and vegetarian foods (13) among adolescent (11-13 yrs) girls

Non-vegetarian foods	Like extremely	like very much	Like moderately	Neither like nor dislike	Dislike moderately	Dislike very much	Dislike extremely
Average	5.75	17.5	3	0.25	0.00	0.00	0.00

**Table 3.** Average values of food preferences among adolescent (11-13 yrs) girls

Food items	Like extremely	Like very much	Like moderately	Neither like nor dislike	Dislike moderately	Dislike very much	Dislike extremely
Cereal products	9.416	22.5	30.37	25.75	10	1.916	0.333
Pulses	5	24.25	35	24	9	2.583	0.166
Vegetables	6.555	8.444	16.444	22.888	22.555	13.111	8.888
Salad	0.00	18.4	18.6	24.2	25.4	12.6	2.8
Milk and milk products	10.66	26.2	31.33	24.66	7	2.16	2.33
Fruits	13.87	22	28.37	21.25	9.25	1.25	0.00
Sweets	4.4	15.1	45.8	24.3	10.1	0.3	0.00
Commercial food products	28	40.2	28.75	4.65	0.00	0.00	0.00
Beverages	14.42	23.42	28	18.14	10.28	5.7	0.00
Fats and oils	1.5	11	31	37.75	16	2.75	0.00

much (2.16%).

The sequence for preference of fruits by adolescent girls followed like moderately (28.37%), like very much (22%), neither like nor dislike (21.25%), like extremely (13.87%), dislike moderately (9.25%), dislike very much (1.25%) and dislike extremely (0.00%).

Sweets preference sequence followed like moderately (45.8%), neither like nor dislike (24.3%), like very much (15.1%), dislike moderately (10.1%), dislike very much (0.3%) and dislike extremely (0.00%). The preference sequence for commercial food products was liked very much (40.2%), like moderately (28.75%), like extremely (28%), neither like nor dislike (4.65%), dislike moderately (0.00%), dislike very much (0.00%) and dislike extremely (0.00%). Preference sequence for beverages followed, like moderately (28%), like very much (23.42%), neither like nor dislike (18.14%), like extremely (14.42%), dislike moderately (10.28%), dislike very much (5.7%) dislike extremely (0.00%).

Preference sequence for fats and oils followed, neither like nor dislike (37.75%), like moderately (31%), dislike moderately (16%), dislike very much (2.75%), like extremely (1.5%) and dislike extremely (0.00%).

#### Implications of the study:

Diet in adolescents is very significant because it influences the future nutritional status. Due to physiologic sex differences

associated with fat deposits during this period and comparative lack of physical activity they may gain weight easily, therefore, there is a serious need to lure them towards healthy foods and creating nutritional awareness so that they might make healthy choices easily. Parents should encourage to cook nutritious and tasty foods at home.

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