Food Consumption Behavior among Elementary Students of Gonabad

Mahdi Moshki,1 Mahnaz Bahrami2

1. Department of Public Health, School of Health, Social Development & Health Promotion Research Center, Gonabad University of Medical Sciences, Gonabad, Iran
2. MSN Student, Student Research Committee, Gonabad University of Medical Sciences, Gonabad, Iran

**Article information**

**Abstract**

**Background:** Most of the dietary habits are formed during childhood and pursuing a correct and balanced dietary pattern is one of the most important factors in preventing degenerative diseases in adulthood.

**Materials and Methods:** In this cross-sectional study, 375 boy and girl students, ranging from grade one to grade five of primary school, participated through the stratified random sampling. The dietary information was collected through filling out Food Frequency Questionnaires (FFQ). Finally, the data were analyzed by using SPSS-16 software.

**Results:** 88.3 percent of the children ate breakfast. The obtained dietary pattern indicated that consumption of food groups, including proteins, milk and dairy, fruit, and vegetables was lower than the recommended allowances.

**Conclusion:** Considering the achieved dietary consumption pattern, compiled and extensive training programs should be designed to promote the knowledge level, insight and behaviors of parents and trainers.

**Keywords:** Consumption, Food, Student

*Corresponding author at:
Social Development & Health Promotion Research Center, Gonabad University of Medical Sciences, Gonabad, Iran.
E-mail: bahrami_mb_66@yahoo.com

Copyright © 2013 Zahedan University of Medical Sciences. All rights reserved.

**Introduction**

In addition to the life-giving and health-making role of diet for children and diet during school ages, it is efficient from other aspects, such as improving the growth process, preventing gastrointestinal-respiratory infections or making grounds for easier and quicker improvement of such diseases [1].

Children need sufficient diet and physical activity more than other age groups to be able to achieve sufficient physical growth as well as mental development and to confront the chronic diseases of this period [2]. In addition, due to the great importance of foodstuff in the growth of body, diet plays a major role at different times. Paying attention to dietary behaviors during childhood and maturity is among the main instrument to achieve physical growth [3].

Most of the behavioral patterns of adults, especially dietary habits, are formed in childhood and they are less flexible during adulthood. During preschool ages, dietary preferences of children are under the influence of family environment. However, by entering school and creating changes in the conditions of the social life, children become far from home environment. As a result, their habits and food options will be changed gradually and they would be under the influence of new conditions, including social trends, media, environmental stress (friends) and diseases [4].

Studies carried out on children indicate that dietary behaviors have been changed over years. They drink less milk and it is often low fat and skimmed milk.

Consumption of sugar, including non-acidic fruit juices, carbonated drinks and candy, has been increased, especially by younger children. Some children nearly gain 50 percent of their required energy from the extra fat and sugar [5].

Comparing family food cart of the Iranian society and the favorable and standard basket determined by WHO indicates that the required foodstuff of body such as milk, dairy, fruit and vegetable stand at a lower position in the food basket. Up to 50 percent of our people suffer from lack of energy and protein in some parts of our country, especially in rural and marginalized urban areas [6]. Therefore, the present research is conducted aiming to study the foodstuff consumption pattern of children of schools of the city of Gonabad. It tries to examine the physical growth and the effective dietary factors.

**Materials and Methods**

This study is a cross-sectional research. In this study, 375 children ranging from 7 to 12 years old children (grades 1 to 5, including 190 girls and 185 boys) were selected from the different areas of Gonabad through the two-stage stratified random sampling. After taking the procedures to receive the plan approval, the letter of introduction was received from the Ministry of Education. Meanwhile, all the samples entered the research willingly.
Vegtable Nuts Sundries
(52.5%) and animal oil (12%), respectively.

cooking by the families of these children were liquid oil
breakfast. The major and minor types of oil used for
it was specified that 88.3% of children under study ate
this group had the daily consumption of 5 units. Whereas
minimum allowances of this dietary group. On average,
however, among all the grades, the first grade had the
samples under study use bread and grains
proteins, milk and dairy, fruit and vegetable was lower
which was consumed at the recommended allowances by
that bread and grains dietary group was the only group,
consumed most by
the children.

dietary pattern is affected by the family dietary pattern-
especially in the main meals- the above finding might be
noteworthy in this concern. In the present research,
consumption of other dietary groups, including protein,
milk and dairy, fruit and vegetable was less than the
recommended level.

A study indicated that the amount of protein group
consumed by grade one students was more than the
recommended levels. In other grades, it was less than the
recommended allowances [10]. It might be one of the
reasons for insufficient intake of iron among school-age
children. Alternatively, a research conducted in Tehran
specified that dairy, especially milk, and fruits were
among the dietary groups consumed most as snacks [7].
In most advanced countries, 50 to 55% of the daily
required calcium is satisfied using a balanced diet.
Therefore, children should be encouraged to consume this
dietary group to prevent the problems related to the
shortage of this dietary group during adulthood.

During the research, it became clear that the majority of
the participants under study eat breakfast. In a research
carried out in Tehran, the percentage of those children
who ate breakfast was 80%. Another research conducted
in Taiwan suggested that the teenagers with regular
consumption of breakfast had less risk to weight gain and
those with irregular consumption of breakfast were
subject to gain weight 51% more [12].

Breakfast is important because it is the most essential
meal for children who are among the vulnerable groups.
Temporary and short-term hunger occurs without eating
breakfast. The result of this short-term fasting is that a
child would become restless by inappropriate stimuli [12].
In this research, the type of consumed oil by families for
cooking was liquid oil, whereas a study conducted
nationwide indicated that hydrogenated oil was used most
for cooking at homes of the students [2].

As the consumption of the dietary group of meat and
proteins, milk, fruit and vegetable is lower than the
recommended allowances, correct design and
implementation of the dietary program at schools and
recording and extensive training programs to promotion
knowledge level of parents and trainers can be the
important factors for removal of dietary problems and
providing favorable growth and health in this vulnerable
age group. Satisfying the hunger of well-fed primary
school children or those with malnutrition within a short
period improves their nutrition, helps them concentrate
and learn better and improves their physical and mental
function.
Acknowledgements
This research (No. 88.3) is carried out with the financial support of Student Research Committee as well as the cooperation of Social Development & Health Promotion Research Center of Gonabad University of Medical Sciences.

Authors’ Contributions
All authors had equal role in design, work, statistical analysis and manuscript writing.

Conflict of Interest
The authors declare no conflict of interest.

Funding/Support
Gonabad University of Medical Sciences.

References
