

PRECOCIOUS PUBERTY IN SCHOOL GOING GIRLS

Ms. Deepti Sharma

(Biology Educator – GD Goenka Public School Dwarka,

Co Author – Ms. Anita Khosla

(Principal, GD Goenka Public School Dwarka)

Student's Support: Samiksha Sharma, Jayesha Chawla

ABSTRACT

Early menarche refers to the onset of menstruation before the age of 8-9 years, which is earlier than the typical age range of 10-15 years. Higher Body Mass Index (BMI) is strongly associated with earlier puberty. Increased fat tissue can produce higher levels of oestrogen, triggering puberty. Diets rich in processed foods, fats, and sugary drinks are linked to earlier menarche. Exposure to endocrine-disrupting chemicals found in plastics, cosmetics, and pesticides can interfere with hormonal systems. Contaminants like hormones in food (e.g., milk) may contribute. Continuous exposure to even small amounts of synthetic hormones like oxytocin could theoretically interfere with the body's endocrine system, potentially contributing to earlier puberty or menstrual onset.

PURPOSE

Menarche, the onset of menstruation, is a significant milestone in the biological and emotional development of adolescent girls. For school-going girls, this transition can bring both challenges and opportunities for growth. GD Goenka Public School has taken a proactive step to raise awareness about the early onset of menstruation. This initiative will have a significant positive impact on young students, helping them navigate this critical phase of their development with confidence and knowledge. Our school has conducted a survey for championing menstrual health awareness and contributing to the holistic development of the students.

OBJECTIVES:

- Primary Objective: To determine the age of onset of menarche (the first occurrence of menstruation) among school girls in classes 4 and 5.

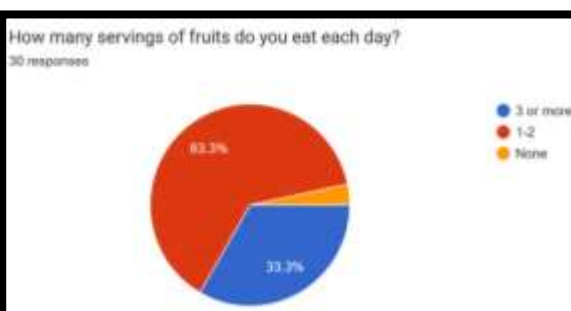
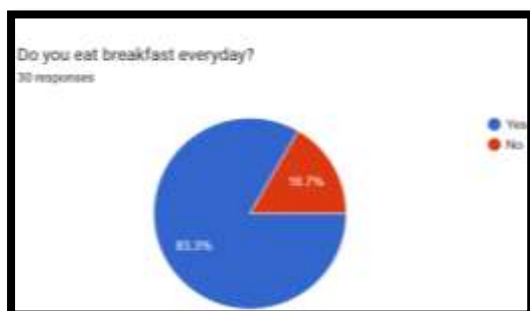
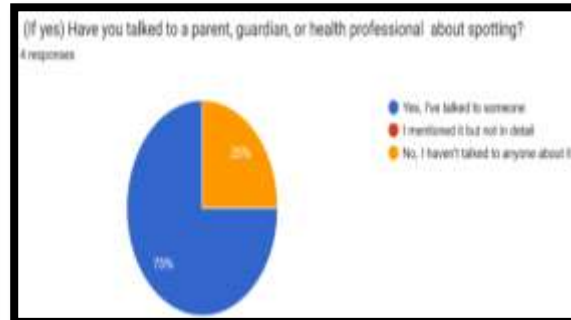
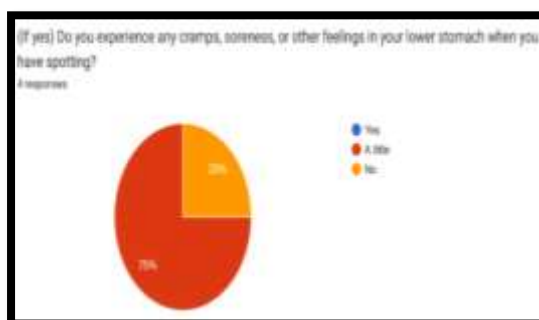
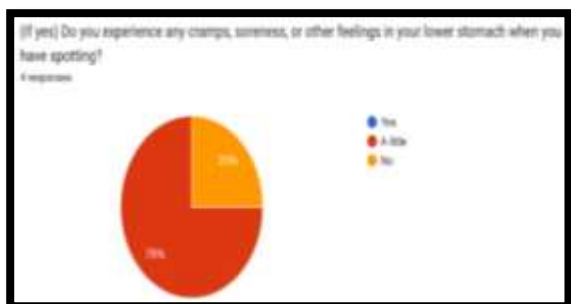
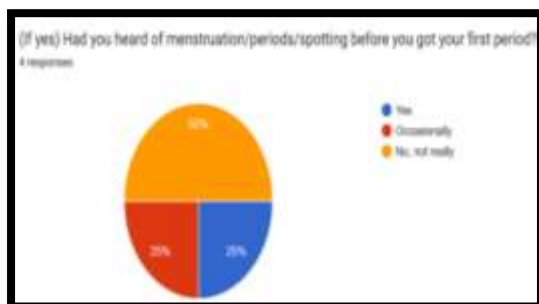
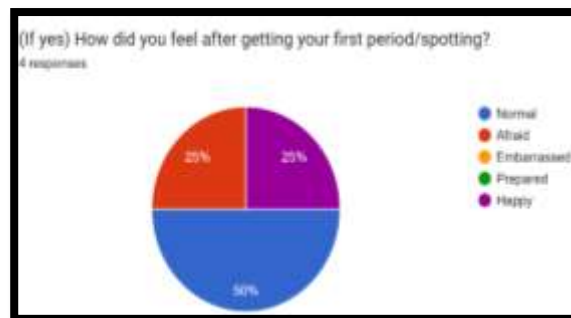
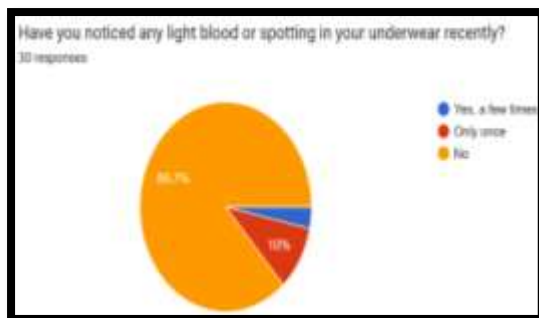
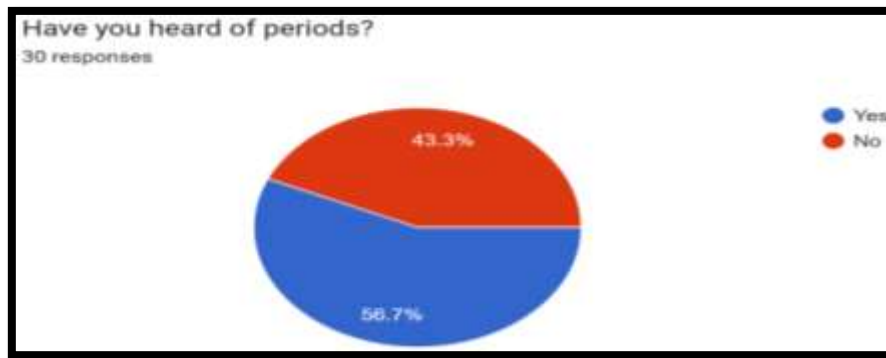
(PART A) Develop a Questionnaire:

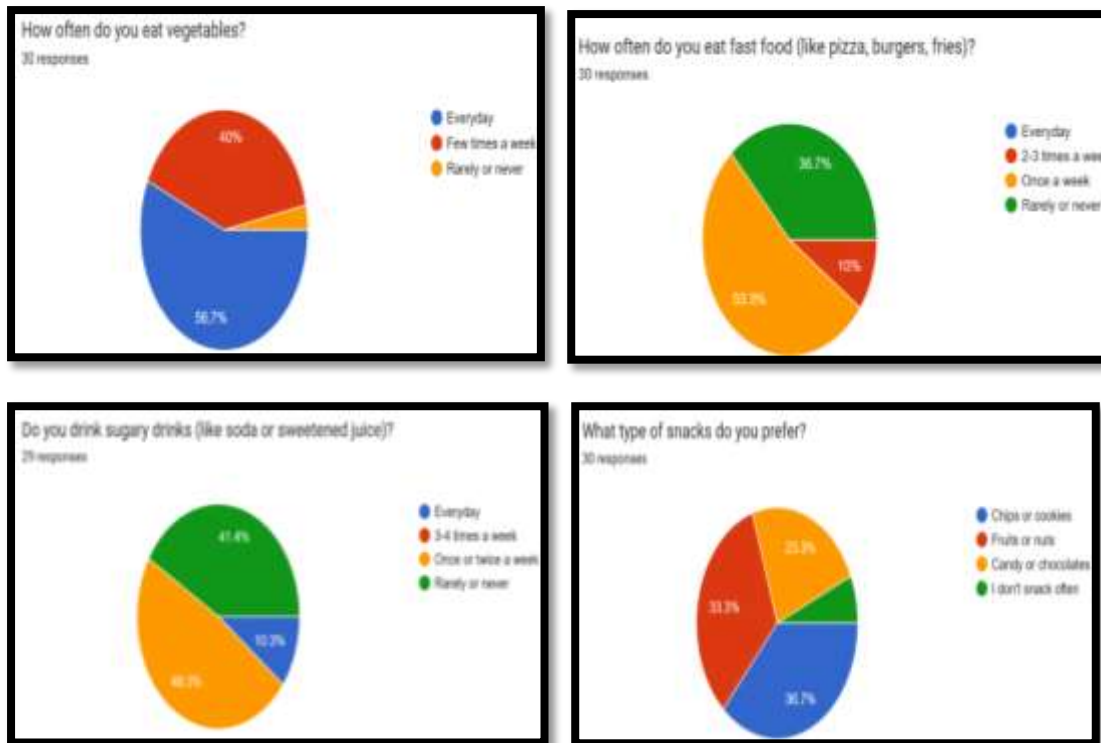
A questionnaire was created for the survey tailored to the objectives. The sample is attached with the report

DATA COLLECTION:

The survey was conducted in a respectful and sensitive manner among girls of class 4 & 5.

Data Analysis:





Analysis of the data:

- Average Age of Menarche Onset: After the age of 11 year.
- Prevalence of Early Menarche: 10 % of girls who have experienced menarche before the typical age (usually before age 11).
- Associated Factors: Junk food consumption has been linked to the early onset of menarche (the first menstrual period).

CONCLUSION:

Studies have shown that girls who consume diets high in processed and junk foods tend to experience menarche earlier than those with balanced, nutrient-rich diets. Junk food contains artificial additives, preservatives, and sometimes endocrine-disrupting chemicals (EDCs), such as BPA or phthalates in packaging. These chemicals can interfere with the endocrine system and mimic or disrupt natural hormonal activity, contributing to earlier puberty.

Recommendations:

Balanced Diet

- Encourage a diet rich in fruits, vegetables, whole grains, lean proteins, and healthy fats.
- Minimize processed foods and sugary beverages.

Parental Awareness

- Educate parents about the link between diet and puberty to help guide healthier food choices at home.

School Programs

- Incorporate nutrition education into the curriculum to promote awareness among students.

- Ensure that school canteens offer healthy snacks and meals.

Physical Activity

- Encourage regular exercise to maintain a healthy BMI and regulate hormones.

PART B: Secondary Objectives:

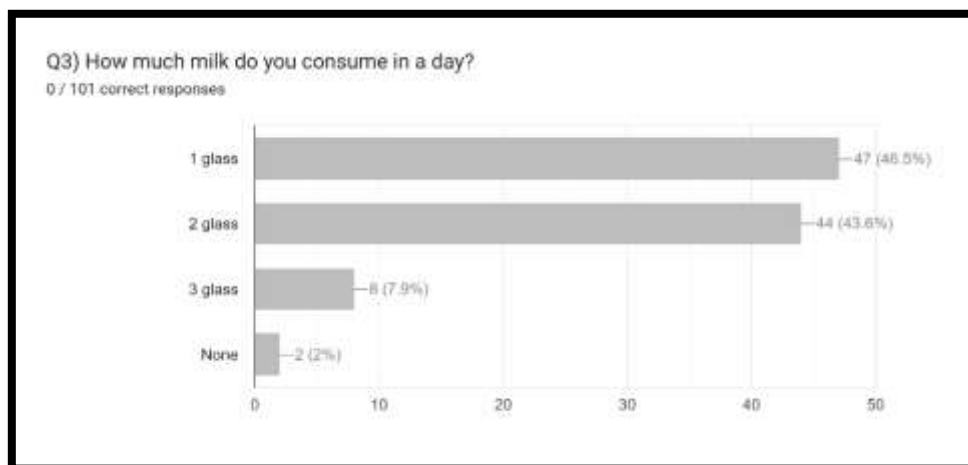
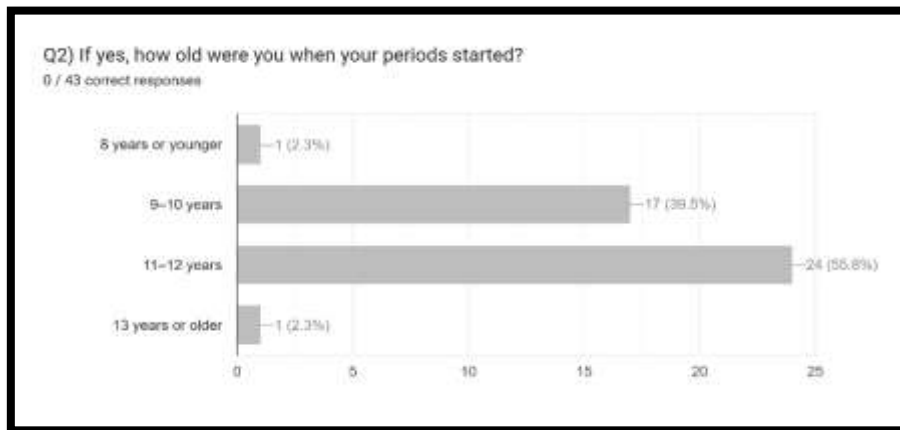
- Identify the prevalence of early menarche in this group.
- Examine possible factors associated with early menarche, such as dietary preferences, nutrition, physical activity, and development.
- Understand the emotional and psychological impact of early menarche on young girls.

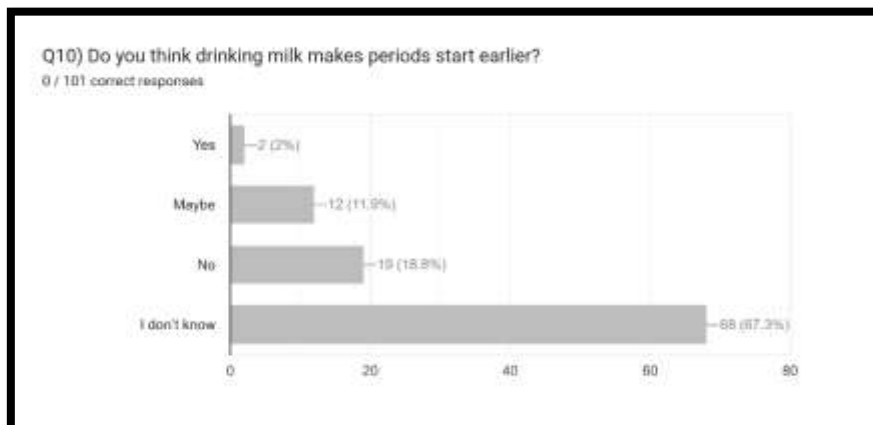
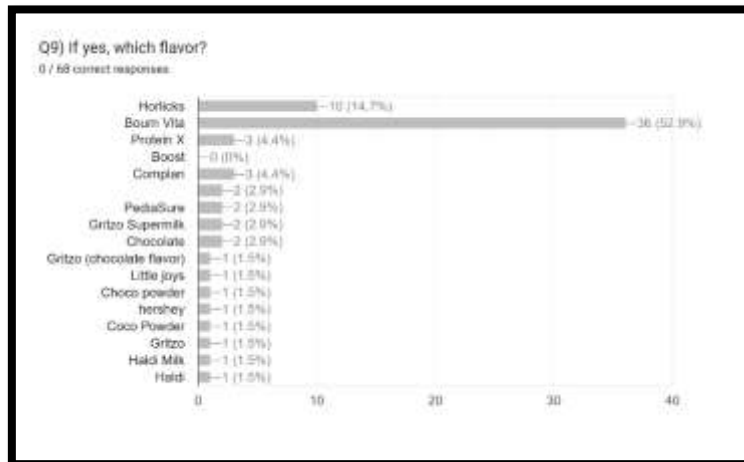
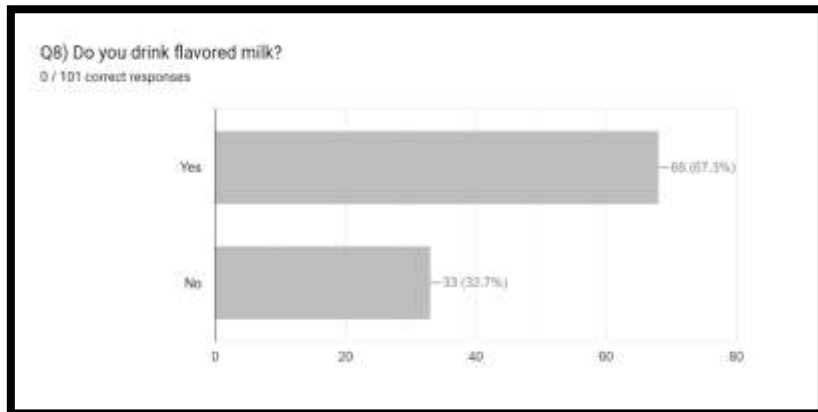
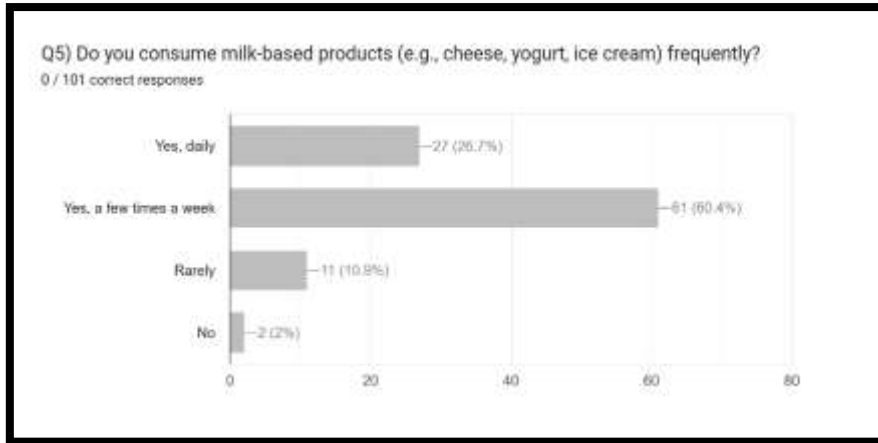
Develop a Questionnaire: A questionnaire was created for the survey tailored to the objectives. The sample is attached with the report.

Data Collection:

The survey was conducted in a respectful and sensitive manner among girls of class 4, 5 & 6.

Data Analysis:





ANALYSIS OF THE DATA:

- Around 22% of the girls who have experienced early menarche consume milk supplied by milkman.
- Other factors like supplements and flavoured health drinks have also been found to be associated with early menarche.

CONCLUSION:

The notion of a direct link between early menarche (the onset of menstruation) and consuming milk supplied by a milkman is an area that has been explored in studies examining diet, nutrition, and puberty timing. The concern about milk supplied by milkmen potentially containing hormones like oxytocin and its link to early puberty in girls is a topic of public and scientific interest. Continuous exposure to even small amounts of synthetic hormones like oxytocin could theoretically interfere with the body's endocrine system, potentially contributing to earlier puberty or menstrual onset. Many countries have strict regulations against using oxytocin in milk production because of its potential health impacts on both animals and humans. Advocate for stricter enforcement of laws preventing hormone misuse in dairy farming.