Study On Nutritional Behaviour During Menstruation In Female Collegiates Of Lucknow City.

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Abstract

Background

Menstruation is a natural physiological process experienced by women of reproductive age, characterized by cyclic hormonal changes leading to uterine shedding. While menstruation is a normal part of female biology, it can be accompanied by various physical and emotional symptoms, including changes in nutritional behavior. This abstract aims to provide a comprehensive review of nutritional behavior during menstruation, highlighting key aspects such as dietary preferences, nutrient requirements, and the impact of hormonal fluctuations on food choices. During menstruation, many women experience cravings for specific foods, with chocolate, sweets, and salty snacks being commonly desired. These cravings are often attributed to hormonal shifts, particularly fluctuations in estrogen and progesterone levels, which can influence neurotransmitters like serotonin and dopamine, leading to changes in appetite and food preferences. Additionally, the onset of menstruation is associated with alterations in mood and energy levels, further influencing dietary choices. Nutrient requirements may also vary during menstruation, with a potential increase in iron and zinc needs due to blood loss. Iron, in particular, plays a crucial role in preventing menstrual-related anemia, making it essential to consume iron-rich foods such as leafy greens, legumes, and lean meats during this phase. Adequate hydration is also vital to offset fluid loss and maintain optimal bodily functions. Psychological factors, including cultural beliefs, socioeconomic status, and individual dietary habits, can significantly impact nutritional behavior during menstruation. Education an awareness regarding balanced nutrition and healthy eating practices are essential in promoting overall well-being and managing menstrual symptoms effectively.

INTRODUCTION

Nutritional behavior during menstruation is a multifaceted aspect of women's health that encompasses dietary preferences, nutrient requirements, and the interplay of physiological and psychological factors. Menstruation is a fundamental process in the female reproductive system, involves cyclical hormonal changes leading to the shedding of the uterine lining. This phase is often accompanied by a range of physical and emotional symptoms, including changes in appetite, food cravings, and energy levels. Understanding the nuances of nutritional behavior during menstruation is essential for promoting overall well-being and addressing the unique needs of women during this phase of their menstrual cycle. Hormonal fluctuations, particularly changes in estrogen and progesterone levels, can influence

neurotransmitters and appetite-regulating hormones, leading to alterations in food preferences and cravings. These hormonal shifts may contribute to the commonly reported desire for certain foods such as chocolate, sweets, and salty snacks during menstruation.

Menstruation is associated with physiological changes such as blood loss, which can impact nutrient requirements. Adequate intake of nutrients like iron, zinc, and essential vitamins becomes crucial to support overall health and prevent conditions such as menstrual-related anemia. Additionally, hydration is vital to offset fluid loss and maintain optimal bodily functions during menstruation. Cultural beliefs, socioeconomic status, and individual dietary habits can influence food choices and eating patterns during this phase of the menstrual cycle. Education and awareness regarding balanced nutrition and healthy eating practices are imperative in empowering women to make informed dietary decisions and manage menstrual symptoms effectively. Comprehensive exploration of nutritional behavior during menstruation, highlighting the complex interplay of hormonal, physiological, and psychological factors that shape dietary preferences and nutrient requirements during this crucial phase of women's health.

METHODS AND METHODOLOGY

Study design: Describe the overall design of the study, whether it's Observational, Experimental, cross sectional, longitudinal, etc. Explain why this design was chosen and how it relates to the research question.

Participants: Detail the Characterstics of the participants, such as age range, demographic information as age of menarch, Duration of menstrual flow, Normal menstrual cycle, Physical symptoms, Food pattern, Emotinal health, Physical exercise and any inclusion or exclusion criteria.

Data Collection: Explain the methods used to collect data of 200 participant's on nutritional behaviour during menstruation in female collegiate of lucknow city. This could include dietary surveys,food diaries,interviews or observational studies.Provide information on the tools or instrument used for data collection and any modification made to adapt them to study's focus.

Variables: Clearly define the variables of intrest,including nutritional behaviours (like dietary intake,food cravings) menstrual cycle phases, and any potential confounding variables considered in the analysis.

Data Analysis: This data analysis using Microsoft Excel for examining the data by frequency and percentage.

RESULTS

Student's questionnaire

The student's questionnaire contains number of question based on Menstrual history,Physical health during menstruation,emotional health,Food   pattern,sleep cycle,Exercise pattern,Cultural based behaviour.Designing the questionnaire in this way allowed the researcher to elicit a combination of quantitative and qualitative responses;students'preference by selecting a given option together with a justification for selecting that option.

1. **Age of menarche:**

Age is an important factor,that influences the attainment of menarche.The research work was done in baba saheb bhimrao ambedkar university of lucknow.Twenty girls from age less than 10 years attained menarche were selected from baba saheb bhimrao ambedkar university in Lucknow city.one fourty eight girls who attained menarche at the age between 10-11 years.One hundred two girls who attained menarche at the age between 12-14 years.Thirty girls who attained menarche at the age 15 or more than age of 15 years.

Table 1.1:Age of the adolescent girls at the time of menarche.

| Age	Percentage(%)
Less than 10 year	10%
10-11 years	24%
12-14 years	51%
More than 15 years	15%

2.Duration of menstrual flow:

The menstrual flow,also known as menstruation or a period, is a natural process that occurs in people with female reproductive system.shedding of the uterine linning which wasn't needed for a potential pregnancy.mestruation flow usually begins during puberty and continue until menopause.
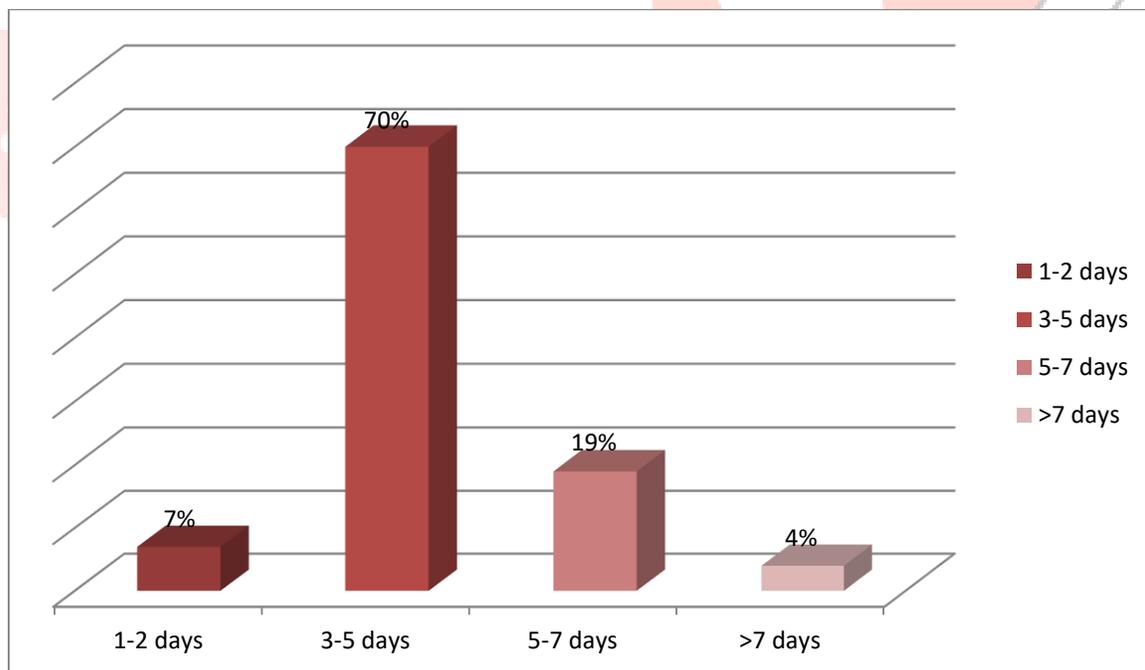
Fig2.2: This chart represents the rate of flow of participant's.Most of the respondents fall in the category of rate of flow for 3-5 days,70%.19% are fall in category of 5-7 days.7% are fall in the category of 1-2 days&4% are fall in the category of more tha 7 days.

3. Menstrual cycle:

The menstrual cycle last about 28 days. Bleeding phase occurs as the uterine lining sheds. It usually lasts 3 to 7 days. After menstruation, the body begins preparing for ovulation. Follicles in the ovaries mature, and one dominant follicle releases an egg. Around day 14 of a 28-day cycle (can vary), the matured egg is released from the ovary, ready for fertilization.
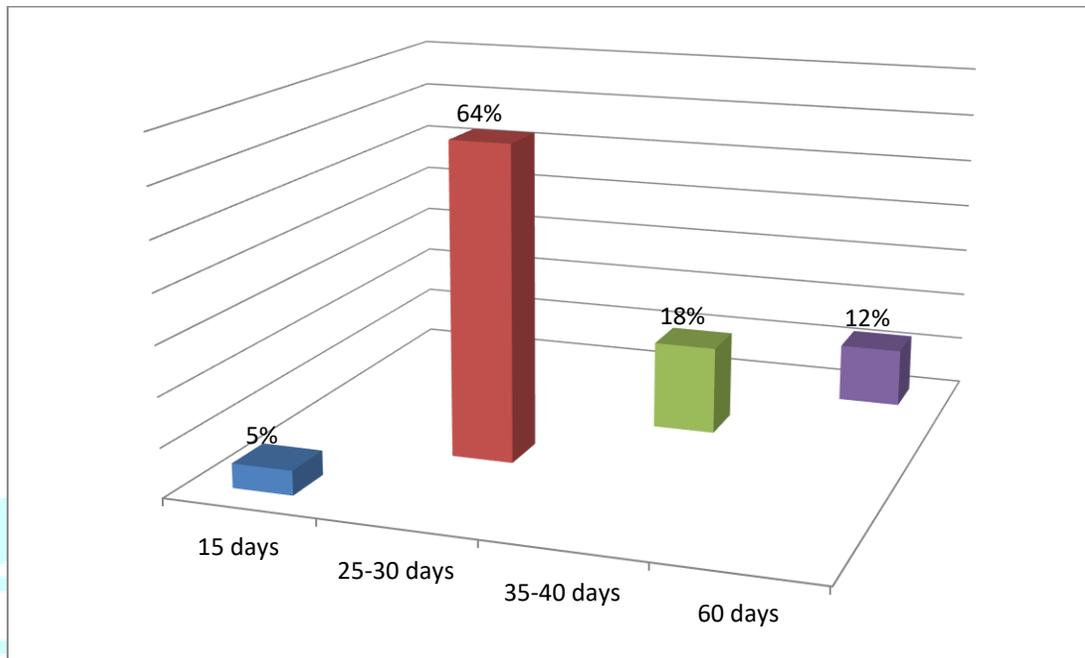
Fig3.3: It summarizes the response of participant's of menstrual cycle.most of the respondent's are fall in the category of 25-30 days.18% are fall in the category of 35-40days.12% are fall in the category of 60 days&5% of respondent's are fall in the category of 15 days of menstrual cycle.

Table 4.Intake of nutritional rich food during menstruation by participant.
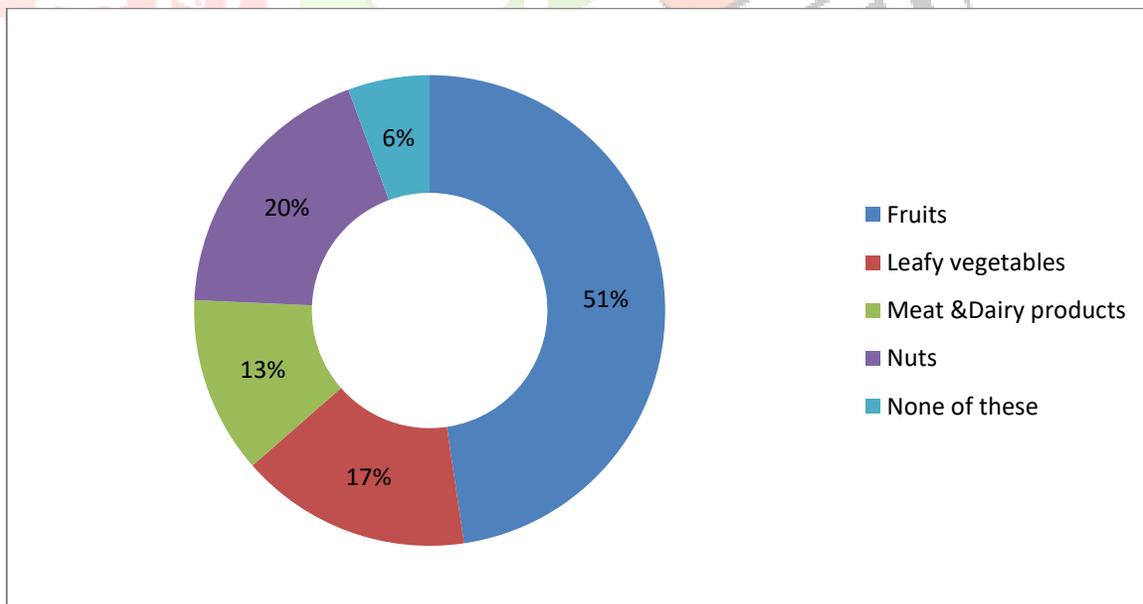
Fig4.4: This chart shows intake of nutritional rich food of the repondent's out of which 51% respondent's intake fruits,20%of respondent's intake nuts,17% of respondent's intake leafy vegetables,13%of respondent's intake meat and dairy products.6% of respondent's intake none of these nutritional food during menstruation.

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