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Research Paper

Nutritional Knowledge, Attitude and Consumption Pattern of Milk Vs. Cold Drink Among Young Adult Female in District Kurukshetra

Home Science

KEYWORDS : Milk, Cold drink, Young adult females

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ABSTRACT

The establishment of unhealthy habits in early life can lead to greater risk of chronic disease in later life. Young adults are particularly vulnerable for establishing unhealthy habits. Now a day's cold drinks displacing healthier drinks in our diet. Milk and milk products are linked to improved bone health. The major concern about milk and dairy drink consumption is that it provides adequate calcium status during adulthood which is important to reach peak bone mass in later life. No studies were found investigating the relation between milk and cold drink consumption. Keeping the above in mind the present study was planned to determine the nutritional knowledge, attitude and consumption pattern of milk vs. cold drink among young adult female. The study was conducted on sixty young adult females. A self administered designed questionnaire including demographic data and questions measuring knowledge, attitude and consumption pattern of milk vs. cold drink was developed. The questionnaire contains in total twenty questions. The data was presented in percentage, mean and standard deviation. The results revealed that more than half of the subjects (63.33%) prefer cold drink over milk. Majority (70%) of the subjects were aware about the benefits of milk. A casual (81.67%) attitude of the subjects related to cold drink consumption was noticed in the study. Only 26.67 per cent of the respondents seriously wanted change their consumption pattern of cold drink over milk. Drink milk campaigns can be constructed to increase the awareness of young adult females about the side effect of cold drinks on bone and related diseases as well as benefit of milk for achieving longevity and maintaining healthy lifestyle habits.

INTRODUCTION

Changes in the dietary pattern in turn influence the nutritional status of the population. It was established that milk is a complete food in itself. Milk's nutrients play an important role in bone development and maintenance and overall nutrient adequacy throughout childhood and adulthood (U.S.Department of Health and Human Services, 2005).Milk provides calcium, which is essential for bone growth and development. The peak bone mass is not reached until age thirty further emphasizes the importance of milk and dairy consumption for adequate calcium status during young adults. Optimising bone mass in this age also help to reduce the risk of osteoporosis (a debilitating, brittle bone disorder) in later life. The U.S. National Dairy Council (2009) further concur that consuming milk beverages such as fermented and flavoured milk provides vitamin D, calcium, magnesium and potassium, four of the seven nutrients limiting in adults' diet.

Today soft drinks have become the largest beverage sector worldwide. The consumption and popularity of soft drinks has been increasing steadily due to increased strong preference to palatable sweet taste, at a reasonably low price (Sartor et al., 2011). Generally soft drinks are non-alcoholic beverages containing basically water, a flavouring agent and a sweetener (Hu e al., 2010). Soft drinks are composed of 100% carbohydrates, with no protein and fats (low in cholesterol and saturated fats). They also have phosphoric and/or citric acids, flavouring agents and carbonated water. A major ingredient in soft drinks is sugar and often high amounts of caffeine.

Soft drinks contain high amounts of energy and the ability of the body to compensate energy from carbohydrate consumed in fluid form is less clear than from carbohydrates consumed in solid form. This means that sugar in soluble form may fail to trigger satiety in the same way than solid foods do (Wolff et al., 2008), thus puts consumers at greater risk of overweight and obesity (Gibson et al., 2007; Malik et al., 2006; Vartanian et al., 2007).

Soft drinks can also affect the diet quality like it may displace milk consumption, thus reducing calcium intake from milk which is the main source of calcium. (French et al., 2003; Harnack et al., 1999). Therefore, the present study has been undertaken to study the consumption pattern of beverages among young females in District Kurukshetra. Present study was mainly focused on consumption pattern of carbonated soft drinks such as soda varieties (Coca-cola, Pepsi, Sprite, Fanta etc) and milk by young ladies.

MATERIAL & METHODS

Subjects:

The study was conducted on sixty young females. All participants with age 23-27 years were selected for the study. All the subjects selected for the study were fully informed of the purpose and procedure of the investigation and provided consent at the outset.

Questionnaire Development:

A self administered designed questionnaire including demographic data and questions measuring knowledge, attitude and consumption pattern of beverages like milk and cold drink by subjects was developed. The questionnaire contains in total twenty questions. The questions were divided into four sections including: consumption pattern, preferences, knowledge and attitude of the subjects about beverage intake.

Procedure:

Questionnaires were distributed to the selected subjects. A cover letter was included to explain the study to the participants and to indicate their rights as participants. The questionnaire including questions including demographic profile, consumption pattern, nutritional knowledge and attitude of the subjects about the beverages intake were distributed to the participants on an assigned day. The cover letter and directions were read aloud while the participants reached along. After the direction was read, time was allotted for the participants to complete the study. After completing questionnaires, the participants were asked to place them in a labeled envelop in the front of the room.

Statistical Analysis:

The results were analyzed using arithmetic mean, standard deviation and percentages.

RESULTS & DISCUSSIONS

The age of the studied participants ranges between 23 -27 years (Table 1) with mean value of 25.43±2.72 years. The height of the selected subjects ranged from 1.53 to 1.59m, with mean value of 1.56.±3.38m respectively. The range of respective weights of the studied subjects lies between 54 - 58 kg with mean value of 56.64±2.47kg. On the basis of height and weight of the subjects the mean calculated BMI of the participants was 24.29±1.62 Kg/m^2.

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Table 1: Anthropometric Dimensions of the Subjects

Parameters	Subjects (n=60) Mean±S.D
Age(years)	25.43±2.72
Weight(kg)	56.64±2.47
Height(m)	1.56.±3.38
BMI(kg/m^2)	24.29±1.62

Data in Table 2 revealed that out of a total sixty percent of the subjects drink milk with average consumption of 1-2 cups/day (80.56%). About 40 per cent of the subjects do not like to drink milk. The main reasons not liking milk is taste (58.33%), smell (25%), other (16.67%) like milk intolerance and flatulence formation after drinking respectively.

The data also indicated that about seventy per cent of the subjects like to drink cold drink with average consumption of 1-2 cups/day (71.43%). Only thirty per cent of the participants do not like cold drink and according to them the primary reason for that is taste (83.33%).The respondents responded that the consumption of the cold drink by them was influenced by peer group (23.33%), occasion (23.33%) and mood (53.33%) respectively. Hattersley et al. (2009) explained that the intrinsic qualities of beverages, including taste, have been found to be significant as they emphasize influences on soft drink consumption in young adults. Furthermore it was found in that study that the number of respondents, mostly female participants, described the consuming of soft drinks as a treat or to reward themselves.

Table 2 : Consumption Pattern of Beverages by the Subjects

Parameter	Response	Subject (n=60)	Percentage (%)
Consume milk	Yes	36	60
	No	24	40
If Yes			
Average Consumption (Cup/day)	<1	2	5.56
	1-2	29	80.56
	3-4	5	13.89
	>5	-	
If No			
Reason for not consuming	Taste	14	58.33
	Smell	6	25
	Other	4	16.67
Like cold drink	Yes	42	70
	No	18	30
If Yes			
Average Consumption (Cup/day)	<1	2	4.76
	1-2	30	71.43
	3-4	8	19.05
	>5	2	4.76
If No			
Reason for not consuming	Taste	15	83.33
	Smell	-	
	Other	3	16.67
Consumption of cold drink influence by	Peer group	14	23.33
	Occasion	14	23.33
	Mood	32	53.33

On comparing the preferences of the subjects about the milk vs. cold drink consumption in Table 3 it was concluded that about 63 per cent of the respondent prefer cold drink over milk and only 36.67 per cent subjects like to drink milk in comparison to cold drink. Many studies have shown that milk is inversely associated with soft drink consumption for children and adolescents. Previous research found that children in a school cafeteria have greater confidence and preferred consuming soft drink over milk following their peer's influence (Thompson et al., 2007).

Further it was also seen by the data (Table 4) that majority (70%) of the subjects know about the health benefits of drinking milk while only (40%) were know the ill effect of drinking cold drink on health. The respondents expressed agreement with the statement that milk is among the most complete of all foods. More than half (60 %) of the subjects were not aware about the impact of cold drink on health

The attitude of the subjects (81.67%) about cold drinks vs milk consumption was very casual. Out of the total subjects 26.67 per cent wants to change their present attitude of cold drink vs. milk consumption here as majority (73.33%)of them were not serious about their habit of drinking cold drink and ants o continue (Table 5). Research has established certain factors that influence beverage choice including age, gender, socioeconomic status, body weight, taste preferences, lactose intolerance and self confidence (Thompson et al., 2007).

Table 3: Comparison of Subjects on Preference of Consumption of Milk vs Cold Drink

Parameter	Response	Subject (n=60)	Percentage (%)
Preference	Milk over cold drink	22	36.67
	Cold drink over milk	38	63.33

Figure 1: Comparison of Subjects on Preference of Consumption of Milk vs Cold Drink

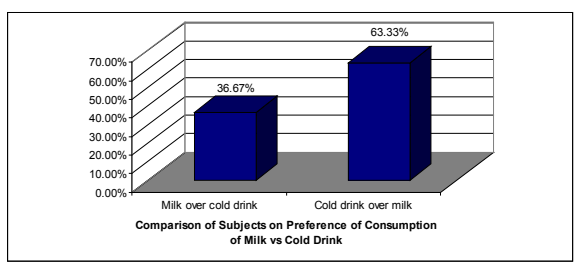


Table 4: Nutritional Knowledge of Subjects

Parameter	Response	Subject (n=60)	Percentage (%)
Know health benefits of milk	Yes	42	70
	No	18	30
Know ill effects of cold drink	Yes	24	40
	No	36	60

Figure 2: Nutritional Knowledge of Subjects

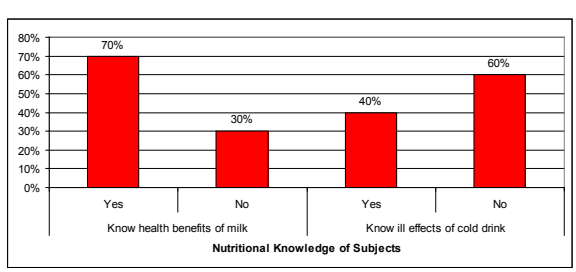
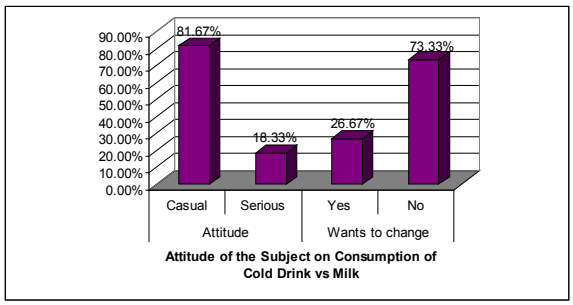


Table 5: Attitude of the Subject on Consumption of Cold Drink vs Milk

Parameter	Response	Subject (n=60)	Percentage (%)
Attitude	Casual	49	81.67
	Serious	11	18.33
Wants to change attitude	Yes	16	26.67
	No	44	73.33

Figure 3: Attitude of the Subject on Consumption of Cold Drink vs Milk



CONCLUSION

The results of the present study demonstrate the need to educate the young females about nutritional importance of milk and bad impact of soft drink consumption on body. Drink milk campaign can also be constructed to increase awareness among the youth about milk consumption for improving and maintaining good health throughout life.

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