

Dietary Habits of Adolescents

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Abstract

Adolescence Is A Second Period Of Rapid Growth Which Is Also Associated With Cognitive, Emotional And Hormonal Changes. The Dramatic Increase In Physical Growth And Development Puts Greater Pressure On The Need For Nutrients. This Study Aimed To Assess The Dietary Habits Of Adolescents Especially The Intake Of Fruits, Vegetables, Milk And Water Intake And Its Association With Socio Demographic Characteristics. A Total Of 300 Adolescents Aged 13 To 18 Years Residing In Chennai Were Selected As Samples. An Exploratory Survey Was Conducted And A Structured Questionnaire Was Used To Collect Data. Convenient Sampling Technique Was Used. The Study Results Revealed That Approximately 50% Of The Adolescents Consumed One Tumbler Milk And 1-2 Lts Of Water. Carrot And Tomato Were The Most Preferred Raw Vegetables And Guava Is The Preferred Fruit. There Was A Statistically Significant Association Between Dietary Habits With Age And Gender At 0.05 Level And Dietary Habits With Religion At 0.01 Level.

Key Words: *Adolescence, Dietary Habits, Vegetables, Fruits, Milk, Water*

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I Introduction

World Health Organization Defines Adolescents As Persons In The Age-Group Of 10 To 19 Years. In India, There Are An Estimated 190 Million Adolescents Comprising Over One-Fifth Of The Entire Population (Kotecha P.V. Et Al, 2013). Adolescence Is A Second Period Of Rapid Growth Which May Serve As A Window Of Opportunity For Compensating For Early Childhood Growth Failure. This Adolescent Growth Spurt Is Also Associated With Cognitive, Emotional And Hormonal Changes. The Dramatic Increase In Physical Growth And Development Puts Greater Pressure On The Need For Nutrients. Adolescents Will Experience A Psychological Changes And Development Of Their Own Personality Can Impact On Their Dietary Habits During A Phase When They Are Very Much Influenceable (WHO, 2006).

Adolescents Are Becoming More Independent And Making Many Food Decisions On Their Own. Adolescents Tend To Eat More Meals Away From Home Than Younger Children. They Are Also Heavily Influenced By Their Peers. The Development Of Healthy Eating Habits Is Important And Various Studies On Diet And Nutrition Intake Of Adolescents Have Shown That Their Diets Are Often High In Fats And Refined Carbohydrates. Some Dietary Patterns Appear Quite Common Among Adolescents, To Mention A Few: Snacking, Usually On Energy-Dense Foods; Meal Skipping, Particularly Breakfast, Or Irregular Meals; Wide Use Of Fast Food; And Low Consumption Of Fruits And Vegetables. Among Urban Adolescents In India, Some Of These Patterns Are Also Likely To Be Common But Very Little Information Is Available. Therefore, This Study Was Carried Out Among Adolescents, With The Objective To Assess Their Dietary Habits And Preferences To Fruits And Vegetables In Chennai, India.

Problem Statement

A Study To Assess The Dietary Habits Of Adolescents Residing At Selected Community Area, Chennai.

Objectives

- To Assess The Water And Milk Consumption Of Adolescents
- To Assess The Vegetables Eating Habits Of Adolescents
- To Assess The Fruits Eating Habits Of Adolescents
- To Associate The Dietary Habits With Demographic Variables Such As Age, Gender And Religion.

Method

An Exploratory Survey Was Conducted. Three Hundred Adolescents In The Age Group Of 13 To 18 Years Residing At Guindy And Kotturpuram Community Area Were Selected As Samples Using Convenient

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Sampling Technique. A Self Report Was Obtained And A Structured Questionnaire Was Used To Collect Data. The Tool Consisted Of Demographic Variables Of Adolescents, Items On Water, Milk Consumption, Vegetables And Fruit Eating Habits. Informed Consent Was Obtained From The Parents.

II Results And Discussion

Demographic Variables Of Adolescents Reveals That Out Of 300 Samples, 26% Were 15 Years Of Age And Majority Of Adolescents (79%) Were Male. Majority (66.3%) Of Samples' Mothers Had Completed High School Education And 57.7% Of The Samples' Mothers Were House Wife. Regarding Religion, 72.7% Of Samples Belonged To Hindu And 20.7% Were Christians. Majority Of The Adolescents (88.3%) Were Non Vegetarians And 47% Of The Adolescents Reported That Their Food Choice Was Influenced By Friends.

Table 1: Assessment Of Water And Milk Consumption Habits Of Adolescents

Sl. No	Demographic Variables	Frequency	Percentage
1	Water Consumption In A Day		
	Less Than 1lt	78	26.0
	1-2 Lts	139	46.3
	2-4 Lts	56	18.7
	More Than 4 Lts	27	9.0
2	Amount Of Milk Consumed In A Day		
	Don't Drink	84	28.0
	One Tumbler	156	52.0
	Two Tumbler	40	13.3
	Three Tumbler	20	6.7

Table 1 Revels That Out Of 300 Samples, 46.3% Were Consuming 1-2lts And 26% Were Consuming Less Than One Litre. Amount Of Milk Consumed By Adolescents Revealed That 52% Were Consuming One Tumbler And 28% Were Not Consuming Milk At All. The Study Findings Were Supported By Guelinckx I (2015) Who Reported That The Highest Mean Intake Observed For Water Was (738 ± 567 MI/Day), Followed By Milk (212 ± 209 MI/Day). American Academy Of Paediatrics Recommends That The Adolescents Should Drink 3-4 Servings Of Milk In A Day Since The Maximum Bone Growth Takes Place During The Teen Age.

Table 2: Assessment Of Vegetable Eating Habits Of Adolescents

Sl. No	Demographic Variables	Frequency	Percentage
1	Time Of Taking Cooked Vegetables		
	Breakfast	15	5.0
	Lunch	176	58.7
	Dinner	53	17.7
	None	56	18.7
2	Amount Of Cooked Vegetables		
	Don't Eat	56	18.7
	Less Than One Small Cup	160	53.3
	One Small Cup	70	23.3
	Two Small Cup	14	4.7
3	Amount Of Raw Vegetables		
	Don't Eat	88	29.3
	Less Than One Small Cup	119	39.7
	One Small Cup	76	25.3
	Two Small Cup	17	5.7
4	Raw Vegetable Consumed In Common		
	Carrot	101	33.7
	Tomato	107	35.7
	Cucumber	69	23.0
	Onion	23	7.7

Table 2 Revels That Out Of 300 Samples, 58.7% Were Taking Cooked Vegetables For Lunch And 18.7 % Were Not Eating Cooked Vegetables. Regarding The Amount Of Cooked Vegetables, 53.3% Were Taking Less Than One Small Cup And 18.7% Were Not Taking Vegetables. 39.7% Of Samples Were Taking Less Than One Small Cup Of Raw Vegetables And 29.3% Were Not Taking Raw Vegetables. Carrot (33.7%) And Tomato (35.7%) Were Consumed In Common. Shokrvash B(2013) Et Al., Reported That The Average Serving Size Of Vegetables Consumption Among Adolescents Was 2.67±0.99 And Only One Third (34.6%) Of Adolescents Had The Optimal Consumption Of Vegetables.

Table 3: Assessment Of Fruit Eating Habits Of Adolescents

Sl. No	Demographic Variables	Frequency	Percentage
1	Fruit Consumed Often		
	Apple	77	25.7
	Guava	134	44.7
	Orange	53	17.7
	Papaya	29	9.7
	Banana	7	2.3
2	Number Of Fruit Taken Daily	85	28.3
	Less Than One Fruit	140	46.7
	One Fruit	61	20.3
	Two Fruit	14	4.7
3	Amount Of Fruit Taken Daily	89	29.7
	Less Than One Fruit	127	42.3
	One Small Fruit/Cup	61	20.3
	One Medium Size Fruit/Cup	23	7.7
	Two Medium Size Fruit/Cup		

Table 3 Reveals That Out Of 300 Samples, 44.7% Were Taking Guava Often Followed By Apple (25.7%). Regarding Number Of Fruit Taken Daily, Majority (46.7%) Were Taking One Fruit And 42.3% Were Taking One Small Fruit. Shokrvash B(2013) Et Al., Reported That The Average Serving Size Of Fruits Consumption Among Adolescents Were 2.58 ±0.96 And Only One Third (30.3%) Of Adolescents Had The Optimal Consumption Of Fruits.

Table 4: Association Of Dietary Habits With Age

Dietary Habits		Age In Years						X ² Value	P Value
Raw Vegetable Consumed In Common		13	14	15	16	17	18	25.84 Df-15	0.04
	Carrot	18	23	23	14	11	12		
	Tomato	18	17	36	19	8	9		
	Cucumber	11	10	17	7	13	11		
	Onion	9	6	2	1	1	4		
Fruit Consumed Often	Apple	22	20	14	9	5	7	34.68 Df-20	0.02
	Guava	22	20	44	19	16	13		
	Orange	6	9	13	9	8	8		
	Papaya	4	6	7	4	4	4		
	Banana	2	1	0	0	0	4		
Amount Of Fruit Taken Daily	Less Than One Fruit	10	16	35	10	8	10	26.12 Df-15	0.03
	One Small Cup	28	23	24	16	19	17		
	One Medium Size Cup	13	13	16	12	4	3		
	Two Medium Size Cup	5	4	3	3	2	6		
Amount Of Milk Consumed	Don't Drink	18	11	25	12	6	12	27.04 Df-15	0.02
	One Tumbler	28	39	33	18	16	22		
	Two Tumbler	8	6	10	8	7	1		
	Three Tumbler	2	0	10	3	4	1		

Table 4 Reveals That There Is An Association Between Dietary Habits (Raw Vegetable Consumed In Common, Fruit Consumed Often, Amount Of Fruit Taken Daily, Amount Of Milk Consumed) And Age Of Adolescents At 0.05 Level Of Significance

Table 5: Association Of Dietary Habits With Gender

Dietary Habits		Gender		X ² Value	P Value
		Male	Female		
Time Of Taking Cooked Vegetables	Breakfast	15	0	13.07 Df=3	0.05
	Lunch	137	39		
	Dinner	35	18		
	None	50	6		
Amount Of Cooked Vegetables	Don't Eat	41	15	7.71 Df=3	0.05
	Less Than One Small Cup	121	39		
	Once Small Cup	62	8		
	Two Small Cup	13	1		

Table 5 Reveals That There Is An Association Between Dietary Habits (Time Of Taking Cooked Vegetables, Amount Of Cooked Vegetables) And Gender Of Adolescents At 0.05 Level Of Significance.

Table 6: Association Of Dietary Habits With Religion

Dietary Habits		Religion				X ² Value	P Value
		Hindu	Christian	Muslim	Others		
Amount Of Cooked Vegetables	Don't Eat	39	8	8	1	19.31 Df=9	0.01
	Less Than 1 Small Cup	112	42	4	2		
	Once Small Cup	54	11	5	0		
	Two Small Cup	13	1	0	0		
Raw Vegetable Consumed In Common	Carrot	77	19	3	2	21.55 Df=9	0.01
	Tomato	73	19	14	1		
	Cucumber	50	19	0	0		
	Onion	18	5	0	0		
Number Of Fruit Taken Daily	Less Than One Fruit	64	11	7	3	19.85 Df=9	0.01
	One Fruit	98	37	5	0		
	Two Fruit	44	14	3	0		
	More Than 2 Fruit	12	0	2	0		

Table 6 Reveals That There Is An Association Between Dietary Habits (Amount Of Cooked Vegetables, Raw Vegetable Consumed In Common, Number Of Fruit Taken Daily) And Religion Of Adolescents At 0.01 Level Of Significance

III Conclusion

It Is Understood That The Water Consumption By Adolescents Is Far Less Than Recommended Intake. Water Is Important For Metabolic Activities And For Those Who Engage In Vigorous Physical Activities, Adequate Intake Is Essential To Avoid Dehydration. Milk Consumption Is Also Beneficial For Increasing Bone Mineral Density, Especially Among Girls. Fruits And Vegetables Have Lots Of Vitamins And Minerals Which Help Boost The Immune System And Are Important Sources Of Fiber, Vitamins, And Other Biologically Active Substances.

This Study Results Concluded That Milk, Water, Fruits And Vegetables Consumption Among The Adolescents Is Far Less Than The WHO Recommended Level And Confirms That Children And Adolescents Are Victims Of Unhealthy Behaviors: Poor Nutrition, Insufficient Daily Fruit And Vegetables. So There Is A Dire Need To Educate The Adolescents And Their Parents About The Importance Of Milk, Water, Fruits And Vegetables In Their Diet For A Healthier Life. Food Selection And Investment In Low Cost, Healthy Nutrition Is Vital For Individual's Life As It Prevents Metabolic Syndromes And Other Nutrition And Life Style Related Problems. Peer Education And Targeted Education On Balanced Nutrition At School Will Be Useful. The Problems Of Unhealthy Eating Such As Under Nutrition And Over Nutrition, Over Weight And Obesity Should Be Taught To The Adolescents And They Should Be Appraised That Healthy Nutrition At Young Age Is The Foundation For Better Adulthood. School Health Nurse Should Be Influential In Changing The Concepts, Encourage And Motivate Them For Better Eating Habits.

References

- [1] Bogart, L.M., Babey, S.H., Patel, A.I., Wang, P & Schuster, M.A. (2015), Lunch Time School Water Availability And Water Consumption Among California Adolescents, *Journal Of Adolescent Health*, 58(1); 98-103. Doi: 10.1016/J.Jadohealth.2015.09.007
- [2] Guelinckx, I (2015). Intake Of Water And Beverages Of Children And Adolescents In 13 Countries. *European Journal Of Nutrition*. 54(Suppl 2): 69–79. Doi: 10.1007/S00394-015-0955-5
- [3] Kotecha P.V. Et Al (2013) Dietary Pattern Of School Going Adolescents In Urban Baroda, India, *Journal Of Health Population Nutrition*, 31(4): 490–496. <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC3905643/>
- [4] Shokrvash B. Et Al., (2013). Fruit And Vegetables Consumption Among Adolescents: A Study From A Developing Country, *World Applied Sciences Journal*. 21 (10): 1502-1511, DOI:10.5829/Idosi.Wasj.2013.21.10.2920
- [5] Kotecha P.V. Et Al (2013) Dietary Pattern Of School Going Adolescents In Urban Baroda, India, *Journal Of Health Population Nutrition*, 31(4): 490–496. <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC3905643/>
- [6] World Health Organization (2006) Adolescent Nutrition: A Review Of The Situation In Selected South- East Asian Countries, Newdelhi. Retrieved From https://www.hopkinsmedicine.org/healthlibrary/conditions/pediatrics/healthy_eating_during_adolescence_90,P01610

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