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RESEARCH ARTICLE

EFFECT OF MEAL SKIPPING ON NUTRITIONAL STATUS OF COLLEGE STUDENTS OF KANPUR

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ABSTRACT

Breakfast, the first meal of the day, is considered the most important meal throughout the day. As nutritionist Adelle Davis famously put it back in the 1960s: "Eat breakfast like a king, lunch like a prince and dinner like a pauper". Breakfast is most commonly skipped meal more than lunch and dinner specifically in the young adult in the university study period and those who wake up late. Lack of time is the main reason behind skipping meals, in general, lack of appetite, inability to cook, fasting/religion, and not being hungry. Many people are used to be in a hurry for job, business, children's school in the morning where a filled stomach may prevent them to walk a long way. It is obvious that the irregular omission of breakfast may be effective in energy intake reduction over the next 24 hours and in this day, exercise performance may be compromised. There is no evidence that breakfast skipping reduces overeating or prevent weight gain. Some people argue that breakfast and good health is a marketing strategy by breakfast companies.

INTRODUCTION

The simple definition of breakfast is "the first meal of the day," which is consistent with the etymology to "break" the "fast". It is simply identified as "the first meal of the day," consumed within 2 hours of waking, before starting daily activities. Experts say that people who eat breakfast are less likely to overeat the rest of the day. Breakfast-eaters tend to have lower rates of heart disease, high blood pressure and high cholesterol, the American Heart Association reported in 2017. It might be better for weight loss to skip dinner, even eating an early dinner can boost calorie burn, according to Times Magazine. Moreover, it is found that Japanese people has decreased energy intake but the percentage of obese people has increased. This suggests that the timing of meals is related to obesity. However, skipping meals has become an increasingly popular part of modern life, especially in young adults. It was found that irregular omission of breakfast might be effective in energy intake reduction over the next 24 hours if the breakfast is habitually consumed and, in this day, exercise performance may be compromised. Cardiac function and sugar control mechanism disrupted along with wait gain, declined wits, mood swing, lethargy, bad breath, low cortisol, chronic inflammation, worsen periods in women commonly reported.

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MATERIAL AND METHODS

One colleges of Kanpur city were purposively selected namely CSA University Kanpur, for the study and data collection. A total 30 (both girls and boys) respondents of age group between 18 to 26 years were randomly selected for the study and collection of required information and the self-developed questionnaire was used for the data collection. For the assessment of nutritional status anthropometric measurement (height, weight and BMI (WHO, 2000) dietary habits, clinical observation (Park, 2002) , meal assessment and 24 hours dietary recall methods were used and statistically analysed by using t-test (Gupta and Kapoor, 2002)

RESULTS AND DISCUSSION

The data and results obtained from the study were discussed on the different aspect of the as per the methodology are:

Out of total 30 respondents, 2.55 per cent girls and 1.8 per cent boys were vegetarian, 2.1 per cent boys and 1.2 per cent girls were non vegetarian and 3.45 per cent boys and 4.67 per cent girls were eggitarian. Also out of 30 respondents, 6.90 per cent boys and 5.61 per cent girls were having only breakfast + dinner as their meal pattern, 12.07 per cent boys and 9.35 per cent girls were having only lunch + dinner as their meal pattern, 36.21 per cent boys and 29.91 per cent girls were having 3 meal pattern, i.e., breakfast + lunch + dinner, 31.03 per cent boys and 51.40 per cent girls were having breakfast +

Table 1. Distribution of the respondents according to the dietary pattern and habit

S. no	Particulars	Boys=15		Girls=15		Total N = 30	(%)
		N	%	N	%		
1	Dietary Pattern						
	Vegetarian	12	1.8	17	2.55	29	4.35
	Non-Vegetarian	14	2.1	8	1.2	22	3.33
	Eggitarian	2	3.45	5	4.67	7	4.24
2	Meal Pattern						
	(a) Breakfast + Dinner	4	6.90	6	5.61	10	6.06
	(b) Lunch + Dinner	7	12.07	10	9.35	17	10.30
	(c) Breakfast + Lunch + Dinner	9	1.33	6	.21 32	29.	91 53
	(d) Breakfast + Lunch + Evening snack's +Dinner	18	31.03	10	9.35	28	4.2
	(e) Early Morning+ Breakfast + Mid-Morning + Lunch + Evening snacks + Dinner + Bed Time	8	13.79	4	3.74	12	7.27

Table 2. Average nutrient intake per day by boys respondents

Parameter	Energy(kcal/day)	Protein(g/day)	Fat (g/day)	Iron(mg/day)	Calcium(mg/day)
Intake	2112.17	66.81	50.2	12.82	582.3
RDA	23.20	7.3	25	17	500
Difference	-207.83	6.81	25.2	5.83	-7.01
t-value (cal)	21.33	18.6	2.98	6.84	70.8
t-table	12.70	12.7	12.7	12.70	2.7
Result	S	s	ns	ns	s

*Significant at 0.05% level of significance

Table 3. Average nutrient intake per day by girls respondents

Parameter	Energy(kcal/day)	Protein(g/day)	Fat (g/day)	Iron(mg/day)	Calcium(mg/day)
Intake	1543.3	49.11	44.59	14.44	466.6
RDA	1900	55	20	21	600
Difference	-35.4	5.8	24.59	6.56	-133.2
t-value (cal)	9.72	17.6	2.63	5.4	7.9
t-table	12.70	12.7	12.70	12.70	12.70
Result	nS	s	ns	ns	ns

*Significant at 0.05% level of significance

Table 4. Distribution of the respondents regarding Meal Skipping

S. no	Questions	Boys=15		Girls=15		Total N = 30	(%)
		N	%	N	%		
1	Do you Skip Meals?						
	Yes	13	1.9	8	1.2	21	6.3
	No	2	0.3	7	1.05	9	2.7
2	If Yes, Why do you Skip Meals?						
	Lack of time	23	39.66	48	44.86	71	43
	Taste	5	8.62	12	11.21	17	10.30
	Cannot cook	6	10.34	11	10.28	17	10.30
	Habit	12	20.69	10	9.35	21	12.72
	Weight control	4	6.89	7	6.54	11	6.66
	Money	1	1.72	2	1.87	3	1.8
	Illness	2	3.45	7	6.54	9	5.45

lunch + evening snacks + dinner as their meal pattern, 13.79 per cent boys and 3.74 per cent girls were having early morning + breakfast + mid-morning + lunch + evening snacks + dinner + bed time as their meal pattern. Shows the average value of nutrients intake by the selected boys respondents with respect to energy, protein, fat, iron and calcium. The value obtained by calculating the average nutrient intake per day were compared with the average nutrient value of ICMR, RDA (2010) and it was observed that protein intake, fat intake and iron intake were higher than the RDA whereas, energy intake and calcium intake were less than RDA. This conclude that they were skipped meals and there may be a chances of stress, headache and depression in their day to day life. The protein intake was higher because for building their body fit and stronger they tend to consumed more proteinous food like high protein shake, banana shake, nuts, egg curry and roll, chicken etc. By applying t-test, it was found that there is significant difference between the intake and RDA for energy, protein and calcium. Shows the average value of nutrients intake by the selected girls respondents with respect to energy, protein, fat, iron and calcium. The value obtained by calculating the average nutrient intake per day were compared with the average nutrient value of ICMR, RDA (2010) and it was observed that only fat intake was higher than the RDA whereas, energy intake, protein intake, iron intake and calcium intake were less than RDA. This conclude that they were skipped meals and there may be a chances of stress, headache and depression in their day to day life and also May be prone to anaemic, obesity and suffer from micro nutrient deficiency.

By applying t-test, it was found that there is significant difference between the intake and RDA for protein only. Energy intake is influenced by the effect of foods energy density, total energy content and meal frequency and the extent to which these alter satiety. The efficacy of increased meal frequency (or snacking) regimens in causing metabolic alterations, particularly in relation to weight management (Solomon et al. 2008). Revealed that out of total 165 respondents, 70.69 per cent boys and 72.89 per cent girls were skipped meals whereas, 29.31 per cent boys and 27.10 per cent girls were did not skipped meals. Boys who skip meal because of their habit, cannot cook and lack of time and girls who skip meal because of lack of time, taste preference, weight conscious and also because of they having fast. Total 72.12 per cent respondents skipped meals due to many reasons in which 39.66 per cent boys and 44.86 per cent girls skipped meals due to lack of time, 8.62 per cent boys and 11.21 per cent girls skipped meals due to taste preference, 10.34 per cent boys and 10.28 per cent girls skipped meals because they cannot cook, 20.69 per cent boys and 9.35 per cent girls skipped meals due to habit, 6.89 per cent boys and 6.54 per cent girls skipped meals to control the body weight, 1.72 per cent boys and 1.87 girls skipped meals because of money, 3.45 per cent boys and 6.54 per cent girls skipped meals due to illness.

Conclusion

Not only breakfast, skipping a meal often creates harm to health, although fasting has its own advantage which is ritual in many religions. A healthy breakfast but not a heavy breakfast is highly recommended. Those who are in a rush can take a protein rich low volume diet. Protein shake as an alternative for breakfast is a common practice in many western countries but this discussion is not within the scope of this article. Skipping meal in IBS and gastroenteritis may found little benefit but no study ever pointed to skip a breakfast for those issues. A healthy breakfast is different for different people based on age, sex, living style and physical activities. School/University going students should never miss a breakfast causes they badly need a jumpstart of energy for the day. Diabetic people should keep in mind that the same is important for them to sensitize insulin release. Rich or poor, young or elderly, all must have a healthy refreshment in the morning for an energized and enthusiastic day start.

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