e ISSN-0976-8351 Visit us: www.researchjournal.co.in

A study on influence of lifestyle and breakfast skipping on body image concern among post graduate students

■ LIPSA DASH, MONIKA SATPATHY AND VIJAYETA PRIYADARSHINI

Received: 10.02.2017; **Revised:** 08.04.2017; **Accepted:** 25.04.2017

■ ABSTRACT: Adolescence is a transitional period and college life is an important stage as at this time like behaviours are conducive to change. Dietary intake during adolescence contributes to lifelong eating habits and the development of early risk factors for disease in adulthood. Insight into breakfast consumption of adolescents is of public health concern, for several reasons as it has been associated with positive outcomes for diet quality, BMI status and lifestyle factors. Studies suggest that eating a breakfast which contains sufficiently balanced nutrients has a beneficial impact on both student health – in terms of nutrient intake height-toweight ratio and early physical development- and cognitive skills such as focused attention and memory recall. In the research study the researcher had studied aiming on the objectives like - to access association of body image in skipping breakfast, lifestyle of post graduate students, impact of skipping breakfast on memory and concentration, taking 46 (Female) post graduate students as sample size of Sambalpur University. According to the results of the current study it was found that 60.87 per cent agreed whereas 39.13 per cent denied, that students breakfast skipping shows an impact on memory and 82.6 per cent agreed whereas 17.4 per cent denied that they felt difficulty in doing their work and concentrate if they do not consume breakfast. As per BMI 54.35 per cent were under weight, 36.96 per cent were normal weight and 8.69 per cent were obese, respectively. A significant variation in life style and body image was observed.

See end of the paper for authors' affiliations

LIPSA DASH

Department of Home Science, Sambalpur University, BURLA (ODISHA) INDIA Email: dashlipsa28@gmail.com; lipsadash@suniv.ac.in

■ KEY WORDS: Lifestyle, Breakfast skipping, Body image, Concentration, Post graduate students.

■ HOW TO CITE THIS PAPER: Dash, Lipsa, Satpathy, Monika and Priyadarshini, Vijayeta (2017). A study on influence of lifestyle and breakfast skipping on body image concern among post graduate students. *Asian J. Home Sci.*, 12 (1): 131-134, DOI: 10.15740/HAS/AJHS/12.1/131-134.

dolescence and puberty bring a variety of physical, social and emotional changes and is stated as a transitional period. Usually the college life is of great significant stage as at this phase behaviours are conducive to change (Fujiwara and Nakata, 2004; Fujiwara et al., 2007 and Cerin et al., 1993). During adolescence, there is a possibility of heightened self-awareness and concerns of how an adolescent girl's

peers portray her (Davidson and McCabe, 2006).

Dietary habits are fundamental factors that influence human life styles and individual quality of life. Additionally, dietary habits in young women may determine their quality of life in subsequent middle or old age and should be evaluated from the perspective of total benefit throughout the whole life (Deshmukh-Taskar *et al.*, 2010). Breakfast is widely acknowledged to be the most

important meal of the day. Children who habitually consume breakfast are more likely to have favourable nutrient intakes including higher intake of dietary fibre, total carbohydrate and lower total fat and cholesterol. But unfortunately adolescent girls in particular, because of their excessive concern with body weight or obsession with thinness, are reported with moderate level of disordered eating behaviours (Madanat et al., 2011).

Breakfast consumption is also associated with other healthy lifestyle factors (Sandercock et al., 2010). Children who do not consume breakfast are more likely to be less physically active and have a lower cardio respiratory fitness level. Consuming breakfast can also contribute to maintaining a body mass index (BMI) within the normal range (Szajewska and Ruszczynski, 2010). Two systematic reviews report that children and adolescents who habitually consume breakfast [including ready-to-eat-cereal (RTEC)] have reduced likelihood of being overweight (Balvin et al., 2013). Breakfast also makes a large contribution to daily micronutrient intake (Gibson, 2003). Iron, B vitamins (folate, thiamine, riboflavin, niacin, vitamin B6, and vitamin B12) and Vitamin D are approximately 20–60 per cent higher in children who regularly eat breakfast compared with breakfast skippers.

Objectives:

Keeping in view the above facts, the present study has therefore the following specific objectives

- To access the association of body image in skipping breakfast
 - To study the lifestyle of post graduate students.
- To access the impact of skipping breakfast on memory and concentration

■ RESEARCH METHODS

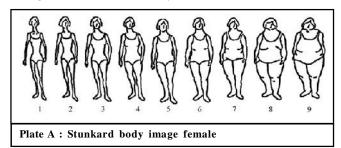
The present study is a cross sectional study carried out in the campus of Sambalpur University. A descriptive cum exploratory study was planned for a period of August 2016 to September 2016. The targeted population of this study was 46 female university students who were randomly selected and the selection was based on convenience. A structured questionnaire was developed in keeping view the objectives of the study to assess the general information, anthropometric profile, life style habits and the impact of breakfast skipping on various physical and cognitive abilities of the respondents. The data has been analysed by suitable statistical methods.

The anthropometric measurements:

Height of the respondents was measured while the subject was standing without foot wear, to the nearest 0.1 cm, using a portable Anthropometry rod. Weight was measured with the subject standing and wearing light clothes using a portable electronic weight machine. The formula for Body Mass Index (BMI) prescribed by WHO, weight (Kg)/ height (m²) was used to calculate Body Mass Index (BMI) and international cut-off for BMI was used for classification of subjects as malnourished/ malnutrition (BMI below 18.0 kg/m²), normal 18<BMI>25kg/m²), over weight (25 <BMI<30 kg/m²) and obesity (BMI>30kg/m²) (Priyadarshini Vijayeta, 2015).

Body image scale:

The Body Image scale consists of nine female Fig. 1–9, ranging from very thin to very obese (Stunkard et al., 1983) (Plate A). Participants were asked to choose one figure that they thought represented their body currently as current body size (CBS) and one that they thought to be the ideal body size (IBS).



■ RESEARCH FINDINGS AND DISCUSSION

According to the above Table 1 in relation to BMI it was found that above 50 per cent respondents were under weight, 39.96 per cent were normal and about 8.96 per cent only were obese with the mean 21.36 and $SD \pm 4.43$.

Table 1: Distribution of respondents according to BMI and preference of body image				
BMI	%			
Under weight	54.35			
Normal weight	36.96			
Obese	8.69			
Mean	21.36			
±SD	4.43			

Table 2 : Distribution of respondent according to life style						
Particulars	Yes	%	No	%		
Life style of post graduate students						
Eating while watching T.V/Video/Movie	29	63.04	17	36.95		
Practicing physical activity	5	10.86	41	89.13		
Eating late at night	12	26.08	34	73.91		
Eating when feeling bored	8	17.39	38	82.6		
Hours spending in mobile		F		%		
< 3 Hours	1	13		28.26		
3 Hours+	3	33		71.74		
Total	2	46		100		
Hours using internet						
Not using		3		6.52		
< 3 Hours	2	28		60.87		
3 Hours+	1	15		32.60		
Total	4	46		99.99		
Hours of sleeping						
<7 Hours	3	32		69.56		
7 Hours+	1	14		30.43		
Total	4	46		99.99		

Table 3: Distribution of respondent on impact of skipping breakfast		
Impact of skipping breakfast on selected respondents	Agree (%)	Disagree (%)
Impact on memory	60.87	39.13
Impact on concentration	82.60	17.4
Impact on attendance	33.97	66.03
Impact on physical activity	74.28	25.72

Plate A show the preference of body image from the Stunkard scale. The study revealed that most of the girls having normal weight and about those who were underweight preferred the body image of Fig. 3 followed by Fig. 4 and 5 i.e. 34.78 per cent and 13.4 per cent, respectively where as 13 per cent obese girls preferred the body image of Fig. 4.

Table 2 reflect that most of the respondents were leading a sedentary lifestyle. It also states that only 10.86 per cent were stated as physically active whereby affecting their life style, eating habits i.e. 63.04 per cent preferred watching T.V/movie/video for food intake. The time spent on mobile, internet was found to be of above 3 hours i.e. 71.74 per cent and 32.6 per cent respondents, respectively.

Table 3 states that impact of breakfast skipping was found higher on concentration which is about 82.6 per cent whereas regarding physical activity it is about 74.28 per cent, followed by memory which is 60.87 per cent, and in relation to class attendance it is observes as 39.97 per cent, respectively agreed that skipping of breakfast shows impact on the mentioned several categories.

Conclusion:

Fast food has become an important component of the dietary pattern for adolescents or young adults, and their fast food eating is likely to continue and rise. The widespread use of fast food among adolescents and young adults is of concern due to the high fat and calorie intake, which may cause obesity and obesity-related diseases. The study demonstrated that university students tend to have poor eating habits i.e. preferring the consumption of unhealthy food and skipping breakfast which has an adverse effect on their health. So an immediate step has been taken to replace the unhealthy food by preparation of tasty, convenient, and nutritious alternatives to fast food. At the same time specific health education programmes, dietary guidelines and effective public awareness campaigns, proper information, education and communication (IEC) activities could be initiated to address the unhealthy lifestyle of university students and to improve their health status. Finally, government legislation is needed to regulate the marketing of fast food.

Authors' affiliations:

MONIKA SATPATHY, Department of Home Science, Sambalpur University, BURLA (ODISHA) INDIA

(Email: mishraseem768027@gmail.com)

VIJAYETA PRIYADARSHINI, Department of Home Science, Govt.

Women's College, KEONJHAR (ODISHA) INDIA (Email: vijayeta.priyadarshini@gmail.com)

■ REFERENCES

Balvin Frantzen, L., Treviño, R.P., Echon, R.M., Garcia-Dominic, O. and Dimarco, N. (2013). Association between frequency of ready-to-eat cereal consumption, nutrient intakes, and body mass index in fourth-to sixth-grade low-income minority children. J. Acad. Nutr. Diet., 113: 511-519.doi: 10.1016/j.jand.2013.01.006.

Cerin, A., Collins, A., Landgren, B.M. and Eneroth, P. (1993). Hormonal and biochemical profiles of premenstrual syndrome. Acta Obstet Gynecol Scand, 72: 337-343.

Davidson, T.E. and McCabe, M.P. (2006). Adolescent body image and psychosocial functioning. J. Soc. Psychol., 146: 15-30.

Deshmukh-Taskar, P.R., Nicklas, T.A., O'Neil, C.E., Keast, D.R., Radcliffe, J.D. and Cho, S. (2010). The relationship of breakfast skipping and type of breakfast consumption with nutrient intake and weight status in children and adolescents: the National Health and Nutrition Examination Survey 1999-2006. J. Am. Diet. Assoc., 110: 869–878.doi:10.1016/j.jada. 2010.03.023.

Fujiwara, T. and Nakata, R. (2004). Current problems of food intake in young women in Japan: their influence on female reproductive function. Reprod. Med. Biol., 3: 107-114.

Fujiwara, T., Sato, N., Awaji, Sakamoto, H. and Nakata, R. (2007). Adverse effects of dietary habits on menstrual disorders in young women. Open Food Sci. J., 1: 24-30.

Gajre, N.S., Fernandez, S., Balakrishna, N. and Vazir, S. (2008). Breakfast eating habit and its influence on attentionconcentration, immediate memory and school achievement. Indian Pediatrics, 45 (10): 824-828.

Gibson, S. (2003). Micronutrient intakes, micro nutrient status and lipid profiles among young people consuming different amounts of breakfast cereals: further analysis of data from the National Diet and Nutrition Survey of Young People aged 4 to 18 years. Public Health Nutr., 6: 815–820.doi: 10.1079/ PHN2003493.

Hoylanda, A. (2009). A systematic review of the effect of breakfast on the cognitive performance of children and adolescents. Nutri. Res. Rev., 22 (2): 220-243.

Katie, Adolphus, C.L. (2013). The effect of breakfast on behaviour and academic performance in children and adolescents. Frontiers Human Neuroscience, 7: 425.

Madanat, H.N., Lindsay, R. and Campbell, T. (2011). Young urban women and the nutrition transition in Jordan. Public Health Nutri., 14 (4): 599-604.

Niemeier, H.M., Raynor, H.A., Lloyd-Richardson, E.G., Rogers, M.L. and Wing, R.R. (2006). Fast food consumption and breakfast skipping: predictors of weight gain from adolescence to adulthood in a nationally representative sample. J. Adolescent Health, 39: 842-849.

Priyadarshini, Vijayeta (2015). Concern and dissatisfaction about body image and body weight among the urban adolescent girls. *Asian J. Home Sci.*, **10** (1): 155-160.

Sandercock, G.R.H., Voss, C. and Dye, L. (2010). Associations between habitual school day breakfast consumption, body mass index, physical activity and cardio respiratory fitness in english school children. Eur. J. Clin. Nutr., 64: 1086–1092. doi:10.1038/ejcn.2010.145.

Silliman, K., Rodas-Fortier, K. and Neyman, M. (2004). A survey of dietary and exercise habits and perceived barriers to following a healthy lifestyle in a college population. Californian J. Health Promot., 2 (2): 10-19.

Stunkard, A.J., Sorenson, T.I. and Schulsinger, F. (1983). Use of the Danish Adoption Register for the study of obesity and thinness. In: Kety S, Rowland LP, Sidman RL, Matthysse SW, editors. The Genetics of Neurological and Psychiatric Disorders. Raven Press; New York: 1983. pp. 115-120.

Szajewska, H. and Ruszczynski, M. (2010). Systematic review demonstrating that breakfast consumption influences body weight outcomes in children and adolescents in Europe. Crit. Rev. Food Sci. Nutr., 50: 113-119.doi: 10.1080/104083 90903467514.

