

# THE RELATIONSHIP BETWEEN BREAKFAST AND ACADEMIC ACHIEVEMENT AMONG STUDENTS OF MEDICAL COLLEGES AT AL ANDALUS UNIVERSITY FOR MEDICAL SCIENCES

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## ABSTRACT:

**Background:** Breakfast is one of the most important meals for children and adults alike. It also plays a role in controlling weight and avoiding hunger and has a role in the development of educational abilities and mental performance. These results may affect the current educational and professional performance of medical students who will become important health care providers in the future. Thus, early detection, access to medical students' attitudes towards eating along with their food behavior is needed to achieve better results for primary prevention.

**Methods and Materials:** This study was conducted randomly among students of medical colleges. A questionnaire was designed based on the EAT-26 test model. The questionnaire covered fatigue, lifestyle, and academic performance. Fatigue intensity was measured using a fatigue scale.

**Results:** The study included 649 students who found that the number of people eating breakfast regularly 134 students (20.6%) and sometimes 182 students (28%) while those who eat breakfast rarely or never eat 333 students (33.3%) mostly from the Faculty of Medicine, especially males, The majority of whom were smokers. Most students (78%) were tired, either always or sometimes during their time at university, when they did not eat breakfast in the morning, while 90% of the students were more active after breakfast. 58.7% of the students said they did not feel the concentration of lectures when they did not eat a meal, while 90.6% of the students said they were more focused and absorbed permanently or more often when they ate breakfast.

**Conclusion:** Breakfast for university students is one of the most important meals that must be adhered to, because it will increase the focus and scientific production and raise the level of academic performance, and neglect of breakfast will increase fatigue and tiredness during the work and affect the health status of future doctors. The development of a correct curriculum by the university to improve this will reflect positively on the health and achievement of students.

**Keywords:** breakfast, medical students, academic achievement, AL Andalus University.



## INTRODUCTION:

Often people ignore breakfast, arguing that he has woken up late, does not have enough time to prepare food, or that his appetite is low in the morning, and he drinks some drinks, such as coffee and others. Breakfast is one of the most important meals for children and adults

alike.<sup>[1]</sup> It also plays a role in weight control and avoid feeling hungry and has a role in the development of educational capacity and mental performance in children, and a study on the importance of eating children breakfast regularly, found that this makes them more able to

focus in school and in addition, Studies have shown that educational achievement for children who eat breakfast is much better than those who do not eat breakfast.<sup>[2]</sup> Eating disorders are common problems in adolescence or during school years, which may affect the psychological and physical aspects of students.<sup>[3]</sup> It has been reported that female medical students are much more susceptible to eating disorders than to male eating habits. In addition, medical students who recorded any history of eating disorders accounted for a greater proportion of social deterioration later when compared with other non-medical groups.<sup>[4]</sup> These results may affect the current educational and professional performance of medical students who will become important health care providers in the future. Thus, early detection, access to medical students' attitudes towards eating along with their dietary behavior is needed to achieve better results for primary prevention.<sup>[5]</sup>

Fatigue is defined as difficulty in early or sustained activities, a common symptom. Up to half of the adult population is generally tired, and medical students are no exception, because fatigue is associated with weak academic achievement, such as poor academic performance and absenteeism.<sup>[6]</sup> The impact of fatigue on medical students should be emphasized. In children and adolescents, weak dietary habits, such as skip breakfast and irregular meals, are associated with poor school performance.<sup>[7-8]</sup>

This study was conducted among students of the first three years of medical colleges to investigate the link between skipping breakfast and fatigue or poor concentration during classes or lack of academic achievement in order to develop a strategy that gives students enough attention to their health and nutritional status and increase the amount of their academic achievement.

## **MATERIALS AND METHODS:**

The study was conducted in a random survey among students of medical colleges (human medicine, dentistry, pharmacy) at the University of Andalusia for medical sciences in Tartous, Syria. Between 12-9-2017 and 11-11-2017. In order to study the dietary habits of students in medical colleges, especially those related to eating the breakfast meal in the morning before attending the university and the impact on attention and concentration in lectures, especially the first morning lecture and the second.

A questionnaire was designed based on the sample (The Eating Attitudes Test-26) (EAT-26) and included the characteristics of the studied sample in terms of age, gender, school year, weight and height. The questionnaire also covered fatigue, lifestyle, and academic performance. Fatigue intensity was measured using the fatigue scale.<sup>[9]</sup> Ethical approval was obtained from the University administration. A detailed explanation of the questionnaire was provided to all participants prior to data

collection. The purpose of the study has been explained by the designers and obtain verbal approval from the participants. Participants were also assured about strict confidentiality of their information. The poll was conducted during the day of a public lecture that asked to fill out the questionnaire. It took about 15 to 20 minutes to complete the questionnaire. Authors provided assistance when needed to ensure optimal collection of information. The collected data has been verified, verified and used in the final analysis. Statistical analysis was performed using the SPSS (Statistical Package for Social Sciences) version 22. The frequency (and percentage) of the class data was calculated and compared between the groups; Kay Square was tested. A P value of less than 0.05 was considered to be of statistical significance.

## RESULTS:

The study involved 649 students from medical colleges at AL Andalus University with 367 students from the Faculty of Medicine, 182 students from the Faculty of Pharmacy and 100 students from the Faculty of Dentistry. There were 278 first-year students, 143 second-year students, 212 third-year students and 16 fourth-year students. The number of male participants was 380 students versus 269 females. Table 1:

We found that the number of people who eat breakfast regularly 134 students and sometimes 182, while those who eat

breakfast rarely or never eat 333 students. We found that students (224 students) who rarely or never eat breakfast are from the Faculty of Medicine (61% of the participating medical students), especially males, the majority of whom are smokers. The highest proportion of breakfast attendees were among the students (28%). Table 2.

We found that most students (508 students) feel tired either at all times or sometimes during their time at university when they do not eat breakfast in the morning, while 586 students are more active after breakfast. A total of 381 students said they did not feel the focus of lectures when they rarely ate breakfast, while 588 students said they were more focused and absorbed permanently or more often when they ate breakfast.

Almost half of the students sometimes had time for breakfast, while 40% of the students did not have the time to eat breakfast only rarely or permanently. We also found that most students (96%) felt that breakfast meal is necessary to increase activity and improve concentration, absorption and health maintenance. Table 3:

We found that the students' sense of activity in the lectures is more related to the teacher of the material and its style in explaining and then eating meals, while the students' sense of inactivity was associated with the lectures not to eat breakfast, mainly the timing of the

lecture and the teacher of the article with the importance of statistical.

mental activity and scientific achievement.

## DISCUSSION:

People need energy to carry out their daily activities. This energy is obtained by eating. Breakfast is the first meal of the day. It is the basis of human activity and concentration throughout the day. Breakfast helps to fill blood glucose levels in the morning. , Especially for the brain, which does not contain any sugar of the population, which reflects positively on the state of concentration and the student's ability to absorb, where one-third of students lose focus when they do not eat breakfast, but the concentration of most students almost when they eat breakfast.<sup>[10]</sup> Breakfast is one of the essentials that all students must adhere to in their school years because they have an impact on concentration and memory together.<sup>[11]</sup> In our study more than half of the students were not committed to eat breakfast or do not eat it at all, and a large part of them were smokers, as Smoking makes a person delirious that he has energy and activity and energizes the high level of nicotine but without the existence of real energy in the body, prompting smokers to ignore meals, especially breakfast and dependence The rest of the day on fast meals causes multiple metabolic disorders.<sup>[12]</sup> Despite the importance of breakfast for each person, but the importance of the double for students; helping them to absorb their lessons and increase their

The number of students going to school without breakfast is increasing and continuous. This may be due to parents' preoccupation with work or the family's failure to eat breakfast or to wake up and wake up late, leading to their inability to breakfast at home [13,14]. The students 'or students' sleep time in the evening makes them very much in need of breakfast because they will feel very hungry, so breakfast, even in small quantities, is considered one of the most important meal.<sup>[15]</sup>

## CONCLUSION:

The breakfast meal for university students is one of the most important meals that must be adhered to, because it will increase the concentration and scientific production and raise the level of academic performance, and the neglect of breakfast will increase fatigue and fatigue during the work and affect the health status of future doctors. The development of a correct curriculum by the university to improve this subject will reflect positively on the health and achievement of students. It is important to note the need for students to participate in this matter in terms of implementation and planning.

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**TABLES:**

**Table (1): Percentage Distribution of Participants by Medical College and Year of Study**

	Male	female	total
<b>College</b>	380	269	649
Medicine	244	123	367
Dentistry	77	23	100
<b>faculty of Pharmacy</b>	59	123	182
<b>Academic Year</b>			
First year	146	132	278
Second year	88	55	143
Third year	93	119	212
Fourth year	11	5	16
Smoking	241(63%)	93(23%)	

**Table2: Breakfast rate among students**

	Male			Female			total
	Medicine	Dentistry	Pharmacy	Medicine	Dentistry	Pharmacy	
Always	34	16	20	22	34	8	134
Sometimes	53	19	28	34	41	7	182
Rarely	33	5	14	25	16	8	101
Never	124	19	15	42	32	0	232
Total	244	59	77	123	123	23	649

**Table3: Students' view of the breakfast special**

	Always	Sometimes	Rarely	Never
Do you feel tired without breakfast?	308	200	71	70
Do you feel active after breakfast?	407	179	42	21
Do you focus on the lecture without breakfast?	98	170	182	199
Do you get more focused if you break your fast?	458	130	37	24
Do you take supplements instead of breakfast?	27	95	78	449
Do you have breakfast during the holidays?	478	127	27	17
Do you have time to eat breakfast?	47	339	152	111
In your opinion: Is breakfast necessary?	580	47	8	14

Table (4): causes of activity and inactivity in lectures		
	sense of activity in the lecture	sense of inactivity in the lecture
Subject of the lecture	97	82
Professor	335	163
timing	108	164
With Breakfast	109	-
without breakfast	-	240
total	649	649