



THE BREAKFAST PATTERNS, IT'S CORRELATION TO BODY MASS INDEX AND THE SATISFACTION ON BREAKFAST AVAILABLE AT THE FACULTY PREMISES AMONG FIRST AND THIRD YEAR MEDICAL UNDERGRADUATES OF UNIVERSITY OF KELANIYA



Research group D.2.3.

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INTRODUCTION

A well-balanced diet is fundamental to human health and wellbeing, including a well consumed breakfast. (1)
 First year students are exposed to new routines in regards to academic schedules, and are susceptible to irregular dietary habits, while third year students are introduced for the first time to the clinical field, with hospital appointments. (2) (3)

OBJECTIVES

- To describe the breakfast patterns among
- To compare breakfast patterns among
- To determine the level of satisfaction of
- To determine the perceived factors associated with poor breakfast habits among
- To determine and compare the association of breakfast patterns with the sex and BMI; of first and third year Medical Undergraduates of the Faculty of Medicine, University of Kelaniya

MATERIALS AND METHODS

Study Design: Cross Sectional Study with an analytical component
Study Setting and the population: First and third year Medical Undergraduates of Faculty of Medicine, University of Kelaniya
Study Period: March 16th 2019- December 30th 2019
Sample size and sampling: Sampling was not conducted. All students of the study population was included.
Study Instruments and data collection:

- Semi-structured, self-administered Questionnaire was used to assess the breakfast patterns
- The food available in the canteen was observed using a observation checklist
- Body Mass Index was assessed using a digital weight scale and a stadiometer

Data Analysis: Descriptive statistics was used to describe breakfast patterns and level of satisfaction. Chi Square test was used to compare the breakfast patterns between the two batches and determine the level of association with sex and BMI. Perceived factors were analysed qualitatively using thematic analysis.

RESULTS

Description of Study Participants

Table 1: Description of Study Participants according to sex and year of study

Characteristic	n (%)
First Year	Male 68 (42%)
	Female 93 (58%)
Third Year	Male 60 (37%)
	Female 101 (63%)
Total	322

Only 61% of 1st years 36% of 3rd years consumed breakfast daily

Breakfast Patterns according to Type and Frequency

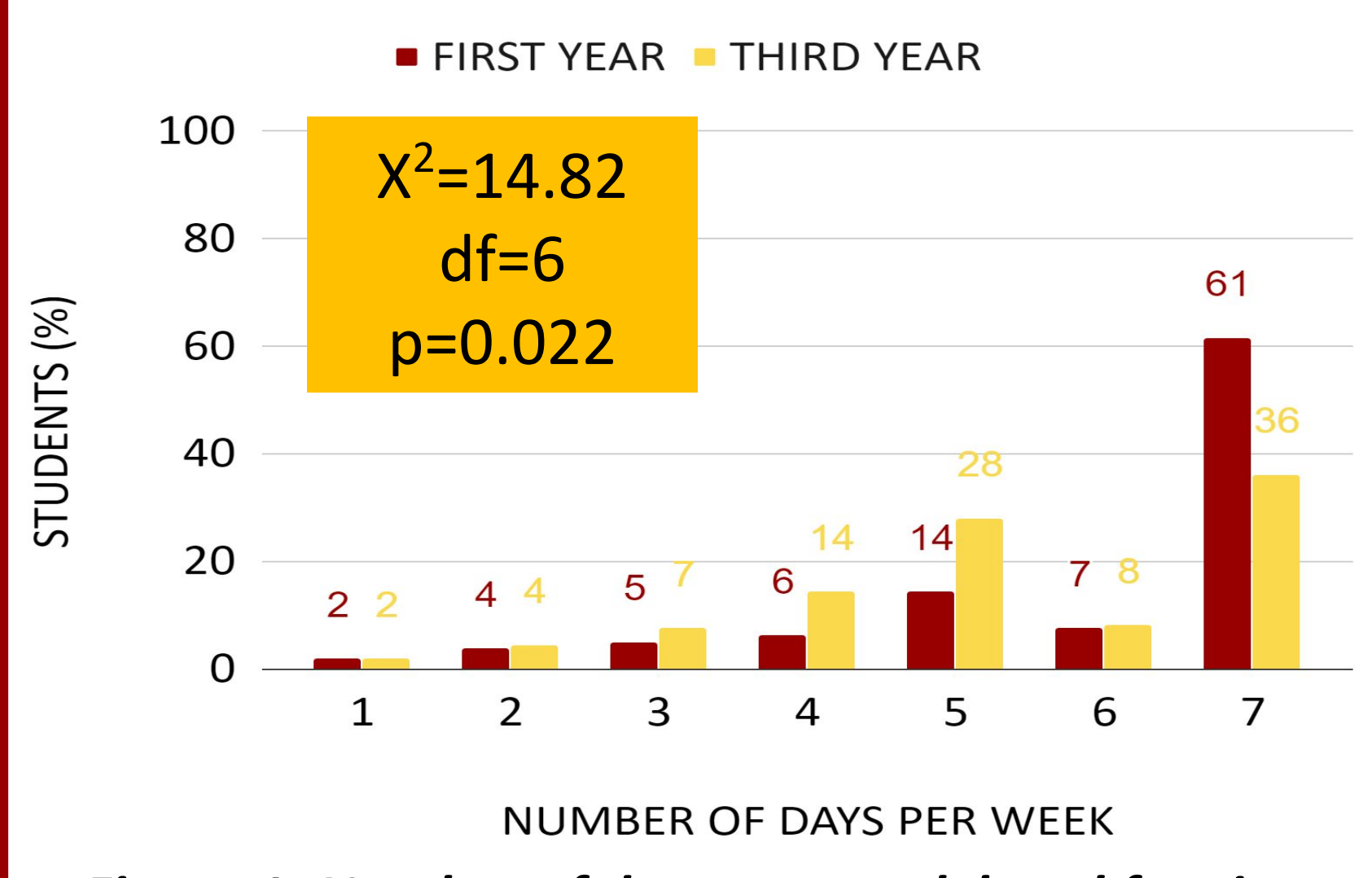


Figure 1: Number of days per week breakfast is consumed vs. year of study

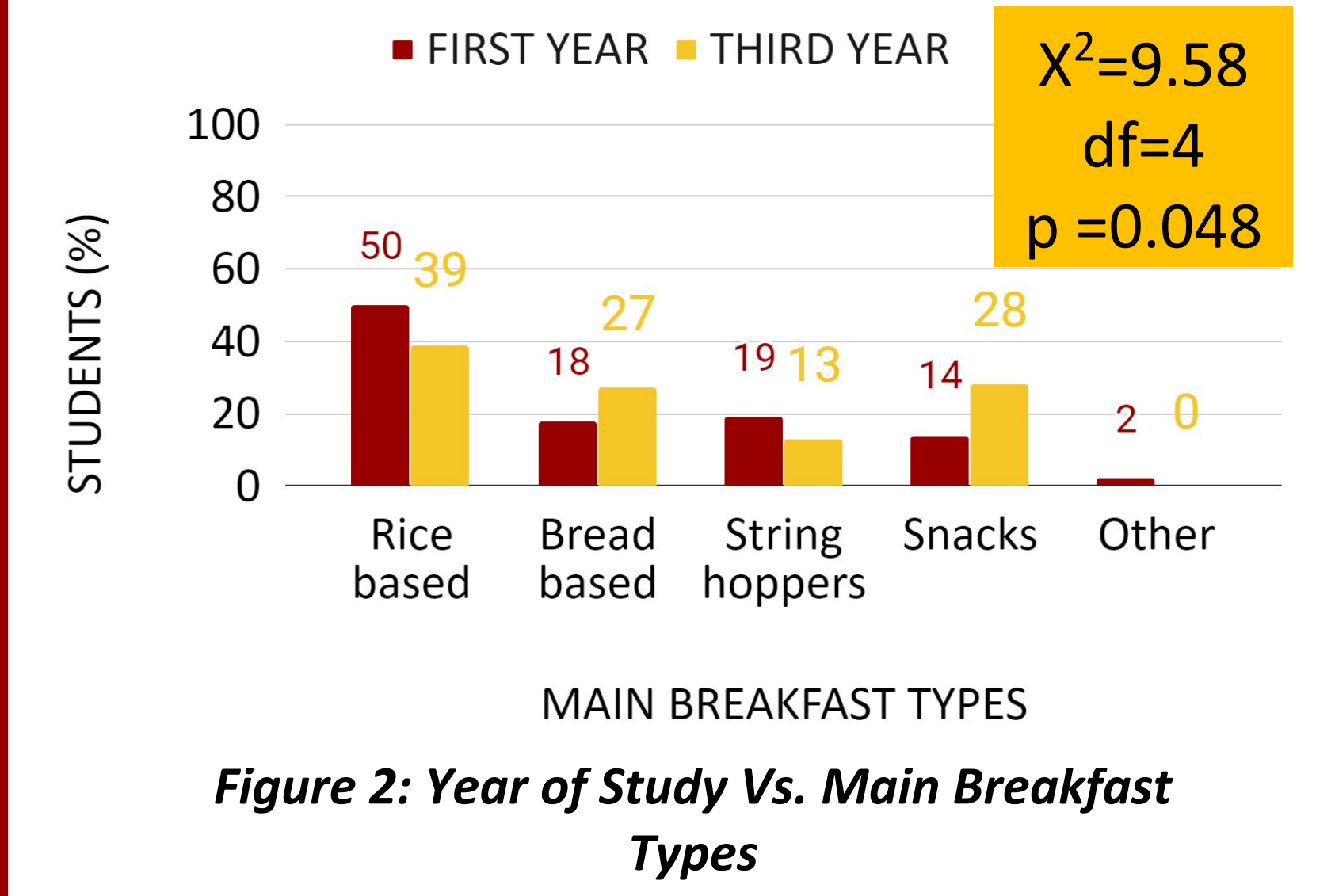


Figure 2: Year of Study Vs. Main Breakfast Types

Table 2: Ten Commonest Types of Breakfasts Consumed based on Year of Study

FIRST YEAR (N=108)		THIRD YEAR (N= 86)	
TYPE	(%)	TYPE	(%)
Rice + Curry	30.6	Milk Rice + Milk Packet	14.0
Rice + Curry + Tea	21.3	Rolls	12.8
String Hoppers	13.9	Sandwiches + Milk Pkt	12.8
Bread + Curry	9.3	Rice + Curry + Tea	10.5
String Hoppers + Tea	5.6	Milk Packet	10.5
Milk Rice + Tea	4.6	Rice + Curry	10.5
Buns + Milk Pkt	4.6	Bread + Curry + Tea	10.5
Milk Rice Only	3.7	Rice + Curry + Milk Pkt	7.0
Bread + Curry + Tea	3.7	String Hopper	5.8
Rolls	3.7	Bread + Curry + Milk Pkt	4.7

Satisfaction Level of Breakfast Served in the Faculty

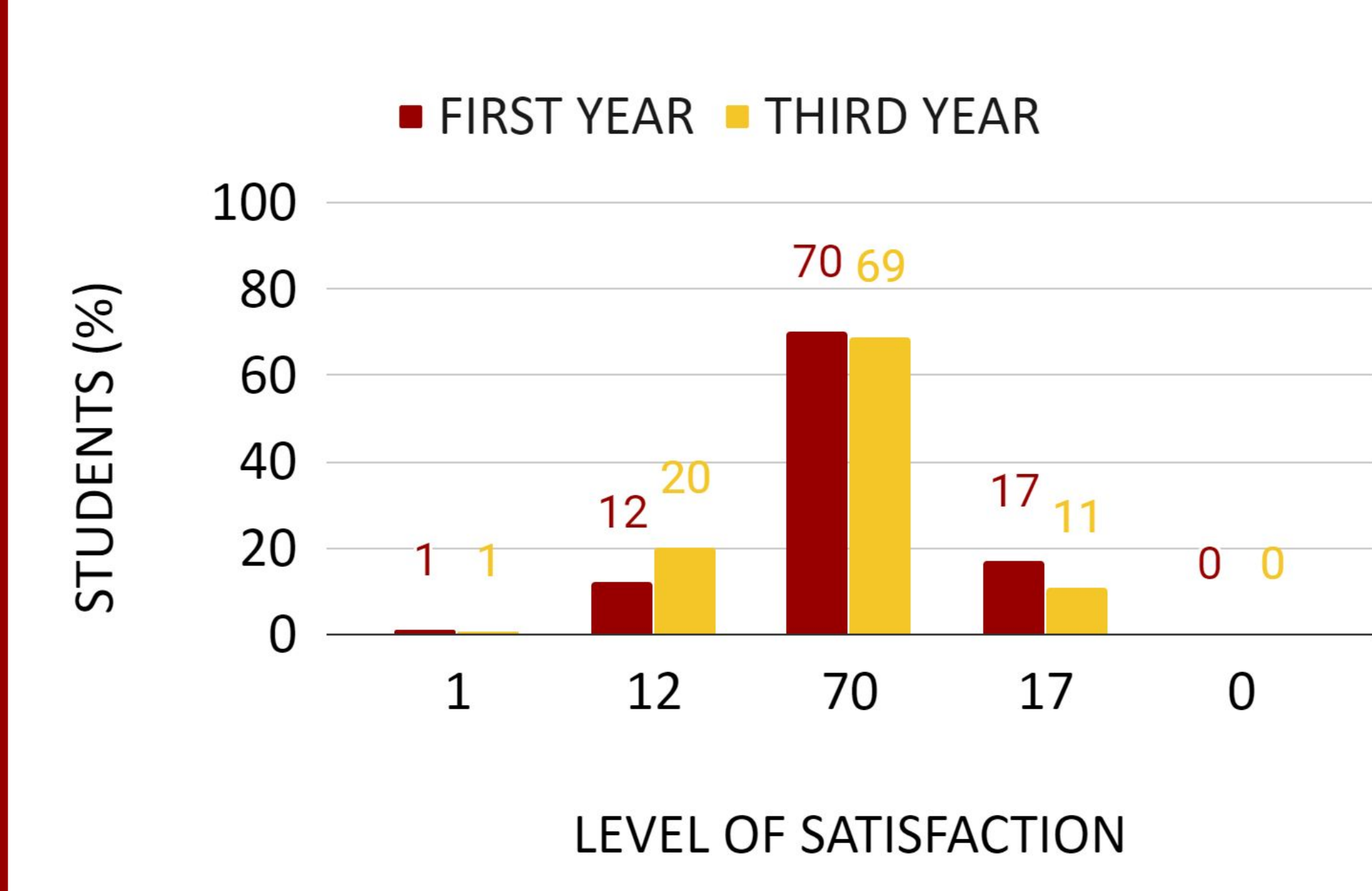


Figure 3: Proportion of Students Vs. Level of Satisfaction

The satisfaction rating of 5-6 of maximum of 10 was the highest in both first and third-years (70%;69%) (Figure 3)

Perceived Factors for Poor Breakfast Habits

- OVERSLEPT
- CANTEENS HAVE POOR HYGIENIC STANDARDS
- CANTEEN FOODS HAVE NO VARIETY
- THE CANTEENS DO NOT SERVE APPETIZING AND HEALTHY MEALS FOR BREAKFAST!
- LONG QUEUE LINES IN THE CANTEENS
- FOOD SERVED IN THE CANTEENS IS NOT PRE-HEATED
- WASNT IN THE MOOD FOR BREAKFAST
- FOOD ITEMS AVAILABLE IN THE CANTEENS QUICKLY RUN OUT
- FOOD SERVED IN THE CANTEENS IS TOO OILY

Figure 4: Common perceived factors in both years

The major concerns related to food served in faculty premises were:
 Palatability
 Healthiness
 Variety

Association of Breakfast Patterns with Sex and BMI

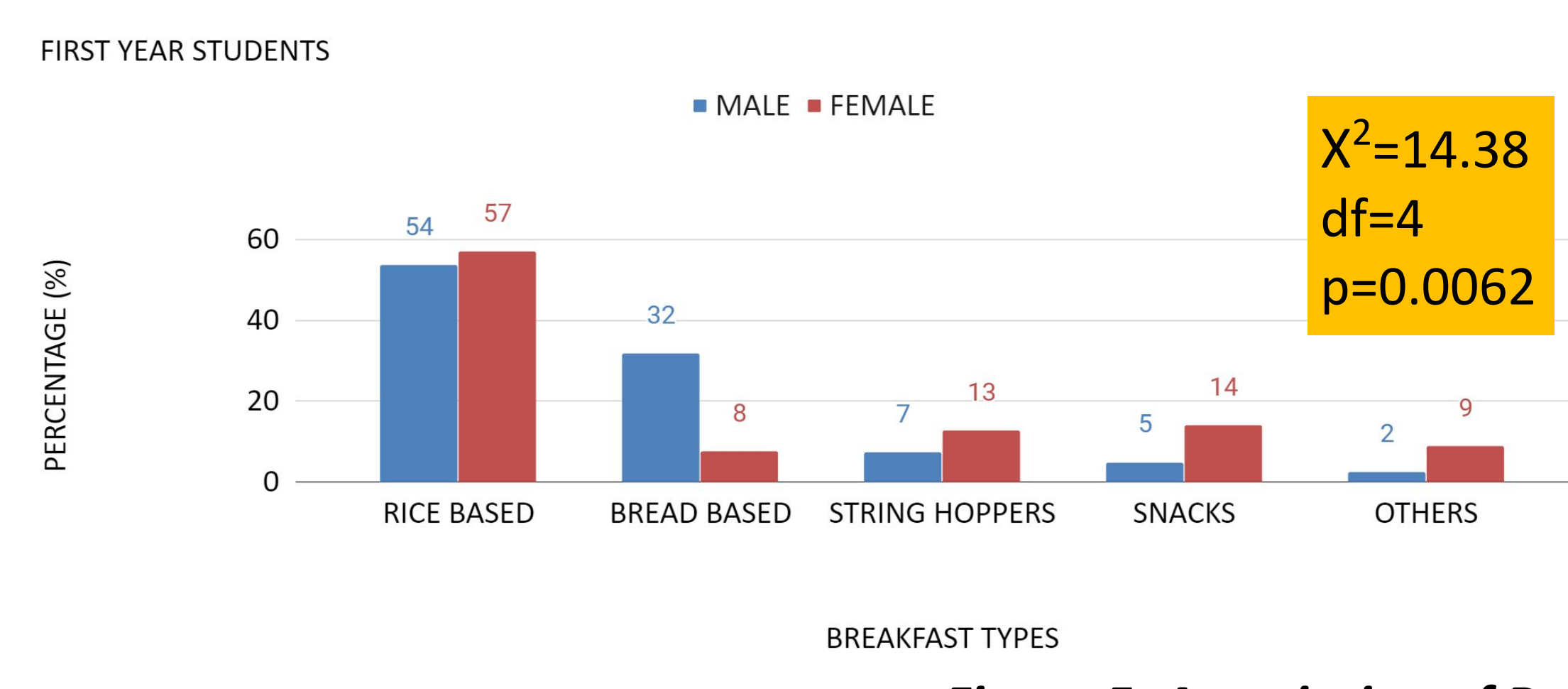


Figure 5: Association of Breakfast Patterns (Type) with Sex

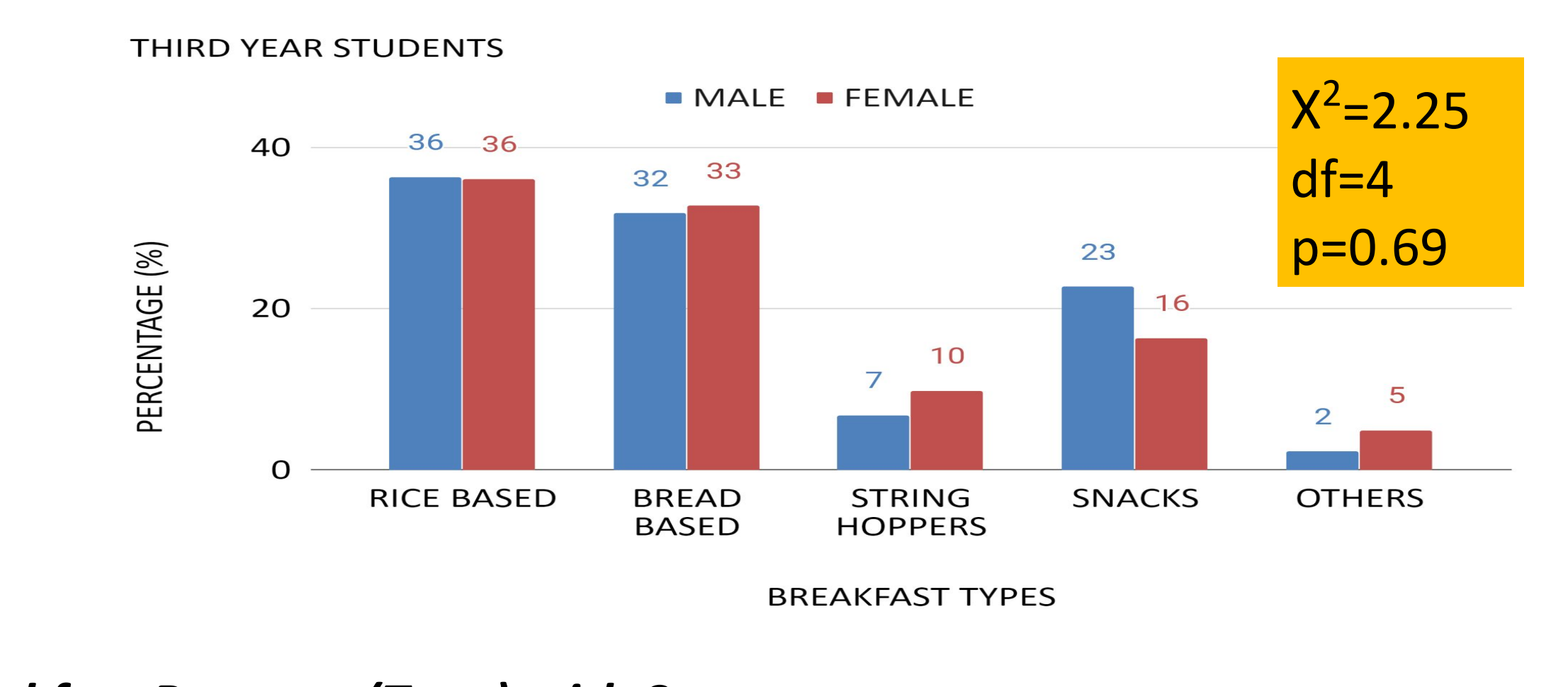


Figure 6: Association of Breakfast Patterns (Type) with BMI

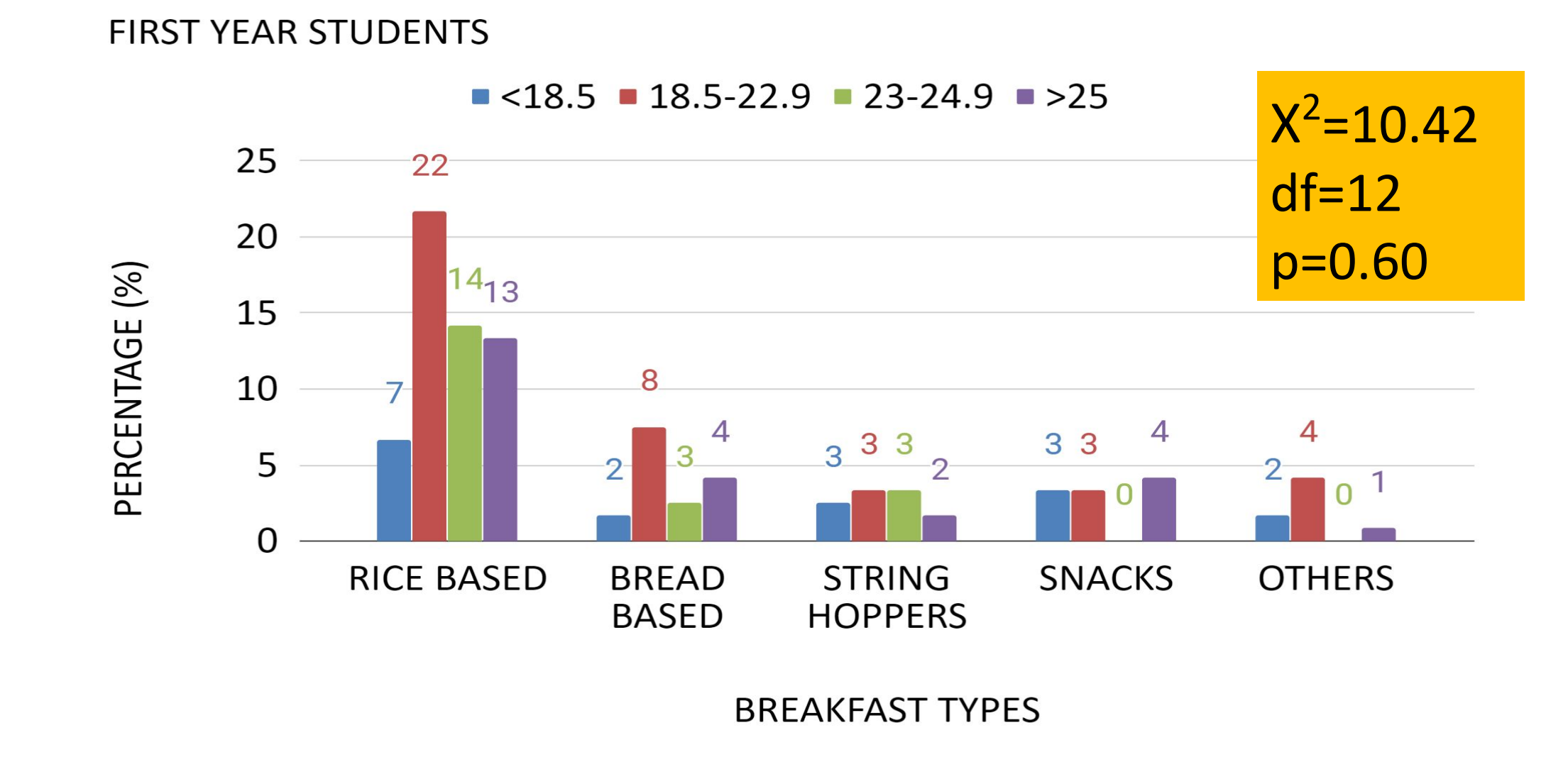


Figure 7: Association of Breakfast Patterns (Type) with BMI

Breakfast types amongst male and female first-years was significantly different (Figure 5). The breakfast types was not associated with BMI (Figure 6).

LIMITATIONS

Use of self-reported may have generated an information bias as under-reporting of unhealthy practices may have occurred by the study participants.

CONCLUSION AND RECOMMENDATIONS

- Skipping breakfast was seen in both batches but was higher in the third year students.
- Type of breakfast was associated with the year of study.
- There was no association between breakfast type and BMI.
- Commonest perceived factor of skipping breakfast was unpalatability of canteen food.
- Canteen services should be improved to improve breakfast habits of medical students.

REFERENCES

(1) IvyRose. What is a Balanced Diet? [Internet]. [cited 2019 Jul 26]. p. 1. Available from: <https://www.ivyroses.com/HumanBiology/Nutrition/What-is-a-Balanced-Diet.php>
 (2) Sajwani RA, Shoukat S, Raza R, Shiekh MM, Rashid Q, Siddique MS, et al. Knowledge and practice of healthy lifestyle and dietary habits in medical and non-medical students of Karachi, Pakistan. J Pak Med Assoc. 2009
 (3) Gupta S, Ray T, Saha I. Overweight, obesity and influence of stress on body weight among undergraduate medical students. Indian J Community Med. 2009

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