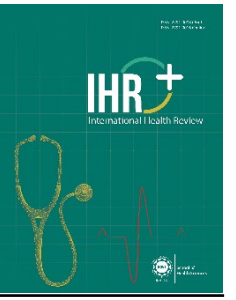
International Health Review (IHR)
Volume 6 Issue 1, Spring 2026
ISSN$_{(P)}$: 2791-0008, ISSN$_{(E)}$: 2791-0016
Homepage: https://journals.umt.edu.pk/index.php/ihr



Title:	**Comparison of Intuitive Eating Practices between the Students of Nutrition Majors and Non-health Science Majors**
Author (s):	Fatima Naqvi[1], Samawia Qureshi[1], and Maida Qureshi[2]
Affiliation (s):	[1]Kinnaird College for Women University, Lahore, Pakistan. [2]Beaconhouse International College, Lahore, Pakistan.
DOI:	http://doi.org/10.32350/ihr.61.04
History:	Received: August 7, 2024, Revised: December 18, 2025, Accepted: March 14, 2026, Published: June 20, 2026
Citation:	Naqvi F, Qureshi S, Quresh M. Comparison of intuitive eating practices between the students of nutrition majors and non-health science majors. *Int Health Rev.* 2026;6(1):64-82. http://doi.org/10.32350/ihr.61.04
Copyright:	© The Authors
Licensing:	This article is open access and is distributed under the terms of Creative Commons Attribution 4.0 International License
Conflict of Interest:	Author(s) declared no conflict of interest

A publication of
The School of Health Science
University of Management and Technology, Lahore, Pakistan

Comparison of Intuitive Eating Practices between the Students of Nutrition Majors and Non-Health Science Majors

Fatima Naqvi[1], Samawia Qureshi[1*], and Maida Qureshi[2]

[1]Department of Food Science and Human Nutrition, Kinnaird College for Women University, Lahore, Pakistan
[2]Beaconhouse International College, Lahore, Pakistan

ABSTRACT

Intuitive eating (IE) promotes attunement to internal hunger and satiety cues rather than adherence to restrictive diets or external food rules. Since nutrition education shapes attitudes and behaviors towards food, nutrition majors may differ in eating practices from students in non–health sciences. The current study compared IE between nutrition and non–health sciences majors. It was hypothesized that nutrition majors would report higher IE and lower Body Mass Index (BMI). Additionally, IE was expected to be negatively associated with BMI, and both BMI and academic discipline were expected to predict IE. A cross-sectional sample of 301 final-year students from public and private universities in Lahore participated in the study (150 nutrition majors; 151 non–health sciences majors). Participants completed a self-administered questionnaire including demographics and the Intuitive Eating Scale-2 (IES-2). BMI was calculated from self-reported data. Independent samples t-tests indicated that nutrition majors had significantly higher IES-2 scores and lower BMI than non–health sciences majors. Pearson correlation showed a significant negative association between IE and BMI. Hierarchical regression revealed that BMI was a significant negative predictor of IE, and academic discipline remained a significant predictor after controlling for BMI. Nutrition students demonstrated stronger IE practices and lower BMI than their peers. These findings highlighted the potential value of incorporating nutrition education and IE principles into curricula to support healthier eating behaviors among young adults.

Keywords: body mass index, intuitive eating, nutrition majors

1. INTRODUCTION

Over the past 50 years, obesity has emerged as a global pandemic. Notable upsurges in Body Mass Index (BMI) have been recorded in South

*Corresponding Author: samawia.qureshi@kinnaird.edu.pk

Asia, Southeast Asia, the Caribbean, and Southern Latin America [1]. By 2020, 45% of people in 30 countries were trying to lose weight [2]. In Pakistan, approximately, 22.8% of the population was expected to be overweight and 5.1% obese [3]. Obesity impacts physical health, mental well-being, and social functioning both short-term and long-term. It significantly raises the risk of various diseases [4].

University students, in particular, encounter significant social pressures and challenges, which might lead towards increased stress, anxiety, and depression. Academic stress may trigger various unhealthy eating behaviors, such as unintentional overeating, leading towards weight gain. Although some students resort to restrictive eating as a coping mechanism, this approach is not effective in the long-term [5,6]. However, frequent dieting often results in weight fluctuations that can harm both mental and physical health [7,8].

Sustainable weight loss is crucial, as highlighted by Van Dyke [9]. Research shows that individuals who engage in self-restricted eating may consume less food but are at a higher threat to develop mental health issues, such as disordered eating, depression, anxiety, and body dissatisfaction. These concerns are exacerbated by media exposure and societal pressure to maintain a slim appearance, particularly among adolescents and young adults [10–12].

Given the challenges of maintaining weight loss through restrictive diets, there is a pressing need for developing sustainable eating patterns. These patterns would not only address obesity and metabolic health-related issues but may also reduce the emotional distress associated with restrictive eating [13]. Intuitive Eating (IE) has been considered as an alternative method. Developed by clinical dietitians Evelyn Tribole and Elyse Resch in 1995, IE focuses on responding to internal hunger and fullness cues rather than external diet rules. Supported by over 100 studies and featuring a validated assessment scale by Tylka [14]. IE promotes the innate ability to standardize food intake for optimal energy balance. Research shows that even young children can adjust their caloric intake based on their physiological needs, though external pressures, such as parental control may interfere with these natural signals [15,10].

IE is a dietary approach that includes: Reliance on Hunger and Satiety Cues (RHSC). This includes using physiological signals of hunger and

fullness to guide eating timetables and quantities. Individuals who practice IE are more attuned to their body's internal signals. On the other hand, those who follow societal dieting guidelines may lose touch with these cues due to overreliance on external messages [16].

Unconditional Permission to Eat (UPE): This principle allows individuals to eat any food they desire based on hunger and satiety cues, removing food restrictions. This approach helps reduce the likelihood of binge eating, as it encourages a healthier relationship with food and enhances emotional resilience [16].

Eating for Physical rather than Emotional Reasons (EPR): IE encourages eating primarily to satisfy physical hunger rather than addressing emotional needs. Non-dieters start and stop eating based on hunger and fullness, whereas chronic dieters may experience anxiety and overeating when they breach their restrictive food boundaries. Restrained eaters may use food to manage emotions, leading to unhealthy eating patterns [16].

Body Food Choice Congruence (B-FCC): This dimension assesses how well individuals' food choices align with their body's nutritional needs and the overall health consciousness [17,18].

IE promotes a healthy relationship with food, mind, and body, enhancing nutrient intake and overall well-being. Research indicates that IE is inversely related to eating disorder symptoms and has positive correlation with body acceptance and self-esteem [19–22]. Individuals practicing IE often experience improved physical health and reduced maladaptive eating behaviors.

Traditional dietetic education typically emphasizes cognitive eating strategies, focusing on energy intake and macronutrient guidelines. In contrast, recognizing and responding to physiological signals instead of following cognitive rules is the major feature of IE practice. Literature suggests that students majoring in nutrition exhibit higher levels of IE and lower body dissatisfaction compared to non-majors [23].

Dietitians are often regarded as models of healthy eating and weight management due to their expertise. However, recent reports have questioned whether their actual health practices align with their professional image [24,25]. Dietetics education and practice traditionally focus on weight issues, and studies have shown that dietetic students and

practitioners may hold stigmatizing views towards individuals who are overweight. Maintaining thinness is often seen as a key indicator of a dietitian's competence, which may result in stigma against dietetic students who are overweight within educational settings [26,27].

The existing literature presents mixed findings. Some studies indicate that higher nutrition knowledge among dietetic students may increase their susceptibility to eating disorders, such as orthorexia nervosa (ON), and heighten their desire to lose weight [28,29]. Conversely, other research suggests that students majoring in nutrition may have a better relationship with food. Additionally, a study found that individuals with ON often practice more mindful eating habits compared to those without the disorder [29].

Evidence shows that nutrition knowledge significantly influences health by helping individuals make informed food choices [30]. For instance, a study of medical students in Romania found an association between mindful eating and nutrition knowledge. Another study indicated that students who gained more than 5 kg were likely to engage in emotional or mindless eating [8].

This study aimed to expand on the existing research by comparing IE behaviors between dietetic students and their peers in non-nutrition fields. The goal was to assess how nutrition knowledge influences the ability to recognize hunger and satiety cues, which are essential for making informed food choices. Notably, this type of comparison has not yet been conducted in Pakistan. While it was previously believed that dietitians relied more on cognitive than intuitive decision-making in food selection [2], modern dietetic education now includes various aspects of nutrition, such as distraction eating, emotional eating, chrono-nutrition, as well as eating disorders and their consequential effects on health. By considering all the existing literature, following hypotheses were formulated:

In the light of existing literature, following hypotheses were formulated:

H1: There would be a negative relationship between IE and BMI of young adults

H2: Demographics (BMI and Major discipline) would predict IE in young adults

H3: Students with nutrition majors would be high on IE than students with

other fields

H4: Students with nutrition majors would be low on BMI than students with other fields.

2. METHODOLOGY

2.1. Study Design and Participants

A cross-sectional descriptive design was applied in the study to compare IE practices between the students of nutrition majors and students from non-health science majors.

2.2. Sample

The study targeted final-year students enrolled in public and private universities across Lahore. It specifically focused on those majoring in nutrition as well as those pursuing non-health sciences disciplines. For data collection, three institutions were selected based on convenience to the researcher: Kinnaird College for Women University (KCWU), University of Lahore (UOL), and Lahore College for Women University (LCWU). The sample size was meticulously calculated using G Power, resulting in a total of 301 participants drawn from these institutions. To ensure a relevant and representative sample, purposive sampling was employed in selected participants. This approach allowed for targeted data collection from individuals fitting the study's criteria.

Table 1. Demographic Characteristics of the Sample (*N*=301)

Characteristics	*M*	*SD*	*f (%)*
Age (in years)	21.8	2.0	
Gender			
Male			25(8.2%)
Female			276(90.8%)
University Category			
Public Sector			119(39.1%)
Private Sector			182(59.9%)
Major Discipline			
Nutrition			150 (49.3%)
Other Discipline			151 (49.7%)
Semester			
Semester 7			75(24.7%)

Characteristics	*M*	*SD*	*f (%)*
Semester 8			226(74.3%)
Family Background			
Rural			28(9.2%)
Urban			273(89.8%)
Employment Status			
Employed			41(13.5%)
Unemployed			259(85.2%)
BMI	22.7	3.1	

2.2.1. Inclusion Criteria.

- The study specifically included final-year students pursuing majors in Nutrition.
- For comparative purposes, the study also selected final-year students enrolled in majors outside the health sciences, such as Computer Science, English, and Business Administration.

2.2.2. Exclusion Criteria.

- Students who were not in their final year were excluded from the study.
- Additional students majoring in health sciences other than nutrition were also excluded.

2.3. Tools for Data Collection

A questionnaire was used to carry out data collection. The questionnaire was divided into following 3 parts:

2.3.1. Consent Form. This ensured students' approval to participate in the current research.

2.3.2. Demographics. The demographic questions inquired about gender, employment status, major, family type, university level, and semester. Furthermore, self-reported height and weight were used to calculate BMI.

2.3.3. IES-2. The 23-item IES-2 scale developed by Tylka and Kroon Van Diest (2013) was included in the questionnaire. The 23-item IES-2 assessed IE by obtaining a total score and scores for four subscales: UPE. RHSC, EPR, and B-FCC. Participants' responses varied from one (*strongly disagree*) to five (*strongly agree*). The level of IE, as well as its subscales,

is indicated by higher scores. IES-2 scale reported Cronbach's alphas of .88 and .89 for the total score; .93 and .92 for EPR; .81 and .82 for UPE; .85 and .89 for RHSC, and .86 and .83 for B-FCC (Tylka & Kroon Van Diest, 2013).

2.4. Data Collection Procedure

The researcher personally visited the designated departments at Kinnaird College for Women University (KCWU), the University of Lahore (UOL), and Lahore College for Women University (LCWU) to collect the required data. Permission and cooperation were sought from the course instructors, who kindly allocated time and facilitated the data collection process. During these visits, the researcher described the study's purpose and objectives in detail to ensure transparency and understanding. Students who agreed to participate were given questionnaires to complete. Before distributing the questionnaires, the researcher thoroughly briefed the participants about the study's aims and obtained their informed consent to ensure ethical compliance and voluntary participation.

2.5. Data Analysis

Data analysis was done by using SPSS version 2.0. The analysis used descriptive and inferential statistics. The mean and standard deviation from the descriptive statistics were utilized to respond to the socio-demographic data. Independent sample t- test, Pearson correlation, and multiple hierarchical regression analysis were employed to test the hypotheses.

3. RESULTS

Table 2. Descriptive and Reliability of the Study Variable (N = 301)

Scale	*M*	*SD*	Range	Medians (Cut offs)	α
IES-2	80.4	8.5	23-115	69	.72
UPE	19.6	2.5	6-30	18	.71
RHSC	21.5	3.2	8-40	24	.87
B-FCC	11.7	3.5	3-15	9	.85
EPR	27.4	3.5	6-30	18	.74

Note. IES-2= Intuitive Eating Scale-2; UPE= Unconditional Permission to eat; RHSC = Reliance on Hunger and Satiety Cues Subscale; BFCC= Body Food Choice Congruence Subscale; EPR= Eating for Physical Rather than Emotional Reasons.

Table 2 shows that the study's scales were deemed reliable, with Cronbach's alpha values exceeding .70 for all measures. Cut-off scores specific to the sample were established to gauge mean performance levels. The mean scores for the IES-2, UPE, EPR, and BFCC were above their cut-off values, suggesting generally high IE scores among young adults. However, the mean score for RHSC was slightly below the cut-off, though it still indicated a high prevalence of IE behaviors.

Table 3. Correlation Matrix to Assess the Relationship between IE, BMI, and Major Discipline in Young Adults (*N*= 301)

Variables	*M*	*SD*	2	3	4	5	6	7
1.IES Total	80.4	8.56	.666**	.765**	.707**	.780**	-.130*	-.19**
2.UPE	19.6	2.5	-	.251**	.318**	.431**	-.057	-.081
3.RHSC	21.5	3.2		-	.558**	.377**	-.118*	-.18**
4.B-FCC	11.7	3.5			-	.325**	-.021	-.130*
5.EPR	27.4	3.5				-	-.139*	-.15**
6.BMI	22.7	3.1					-	.141*
7.Major Discipline								-

Note. BMI=Body Mass Index. *p< .05; **p< .01; ***p<.001

Table 3 shows the relationship between IE along with its subscales, BMI, and major discipline. Assumptions were fulfilled. Results indicated that there was a significant negative correlation between IE and BMI (r= -.130, p< .05), from the subscales, negative correlation was noted between RHSC and BMI (r= -.118, p< .05), EPR and BMI (r= -.139, p< .05). There was no significant relationship between UPE and BMI and BFCC and BMI.

A positive correlation was found between the major discipline and BMI (r= .141, p< .05). Moreover, the major discipline had a significant negative correlation with IE (r= -.192, p< .01), RHSC (r= -.175, p< .01), BFCC (r= -.130, p< .05), EPR (r= -.175, p< .01). No significant correlation was found between the major discipline and UPE.

Table 4. Hierarchical Regression Analysis for Predicting Relationship between BMI, Major Discipline, and IE

Variables	IES-2 Total		IES-2 Subscales							
			UPE		EPR		RHSC		B-FCC	
	ΔR^2	β	ΔR^2	β	ΔR^2	β	ΔR^2	β	ΔR^2	β
Step 1	.02		.003		.02		.01		.00	
BMI		-.36*		-.05		-.16*		-.15*		-.02
Step 2	.03		.005		.01		.03		.02	
Major Discipline		-.15**		-.19		-.40*		-.52**		-.34**

Note. BMI=Body Mass Index. *p< .05; **p< .01; ***p<.001

Assumptions of multicollinearity were fulfilled and the tolerance value was above .2, indicating no multicollinearity in variables. The results of hierarchical regression analysis for predicting IE behaviors among young adults are shown in Table 4. The results showed that the overall model explained 4.8% variance in IE. In step 1, the model was significant at F (1, 300) = 5.017, p< .05 and showed 1.7% variance in IE among young adults. Standardized value of beta depicted that BMI is a negative significant predictor of IE behaviors in young adults. In step 2, the model was significant at F (2, 299) = 7.33, p< .01 and revealed 3.1% variance in IE among young adults. The major discipline appeared to be the significant predictor of IE in young adults. For the subscale UPE, the model was non-significant in both step 1 and step 2.

In subscale EPR, the model explained an overall variance of 3.2%. In step 1, the model was significant at F (1, 300) = 5.88, p< .05 and depicted 1.9% variance for EPR among young adults. Standardized value of beta revealed that BMI was a negative significant predictor of EPR among young adults. The model was significant in step 2 at F (2, 299) = 4.891, p< .05 and showed the variance of 1.3% for EPR among young adults. Standardized value of beta proved that major discipline predicted EPR.

The results of hierarchical regression analysis for RHSC subscale showed an overall variance of 4%. The model was significant in step 1 at F (1, 300) = 4.119, p< .05 with 1.4% variance for RHSC. Standardized value of beta showed that BMI was a negative significant predictor of RHSC. In step 2, the model was significant at F (2, 299) = 6.021, p< .01 and showed the variance of 2.6% for RHSC. Standardized value of beta showed that the major discipline was a predictor of RHSC.

The last subscale BFCC showed an overall variance of 2.2%. The model was not significant in step 1, F (1, 300) = 127, p> .05 showing that BMI did not predict B-FCC. In step 2, the model was significant with F (2, 299) = 3.406, p< .01 with a variance of 2.2%, showing major discipline as a predictor of B-FCC.

The differences of IE scores and BMI based on major discipline of young adults was identified using independent sample t-test. It is evident from the results that the students with nutrition majors scored significantly higher in IE, RHSC, BFCC, and EPR. This showed that students with nutrition majors were better at relying on physiological cues of hunger and

satiety and not driven by emotional eating. No significant difference was found for UPE between the students of nutrition majors and non-health sciences majors. This showed that the young adults do not restrict themselves, rather allow them to eat wherever and whenever they want. The results showed that students with nutrition majors had a significant lower BMI than those with other fields, highlighting the significance of nutritional awareness in maintaining health.

Table 5. independent sample t-test to compare the scores of IE and BMI between the students of nutrition majors (n=150) and other fields (n=151)

Variables	Nutrition (*n*=150)		Other fields (*n*=151)		*t* (299)	*p*	95%*CI*		Cohen's *d*
	M	*SD*	*M*	*SD*			*LL*	*UL*	
IES-2 total	82.02	9.07	78.74	7.6	3.3	.001	1.33	5.21	0.39
UPE	19.8	2.6	19.3	2.4	1.3	.164	-.17	.99	0.19
RHSC	22.1	3.3	21.0	3.06	3.0	.003	.40	1.8	0.34
EPR	27.9	3.7	26.9	3.3	2.2	.024	.12	1.7	0.28
B-FCC	12.07	2.1	11.3	2.3	2.6	.009	.16	1.19	0.34
BMI	22.33	2.9	23.22	3.2	-2.46	.014	-1.6	1.77	0.29

4. DISCUSSION

The current study examined the IE practices among young adults. The primary aim of the study was to compare the IE practices between the students of dietetic majors and their non-health science majors. The relationship of IE with BMI and major discipline of young adults was studied as a secondary outcome.

It was hypothesized that students with nutrition majors would be higher in IE scores than the students of other fields. To test the hypothesis, an independent sample t-test was run. The results supported the hypothesis revealing that the students of nutrition majors had significantly higher scores in IES-2 scale, RHSC, EPR, and BFCC subscales in comparison to the students of other fields. This comparative analysis showed that the students with dietetic majors had increased IE behaviors than the students in other fields. RHSC scores indicated that they are better in paying heed to physiological cues of hunger and satiety, EPR scores revealed they eat for physical needs of the body rather than driven by emotions, and it is evident from BFCC scores that they make food choices based on the health and nutritional needs of the body. Another study showed that students with nutrition majors had significantly lower emotional eating scores than their

non-nutrition counterparts [31, 32]. There was no significant difference between the two groups for the UPE subscale scores. This indicated that both the study groups in the current study's sample of young adults equally allowed themselves to eat whenever and wherever they wanted. Moreover, a significant correlation was found between the major disciplines and IES-2, RHSC, BFCC, and EPR but not with UPE. In step 2 of hierarchical regression analysis, major discipline was shown to be a significant predictor of IES-2, EPR, RHSC, and BFCC but not UPE.

According to Polivy and Herman [33], individuals giving themselves an unconditional permission to eat displayed fewer avoidance behaviors. Those who followed their physiological satiety signals and did not distinguish between acceptable and non-acceptable foods exhibited less avoidance behaviors. This is evident from a study conducted by Caferoglu and Toklu [34] which showed an inverse association between UPE and restrained eating. In the current study, the alignment of UPE and BFCC scores reveal a nuanced approach to dietary choices among nutrition majors. Specifically, these scores indicate that while these students practice unconditional permission to eat (UPE) and avoid restrictive eating patterns, they simultaneously select foods rich in essential nutrients. Minot [35] underwent an intervention study by incorporating a 16-week nutrition course with the addition of IE in the curricula of students. Students participated throughout the semester. The study was a non-randomized intervention trial with pre- and post-surveys. The study concluded that students' IE practices significantly improved over the 16-week course due to education on nutrition and IE principles.

The results of the current study are consistent with another study conducted by Russell [23] which showed that IES-2 scores of nutrition majors were significantly higher than those of non-majors. Nutrition undergraduate students intending to become registered dietitians reported eating more intuitively and experiencing less body dissatisfaction than their non-nutrition counterparts. Moreover, Wilson [12] claimed that IE can be improved with education.

The hypothesis that there would be a negative correlation between IE and BMI was supported by the current study's findings. The Pearson correlation results revealed that IE and BMI had a significant negative correlation. This indicated that increased IE behaviors are linked to lower BMI. Similarly, BMI was found to be negatively correlated with RHSC and

EPR. These results emphasized that higher IE scores were associated with lower BMI and vice versa. Similarly, the results of the subscales revealed that avoiding emotional eating and relying on physiological hunger and satiety signals to regulate food intake prevents overeating and subsequent overweight and obesity. Literature revealed that higher BMI is a predictor of emotional eating [36,37].

In the current study, it was evident from the results of hierarchical regression analysis that in step 1, BMI was a significant negative predictor of IES-2, EPR, and RHSC. BMI neither correlated nor significantly predicted BFCC and UPE. According to Caferoglu and Toklu, [12] UPE is negatively associated with restrained eating, and elevated restrained eating is associated with increased BMI [2]. A longitudinal study among adolescents showed that increased BMI is a significant predictor of restrained eating [38,39].

The previous literature supports the results of the current research [14,40–42]. Denny et al. [10] analyzed IE over 2200 participants, 45.2% males and 54.9% females, with a mean age of 25.3 years. Unlike the current study, IE was calculated using the original IES scale [14]. The results revealed that individuals with lower BMIs were more likely to have higher IE scores than those with higher BMIs.

The hypothesis that the BMI of the students with nutrition majors was significantly lower than that of the students of non-health science majors was confirmed by the results of independent sample t-test. These results of the study conducted by Russell [23] are in line with the current research. Previous literature supports the results showing that lower BMI dietetic majors in senior semesters with advanced education and nutrition counseling experience were more likely to employ IE practices and expressed positive attitudes towards it. Most dietitians support IE and apply its principles when advising clients [43]. The results of another study conducted by Caferoglu and Toklu are consistent with the current study, showing that dietetic majors exhibiting greater IE patterns correlated with lower BMIs, with the RHSC dimension displaying the strongest inverse association. Some other dimensions that were not explored by this study revealed that those with higher IE scores displayed lower risks for eating disorders, uncontrolled eating, and emotional eating.

4.1. Conclusion and Recommendations

In conclusion, the current study found significantly higher IE scores among students majoring in nutrition. This demonstrated a strong correlation between major discipline and IE scores. Additionally, nutrition majors showed significantly lower BMI compared to their peers in non-nutrition majors, with BMI inversely correlated to IE scores. These results underscored the potential of nutrition knowledge in enhancing IE practices and mitigating risks of overweight and obesity. Based on these findings, the study recommended to integrate comprehensive nutrition education that encompasses all principles and subscales of IE into the curricula of adolescents and young adults. This approach could contribute to promoting healthier eating behaviors and preventing disordered eating patterns. Future research should explore the efficacy of combining nutrition education with IE principles in interventions aimed at reducing body weight dissatisfaction and improving both physical and mental health outcomes.

Author Contribution

Fatima Naqvi: Conceptualization, data curation, formal analysis, investigation, methodology, resources, writing - original draft. **Samawia Qureshi:** writing - original draft, supervision, project administration, writing- review & editing. **Maida Qureshi:** Software, visualization, data curation, formal analysis, investigation.

Conflict of Interest

The authors of the manuscript have no financial or non-financial conflict of interest in the subject matter or materials discussed in this manuscript.

Data Availability Statement

Data supporting the findings of this study will be made available by the corresponding author upon request.

Funding Details

No funding has been received for this research.

Generative AI Disclosure Statement

The authors did not use any type of generative artificial intelligence software for this research.

REFERENCES

1. Yang X, Bayliss G, Zhuang S. Obesity-related glomerulopathy: epidemiology, pathogenesis, and current treatments. *Integr Med Nephrol Androl.* 2024;11(3):e24-00011. https://doi.org/10.1097/IMNA-D-24-00011
2. Minot K. *Impact of Incorporating Intuitive Eating Principles Into a*

College Nutrition Course on Eating Behaviors [master's thesis]. California Polytechnic State University; 2020. https://digitalcommons.calpoly.edu/theses/2465/

3. Asif M, Aslam M, Altaf S, Atif S, Majid A. Prevalence and sociodemographic factors of overweight and obesity among Pakistani adults. *J Obes Metab Syndr.* 2020;29(1):58-66. https://doi.org/10.7570/jomes19039

4. Brandreth RA, Semple C, Dias R, et al. Obesity and complications of excess weight in children and young people. In: *The Transition of Respiratory Care: From Child to Adult (ERS Monograph).* European Respiratory Society; 2024:23-37. https://doi.org/10.1183/2312508X.10011023

5. Caso D, Miriam C, Rosa F, Mark C. Unhealthy eating and academic stress: the moderating effect of eating style and BMI. *Health Psychol Open.* 2020;7(2):e2055102920975274. https://doi.org/10.1177/2055102920975274

6. Devonport TJ, Nicholls W, Fullerton C. A systematic review of the association between emotions and eating behaviour in normal and overweight adult populations. *J Health Psychol.* 2019;24(1):3-24. https://doi.org/10.1177/1359105317697813

7. Gillen MM, Markey CN, Markey PM. An examination of dieting behaviors among adults: links with depression. *Eat Behav.* 2012;13(2):88-93. https://doi.org/10.1016/j.eatbeh.2011.11.014

8. Rocks T, Pelly F, Slater G, Martin LA. Eating attitudes and behaviours of students enrolled in undergraduate nutrition and dietetics degrees. *Nutr Diet.* 2017;74(4):381-387. https://doi.org/10.1111/1747-0080.12298

9. Van Dyke N, Drinkwater EJ. Relationships between intuitive eating and health indicators: literature review. *Public Health Nutr.* 2014;17(8):1757-1766. https://doi.org/10.1017/S1368980013002139

10. Denny KN, Loth K, Eisenberg ME, Neumark-Sztainer D. Intuitive eating in young adults. Who is doing it, and how is it related to disordered eating behaviors? *Appetite.* 2013;60:13-19. https://doi.org/10.1016/j.appet.2012.09.029

11. Karyotaki E, Cuijpers P, Albor Y, et al. Sources of stress and their associations with mental disorders among college students: results of the World Health Organization World Mental Health Surveys International College Student Initiative. *Front Psychol.* 2020;11:e1759. https://doi.org/10.3389/fpsyg.2020.01759

12. Wilson RE, Marshall RD, Murakami JM, Latner JD. Brief non-dieting intervention increases intuitive eating and reduces dieting intention, body image dissatisfaction, and anti-fat attitudes: a randomized controlled trial. *Appetite.* 2020;148:e104556. https://doi.org/10.1016/j.appet.2019.104556

13. Keirns NG, Hawkins MA. The relationship between intuitive eating and body image is moderated by measured body mass index. *Eat Behav.* 2019;33:91-96.

14. Tylka TL. Development and psychometric evaluation of a measure of intuitive eating. *J Couns Psychol.* 2006;53(2):226-240. https://doi.org/10.1037/0022-0167.53.2.226

15. Tribole E. 10 principles of intuitive eating. Intuitive Eating. Published December 19, 2019. Accessed June 5, 2026. https://www.intuitiveeating.org/10-principles-of-intuitive-eating/

16. Stapleton PB, Nikalje A. Constructing body image in university women: the relationship between self-esteem, self-compassion, and intuitive eating. *Int J Health Caring.* 2013;13(2):1-20.

17. Horwath C, Hagmann D, Hartmann C. Intuitive eating and food intake in men and women: results from the Swiss Food Panel Study. *Appetite.* 2019;135:61-71. https://doi.org/10.1016/j.appet.2018.10.030

18. Camilleri GM, Méjean C, Bellisle F, et al. Intuitive eating dimensions were differently associated with food intake in the general population-based NutriNet-Santé study. *J Nutr.* 2017;147(1):61-69. https://doi.org/10.3945/jn.116.234088

19. Tylka TL, Calogero RM, Daníelsdóttir S. Intuitive eating is connected to self-reported weight stability in community women and men. *Eat Disord.* 2020;28(3):256-264. https://doi.org/10.1080/10640266.2019.1580126

20. Carbonneau E, Bégin C, Lemieux S, et al. A Health at Every Size

intervention improves intuitive eating and diet quality in Canadian women. *Clin Nutr.* 2017;36(3):747-754. https://doi.org/10.1016/j.clnu.2016.06.008

21. Barad A, Cartledge A, Gemmill K, et al. Associations between intuitive eating behaviors and fruit and vegetable intake among college students. *J Nutr Educ Behav.* 2019;51(6):758-762. https://doi.org/10.1016/j.jneb.2018.12.003
22. Barrada JR, Cativiela B, van Strien T, Cebolla A. Intuitive eating: a novel eating style? Evidence from a Spanish sample. *Eur J Psychol Assess.* 2018;36(1):19-31. https://doi.org/10.1027/1015-5759/a000482
23. Russell K. *Intuitive Eating, Attitudes to Food, and Body Size: A Comparison Between Nutrition Majors and Non-Majors* [unpublished thesis]. 2014. Accessed June 5, 2026. https://portalcris.lsmuni.lt/
24. Mahn HM, Lordly D. A review of eating disorders and disordered eating amongst nutrition students and dietetic professionals. *Can J Diet Pract Res.* 2015;76(1):38-43. https://doi.org/10.3148/cjdpr-2014-031
25. Drummond D, Hare MS. Dietitians and eating disorders: an international issue. *Can J Diet Pract Res.* 2012;73(2):86-90. https://doi.org/10.3148/73.2.2012.86
26. Seagle HM, Strain GW, Makris A, Reeves RS. Position of the American Dietetic Association: weight management. *J Am Diet Assoc.* 2009;109(2):330-346. https://doi.org/10.1016/j.jada.2008.11.041
27. Bonafini BA, Pozzilli P. Body weight and beauty: the changing face of the ideal female body weight. *Obes Rev.* 2011;12(1):62-65. https://doi.org/10.1111/j.1467-789X.2010.00754.x
28. Novotny D, Matthews E, Powell SM. Disordered eating attitudes and behaviors of dietetics students. *Top Clin Nutr.* 2021;36(4):299-310. https://doi.org/10.1097/TIN.0000000000000260
29. Demirer B, Yardımcı H. Is mindful eating higher in individuals with orthorexia nervosa? A cross-sectional study. *J Public Health.* 2024;32(3):455-460. https://doi.org/10.1007/s10389-023-01829-0
30. Baker MT, Lu P, Parrella JA, Leggette HR. Investigating the effect of consumers' knowledge on their acceptance of functional foods: a systematic review and meta-analysis. *Foods.* 2022;11(8):e1135.

31. Worobey J, Schoenfeld D. Eating disordered behavior in dietetics students and students in other majors. *J Am Diet Assoc.* 1999;99(9):1100-1102. https://doi.org/10.1016/S0002-8223(99)00264-3

32. Craig WJ, Mangels AR. Position of the American Dietetic Association: vegetarian diets. *J Am Diet Assoc.* 2009;109(7):1266-1282. https://doi.org/10.1016/j.jada.2009.05.027

33. Polivy J, Heatherton TF, Herman CP. Self-esteem, restraint, and eating behavior. *J Abnorm Psychol.* 1988;97(3):354-356. https://doi.org/10.1037/0021-843X.97.3.354

34. Caferoglu Z, Toklu H. Intuitive eating: associations with body weight status and eating attitudes in dietetic majors. *Eat Weight Disord.* 2022;27(2):683-692. https://doi.org/10.1007/s40519-021-01185-1

35. Bjørklund O, Wichstrøm L, Llewellyn C, Steinsbekk S. The prospective relation between eating behaviors and BMI from middle childhood to adolescence: a 5-wave community study. *Prev Med Rep.* 2022;27:e101795. https://doi.org/10.1016/j.pmedr.2022.101795

36. Derks IP, Sijbrands EJ, Wake M, et al. Eating behavior and body composition across childhood: a prospective cohort study. *Int J Behav Nutr Phys Act.* 2018;15:1-9. https://doi.org/10.1186/s12966-018-0704-x

37. Forrester-Knauss C, Perren S, Alsaker FD. Does body mass index in childhood predict restraint eating in early adolescence? *Appetite.* 2012;59(3):921-926. https://doi.org/10.1016/j.appet.2012.09.006

38. Snoek HM, van Strien T, Janssens JM, Engels RC. Restrained eating and BMI: a longitudinal study among adolescents. *Health Psychol.* 2008;27(6):753-759. https://doi.org/10.1037/a0013589

39. Tylka TL, Kroon Van Diest AM. The Intuitive Eating Scale-2: item refinement and psychometric evaluation with college women and men. *J Couns Psychol.* 2013;60(1):137-151. https://doi.org/10.1037/a0030830

40. Camilleri GM, Méjean C, Bellisle F, et al. Intuitive eating dimensions were differently associated with food intake in the general population-based NutriNet-Santé study. *J Nutr.* 2017;147(1):61-69.

https://doi.org/10.3945/jn.116.234088

41. Madden CE, Leong SL, Gray A, Horwath CC. Eating in response to hunger and satiety signals is related to BMI in a nationwide sample of 1601 mid-age New Zealand women. *Public Health Nutr.* 2012;15(12):2272-2279. https://doi.org/10.1017/S136898001200101X
42. Schaefer JT, Zullo MD. US registered dietitian nutritionists' knowledge and attitudes of intuitive eating and use of various weight management practices. *J Acad Nutr Diet.* 2017;117(9):1419-1428. https://doi.org/10.1016/j.jand.2017.01.021
43. Alkazemi D, Saleh A, Shaban L, Al-Hilal M. Intuitive eating and weight restrictive practices among dietitians in Kuwait. *Arab J Nutr Exerc.* 2019;3(1):18-32. https://doi.org/10.18502/ajne.v3i1.4815