



## **Nutritional status, Korean wave, body image, diet quality: multivariate analysis**

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### **ABSTRAK**

**Latar Belakang:** Mahasiswa cenderung tidak memperhatikan kandungan gizi dan keberagamannya sehari-hari, yang dapat mengakibatkan kualitas diet menjadi rendah. Kualitas diet yang rendah dapat disebabkan oleh beberapa faktor seperti malnutrisi, paparan Korean wave yang tinggi, dan citra tubuh negative.

**Tujuan:** Studi ini bertujuan untuk menganalisis hubungan antara status gizi, paparan Korean wave, dan citra tubuh dengan kualitas diet mahasiswa di Depok yang terpapar Korean wave.

**Metode:** Studi ini menggunakan desain observasional cross-sectional dengan metode voluntary quota sampling dan snowball sampling untuk menganalisis hubungan antara status gizi, paparan Korean wave, dan citra tubuh dengan kualitas diet mahasiswa di Depok yang terpapar Korean wave. Studi ini melibatkan 128 responden. Analisis data dilakukan dengan menggunakan uji Chi-Square, Fisher's Exact Test, dan Regresi Logistik Biner Multivariat.

**Hasil:** Hasil menunjukkan bahwa status gizi dan citra tubuh berhubungan dengan kualitas diet mahasiswa di Depok ( $p < 0,05$ ). Berdasarkan hasil regresi logistik biner multivariat, citra tubuh negatif ( $B=2,035$ ; Adjusted OR=7,653) menunjukkan hubungan terkuat dengan kualitas diet. Variabel independen menjelaskan 33,7% variasi dalam kualitas diet, dan sisanya dipengaruhi oleh variabel lain di luar penelitian (Nagelkerke R-Square = 0,337).

**Kesimpulan:** Status gizi dan citra tubuh berhubungan dengan kualitas diet mahasiswa di Depok yang terpapar gelombang Korea. Citra tubuh negatif ( $B=2,035$ ; Adjusted OR=7,653) menunjukkan hubungan terkuat dengan kualitas diet.

**KATA KUNCI:** citra tubuh; kualitas diet; mahasiswa; Korean Wave; status gizi

## ABSTRACT

**Background:** University students often do not pay attention to the nutritional content and diversity of their daily intake, resulting in low dietary quality. Several factors can contribute to low dietary quality, such as malnutrition, high Korean Wave exposure, and negative body image. This study aims to analyze the relationship between nutritional status, Korean Wave exposure, body image, and dietary quality among university students in Depok exposed to the Korean Wave.

**Methods:** This study used an observational cross-sectional design with voluntary quota sampling and snowball sampling to analyze the relationship between nutritional status, Korean Wave exposure, body image, and dietary quality among university students in Depok exposed to the Korean Wave. This study involved 128 respondents. We analyzed the data using the Chi-Square test, Fisher's Exact Test, and multivariate binary logistic regression..

**Results:** Nutritional status and body image were associated with dietary quality among university students in Depok exposed to the Korean wave ( $p < 0.05$ ). Based on the multivariate binary logistic regression results, negative body image ( $B = 2.035$ ; Adjusted OR = 7.653) showed the strongest association with low diet quality. The independent variables explained 33.7% of the variation in diet quality, and the remainder was influenced by variables outside the study (Nagelkerke R-Square = 0.337).

**Conclusions:** Nutritional status and body image were associated with diet quality among students in Depok exposed to the Korean wave. Negative body image ( $B=2.035$ ; Adjusted OR=7.653) showed the strongest association with diet quality.

**KEYWORDS:** body image; diet quality; Korean Wave exposure; nutritional status; university student

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## INTRODUCTION

University students often choose food without considering health factors and diversity, which affects the quality of their diet (1,2). Research by Ramadenadia in 2024 found that more than 80% of students have poor diet quality, which requires attention because it can increase nutritional risks (3,4). On the other hand, alongside the rising global prevalence of obesity, many people are adopting fad diets, characterized by nutritional imbalance and the exclusion of specific food groups, as a solution, even though these diets can negatively impact an individual's diet quality (5). Diet quality is an assessment of food consumption that measures the suitability of intake to nutritional recommendations/guidelines (6,7). Diet quality can be measured using the Diet Quality Index - International (DQI-I) instrument, which assesses four aspects of intake: variety, adequacy, moderation, and balance (8,9). According to the Survei Kesehatan Indonesia (SKI) 2023, more than 36% of individuals aged 19 and 20-24 years experience malnutrition (10). This high prevalence demonstrates the importance of diet quality for achieving normal nutritional status. Nutritional status, exposure to the Korean wave, and body

image can influence an individual's diet quality. Amid the rising global prevalence of obesity, fad diets are widely recognized as a solution for addressing that condition (5). A previous study by Aslam et al. (2022) found that 58% of students had tried fad diets to lose weight. This is because, in most countries, being slim is viewed as a sign of attractiveness and health, prompting people to seek to shed excess weight as quickly as possible by adopting fad diets. On the other hand, Meilawati (2022) also showed that lower diet quality increases the risk of malnutrition (11). Furthermore, Lestari et al. (2024) found a relationship between nutritional status and diet quality: most respondents with low-quality diets experienced malnutrition, and vice versa (12).

The Korean wave is a phenomenon in which Korean culture enters and influences other countries' cultures (13)(14). Currently, the Korean wave has influenced teenagers worldwide through various forms while introducing Korean culture to the public (15)(16). Unfortunately, the rise of the Korean wave can trigger the rise of celebrity worship due to a sense of obsession that influences a person's daily behavior and body

image, resulting in a desire to have a body shape that is considered ideal according to standards through practices such as excessive dieting, which can lead to lower diet quality (17). Research by Kumari in 2024 found a difference in eating disorder dimensions, showing that the group that did not watch K-Pop (Mean = 1.4580) had lower scores on the Eating Disorder Examination Scale than those who watched K-Pop (Mean = 4.6153) (18). Korean wave culture can also contribute to body dissatisfaction, which is one of the predictors of eating problems, as individuals may desire to have the same body shape as their idols (16).

Body image is an individual's perception, thoughts, and feelings about their body and its appearance (19). Body image is divided into positive body image (individuals are satisfied and accept their body shape, resulting in positive actions to maintain it) and negative body image (individuals cannot accept their body condition and image, resulting in negative actions) (20). Changes in body shape are common among university students, leading to changes in body image and a desire to achieve an ideal body shape through unhealthy eating habits (21). A study found a relationship between body image and diet quality: most students with positive body image followed healthy diets, and vice versa (22).

This is important to consider because a healthy, high-quality diet is essential for maintaining individual health (9). Previous research has limited focus on nutritional status and Korean wave exposure as independent variables associated with diet quality, particularly among university students in Depok City. To

address this gap, this study examines nutritional status, Korean wave exposure, and body image as factors hypothesized to influence diet quality. The authors aimed to understand how the multivariable relationship among these factors affects the diet quality of individuals exposed to the Korean wave. Based on a preliminary study of students at four universities in Depok City, 92 students reported exposure to the Korean wave. Therefore, the researchers considered Depok City an appropriate location for this study.

## MATERIALS AND METHODS

This study used a cross-sectional observational design to analyze the relationships between variables and was conducted from December 2025 until May 2026. The population included all university students in Depok, including those at Universitas Pembangunan Nasional "Veteran" Jakarta, Universitas Indonesia, and Universitas Gunadarma, who completed an online survey via Google Forms and were exposed to the Korean wave. The minimum sample size required for this study was calculated using the Lemeshow formula, which indicated a requirement of at least 116 respondents.

The final sample consisted of 128 university students studying in Depok City, including those from Universitas Pembangunan Nasional "Veteran" Jakarta, Universitas Indonesia, and Universitas Gunadarma. This study used voluntary quota sampling, followed by snowball sampling. Snowball sampling involved initial respondents referring other individuals who met the inclusion criteria to expand the sample through social networks (23,24).

**Table 1. Diet Quality Index-International (DQI-I) of respondents**

| Item                                                        | r-Table (0.05) | r-Calculated | Remarks |
|-------------------------------------------------------------|----------------|--------------|---------|
| 1st Validity Test of The Korean Wave Exposure Questionnaire |                |              |         |
| Length of Exposure                                          |                | 0.191        | Invalid |
| Type of Exposure                                            | 0.312          | 0.716**      | Valid   |
| Duration of Exposure                                        |                | 0.863**      |         |
| 2nd Validity Test of The Korean Wave Exposure Questionnaire |                |              |         |
| Type of Exposure                                            |                | 0.778**      | Valid   |
| Duration of Exposure                                        | 0.312          | 0.890**      |         |

\*\*Valid items (r-table < r-calculated)

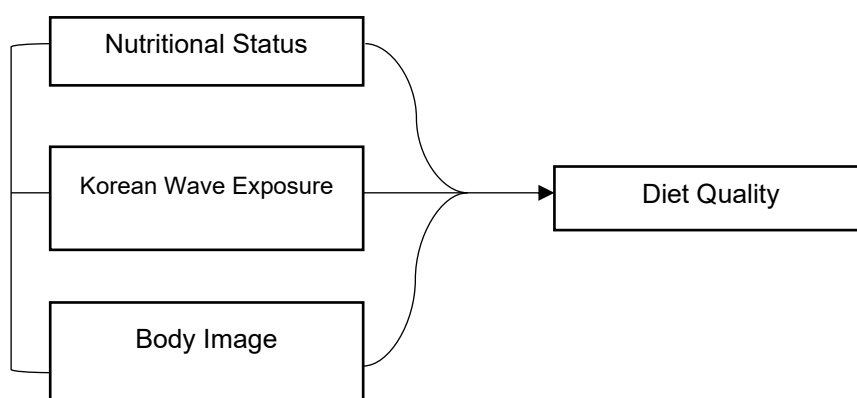
The data used in the study included respondents' characteristics through questionnaires, nutritional status through direct measurement of height and weight, Korean wave

exposure through questionnaires, body image through the Body Shape Questionnaire (BSQ)-16A, and diet quality through 2 x 24-hour food recalls and the Dietary Quality Index-International

(DQI-I), a standardized dietary quality assessment tool developed by Kim et al. in 2003 and previously applied in similar research by Ramadenadia et al in 2025 (8) (25). Prior to data collection, the Korean Wave Exposure Questionnaire was tested for validity and reliability, with the results presented below. Based on **Table 1**, one item (Length of Exposure) of the Korean Wave questionnaire was found to be invalid. Statistically, this outcome may be due to high homogeneity in respondents' answers (38 of 40 respondents provided identical responses, reporting a length of exposure of more than 12 months). Therefore, these three items were retained for the data collection and analysis stages of this study. This research has been approved by the KEP of Universitas Pembangunan Nasional "Veteran" Jakarta with letter number 19/II/2026/KEP. The data analysis was carried out in three stages. First, univariate analysis was conducted to describe the

respondents' characteristics and all research variables. Second, bivariate analysis using Chi-Square and Fisher's Exact tests examined the relationships between the independent variables (nutritional status, Korean Wave exposure, and body image) and the dependent variable (diet quality).

Third, multivariate analysis using specifically multivariate binary logistic regression was conducted to assess which independent variable had the strongest relationship with the dependent variable, as illustrated in **Figure 1**. Before the multivariate analysis, variables were assessed using bivariate analysis (Chi-Square and Fisher's Exact Test). Subsequently, variables that showed significant association ( $p < 0.05$ ) in the bivariate analysis were selected for inclusion in the multivariate binary logistic regression model to determine the most dominant factor associated with diet quality



**Figure 1. Conceptual Framework**

## RESULT AND DISCUSSIONS

Univariate analysis described the characteristics, diet quality, nutritional status, Korean wave exposure, and body image of 128 university students in Depok City exposed to the Korean wave.

### Respondents Characteristics

This study involved 128 university students from various universities in Depok City, including Universitas Pembangunan Nasional "Veteran" Jakarta (64.00%), Universitas Indonesia (34.40%), and Universitas Gunadarma (1.60%), using voluntary quota sampling followed by

snowball sampling. Respondents ranged in age from 19 to 22 years old, with the majority being 19 years old (31.30%); respondents were male (10.20%) and female (89.80%).

### Diet Quality Index-International (DQI-I) of Respondents

Based on **Table 2** the mean  $\pm$  SD total score of the respondents' diet quality index is  $46.48 \pm 10.47$ , with a minimum score of 29.00 and a maximum score of 72.50. Based on Table 3, 83.60% of respondents had low diet quality (score  $\leq 60$ ). The cut-off value was determined based on a previous study by Kim et al. (2023) and

Ramadenadia et al. (2025), which used 60% of the maximum score (100) to dichotomize diet quality into good and low (25).

Several similar studies also show that most university students have low-quality diets. A study by Ramadenadia (2024) reported that > 80% of university students have low-quality diets (3). Another study by Setyaningsih et al. (2024) also

found that > 60% of university students have low-quality diets (26). Unhealthy eating patterns and a lack of dietary diversity, common among students, can lead to low-quality diets (2). Furthermore, university students often experience psychological stress due to academic performance targets, which can lead to unhealthy lifestyles, a predictor of low-quality diets (27)(28).

**Table 2. Diet Quality Index-International (DQI-I), nutritional status, korean wave exposure, and body image of respondents**

| Diet Quality Index-Internasional (DQI-I) Score | Mean  | SD    | Min.  | Max.  |
|------------------------------------------------|-------|-------|-------|-------|
| Variety                                        | 14.92 | 2.96  | 8.00  | 20.00 |
| Adequacy                                       | 16.95 | 5.85  | 8.00  | 31.00 |
| Moderation                                     | 14.09 | 5.14  | 4.50  | 27.00 |
| Balance                                        | 0.50  | 1.11  | 0.00  | 5.00  |
| Total                                          | 46.48 | 10.47 | 29.00 | 72.50 |
| Body Image (BSQ-16A)                           | 50.93 | 15.28 | 25.00 | 93.00 |

BW = Body Weight; BMI = Body Mass Index; FBG = Fasting Blood Glucose.

### Nutritional Status of Respondents

This study classified nutritional status into two categories to ensure a sufficient sample size in each category: normal nutritional status and malnutrition (wasting, overweight, and obesity), using the nutritional status cut-off set by Kemenkes (10). Based on **Table 3**, 57.00% of respondents had normal nutritional status, and the remaining 43.00% had abnormal nutritional status (12.50% with wasting, 10.90% with overweight, and 19.50% with obesity).

### Korean Wave Exposure in Respondents

This study measured Korean Wave exposure across three aspects: duration, type, and frequency of exposure, using a modified questionnaire by Rezkyoda (2024) and Habibah & Tsani (2021). **Table 3** shows that 89.80% of respondents reported Korean Wave exposure of more than 12 hours, 49.20% chose music/music videos, and 42.20% reported low exposure (<7 hours/week).

### Body Image in Respondents

Respondents' body image was measured using the Body Shape Questionnaire (BSQ)-16A instrument, which consists of 16 questions, each with a Likert scale of 1-6 (29). In this study, the classification of respondents' body image was divided into two categories, namely positive body image (no concern with shape: score <38; and mild concern with shape:  $38 \leq \text{score} \leq 51$ ) and

negative body image (moderate concern with shape:  $52 \leq \text{score} \leq 66$ ; and marked concern with shape: score > 66).

Based on **Table 3**, the mean  $\pm$  SD score for respondents was  $50.93 \pm 15.28$ , with a minimum score of 25 and a maximum score of 93. Most respondents (54.70%) had a positive body image; however, 45.30% had a negative body image. Negative body image in university students can be caused by several factors, including physical changes, mass media, relationships and experiences, self-esteem, cultural norms, mass media, and gender (19,30-32).

### Relationship Between Nutritional Status and Diet Quality

**Table 4** shows that nutritional status is associated with diet quality ( $p=0.001$ ) among university students in Depok City exposed to the Korean wave. Most respondents with good diet quality (19 of 21) had normal nutritional status, while most respondents with malnutrition (53 of 55) had low diet quality. Based on the data, respondents with malnutrition had lower scores across all diet quality aspects, including variety, adequacy, moderation, and balance, as well as a lower overall diet quality score. The table also shows that respondents with malnutrition were 9.324 times more likely to have low diet quality than those with normal nutritional status (OR = 9.324; 95% CI = 2.069-42.018). These results align with previous research by Fadlina et al. in

2023, which found a significant difference in diet quality between individuals with malnutrition (obesity) and those without obesity ( $p=0.037$ ). People with obesity tended to have lower diet quality scores, as well as lower consumption levels in fruits, whole grains, and fish compared to those without obesity (33). In contrast, Lathifah et al. (2024) also found that diet quality is associated with nutritional status ( $p=0.022$ ), with most

respondents with good diet quality having normal nutritional status (28 out of 36 respondents) (34).

These two factors are related because nutrient intake and utilization can influence an individual's nutritional status (7)(34). Another study by Lestari et al. in 2024 found similar results, indicating that diet quality was associated with nutritional status ( $p = 0.043$ ), with most respondents with good diet quality having normal nutritional status (57.2%) (12).

**Table 3. Diet Quality Index-International (DQI-I), nutritional status, and korean wave exposure of respondents**

| Diet Quality Index-Internasional (DQI-I) Score | Total (n) | Percentage (%) |
|------------------------------------------------|-----------|----------------|
| Diet Quality (DQI-I)                           |           |                |
| Good (Score > 60)                              | 21        | 16.40          |
| Low (Score ≤ 60)                               | 107       | 83.60          |
| Nutritional Status                             |           |                |
| Normal                                         | 73        | 57.00          |
| Malnutrition (Wasting, Overweight, Obese)      | 55        | 43.00          |
| Korean Wave Exposure                           |           |                |
| Length of Exposure                             |           |                |
| < 6 Months                                     | 11        | 8.60           |
| 6-12 Months                                    | 2         | 1.60           |
| > 12 Months                                    | 115       | 89.80          |
| Type of Exposure                               |           |                |
| Variety Show                                   | 21        | 16.40          |
| Serial Drama/Movies                            | 44        | 34.40          |
| Music/Music Videos                             | 63        | 49.20          |
| Duration of Exposure                           |           |                |
| Low (<7 Hours/Week)                            | 54        | 42.20          |
| Moderate (7-21 Hours/Week)                     | 50        | 39.10          |
| High (>21 Hours/Week)                          | 24        | 18.80          |
| Positive (Score ≥ 52)                          | 70        | 54.70          |
| Negative (Score ≤ 51)                          | 58        | 45.30          |

The study explained that inappropriate intake, poor food choices, and failure to follow recommendations result in nutritional problems that affect status (6)(12). In contrast, individuals whose intake meets nutritional recommendations (e.g., Pedoman Gizi Seimbang) can maintain good diet quality and normal nutritional status (12).

### **The Relationship Between Korean Wave Exposure and Diet Quality**

Based on Table 4, the results show that length of exposure ( $p=1.000$ ) and type of exposure ( $p=0.590$ ) were not associated with dietary quality in students in Depok City exposed to the Korean Wave. However, duration of exposure to the Korean wave was associated with dietary quality in students in Depok City exposed to the Korean

wave ( $p = 0.025$ ), where 52.3% of respondents with good dietary quality had a short duration of exposure. In comparison, 70.8% of respondents with long duration of exposure to the Korean wave had poor dietary quality. The table also shows that respondents with moderate duration of Korean wave exposure 1.610x more likely to have low diet quality compared to those with low duration of Korean wave exposure ( $OR=1.610;95\%CI=0.535-4.843$ ); and respondents with high duration of Korean wave exposure 6.451x more likely to have low diet quality compared to those with low duration of Korean wave exposure ( $OR=6.451;95\%CI=1.495-27.829$ ).

These results align with a previous study by Kumari (2024), which showed that individuals who liked Korean content tended to have poorer eating

habits than those who disliked it ( $p = 0.000$ ). This is because exposure to the Korean wave can influence individual eating habits. Characters in Korean content tend to portray and promote things

that can influence individuals to change their lifestyles to look like them, negatively impacting the individual's dietary quality, such as adopting certain diets and non-ideal beauty standards (18).

**Table 4. Bivariate analysis of factors influencing dietary quality**

| Variables                        | n (%)                |                     | OR<br>(95% CL) | P<br>value |
|----------------------------------|----------------------|---------------------|----------------|------------|
|                                  | Good<br>Diet Quality | Low<br>Diet Quality |                |            |
| Nutritional Status               |                      |                     |                |            |
| Normal                           | 19 (14.80)           | 54 (42.20)          | 9.324          | 0.001      |
| Malnutrition                     | 2 (1.60)             | 53 (41.40)          | (2.069-42.018) |            |
| Length of Korean Wave Exposure   |                      |                     |                |            |
| < 6 Months                       | 1 (0.80)             | 10 (9.30)           | Ref            | 0.354      |
| 6-12 Months                      | 1 (0.80)             | 1 (0.80)            | 1.979          |            |
|                                  |                      |                     | (0.239-16.385) |            |
| > 12 Months                      | 19 (14.80)           | 96 (75.00)          | 0.198          |            |
|                                  |                      |                     | (0.012-3.304)  |            |
| Length of Korean Wave Exposure   |                      |                     |                |            |
| < 6-12 Months                    | 2 (1.60)             | 11 (8.60)           | 0.919          | 1.000      |
| > 12 Months                      | 19 (14.80)           | 96 (75.00)          | (0.188-4.482)  |            |
| Type of Korean Wave Exposure     |                      |                     |                |            |
| Variety Show                     | 5 (3.90)             | 16 (12.50)          | Ref            | 0.590      |
| Serial Drama/Movies              | 7 (5.50)             | 37 (28.90)          | 0.533          |            |
|                                  |                      |                     | (0.156-1.820)  |            |
| Music/Music Videos               | 9 (7.00)             | 54 (42.20)          | 0.881          |            |
|                                  |                      |                     | (0.301- 2.575) |            |
| Duration of Korean Wave Exposure |                      |                     |                |            |
| Low (<7 Hours/Week)              | 11 (8.60)            | 43 (33.60)          | Ref            | 0.025      |
| Moderate (7-21 Hours/Week)       | 3 (2.30)             | 47 (36.70)          | 1.610          |            |
|                                  |                      |                     | (0.535-4.843)  |            |
| High (>21 Hours/Week)            | 7 (5.50)             | 17 (13.30)          | 6.451          |            |
|                                  |                      |                     | (1.495-27.829) |            |
| Body Image                       |                      |                     |                |            |
| Positive (Score $\geq 52$ )      | 19 (14.80)           | 51 (39.80)          | 10.431         | 0.000      |
| Negative (Score $\leq 51$ )      | 2 (1.60)             | 56 (43.80)          | (2.315-47.013) |            |

#### The Relationship Between Body Image and Diet Quality

Based on **Table 4**, the results show that body image is related to diet quality ( $p = 0.000$ ) among university students in Depok City exposed to the Korean wave, where 19 out of 21 respondents with good diet quality had a positive body image. In comparison, 56 out of 107 respondents with poor diet quality had a negative body image. The table also shows that respondents with negative body image were 10.431x more likely to have low diet quality than those with low duration of Korean wave exposure (OR = 10.431; 95% CI = 2.315-47.013). These results are also supported by data obtained from respondents' answers to the BSQ-16A questionnaire, which indicate that 52.3% of

respondents frequently worry about their bodies and, consequently, follow specific diets.

These results align with research by Asy'arista et al. (2024), which found that body image is related to dieting ( $p = 0.04$ ), with respondents with negative body image having a 1.4x greater risk of poor dieting (35). Furthermore, another study by Mardiyati & Partya in 2023 also found a similar correlation between body image and dieting behavior ( $p = 0.001$ ), with most respondents with positive body image having healthy dieting behaviors, while most respondents with negative body image had unhealthy dieting behaviors (36). Furthermore, university students are in the age range that commonly experiences changes in body shape and body image (21).

Changes in university students' body image towards the negative can cause anxiety about their appearance and body shape, resulting in efforts to maintain body shape through the adoption of unhealthy eating patterns and even eating disorders that can affect diet quality (37)(38)(39)(21). On the other hand, a previous study by Karyawati et al. in 2023 shows that body

image is associated with dieting behavior in university students ( $p = 0.006$ ); 68.9% of respondents with positive body image exhibited healthy dieting behavior. This is because a positive body image enables individuals to appreciate their own bodies and positively care for them, rather than simply prioritizing appearance or conforming to societal standards (22).

**Table 5. Multivariate analysis of factors influencing dietary quality using multivariate binary logistic regression**

| Variable                         | B     | Sig. | Adj. OR | 95% CI |       | Nagelkerke R-Square |
|----------------------------------|-------|------|---------|--------|-------|---------------------|
|                                  |       |      |         | Upper  | Lower |                     |
| Nutritional Status               |       |      |         |        |       |                     |
| Normal                           | -     | -    | Ref     | -      | -     |                     |
| Malnutrition                     | 1.84  | 0.02 | 6.27    | 1.32   | 29.77 |                     |
| Duration of Korean Wave Exposure |       |      |         |        |       |                     |
| Low                              | -     | 0.13 | Ref     | -      | -     | 0.34                |
| Moderate                         | 1.19  | 0.10 | 3.29    | 0.79   | 13.65 |                     |
| High                             | -0.39 | 0.53 | 0.68    | 0.20   | 2.33  |                     |
| Body Image                       |       |      |         |        |       |                     |
| Positive                         | -     | -    | Ref     | -      | -     |                     |
| Negative                         | 2.04  | 0.01 | 7.65    | 1.63   | 36.05 |                     |

Based on the multivariate binary logistic regression analysis in **Table 5**, the results show that respondents with malnutrition tend to have low diet quality compared to respondents with normal nutritional status ( $B=1.84$ ;  $p=0.02$ ; Adjusted OR= 6.27); and respondents with negative body image tend to have low diet quality compared to respondents with positive body image ( $B=2.04$ ;  $p=0.01$ ; Adjusted OR= 7.65). On the other hand, duration of Korean Wave did not show any association with diet quality in multivariate analysis ( $p > 0.05$ ).

**Table 5** also shows that negative body image ( $B=2.04$ ; Adjusted OR=7.65) showed the strongest association with diet quality compared with other variables. This result is indicated by body image having the highest adjusted OR. Respondents with a negative body image are 7.65 x more likely to have a low diet quality compared to those with a positive body image. In comparison, the OR associated with malnutrition is slightly lower ( $B=1.84$ ; Adjusted OR= 6.27), making respondents with malnutrition 6.27 x more likely to have a low diet quality than those with normal nutritional status. These findings align with previous studies demonstrating that individuals with a negative body image tend to adopt habits

that result in poor diet quality, such as restrictive intake and unhealthy eating patterns, driven by a lack of self-confidence and a desire to achieve an ideal body shape (35)(40)(41).

The Nagelkerke R-Square value of 0.34 indicated that the independent variables in this study explained 33.70% of the variation in dietary quality, while the remaining variation was influenced by variables outside the model. Other factors such as unhealthy habits (high alcohol intake, a sedentary lifestyle, insomnia), high consumption of processed foods, mental health, a history of infectious disease, and so on can predict it. They may also be associated with diet quality (28)(42)(34).

This study has several limitations, including a cross-sectional design that cannot establish causality; the use of snowball sampling, which may introduce selection bias and result in an uneven distribution of respondents, thereby limiting generalizability; and the use of self-administered questionnaires, which could lead to data collection bias. Therefore, future research on similar topics should consider employing longitudinal designs and more objective data collection methods. Despite these limitations, this study provides preliminary evidence of a strong

relationship between psychological factors, specifically body image, and dietary quality, while highlighting key factors for future nutritional interventions.

## CONCLUSION AND RECOMMENDATION

This study showed that nutritional status, Korean wave exposure, and body image were significantly associated with diet quality among respondents in multivariate analysis using binary logistic regression. Respondents with malnutrition and negative body image tend to have lower diet quality compared to respondents with normal nutritional status and positive body image. Among all independent variables, negative body image showed the strongest association with diet quality. Furthermore, multivariate binary logistic regression showed that the independent variables in this study explained 33.70% of the variation in diet quality, indicating that other factors outside the model may also be associated with respondents' diet quality.

Based on these findings, it is hoped that students, especially those who like Korean culture and have a negative body image, will not adopt unhealthy eating habits such as dieting or excessive eating restrictions without considering various aspects that can affect diet quality, such as variety, adequacy, moderation, and balance of intake, which can affect their nutritional status.

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