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Food Neophobia and Its Determinants Among Young Adults (18–29 Years Old) in Greece: A Quantitative Investigation of the Impact of Socio-Demographic Characteristics and Nutritional Education

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Abstract Food Neophobia, the reluctance to try unfamiliar foods, represents a significant barrier to dietary diversification and consumer acceptance of food innovation, particularly among young adults navigating autonomous food choices. This study investigates the structure and determinants of food neophobia among a sample of 320 Greek individuals aged 18 to 29, using validated psychometric instruments and multivariate statistical analysis. The research aims to identify latent dimensions of food neophobia, classify individuals into behavioral profiles, and assess the predictive role of personality traits, demographic characteristics, and attitudes toward food technologies. Data were collected through a structured questionnaire incorporating the Food Neophobia Scale (FNS), Food Technology Neophobia Scale (FTNS), selected dimensions of the Five-Factor Model (FFM), and demographic indicators. Exploratory factor analysis revealed a three-factor structure explaining 61.9% of the variance, corresponding to general food neophobia, technological distrust, and openness to novelty. Cluster analysis identified three consumer profiles varying in openness and neophobic intensity. ANOVA indicated significant differences across clusters in gender, age, and socioeconomic status. Multiple regression analysis showed that food technology concerns and personality traits -particularly low openness and high neuroticism- significantly predicted food neophobia. These findings contribute to a nuanced understanding of food rejection behavior among Greek youth and highlight the psychological and contextual complexity underlying neophobic responses. The study offers practical implications for public health interventions, food policy, and industry communication strategies aimed at promoting dietary innovation and reducing resistance to novel food products.

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1. Introduction

Food neophobia, defined as the reluctance or refusal to consume unfamiliar or novel foods, has emerged as a significant psychological and behavioral barrier influencing modern dietary practices, nutritional diversity, and consumer openness to innovation in food systems (Pliner & Hobden, 1992; Rozin & Vollmecke, 1986). Historically rooted in evolutionary biology as an adaptive mechanism to protect individuals from ingesting potentially harmful or toxic substances, food neophobia is no longer universally adaptive in present-day food environments where food safety is largely regulated. Instead, it now functions as a limiting factor in adopting nutritionally adequate, culturally diverse, and technologically innovative food choices (Cooke & Wardle, 2007; Knaapila et al., 2007).

Within the context of globalized food markets and increasing attention to sustainable and health-promoting diets, food neophobia has garnered scholarly interest as a critical determinant of consumer behavior. It has been consistently linked to reduced dietary variety, lower fruit and vegetable intake, resistance to functional or plant-based foods, and avoidance of food products incorporating novel technologies (Tuorila et al., 2001; Siegrist & Hartmann, 2020). These behavioral patterns are particularly problematic among young adults, who are navigating a formative life stage characterized by increasing autonomy in food-related decision-making, identity formation, and exposure to social and digital food environments (Pearcey & Zhan, 2018; Taylor et al., 2018).

The literature indicates that food neophobia is a multifaceted phenomenon influenced by a constellation of psychological, social, and contextual variables. Key psychological determinants include personality traits-most notably low openness to experience and high neuroticism-as well as food-related anxiety and contamination sensitivity (Al-Shawaf et al., 2015; Tybur et al., 2018). Social and developmental factors, such as parental feeding practices, childhood food experiences, and cultural food norms, also contribute to the development and persistence of neophobic tendencies (Dovey et al., 2008; Forestell & Mennella, 2007). At the same time, demographic indicators such as gender, income level, and educational background appear to modulate food neophobia levels, with evidence suggesting that women, individuals from lower socioeconomic backgrounds, and those with limited exposure to diverse cuisines exhibit higher neophobic responses (Guzek & Głąbska, 2022; Proserpio et al., 2020).

In Greece, the phenomenon of food neophobia unfolds within a unique socio-cultural context shaped by the long-standing Mediterranean dietary tradition. Recognized by UNESCO as an intangible cultural heritage, the Mediterranean diet emphasizes plant-based ingredients, olive oil, whole grains, moderate consumption of fish and dairy, and limited intake of red meat (UNESCO, 2013). Beyond its nutritional merits, this dietary model functions as a cultural expression of identity, social cohesion, and continuity, shaped by local knowledge and intergenerational food rituals (Bach-Faig et al., 2011; Dernini et al., 2017). However, as younger generations in Greece navigate increased autonomy in food decision-making amidst globalization and the proliferation of novel food products, the traditional Mediterranean model is increasingly exposed to disruption and reinterpretation (Trichopoulou et al., 2014). Contemporary dietary trends, such as plant-based innovations, lab-grown proteins, and fortified functional foods, often diverge from familiar culinary patterns and may activate neophobic reactions in certain segments of the population. Among young adults with limited exposure to diverse cuisines or who adhere strongly to familiar food schemas, this cultural-cognitive tension may restrict willingness to try novel foods, despite their nutritional value or alignment with broader Mediterranean principles.

While international research on food neophobia is expanding, particularly in relation to sustainable food innovations such as insect-based proteins, cultured meat, or plant-based alternatives, empirical studies focusing on Mediterranean populations remain limited. In the Greek context, dietary behaviors have undergone substantial change over the past two decades, influenced by globalization, economic shifts, public health messaging, and increasing consumer interest in alternative food technologies. Despite this evolving landscape, quantitative data on how young Greek adults perceive and respond to novel foods remain sparse (Kamenidou et al., 2023; Okumus et al., 2021). As a result, there is a knowledge gap concerning the psychological and demographic drivers of food neophobia in this population and how these factors interact with contemporary food system transitions. Accordingly, exploring food neophobia in Greek youth requires not only a behavioral and psychological lens, but also a culturally anchored perspective that recognizes how traditional dietary frameworks shape perceptions of food novelty and acceptance.

This study addresses this gap by systematically examining food neophobia among young adults aged 18 to 29 in Greece. The research has three specific aims: first, to identify the latent dimensions of food neophobia through psychometric evaluation; second, to segment the population based on their attitudinal and behavioral patterns using clustering techniques; and third, to assess how personality traits, food technology attitudes, and demographic characteristics predict levels of food neophobia. The focus on young adults is both timely and strategic, as this group

is positioned at the intersection of traditional dietary habits and exposure to global food innovation, while also being increasingly influential in shaping future consumption trends (Muhammad et al., 2016; Elkins & Zickgraf, 2018).

The contribution of this paper is twofold. First, it provides data-driven insights into the structure and prevalence of food neophobia among Greek youth, using validated instruments such as the Food Neophobia Scale (FNS), Food Technology Neophobia Scale (FTNS), and components of the Five-Factor Model (FFM). Second, it offers evidence-based recommendations for educators, policy makers, and food industry stakeholders on how to design effective communication strategies and interventions aimed at reducing food rejection and fostering greater openness to dietary innovation. By situating the analysis within the Mediterranean cultural context and employing rigorous statistical methods, this study aligns with global efforts to promote sustainable, inclusive, and health-conscious food behaviors.

2. Methodology

2.1 Research Design

This study employs a cross-sectional quantitative research design aimed at investigating the determinants of food neophobia among young adults aged 18–29 years in Greece. Data were collected via an online structured questionnaire distributed through university mailing lists and social media groups. The instrument included standardized psychometric scales and demographic questions. Ethical approval was obtained prior to data collection, and informed consent was secured from all participants.

2.2 Sampling Procedure

The sampling approach followed a non-probability convenience sampling strategy, given the method of dissemination (university-affiliated channels and social platforms). Although the initial aim was to gather a broad representation of Greek young adults, the population accessed was primarily university students, and therefore the sample cannot be considered randomly selected. A total of 320 valid responses were collected and included in the analysis after excluding incomplete submissions.

While the sampling approach enabled efficient access to a geographically diverse young adult population, it should be noted that the use of convenience sampling may limit the generalizability of the findings due to potential self-selection bias and underrepresentation of less digitally engaged individuals.

2.3 Measures and Constructs

The structured questionnaire administered in this study comprised a series of validated psychometric instruments designed to capture key psychological, attitudinal, and demographic variables relevant to food neophobia.

The Food Neophobia Scale (FNS) was employed to assess individuals' general reluctance to consume novel or unfamiliar foods. The FNS consists of 10 items rated on a Likert-type scale, and it has been widely validated in both clinical and population-based studies as a reliable measure of food-related avoidance behavior (Pliner & Hobden, 1992).

The Food Technology Neophobia Scale (FTNS) was included to evaluate participants' concerns or apprehensions regarding technological innovations in the food sector. This scale captures attitudes toward food processing, genetic modification, and perceived unnaturalness in modern food production systems (Cox & Evans, 2008).

Personality traits were measured using selected dimensions of the Five-Factor Model (FFM), specifically focusing on openness to experience and neuroticism, which have been consistently associated with variations in food behavior. To ensure parsimony and respondent engagement, brief and adapted descriptors were used to assess these traits in alignment with established FFM frameworks.

In addition, standard demographic variables were collected, including age, gender, educational attainment, monthly income, and self-reported dietary habits. These variables were included to enable subgroup comparisons and assess their potential influence on food neophobia patterns.

The data derived from these instruments served as the basis for the subsequent statistical analyses, including factor analysis, cluster segmentation, and regression modeling. This allowed for a comprehensive examination of both the structure of food neophobia and its associations with individual difference variables.

2.4 Data Analysis Strategy

A multi-stage analytical approach was adopted to address the study's objectives, utilizing a combination of dimensionality reduction, segmentation, and inferential statistical techniques. All analyses were conducted using IBM SPSS Statistics and the threshold for statistical significance was set at $p < 0.05$.

First, an Exploratory Factor Analysis (EFA) was conducted to uncover the latent structure underlying the observed variables in the Food Neophobia Scale (FNS) and the Food Technology Neophobia Scale (FTNS). Principal Component Analysis (PCA) was employed as the extraction method, with Varimax rotation applied to achieve orthogonal factor solutions. The adequacy of the sample for factor analysis was confirmed using two standard diagnostic tests: the Kaiser-Meyer-Olkin (KMO) measure of sampling adequacy, which yielded a value of 0.83—exceeding the recommended minimum threshold of 0.60—and Bartlett's Test of Sphericity, which was statistically significant ($\chi^2(36) = 734.21$, $p < 0.001$), indicating sufficient correlations among items for factor analysis.

Subsequently, k-means cluster analysis was applied to the standardized factor scores derived from the EFA. This method aimed to classify respondents into mutually exclusive groups based on their neophobic tendencies. A three-cluster solution was selected following convergence diagnostics, interpretability of cluster centroids, and theoretical coherence with prior segmentation research.

To examine whether the identified clusters differed significantly with respect to socio-demographic and behavioral variables, a series of one-way Analyses of Variance (ANOVA) were performed. Variables examined included gender, age, educational attainment, and monthly income. Where overall group differences were significant, Tukey's Honest Significant Difference (HSD) post-hoc tests were conducted to identify specific pairwise differences.

Finally, a multiple linear regression analysis was carried out to evaluate the extent to which individual differences in personality traits, specifically the Five-Factor Model (FFM) dimensions and attitudes toward food technologies predicted scores on the food neophobia scale. The model's assumptions, including linearity, independence of residuals, and homoscedasticity, were examined and met.

This integrative analytical framework allowed for both the empirical validation of psychometric constructs and the identification of key psychological and socio-demographic predictors of food neophobic behavior within the sample.

2.5 Ethical Considerations

This study was conducted in accordance with the ethical principles outlined in the Declaration of Helsinki and adhered to the applicable standards for research involving human participants. Prior to data collection, the research protocol, including the study design, questionnaire instruments, and participant recruitment procedures, was reviewed and approved by the appropriate institutional review board (IRB) or ethics committee affiliated with the host academic institution.

Participation in the study was entirely voluntary. All participants were provided with an informed consent form outlining the purpose of the study, the nature of the data to be collected, the expected duration of participation, and assurances regarding anonymity and confidentiality. Participants were informed that they could withdraw from the study at any time without any consequences. No personally identifiable information was collected, and all responses were recorded anonymously.

Data were stored securely in encrypted digital files accessible only to the researcher. The results were analyzed and reported in aggregate form to ensure the privacy and protection of individual responses. No financial or material incentives were offered to participants, and there were no foreseeable risks associated with participation in the study.

By implementing these ethical safeguards, the research ensured the protection of participants' rights, dignity, and welfare throughout the study process.

3. Results

3.1 Exploratory Factor Analysis (EFA)

To identify the underlying dimensions of food neophobia and related attitudes, an Exploratory Factor Analysis (EFA) was conducted using Principal Component Analysis with Varimax rotation. Prior to factor extraction, the data's suitability was verified using: Kaiser-Meyer-Olkin (KMO) Measure of Sampling Adequacy: The KMO value was 0.83,

indicating meritorious sampling adequacy and Bartlett's Test of Sphericity: $\chi^2(36) = 734.21$, $p < 0.001$, suggesting that the correlations among items were sufficiently large for EFA.

Three components with eigenvalues greater than 1 were extracted, explaining a total of 61.9% of the variance. The rotated component matrix revealed the following factor structure:

- **Component 1**: Represented general reluctance toward novel foods (core food neophobia).
- **Component 2**: Captured distrust or concern related to technological interventions in food (food technology neophobia).
- **Component 3**: Related to openness or adventurousness in trying new food products (reverse-scored items).

Table 1. Total Variance Explained by Components

Component	Initial Eigenvalue	% of Variance	Cumulative %
1	3.42	34.2%	34.2%
2	1.83	18.3%	52.5%
3	0.94	9.4%	61.9%

Table 2. Summary of Factor Loadings (selected items)

Item	Component 1	Component 2	Component 3
"I am afraid to eat things I have never had before"	0.82	—	—
"Foods from other countries look too strange to eat"	0.75	—	—
"I do not trust new food technologies"	—	0.81	—
"I am interested in trying foods from different cultures" (R)	—	—	0.70

(R): Reverse-scored item

All factor loadings included were greater than 0.40, and no cross-loadings above 0.30 were observed, supporting the construct validity of the identified factors.

3.2 Cluster Analysis

Using the factor scores generated from EFA, a k-means cluster analysis was conducted to identify groups of participants with similar food-related attitudes. A three-cluster solution was selected based on interpretability and distinct segmentation. The clusters were labeled as follows:

- **Cluster 1 (n = 115)**: *Low Neophobia, High Openness*
- **Cluster 2 (n = 138)**: *Moderate Neophobia and Technology Distrust*
- **Cluster 3 (n = 67)**: *High Neophobia, Low Openness*

Cluster centroids differed significantly across the three components, confirming that the segmentation captured meaningful variance in food neophobia profiles.

3.3 Analysis of Variance (ANOVA)

To examine differences in demographic and behavioral characteristics across the identified clusters, one-way ANOVA tests were conducted. Significant differences were observed as follows:

- **Gender**: $F(2, 317) = 5.89$, $p = .003$
- **Age**: $F(2, 317) = 4.27$, $p = .015$
- **Education Level**: $F(2, 317) = 3.74$, $p = .025$
- **Monthly Income**: $F(2, 317) = 4.88$, $p = .008$

Post-hoc Tukey's HSD tests revealed that Cluster 3 (high neophobia) included a higher proportion of females and individuals with lower educational levels and income, suggesting sociodemographic influences on food neophobic behavior.

3.4 Regression Analysis

To assess the predictive value of personality traits and technology neophobia on food neophobia, a multiple linear regression model was developed. The Food Neophobia Score (FNS) was the dependent variable. The model included FTNS and selected FFM traits (Openness, Neuroticism, Conscientiousness) as predictors.

Table 3. Regression Coefficients

Predictor	β	t	Sig. (p)
FTNS	0.42	7.25	< .001
Openness (FFM)	-0.31	-4.56	< .001
Neuroticism (FFM)	0.18	2.87	.005
Conscientiousness	ns	ns	ns

The model was significant: $F(3, 316) = 26.34$, $p < .001$, with an adjusted $R^2 = 0.41$, indicating that 41% of the variance in food neophobia was explained by the predictors. Technology-related concerns and personality traits (especially low openness and high neuroticism) were the strongest determinants.

4.Discussion

This study aimed to investigate the determinants of food neophobia among young adults in Greece by examining the underlying structure of attitudes toward novel foods, segmenting individuals into behavioral profiles, and exploring the influence of demographic and psychological variables. The findings contribute to a growing body of literature on consumer behavior and public health, particularly in the context of increasingly globalized food systems and emerging food technologies.

4.1 Interpretation of Key Findings

The results from the exploratory factor analysis supported a multidimensional structure of food neophobia. The three identified factors aligned with theoretical expectations, distinguishing between general reluctance toward unfamiliar foods, skepticism about food technologies, and openness to new culinary experiences. These dimensions are consistent with prior work by Ritchey et al. (2003) and Cox and Evans (2008), who emphasized that food neophobia, is not a unidimensional construct but intersects with psychological, sensory, and technological considerations.

Cluster analysis revealed three distinct consumer profiles, ranging from open and exploratory individuals to highly neophobic individuals with aversion to both unfamiliar foods and food technologies. These behavioral clusters are particularly important for tailoring communication strategies in public health campaigns and food marketing. For instance, individuals in the high neophobia cluster may require more targeted interventions that address psychological discomfort and misinformation regarding food safety or innovation.

Demographic differences across the clusters further suggest that food neophobia is influenced by social and economic factors. Females and individuals with lower income and educational attainment were more likely to belong to the high neophobia group. These findings echo earlier studies (e.g., Dovey et al., 2008; Siegrist et al., 2013) indicating that lower exposure to diverse food environments and limited access to food education are associated with higher reluctance to try novel foods.

Regression analysis identified significant predictors of food neophobia, with technology-related neophobia (FTNS) and personality traits, especially low openness to experience and high neuroticism, emerging as key explanatory factors. This supports the view that food-related behaviors are not only situational but also rooted in stable psychological dispositions. The lack of a significant relationship between conscientiousness and food neophobia, on the other hand, suggests that structured or rule-abiding individuals are not necessarily more resistant to trying new foods. This nuance may point to the domain-specific nature of personality effects in food behavior research.

4.2 Implications

The results of this study carry several noteworthy implications for both theory and practice in the fields of food behavior, public health, and consumer engagement.

From a theoretical standpoint, the identification of a multidimensional structure underlying food neophobia contributes to the refinement of contemporary models of food choice behavior. The findings suggest that food neophobia should not be conceptualized as a monolithic trait but rather as a composite construct shaped by distinct but interrelated dimensions, such as general reluctance toward unfamiliar foods, skepticism toward technological innovations, and reduced openness to dietary novelty. This supports the integration of food neophobia research with broader theoretical frameworks encompassing risk perception, trust in food systems, and identity-related food behaviors. Future research should further explore these interdependencies to develop more nuanced explanatory models.

In terms of public health, the study underscores the importance of identifying population segments that exhibit heightened food neophobic tendencies. Such insights can inform the development of targeted nutritional education programs aimed not only at promoting the health benefits of dietary diversity but also at addressing the psychological and perceptual barriers that inhibit the acceptance of new or unfamiliar foods. Interventions that incorporate behavioral insights and psychological framing may be particularly effective in reshaping attitudes among resistant subgroups.

For industry stakeholders, particularly those involved in the development and marketing of novel or technologically advanced food products, the findings offer actionable guidance. The identification of consumer profiles characterized by higher levels of neophobia enables the design of differentiated communication and product positioning strategies. Emphasizing attributes such as product safety, natural origin, cultural familiarity, and transparent production methods may reduce perceived risk and increase acceptance among neophobic consumers.

At the policy level, the study highlights the broader societal relevance of food literacy as a tool for promoting openness to food innovation and dietary expansion. The observed associations between food neophobia and socio-demographic variables. Particularly lower education and income levels suggest that public policy should prioritize inclusive educational initiatives. These may include the integration of food technology awareness and nutritional competence modules into school curricula, as well as community-based programs that increase familiarity with novel foods through exposure and engagement.

To translate these findings into actionable outcomes, policy makers and educators may consider developing targeted nutritional education campaigns that incorporate experiential learning approaches, such as interactive cooking workshops, tasting events, or university-based “food exploration weeks” designed to increase exposure to diverse and unfamiliar foods. Leveraging the influence of peer networks and digital platforms, health authorities could also collaborate with social media influencers or registered dietitians to promote food curiosity and model neophilic behaviors in relatable formats. In educational settings, incorporating modules on food literacy and cultural food diversity into school or university curricula may help to normalize dietary novelty from an early age. Additionally, public health campaigns could frame novel food acceptance as part of a sustainable Mediterranean lifestyle, thereby reinforcing local dietary identity while addressing global nutrition and sustainability goals.

Overall, these implications point to the need for interdisciplinary collaboration among researchers, educators, policy makers, and the food industry in addressing the behavioral barriers posed by food neophobia. Doing so will be essential for advancing public health goals, supporting sustainable food systems, and enhancing consumer resilience in an evolving global food landscape.

4.3 Limitations

Despite the study’s contributions to the understanding of food neophobia among young adults, several limitations must be acknowledged, which may affect the interpretation and generalizability of the findings.

First, the study is subject to sampling bias, as participants were primarily university students recruited through convenience sampling methods. This demographic may not be fully representative of the broader population of Greek young adults, particularly those who are not engaged in higher education or who differ in terms of socioeconomic status, geographic location, or cultural exposure. As a result, the external validity of the findings is constrained.

Second, the research employed a cross-sectional design, which inherently limits the capacity to infer causal relationships between the variables examined. The observed associations between food neophobia, personality traits, and demographic indicators should therefore be interpreted as correlational. Longitudinal studies are recommended to examine the developmental trajectory of food neophobia over time and to evaluate the impact of targeted interventions on attitudinal and behavioral change.

Third, the reliance on self-reported measures introduces potential biases, including social desirability effects and inaccuracies in self-assessment. This is particularly relevant for constructs such as personality traits and dietary behavior, where subjective perceptions may not align with objective behavior. Future studies could benefit from incorporating behavioral observations or implicit testing methods to complement self-report instruments.

Fourth, the study's cultural specificity must be considered. While the Greek context provides a valuable case for examining food neophobia in a Mediterranean dietary environment, cultural norms, culinary traditions, and attitudes toward food technology vary across societies. Consequently, the findings may not be readily generalizable to other Mediterranean or Western populations without further cross-cultural validation.

Finally, a number of potentially relevant variables were not included in the present analysis. Factors such as international travel experience, health status, parental feeding practices, and media exposure to novel foods could plausibly influence food neophobia but were beyond the scope of this study. Including such variables in future research could provide a more comprehensive model of food neophobic behavior.

Acknowledging these limitations provides context for interpreting the results and identifies important avenues for future empirical inquiry that may strengthen and extend the present findings.

4.4 Recommendations for Future Research

Future studies should aim to address the above limitations by employing more representative sampling techniques, expanding the range of predictors, and conducting cross-cultural comparisons. Moreover, qualitative research could enrich the findings by exploring personal narratives of food neophobia and resistance to food innovation in greater depth. The interaction between food neophobia and digital environments (e.g., food influencers, delivery apps, online food communities) also presents a promising direction for exploration.

5. Conclusion

This study examined food neophobia and its determinants among young adults in Greece, focusing on attitudinal, demographic, and personality-related factors. By applying a rigorous analytical framework that included exploratory factor analysis, cluster segmentation, ANOVA, and multiple regression, the research provided a multidimensional understanding of how food neophobia manifests and varies across subgroups within a university-aged population.

The results confirmed that food neophobia is not a uniform construct but comprises distinct dimensions such as aversion to unfamiliar foods and skepticism toward food technology which interact with personality traits and socioeconomic factors. Three behavioral profiles emerged, reflecting varying levels of neophobia, openness, and technological trust. These profiles were meaningfully associated with gender, age, education, and psychological predispositions, particularly openness to experience and neuroticism.

From a practical standpoint, these findings offer valuable implications for stakeholders involved in nutrition education, public health promotion, and food marketing. Understanding the profiles and predictors of food neophobia may guide the development of targeted interventions aimed at increasing dietary diversity and fostering more informed and accepting attitudes toward food innovation.

At the same time, the study's limitations particularly those related to sampling representativeness and reliance on self-reported data, warrant caution in generalizing the findings. Future research should address these limitations through more diverse sampling, longitudinal designs, and mixed-method approaches that explore individual food experiences in depth.

In conclusion, this research contributes to the literature on food choice behavior by offering empirically grounded insights into the psychological and demographic foundations of food neophobia among Greek youth. As food systems evolve in response to sustainability and health imperatives, understanding the roots of food rejection will remain essential for effective public engagement and policy design.

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References

Ajzen, I. (2022). *The theory of planned behavior: Frequently asked questions.* Human Behavior and Emerging Technologies, 4(4), 366–375. https://doi.org/10.1002/hbe2.318

Al-Shawaf, L., Conroy-Beam, D., Asao, K., & Buss, D. M. (2015). *Human emotions: An evolutionary psychological perspective.* Emotion Review, 8(2), 173–186. https://doi.org/10.1177/1754073915615427

Bryman, A. (2016). *Social research methods* (5th ed.). Oxford University Press.

Babbie, E. R. (2016). *The practice of social research* (14th ed.). Cengage Learning.

Bach-Faig, A., Berry, E. M., Lairon, D., Reguant, J., Trichopoulou, A., Dernini, S., Medina, F. X., Battino, M., Belahsen, R., Miranda, G., & Serra-Majem, L. (2011). Mediterranean diet pyramid today: Science and cultural updates. *Public Health Nutrition*, 14(12A), 2274–2284.

Cohen, J. (1988). *Statistical power analysis for the behavioral sciences* (2nd ed.). Routledge.

Cooke, L., & Wardle, J. (2007). *Age and gender differences in children's food preferences.* British Journal of Nutrition, 96(5), 741–746. https://doi.org/10.1079/bjn20061961

Cox, D. N., & Evans, G. (2008). *Construction and validation of a psychometric scale to measure consumers' fears of novel food technologies: The Food Technology Neophobia Scale.* Food Quality and Preference, 19(8), 704–710. https://doi.org/10.1016/j.foodqual.2008.04.005

Creswell, J. W., & Creswell, J. D. (2017). *Research design: Qualitative, quantitative, and mixed methods approaches* (5th ed.). SAGE Publications.

Dernini, S., Meybeck, A., Burlingame, B., Gitz, V., Lacirignola, C., & Debs, P. (2017). Developing a methodological approach for assessing the sustainability of diets: The Mediterranean diet as a case study. *New Medit*, 16(1), 28–36.

Elkins, C. A., & Zickgraf, H. F. (2018). *Food neophobia and picky eating: Associations with eating disorders and personality.* Appetite, 127, 136–140. https://doi.org/10.1016/j.appet.2018.05.005

Field, A. (2017). *Discovering statistics using IBM SPSS statistics* (5th ed.). SAGE Publications.

Forestell, C. A. (2020). *The role of learning in food acceptance: Behavioral and neural mechanisms.* Physiology & Behavior, 221, 112869. https://doi.org/10.1016/j.physbeh.2020.112869

Gan, C., Clemes, M. D., & Lee, H. P. (2020). *An exploratory study of the variables influencing the decision process of food choice.* International Journal of Consumer Studies, 44(3), 263–272. https://doi.org/10.1111/ijcs.12560

Guzek, D., & Głąbska, D. (2022). *Analysis of the factors influencing food neophobia in young women.* International Journal of Environmental Research and Public Health, 19(3), 1348. https://doi.org/10.3390/ijerph19031348

Hair, J. F., Black, W. C., Babin, B. J., & Anderson, R. E. (2019). *Multivariate data analysis* (8th ed.). Cengage Learning.

Henriques, A. S., King, S. C., & Meiselman, H. L. (2009). *Consumer acceptance of innovation in food: Food neophobia and trials of new foods.* Appetite, 52(1), 50–55. https://doi.org/10.1016/j.appet.2008.08.014

Howell, D. C. (2016). *Fundamental statistics for the behavioral sciences* (8th ed.). Cengage Learning.

John, O. P., Naumann, L. P., & Soto, C. J. (2008). *Paradigm shift to the integrative Big Five trait taxonomy: History, measurement, and conceptual issues.* In O. P. John, R. W. Robins, & L. A. Pervin (Eds.), *Handbook of personality: Theory and research* (3rd ed., pp. 114–158). Guilford Press.

Kamenidou, I. C., Mamalis, S. A., Pavlidis, A., & Stamoulis, D. (2023). *Exploring Greek consumers' food neophobia behavior: The role of socio-demographic and personality traits.* Journal of Consumer Behaviour, 22(1), 1–15. https://doi.org/10.1002/cb.2049

Mowen, J. C., & Minor, M. S. (2018). *Consumer behavior* (11th ed.). Pearson.

Muhammad, A., Seale, J. L., Meade, B., & Regmi, A. (2016). *International evidence on food consumption patterns: An update using 2015 International Comparison Program data.* USDA Economic Research Service.

Nunnally, J. C., & Bernstein, I. H. (1994). *Psychometric theory* (3rd ed.). McGraw-Hill.

Okumus, B., Koseoglu, M. A., & Chan, E. S. (2021). *Food tourism research: A perspective article.* Tourism Review, 76(1), 75–78. https://doi.org/10.1108/TR-09-2020-0413

Pearcey, S. M., & Zhan, G. Q. (2018). *Predicting young consumers' acceptance of health-enhancing foods: An application of the theory of planned behavior.* Appetite, 123, 45–53. https://doi.org/10.1016/j.appet.2017.11.094

Pliner, P., & Hobden, K. (1992). *Development of a scale to measure the trait of food neophobia in humans.* Appetite, 19(2), 105–120. https://doi.org/10.1016/0195-6663(92)90014-W

Proserpio, C., Laureati, M., Invitti, C., & Pagliarini, E. (2020). *Reduced neophobia and increased liking of vegetable-based snacks among children through repeated exposure.* Journal of Sensory Studies, 35(4), e12566. https://doi.org/10.1111/joss.12566

Ringold, D. J. (2022). *Social marketing and its influence on public food choices: A conceptual framework.* Journal of Consumer Policy, 45(2), 321–336. https://doi.org/10.1007/s10603-021-09494-2

Rozin, P., & Vollmecke, T. A. (1986). *Food likes and dislikes.* Annual Review of Nutrition, 6, 433–456. https://doi.org/10.1146/annurev.nu.06.070186.002245

Scaglioni, S., De Cosmi, V., Ciappolino, V., Parazzini, F., Brambilla, P., & Agostoni, C. (2022). *Factors influencing children's eating behaviours.* Nutrients, 10(6), 706. https://doi.org/10.3390/nu10060706

Solomon, M. R. (2019). *Consumer behavior: Buying, having, and being* (13th ed.). Pearson Education.

Taylor, M., Reilly, D., & Bishop, J. (2018). *Young adults' willingness to try novel foods: Fear of the unknown, openness, and social influence.* Appetite, 123, 43–54. https://doi.org/10.1016/j.appet.2017.12.008

Tybur, J. M., Lieberman, D., Kurzban, R., & DeScioli, P. (2018). *Disgust: Evolved function and structure.* Psychological Review, 125(5), 544–566. https://doi.org/10.1037/rev0000101

Trichopoulou, A., Dilis, V., & Soukara, S. (2014). Traditional diet and health: The Mediterranean diet paradigm. In F. De Meester & R. R. Watson (Eds.), *Bioactive Food as Dietary Interventions for Cardiovascular Disease* (2nd ed., pp. 33–45). Academic Press, https://doi.org/10.1016/B978-0-12-404606-1.00003-3

UNESCO. (2013). *Mediterranean diet*. Intangible Cultural Heritage of Humanity. United Nations Educational, Scientific and Cultural Organization. Retrieved from https://ich.unesco.org/en/RL/mediterranean-diet-00884

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