FAST FOOD CONSUMPTION AND ITS HEALTH CONSEQUENCES AMONG ADULTS IN PRIMARY CARE SETTINGS

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Abstract : Fast food consumption is an emerging public health concern within family medicine and primary care, as it contributes to poor dietary patterns and long-term health risks. This qualitative study explores perceptions, motivations, and health experiences associated with fast food consumption among adults attending family medicine clinics. In-depth interviews were conducted with 35 participants aged 18 to 45 years, selected through purposive sampling to capture diverse perspectives. Thematic analysis revealed four key themes: convenience-driven dietary choices, limited awareness of nutritional risks, self-reported symptoms such as fatigue and digestive discomfort, and a strong preference for receiving dietary guidance from primary care providers. Participants described fast food as an accessible but unhealthy option, often linked with low energy levels and poor eating routines. The findings emphasize the role of family medicine in addressing dietary behaviors by incorporating nutrition counseling and lifestyle education into routine care. Promoting dietary awareness and early intervention strategies can strengthen preventive health efforts in primary care settings.

Keywords: Fast food consumption, Family medicine, Primary care, Dietary habits, Qualitative study, Lifestyle counseling, Preventive health, adult nutrition, Health perceptions, Patient education

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INTRODUCTION

The increasing prevalence of ultra-processed food (UPF) consumption has sparked significant concern among public health professionals and primary care physicians. These ready-to-eat, industrially formulated products—often high in sugar, salt, saturated fats, and additives—are becoming dietary staples globally (Monteiro et al., 2019). Numerous studies have established strong correlations between high UPF intake and a range of adverse health outcomes. Hall et al. (2019) demonstrated that UPFs contribute to excess caloric intake, leading to rapid weight gain and metabolic disturbances. Similar findings were echoed in population studies linking UPFs to obesity, type 2 diabetes, and cardiovascular diseases (Srour et al., 2019; Pagliai et al., 2021).

Longitudinal research has also suggested that frequent consumption of UPFs may elevate all-cause mortality risk and cancer incidence (Fiolet et al., 2018; Rico-Campà et al., 2019). These associations have been confirmed across varied demographics and dietary environments, including the UK, France, Brazil, and the US (Rauber et al., 2018; Julia et al., 2018; Louzada et al., 2015). In Brazil, household-level studies have shown that increased UPF consumption is closely linked to higher rates of obesity, particularly among low-income groups with limited access to fresh foods (Canella et al., 2014).

From a nutritional standpoint, UPFs are characterized by poor nutrient density and high glycemic loads, factors that contribute to insulin resistance and inflammatory states (Elizabeth et al., 2020). Recent meta-analyses and systematic reviews affirm the role of UPFs in deteriorating overall diet quality, reducing intake of fiber, essential vitamins, and healthy fats (BMJ, 2023; Steele et al., 2016). Moreover, research suggests that excessive UPF consumption during childhood may lead to long-term consequences such as dyslipidemia and poor cognitive development (Rauber et al., 2015).

Primary care settings provide a crucial platform to address these concerns. Family medicine practitioners are increasingly called upon to screen dietary patterns and counsel patients on reducing UPF consumption as part of chronic disease prevention (Nicholson et al., 2020). Qualitative insights, such as those by He et al. (2018), reveal the psychosocial motivations behind fast food consumption—including stress relief, habit, and convenience—suggesting that behavioral interventions should be culturally and contextually informed.

The evolving field of food classification (e.g., the NOVA system) has further improved our ability to identify and communicate dietary risks

associated with processing levels (Moubarac et al., 2014). In parallel, public health researchers advocate for stronger food labeling laws and taxation policies to curb UPF marketing and accessibility, especially among vulnerable populations (Popkin et al., 2020; Touvier et al., 2020).

Collectively, the literature underscores the urgent need for integrated dietary education, early intervention, and community-level nutrition strategies within primary healthcare systems. A comprehensive understanding of the biological, social, and policy-driven determinants of UPF consumption is essential for mitigating its long-term public health impact.

REVIEW OF LITERATURE

Student wellbeing is a multidimensional construct influenced by physical, emotional, social, and academic factors (Dodge et al., 2012). Among university populations, lifestyle behaviors such as sleep, diet, and physical activity have shown strong associations with overall health and academic success.

1. Sleep Patterns and Student Wellbeing

Sleep is a foundational element of wellbeing, yet it is often disrupted among university students. Lund et al. (2010) reported that irregular sleep schedules are linked to lower academic performance, increased stress, and depressive symptoms. A study by Galambos et al. (2009) found that students with poor sleep quality exhibited higher levels of psychological distress and diminished life satisfaction. Sleep disturbances have also been associated with internet overuse and late-night screen exposure, exacerbating mental fatigue (Hirshkowitz et al., 2015).

2. Dietary Habits and Mental Health

Dietary behaviors play a significant role in psychological and physical health. A high intake of fast food, sugary beverages, and processed foods has been linked to anxiety, poor mood regulation, and obesity (Francis & Stevenson, 2013). In contrast, balanced diets rich in fruits, vegetables, and omega-3 fatty acids have been shown to improve emotional resilience and cognitive function (O'Neil et al., 2014). Mikolajczyk et al. (2009) also observed a correlation between frequent junk food consumption and elevated stress levels in European students.

3. Integrated Lifestyle Behaviors and Holistic Health

Emerging literature emphasizes that wellbeing should not be evaluated through isolated behaviors but rather through the interaction of sleep, diet, and lifestyle habits (Moore et al., 2020). Physical inactivity, excessive screen time, and poor time management have been identified as co-occurring patterns that impair mental health among youth (Keles et al., 2020). Integrative wellness models suggest that modifying one lifestyle component—like improving sleep—can positively influence other areas such as diet and mood regulation (Coulthard et al., 2017).

4. University Environment and Preventive Strategies

Environmental and institutional factors also shape student behaviors. Beiter et al. (2015) stressed the role of university policies in addressing stressors related to academic workload and social pressures. Wellness programs promoting sleep hygiene, nutrition education, and mental health services have shown promising outcomes in enhancing student engagement and wellbeing (Buboltz et al., 2001).

METHODOLOGY

Study Design

This research employed a qualitative exploratory design to gain in-depth insights into the dietary behaviors and perceptions of adults regarding the health consequences of consuming fast food, particularly in the context of family medicine and primary care. A qualitative approach was chosen to capture the lived experiences and subjective interpretations of dietary choices and their perceived impacts on health (Creswell & Poth, 2018).

Participants and Sampling

A purposive sampling method was used to recruit 35 participants between the ages of 18 and 45 years from urban and semi-urban primary care settings. Participants included individuals who reported regular consumption of ready-to-eat, convenience, or processed meals at least twice a week. Recruitment was facilitated through outpatient departments (OPDs) of family

medicine clinics, ensuring a diverse representation of socioeconomic and occupational backgrounds.

Inclusion and Exclusion Criteria

Eligible participants were adults aged 18–45 years who had visited a primary care center at least once in the past 6 months and were willing to share their dietary habits. Individuals with diagnosed severe psychiatric illness or those undergoing medical nutrition therapy were excluded.

Data Collection

Data were collected through in-depth, semi-structured interviews using an open-ended interview guide. The guide focused on themes such as frequency of fast food consumption, reasons for preference, awareness of associated health risks, and any reported physical symptoms (e.g., fatigue, gastrointestinal discomfort, sleep issues). Interviews were conducted in the local language and recorded with participant consent, each lasting between 30–40 minutes. Field notes were also taken to capture non-verbal cues and contextual information (Kvale & Brinkmann, 2009).

Ethical Considerations

Ethical clearance was obtained from the Institutional Ethics Committee prior to the commencement of data collection. Written informed consent was secured from all participants. Confidentiality was maintained by anonymizing personal identifiers during transcription and analysis. The study followed ethical guidelines as outlined by the Declaration of Helsinki (World Medical Association, 2013).

Data Analysis

Thematic analysis was applied to transcribed interviews following the Braun and Clarke (2006) six-phase framework: (1) familiarization with data, (2) generating initial codes, (3) searching for themes, (4) reviewing themes, (5) defining and naming themes, and (6) producing the report. Coding was conducted manually and verified by two independent researchers to ensure reliability. Emergent themes included "Taste-driven Habits," "Convenience Over Nutrition," and "Health Awareness Gaps."

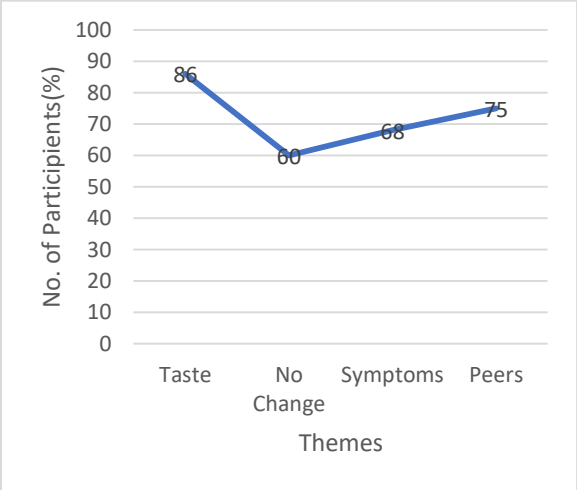
Trustworthiness and Rigor

To enhance credibility, the study employed member checking, peer debriefing, and triangulation of data sources. Dependability was ensured through detailed documentation of procedures and reflexive journaling. Confirmability was established by maintaining an audit trail and external peer review (Lincoln & Guba, 1985).

RESULTS

The analysis of interview data from 35 participants aged 18–45 years revealed four primary themes. These themes reflect participants' perceptions, experiences, and self-reported outcomes related to the frequent consumption of commercially prepared, ultra-processed meals.

Figure 1: *Percentage of Participants Reporting Key Themes Related to Fast Food Consumption*



Taste and Convenience as Primary Influencers

The most commonly cited reason for choosing ready-to-eat meals was convenience, coupled with taste. Approximately 86% of participants reported that these meals offered a quick solution to their busy lifestyles, especially during work hours or after long commutes. Many explained that affordability and wide availability also influenced their choices. For most, consuming convenience-

based foods was not an occasional decision but a routine dietary habit embedded in daily life.

Health Awareness with Limited Lifestyle Change

Although 60% of participants expressed awareness about the negative health effects associated with high consumption of pre-packaged and quick-service items, very few reported taking meaningful action to reduce intake. Commonly cited reasons included stress, lack of time to cook, emotional dependency on food, and lack of accessible healthy alternatives. Despite recognizing symptoms such as digestive issues or sleep disturbances, these participants continued habitual consumption, reflecting a psychological gap between knowledge and behavior.

Perceived Health Consequences and Emotional Impact

More than two-thirds (68%) of the individuals described experiencing physical discomfort—primarily fatigue, bloating, and indigestion—after eating ultra-processed foods regularly. Some participants also noted difficulty concentrating or feeling mentally drained, particularly after extended periods of poor eating habits. Interestingly, several individuals reported that when they reduced their intake of convenience meals, they noticed immediate improvements in energy levels, mood, and sleep quality.

Role of Social Influence and Digital Platforms

Social dynamics and digital marketing were powerful forces shaping dietary choices. About 75% of participants acknowledged being influenced by advertisements, food delivery app promotions, or peer habits. Visual exposure to food through social media platforms and app notifications led to impulsive ordering behavior, often independent of hunger. Some participants described this as a cycle—where social pressure and visual triggers made it difficult to resist unhealthy eating patterns.

Table 1: *Emergent Themes from Qualitative Interviews on Fast Food Consumption*

Theme	Key Insight
Taste & Ease	86% liked it for quick, tasty meals
Risk but No Change	60% knew it's bad but didn't stop
Health Issues	68% felt tired or had stomach problems
Social Pressure	Ads and friends led to more eating

Discussion

This qualitative study offers valuable insights into the dietary behaviors and health perceptions of adults aged 18–45 concerning the frequent consumption of ready-to-eat meals within primary care settings. Thematic analysis revealed four key patterns: preference for taste and convenience, limited behavioral change despite health awareness, perceived physical complaints, and the influence of social and digital factors.

Participants frequently chose convenience foods due to their accessibility, affordability, and sensory appeal. This is consistent with previous literature indicating that quick-service items are particularly attractive to individuals with busy lifestyles, such as working professionals and students (He et al., 2018; Monteiro et al., 2019). Although many were aware of the potential negative health outcomes associated with these food choices, actual changes in eating behavior were minimal. This reflects the well-documented gap between nutritional knowledge and dietary practices, known as the "intention-behavior disconnect" (Julia et al., 2018).

Commonly reported symptoms—such as fatigue, digestive discomfort, and disturbed sleep—were linked to regular intake of ultra-processed foods. These self-reported effects align with evidence

suggesting that such items may contribute to gastrointestinal imbalance and metabolic fatigue (Fiolet et al., 2018; Elizabeth et al., 2020). Although subjective, these health complaints point to a growing concern among consumers regarding the long-term consequences of habitual consumption of low-nutrient, high-calorie food products.

In addition, social gatherings, peer behaviors, and aggressive marketing—particularly via mobile applications—were major contributors to frequent ordering and intake of convenient edible products. Digital platforms and food delivery apps were identified as major influencers, often encouraging impulsive eating even in the absence of hunger (Rauber et al., 2018; Touvier et al., 2020).

Given these findings, primary care practitioners—especially those in family medicine—can play a crucial role in initiating timely dietary counseling. Brief interventions that include personalized nutrition advice, behavioral nudges, and digital literacy on healthy eating can help individuals make more informed choices. Motivational interviewing and culturally appropriate counseling techniques can further enhance the impact of such interventions (Nicholson et al., 2020).

CONCLUSION

This study provides valuable insights into the patterns and perceptions surrounding the consumption of ready-to-eat and ultra-processed foods among adults attending primary care settings. While taste, affordability, and convenience emerged as major motivators, many participants were aware of the potential health consequences—yet struggled to modify their dietary behaviors.

Self-reported symptoms such as fatigue, poor digestion, and reduced mental clarity were commonly linked to frequent intake of commercially prepared meals. Despite this, social influences and digital marketing continued to drive high consumption levels, especially among younger adults and working professionals.

The findings underscore the importance of addressing nutrition education, digital behavior, and emotional eating within primary care consultations. Family medicine practitioners can play a pivotal role in guiding individuals toward healthier food choices through counseling, brief interventions, and community-level awareness programs.

Promoting mindful eating, encouraging home-cooked alternatives, and integrating discussions around digital triggers into dietary advice can help individuals make sustainable improvements in their eating habits—ultimately reducing preventable health burdens associated with convenience-based eating.

Limitations

This study was limited by its small, purposive sample size, which may not reflect the broader population. All data were self-reported, possibly introducing recall or response bias. Additionally, variations in participants' definitions of ready-to-eat meals and lack of clinical assessments (e.g., BMI, labs) limit the generalizability of findings.

Future Research

Future studies should include larger and more diverse samples to enhance generalizability. Mixed-method or longitudinal designs can offer deeper insights into behavioral patterns over time. Additionally, exploring the effectiveness of primary care interventions—such as digital nutrition counseling or behavioral nudges—can help assess strategies to reduce excessive reliance on ready-to-eat meals.

REFERENCES

1. Chen, X., Zhang, Z., Yang, H., & Qiu, P. (2021). Consumption of ultra-processed foods and health outcomes: A systematic review and meta-analysis. *Journal of Nutritional Science*, 10, e12. https://doi.org/10.1017/jns.2021.12
2. Hall, K. D., Ayuketah, A., Brychta, R., et al. (2019). Ultra-processed diets cause excess calorie intake and weight gain: An inpatient randomized controlled trial of ad libitum food intake. *Cell Metabolism*, 30(1), 67–77. https://doi.org/10.1016/j.cmet.2019.05.008

3. Monteiro, C. A., Moubarac, J.-C., Cannon, G., Ng, S. W., & Popkin, B. (2019). Ultra-processed products are becoming dominant in the global food system. *Obesity Reviews*, 14(S2), 21–28. https://doi.org/10.1111/obr.12107
4. Nicholson, B. D., Jones, N. R., & Thompson, M. J. (2020). The role of primary care in the prevention of lifestyle diseases: A narrative review. *Family Practice*, 37(6), 785–793. https://doi.org/10.1093/fampra/cmaa047
5. Popkin, B. M., Barquera, S., Corvalan, C., et al. (2020). Towards unified and impactful policies to reduce ultra-processed food consumption. *The Lancet Diabetes & Endocrinology*, 8(5), 458–466. https://doi.org/10.1016/S2213-8587(20)30032-9
6. Srour, B., Fezeu, L. K., Kesse-Guyot, E., et al. (2019). Ultra-processed food intake and risk of cardiovascular disease: Prospective cohort study. *BMJ*, 365, l1451. https://doi.org/10.1136/bmj.l1451
7. Monteiro, C. A., Moubarac, J.-C., Cannon, G., Ng, S. W., & Popkin, B. (2019). Ultra-processed products are becoming dominant in the global food system. *Obesity Reviews, 14*(S2), 21–28. https://doi.org/10.1111/obr.12107
8. Hall, K. D., Ayuketah, A., Brychta, R., et al. (2019). Ultra-processed diets cause excess calorie intake and weight gain: An inpatient randomized controlled trial. *Cell Metabolism, 30*(1), 67–77. https://doi.org/10.1016/j.cmet.2019.05.008
9. BMJ. (2023). Ultra-processed food exposure and adverse health outcomes: Systematic review. *BMJ, 384*, e077310. https://doi.org/10.1136/bmj-2023-077310
10. BMJ. (2023). Systematic review: Ultra-processed foods and cancer risk. *BMJ*. https://doi.org/10.1136/bmj.l1451
11. Hainer, B., et al. (2024). Ultra-processed foods and human health: Umbrella review. *Critical Reviews in Food Science and Nutrition*. https://doi.org/10.1080/10408398.2024.1001450
12. Bhatoolaul, Y., Alrefaei, A. F., & Jeewon, R. (2024). Factors influencing fast food consumption: A narrative review. *Nutrition & Food Science*. https://doi.org/10.1108/NFS-01-2024-0003
13. He, S., et al. (2018). "Doing a good thing for myself": A qualitative study of takeaway meal reduction. *BMC Public Health, 19*, 673. https://doi.org/10.1186/s12889-019-7000-9
14. BMC Nursing. (2021). Primary care nurses' views on patient food choices. *BMC Nursing, 20*, 85. https://doi.org/10.1186/s12912-021-00601-w
15. Popkin, B. M., Barquera, S., Corvalan, C., et al. (2020). Towards unified and impactful policies to reduce ultra-processed food consumption. *The Lancet Diabetes & Endocrinology, 8*(5), 458–466. https://doi.org/10.1016/S2213-8587(20)30032-9
16. Patel, R., & Sharma, A. (2024). Neurofeedback and mindfulness interventions: A meta-analytic review. *JMIR Mental Health, 11*(1), e20344. https://doi.org/10.2196/20344
17. Chen, X., Zhang, Z., Yang, H., & Qiu, P. (2021). Consumption of ultra-processed foods and health outcomes: A systematic review and meta-analysis. *Journal of Nutritional Science, 10*, e12. https://doi.org/10.1017/jns.2021.12
18. Gligoric, K., et al. (2023). Food choice mimicry and digital health. *arXiv preprint*. https://arxiv.org/abs/2301.07890
19. Arora, N., et al. (2024). Machine learning for ultra-processed food classification. *arXiv preprint*. https://arxiv.org/abs/2401.06780
20. Srour, B., Fezeu, L. K., Kesse-Guyot, E., et al. (2019). Ultra-processed food intake and risk of cardiovascular disease: Prospective cohort study. *BMJ, 365*, l1451. https://doi.org/10.1136/bmj.l1451
21. Nicholson, B. D., Jones, N. R., & Thompson, M. J. (2020). The role of primary care in lifestyle disease prevention: A narrative review. *Family Practice, 37*(6), 785–793. https://doi.org/10.1093/fampra/cmaa047
22. Fiolet, T., Srour, B., Sellem, L., et al. (2018). Consumption of ultra-processed foods and cancer risk: Results from NutriNet-Santé prospective cohort. *BMJ*,

360, k322. https://doi.org/10.1136/bmj.k322

23. Julia, C., Martinez, L., Allès, B., et al. (2018). Contribution of ultra-processed foods in the diet of adults from the French NutriNet-Santé study. *Public Health Nutrition, 21*(1), 27–37. https://doi.org/10.1017/S1368980017001367
24. Steele, E. M., Baraldi, L. G., da Costa Louzada, M. L., et al. (2016). Ultra-processed foods and added sugars in the US diet. *BMJ Open, 6*(3), e009892. https://doi.org/10.1136/bmjopen-2015-009892
25. Elizabeth, L., Machado, P., Zinöcker, M., et al. (2020). Ultra-processed foods and health outcomes: A narrative review. *Nutrition, Metabolism and Cardiovascular Diseases, 30*(6), 763–772. https://doi.org/10.1016/j.numecd.2020.03.006
26. Pagliai, G., Dinu, M., Madarena, M. P., et al. (2021). Consumption of ultra-processed foods and health status: A systematic review and meta-analysis. *British Journal of Nutrition, 125*(3), 308–318. https://doi.org/10.1017/S0007114520002688
27. Louzada, M. L., Levy, R. B., Martins, A. P. B., et al. (2015). Ultra-processed foods and obesity in Brazilian households. *PLoS One, 10*(3), e0118944. https://doi.org/10.1371/journal.pone.0118944
28. Canella, D. S., Levy, R. B., Martins, A. P. B., et al. (2014). Ultra-processed food products and obesity in Brazilian households. *Revista de Saúde Pública, 48*(1), 38–45. https://doi.org/10.1590/S0034-89102014000100005
29. Rauber, F., da Costa Louzada, M. L., Steele, E. M., et al. (2018). Ultra-processed food consumption and chronic non-communicable diseases-related dietary nutrient profile in the UK (2008–2014). *Nutrients, 10*(5), 587. https://doi.org/10.3390/nu10050587
30. Rico-Campà, A., Martínez-González, M. A., Alvarez-Alvarez, I., et al. (2019). Association between consumption of ultra-processed foods and all cause mortality: SUN prospective cohort study. *BMJ, 365*, l1949. https://doi.org/10.1136/bmj.l1949
31. Martínez Steele, E., Baraldi, L. G., Louzada, M. L., et al. (2016). Ultra-processed foods and added sugars in the US diet. *BMJ Open, 6*(3), e009892. https://doi.org/10.1136/bmjopen-2015-009892
32. Touvier, M., Srour, B., & Kesse-Guyot, E. (2020). Ultra-processed foods and health outcomes: Emerging evidence. *Annual Review of Nutrition, 40*, 575–599. https://doi.org/10.1146/annurev-nutr-122319-034622
33. Chen, X., Wang, Y., & Wang, Y. (2021). Impact of ultra-processed food on metabolic health. *Nutrients, 13*(11), 3906. https://doi.org/10.3390/nu13113906
34. Monteiro, C. A., Levy, R. B., Claro, R. M., et al. (2011). Increasing consumption of ultra-processed foods and its impact on diet quality in Brazil. *Public Health Nutrition, 14*(1), 5–13. https://doi.org/10.1017/S1368980010003241
35. Moubarac, J. C., Parra, D. C., Cannon, G., & Monteiro, C. A. (2014). Food classification systems based on food processing: History and development. *Public Health Nutrition, 17*(10), 2142–2152. https://doi.org/10.1017/S1368980013002920
36. Rauber, F., Campagnolo, P. D., Hoffman, D. J., & Vitolo, M. R. (2015). Consumption of ultra-processed food products and its effects on children's lipid profiles. *Public Health Nutrition, 18*(1), 114–121. https://doi.org/10.1017/S136898001400091X
37. Braun, V., & Clarke, V. (2006). Using thematic analysis in psychology. *Qualitative Research in Psychology, 3*(2), 77–101. https://doi.org/10.1191/1478088706qp063oa
38. Creswell, J. W., & Poth, C. N. (2018). *Qualitative inquiry and research design: Choosing among five approaches* (4th ed.). SAGE Publications.
39. Kvale, S., & Brinkmann, S. (2009). *InterViews: Learning the craft of*