Supplementary files

Table S1. Characteristics of included studies.

Author and Year	Aim of the Study	Type of Study	Findings	Implications
Ahmed, Tsiami, and Khan (2023)[9]	To analyze the impact of generational variations on the onset of type 2 diabetes (T2D) in Asian, African, and Caribbean (AAC) populations residing in the UK, emphasizing dietary and lifestyle habits across generations.	Cross-sectional	The study found a significantly higher prevalence of T2D in the first-generation AAC population (5.0%) compared to the second-generation (1.9%). First-generation individuals have increased odds of developing T2D, suggesting non-dietary/lifestyle factors such	The study suggests that beyond diet and lifestyle, genetic or environmental influences may contribute significantly to T2D incidence among AAC populations in the UK. This highlights the need for targeted prevention strategies that consider generational differences.

			as genetics or environment may play a significant role.	
Alae-Carew et al. (2022)[26]	To examine trends in plant-based alternative foods (PBAF) consumption in the UK from 2008 to 2019 and identify characteristics associated with PBAF consumption, with a focus on its role in transitioning to sustainable food systems.	Longitudinal Cohort	PBAF consumption in the UK doubled from 6.7% in 2008-2011 to 13.1% in 2017-2019. Females, Millennials, and higher-income groups were more likely to consume PBAF, especially those who consume less meat.	The growing popularity of PBAF in the UK indicates opportunities to promote sustainable food systems. However, a thorough assessment of their environmental and health impacts is needed to guide population-wide dietary shifts towards more sustainable practices.
Priporas, Vellore-Nagarajan, and	To explore the phenomenon of stressful eating among Generation Z,	Conceptual/Theoretical	Generation Z initially engages in reasoned conditioned	Understanding the cognitive mechanisms behind stressful eating among

Kamenidou (2022)[24]	focusing on cognitive constructs and reasoned conditioned behaviors, and develop a conceptual framework outlining the stages of stressful eating within this demographic.		eating behaviors due to health information, but over time, a cyclical cognitive process linked to the law of effect leads to obesity and reduced self-control.	Generation Z can help design targeted interventions to prevent obesity in this group. This study emphasizes the need for strategies addressing cognitive and behavioral aspects of eating habits among young people.
Kaylor et al. (2023)[4]	This qualitative phenomenological study aims to examine the eating habits, practices, and motivations of Gen Z females (born 1996-2002).	Qualitative (Phenomenological)	Gen Z represents a diverse group with complex characteristics, revealing critical insights for health professionals, educators, and others interested in promoting healthier living environments	The study highlights the complex interplay between social media, self-esteem, and eating behaviors among Gen Z females, revealing blurred lines between healthy and disordered eating habits.

			for this population.	This information is crucial for health professionals and educators to develop supportive environments that promote healthier behaviors and well-being for this demographic.
Burns and Francis (2024)[27]	To investigate risk factors, physiology, presentation, and management of type 2 diabetes, emphasizing the importance of modifiable risk factors and early glycemic control in managing the disease and its complications.	Narrative Review	Type 2 diabetes involves complex interactions between pancreatic beta-cell function and insulin resistance, influenced by various risk factors. Effective management includes	Early and intensive glycemic control can have long-term benefits in reducing diabetes complications. Emphasizing lifestyle modifications and continuous monitoring is crucial for optimal diabetes management and prevention of

			patient education on diet and exercise, regular screening, and early glycemic control to prevent microvascular complications.	related health issues.
Kyrou et al., 2020[23]	To identify and analyze risk factors for type 2 diabetes mellitus (T2DM) in European adults, focusing on lifestyle, socio-demographic factors, and the complex gene-environment interactions that contribute to the disease.	Cross-sectional	The study identified various T2DM risk factors, including age, ethnicity, family history, low socioeconomic status, obesity, metabolic syndrome, and unhealthy lifestyle behaviors, highlighting the significant impact of demographic and	Addressing T2DM prevention in Europe requires a comprehensive approach that considers both traditional and socioeconomic factors. Incorporating multidimensional public health strategies and community-based interventions is essential for effectively mitigating

			socioeconomic diversity on T2DM risk in Europe.	T2DM risks among diverse populations.
Bjornstad et al. (2023)[34]	To address the rising incidence and prevalence of youth-onset type 2 diabetes mellitus (T2DM), its complications, and the key social, environmental, and biological factors contributing to the severe clinical course of the disease among children and adolescents.	Narrative Review	Youth-onset T2DM is increasingly prevalent, especially among Indigenous peoples and people of color, and typically follows a more aggressive clinical course with earlier and more severe complications. Key drivers include rising childhood obesity, sedentary lifestyles, and intrauterine exposure to diabetes, along	Addressing youth-onset T2DM requires targeted prevention and management strategies that account for social and environmental factors, including access to healthcare, nutritious food, and opportunities for physical activity. Understanding the disease's underlying mechanisms can inform more effective interventions to curb this growing epidemic.

			with social and environmental disadvantages.	
Naaz (2021)[18]	To evaluate the relationship between knowledge, attitudes, and practices (KAP) regarding healthy lifestyles among individuals at risk of or living with non-communicable diseases (NCDs), identifying barriers to translating knowledge and positive attitudes into healthy lifestyle actions.	Cross-sectional	Individuals are aware of the detrimental effects of unhealthy behaviors and have a positive attitude towards healthy lifestyles; however, this knowledge and attitude do not consistently translate into actions due to various barriers. Practice rates remain low despite awareness.	Behavior change strategies need to be reevaluated to effectively address barriers to practicing a healthy lifestyle. Understanding these obstacles and facilitators can lead to the development of more sustainable and effective social and behavioral change interventions.
Narula and Nigam (2020)[31]	To examine community awareness of type 2 diabetes mellitus (T2DM),	Cross-sectional	Behavioral interventions significantly increased community	Enhanced community awareness through targeted interventions can

	its risk factors, and health-seeking behaviors, aiming to develop effective program strategies for disease prevention at the community level.		awareness of T2DM to 96.3%. Key risk factors identified include irregular eating patterns, high-carbohydrate diets, being overweight, age over 45, alcoholism, and stress.	significantly reduce T2DM risk factors. Effective prevention strategies should focus on lifestyle changes and education to curb the rising diabetes prevalence in high-risk populations, such as in India.
Sidhu, Lemetyinen, and Edge (2022)[5]	To examine the knowledge and awareness of Type 2 Diabetes Mellitus (T2DM) and modifiable risk factors among young Punjabi Sikhs in the UK, while also exploring their attitudes towards health-seeking behaviors related to T2DM.	Cross-sectional	Young Punjabi Sikhs are aware of T2DM but neglect physical activity as a major factor in its onset. Cultural and gender values significantly influence dietary habits and physical activity	Health professionals should tailor diabetes prevention strategies for Punjabi Sikhs in the UK, using culturally relevant education and interventions that resonate with cultural and gender values to effectively

			preferences, highlighting a need for culturally tailored health interventions.	promote healthy behaviors.
Marquez, Lebensohn-Chialv, and Al-Rousan (2024)[32]	To explore family functioning in the context of obesity among mothers and daughters in the UK, examining how relationships and family dynamics influence weight-related behaviors and health outcomes.	Qualitative (Phenomenological)	The study found that family dynamics, communication patterns, and emotional bonds significantly impact weight-related behaviors in mothers and daughters in the UK. Dysfunctional family relationships and poor communication were associated with unhealthy behaviors and challenges in	The study emphasizes the importance of considering family dynamics in obesity interventions within the UK, particularly in mother-daughter relationships. Health professionals in the UK should incorporate family-based approaches in obesity treatment, focusing on improving communication, emotional support, and positive

			weight management. Supportive and open family environments were linked to better health outcomes and more successful weight management strategies in the UK.	relationship dynamics to enhance weight management outcomes.
Flórez et al. (2024)[20]	To explore individual and social network factors influencing the management of Type 2 Diabetes Mellitus (T2DM) among Mexican American adults in New York City, with implications for similar populations in the UK.	Qualitative (Interviews and Focus Groups)	The study revealed that cultural beliefs, social networks, and individual perceptions of health significantly influence T2DM management among Mexican American adults in New York City, and	The findings suggest that diabetes interventions for Mexican American communities and similar populations in the UK should be culturally tailored, incorporating an understanding of cultural beliefs and social dynamics.

			similar factors may affect T2DM management among Mexican and Latino populations in the UK. Participants often downplayed their symptoms and relied on social networks for support, which sometimes led to suboptimal management of the disease.	Interventions should also promote awareness about the importance of early and appropriate medical intervention to improve diabetes management outcomes.
Henney et al. (2024)[29]	To examine the relationship between ultra-processed food consumption and the risk of non-communicable diseases (NCDs), particularly Type	Case-Control	The study found a strong correlation between ultra-processed food consumption and the prevalence of NCDs such as obesity,	The study recommends reducing ultra-processed food consumption through public health interventions, promoting whole foods, and

	2 diabetes, in the UK.		cardiovascular diseases, and Type 2 diabetes (T2DM) in the UK. Individuals with high ultra-processed food consumption were more likely to develop these conditions.	raising awareness about the health risks associated with these foods in the UK. The findings support the need for policy actions to limit ultra-processed food availability and encourage healthier dietary habits.