PERCEPTIONS OF THE NUTRITION TRANSITION AMONG ISIXHOSA-SPEAKING COMMUNITIES IN NELSON MANDELA BAY

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ABSTRACT

Background

The nutrition transition, a global shift from traditional diets to Westernised eating patterns, has been linked to non-communicable diseases (NCDs) in South Africa (SA) and among *isiXhosa*-speaking people in Nelson Mandela Bay (NMB). Limited research has explored the community's perception of this transition, posing challenges for intervention design. This study explored how *isiXhosa*-speaking adults perceive this nutrition transition and its health implications.

Method

A qualitative research design, using three focus group discussions (FGDs), was employed. Participants were purposively selected from NMB municipal wards. Data were analysed using Tesch's eight-step coding process, with independent verification in ATLAS.ti. FGDs were audio-recorded and transcribed.

Results

Four themes emerged: (1) Traditional vs Western Diets, (2) Economic and Cultural Drivers of Change, (3) Health Consequences of Dietary Shifts, and (4) Strategies for Promoting Traditional Diets. Participants expressed a strong connection to traditional foods but noted shifts to processed products due to urbanisation, economic constraints, and cultural change. They raised concerns about health impacts, particularly obesity and diabetes.

Conclusion

Results highlight a need for targeted interventions that reflect community values and promote traditional diets while addressing socioeconomic barriers. Public health strategies should strengthen traditional food knowledge while countering adverse health effects of the nutrition transition.

KEYWORDS

nutrition transition, traditional African diets, isiXhosa-speaking communities, public health, qualitative research

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ARTICLE INFO

Submitted June 2025
Revision August 2025
Accepted August 2025

DOI: https://dx.doi.org/10.4314/jfecs.v8i1.298836

INTRODUCTION

The term "nutrition transition" refers to the shift from traditional, nutrient-rich diets to more Westernised, energy-dense diets, contributing to the rising non-communicable diseases (NCDs) globally, including in South Africa (SA) (Popkin 2002). This phenomenon has become a critical issue for most African communities, where processed and fast foods have gradually replaced indigenous crops and traditional meals (Nnyepi, Gwisai, Lekgoa & Seru 2015). However, limited research has explored how these communities perceive this transition and its impact on their health, making it challenging to develop culturally appropriate public health interventions.

Traditional African diets (TAD) are typically composed of traditional whole grains, legumes, vegetables and fruits, offering high nutritional value (Okafor 2012). Yet, the rapid urbanisation and globalisation observed in NMB have driven a preference for Westernised foods, including fast foods and sugar-sweetened beverages high in saturated fats and sugars (Steyn & Mchiza 2014). Such shifts are leading to an increase in NCDs, such as obesity and diabetes, which are now significant public health concerns (Popkin, Adair & Ng 2012).

Traditional diets in SA vary considerably across provinces and tribes; traditional food crops specific to the Eastern Cape (EC) include grain sorghum (*Sorghum bicolor L. Moench*), Jew's mallow (*Corchorus olitorius*), amadumbe (*Colocasia esculenta*), marula fruit (*Sclerocarya birrea*), wild medlar (*Vangueria infausta*), num-num (*Carissa macrocarpa*), Kei apple (*Dovyalis caffra*), and monkey orange (*Strychnos spinosa*) (Mbhenyane 2017). Consistent with regional composition data, cowpea beans provide ~23–28% protein (dry weight) with appreciable fibre and minerals (Abebe & Alemayehu 2022; Affrifah, Phillips & Saalia 2022; SAFOODS n.d.). Similarly, *morogo* (African leafy vegetables) often matches or exceeds spinach for calcium, iron, potassium and provitamin A/beta-carotene (Afolayan & Jimoh 2009; Uusiku *et al*. 2010; van Jaarsveld *et al*. 2014). Marula fruit is also an excellent vitamin C source (≈60–400 mg/100 g fresh), with additional antioxidant phytochemicals (Kamanula, Munthali & Kamanula 2022; Mashau *et al*. 2022).

The exclusion of traditional foods from the African diet would be tragic, as these foods can significantly contribute to the nutritional well-being and food security of people in Africa. Knowledge of the production and processing of traditional African foods (TAFs) is passed on from generation to generation, primarily through knowledge transfer. As the number of the younger generation resettling in urban areas increases, knowledge transfer is interrupted, bringing an end to traditional production and processing methods.

This study sought to understand how *isiXhosa* -speaking people in NMB perceive the ongoing nutrition transition and its implications for health, with the aim of informing interventions that encourage a return to more traditional, healthful eating practices. The research question guiding this study was: What are the perceptions of the nutrition transition among isi*Xhosa*-speaking adults living in Nelson Mandela Bay?

METHOD

Design

Consolidated criteria for reporting qualitative research (COREQ) were applied to describe the research methodology and results (Tong, Sainsbury & Craig 2007). COREQ is a formal reporting checklist used to promote complete reporting among researchers and enhance the rigour and comprehensiveness of qualitative methods.

Focus group discussion were used to gather rich, detailed data on participants' perceptions of nutrition transition. A purposive sampling technique was utilised to select participants from 18 randomly selected municipal wards in NMB. Recruitment took place in selected wards through community liaison officers. Participants were recruited at public gathering points (shopping malls, churches) within the randomly selected wards. Each potential participant was asked to state their residential ward, and only those who confirmed residency within the identified ward were invited to participate in the focus group discussions. Three FGDs were conducted, each consisting of approximately 12 participants (total = 36). While methodological guidance often suggests 5–8 participants per FGD, previous studies recognise that up to 12 participants may be appropriate, particularly when seeking a` wide range of perspectives (Kitzinger 1995; Onwuegbuzie *et al*. 2009; Guest, Namey & McKenna 2017). The decision to include 12 participants per group was also informed by logistical considerations, as smaller FGDs were not feasible across multiple wards, given resource and time constraints.

Saturation was assessed iteratively across discussions; by the second FGD no new codes were identified, and the third confirmed and elaborated existing themes (Guest, Bunce & Johnson 2006; Guest *et al*. 2017; Hennink, Kaiser & Marconi 2017; Hennink & Kaiser 2022). Thus, data saturation was reached after three FGDs, and sample adequacy was determined by the depth and richness of discussions rather than numerical representation, consistent with qualitative research standards (Burns, Grove & Gray 2015; Braun & Clarke 2021). Participants were between 18 and 65 years of age, literate members of the *Xhosa* tribe in NMB, physically capable of attending the data collection sessions and consented to participate in the study. The age range of 18 to 65 captured a broad spectrum of adult experiences across` generational divides. This range includes younger adults more influenced by urbanisation and Western media, as well as older participants with lived experiences of traditional diets and cultural practices, thus providing a rich understanding of perceptions across age cohorts (Burns, Grove & Gray; Braun & Clarke).

Setting

The EC comprises of seven districts, with NMB being one district, encompassing two primary urban centres, namely Port Elizabeth (also now known as Gqeberha) and Uitenhage (also now known as *Kariega*) (NMB 2016). NMB is a large urban area with a population comprising predominantly *isiXhosa* -speaking people. It has a population of 1.1 million and covers an area of 1 950 km². Distorted development in the Metropole has manifested in a highly skewed distribution of income and wealth, with just over a third of households (36.8%) earning between R1 000 and R1 600 a month (NMB 2016).

Data collection

Data were collected through three semi-structured FGDs, using an interview guide featuring open-ended questions to facilitate a comprehensive enquiry into the subject of interest, conducted in *isiXhosa*, with participants ranging in age and socioeconomic status. Semi-structured questions were posed

to enable participants to share more closely in the interviews' direction (Ravitch & Carl 2016). The FGDs were audio-recorded, transcribed verbatim and translated into English. This approach allowed for a thorough exploration of participants' perceptions and experiences.

Data collection was conducted in places convenient for the participants: a community hall and two clinic boardrooms, where the researcher ensured the environment was quiet and free from distractions. This strategy provided a private setting, allowing the participants to express their perceptions freely. A pilot FGD was conducted with participants who met the inclusion criteria to ensure the questions were understandable and interpreted accurately (Ravitch & Carl 2016). As alterations were not required, this interview data was included in the final analysis.

A briefing session was held before the FGDs to explain the study's purpose (Chamberlain 2015). A digital recorder captured the discussions, and the researcher made field notes on a printed copy of the interview guide. The FGDs were designed to last between 45 and 60 minutes, ensuring that the entire process did not exceed 90 minutes.

Interviews were conducted by a male *Xhosa* healthcare practitioner, working as a health promoter and trained in counselling skills. The researcher, who was also present during the FGDs, was a PhD candidate at the time and strove to reduce any psychosocial discomfort that could have occurred during the interviews by socialising with participants beforehand to put them at ease. Importantly, before recruitment and data collection, there were no pre-existing relationships between the participants and either the researcher or the interviewer.

Data analysis

The transcribed interviews were checked for accuracy against the audio recordings. Analysis followed Tesch's (1990) eight-step method to code and identify themes. In parallel, an independent coder used ATLAS.ti software to support systematic organisation, thematic mapping, and cross-case comparison (Creswell 2014; Mayer 2015). The researcher's coding was compared with the independent coder's results, and consensus discussions confirmed that the findings accurately reflected the interview content. This process ensured data analysis rigour. Thereafter, the coded results were grouped into themes that guided the documentation of the study results.

To protect confidentiality and track contributions systematically, each participant was assigned a unique identifier. The codes followed the format "NMBxx, P-y", where *NMBxx* referred to the focus group number and *P-y* referred to the participant number within that group. For example, "NMB01, P-5" indicates participant 5 in the first focus group conducted in Nelson Mandela Bay.

Trustworthiness

The researcher ensured trustworthiness by applying Guba's framework, which encompasses four elements: credibility, dependability, confirmability and transferability (Burns, Grove & Gray 2015).

Credibility was strengthened by prolonged engagement with participants, demonstrated through the 60–90 minute FGDs. This duration provided adequate opportunity for participants to share their experiences in depth, consistent with methodological recommendations (Lincoln & Guba 1985; Krueger & Casey 2015). Credibility was further enhanced through member checking, whereby participants reviewed the categories

that emerged from the data to confirm their accuracy (Ravitch & Carl 2016). Field notes were taken during the interviews to enhance the credibility of the data analysis.

Dependability was achieved through a stepwise replication of the research method, the code-recode technique during data analysis, and a dense description of the research methodology (Ravitch & Carl 2016). A thick description was provided by including adequate details about the participants' research settings (Ravitch & Carl).

For confirmability, the researchers agreed upon decisions related to data collection, interpretation and the relevance of findings (Ravitch & Carl 2016). Audit trails were maintained by carefully documenting the approach to data collection, the rationale for gathering specific data, and the interpretation process. This ensured that other knowledgeable researchers could arrive at the same conclusions (Stommel & Wills 2004).

Transferability was promoted by providing a detailed description of the participants' perceptions within the context of this study.

Ethical considerations

Ethics approval was obtained from the Nelson Mandela University (NMU) Research Ethics Committee (H21-HEA-DIET-017). In line with the ethical clearance granted by the university, informed consent was obtained from all participants. Permission to access facilities and engage participants was also granted by the Clinical Governance Manager and Sub-district managers in the Nelson Mandela Bay Health District (NMBHD) prior to data collection. Participants were assured of confidentiality and anonymity, and no identifying information was included in the transcripts or reports.

RESULTS

The analysis generated four main themes, each with several sub-themes. The first theme reflected participants' emphasis on the stark contrast between ancient, traditional diets and modern, Westernised foods.

The second theme, highlighted that the dietary shift was driven by a lack of access to nutrition knowledge, economic pressures, and cultural factors such as urbanisation. Traditional foods were perceived as expensive and difficult to prepare, whereas processed foods were more accessible and aligned with modern, fast-paced lifestyles.

TABLE 1: SUMMARY OF THEMES AND SUB-THEMES

Themes	Sub-Themes
1. Traditional vs Western Diets	1.1 Contrast between ancient and modern diets 1.2 Perceptions of nutritional balance 1.3 Importance of home gardening
2. Economic and Cultural Drivers	2.1 Lack of access to nutrition and food knowledge 2.2 Reduced disposable income and increased cost of living 2.3 Lack of home gardens and farming land 2.4 Laziness and dependence syndrome
3. Health Consequences of Shift	3.1 Foods consumed in communities linked to diseases and ageing 3.2 Unhealthy dietary choices in communities 3.3 Overconsumption of starch
4. Strategies for Promoting Diets	4.1 Government support for community gardens and social relief 4.2 Community-led food production initiatives 4.3 Educational initiatives to promote balanced diets

In the third theme, participants expressed concern about the increasing rates of NCDs, particularly diabetes and hypertension, which they attributed to the overconsumption of processed and starchy foods.

Finally, the fourth theme, outlined community-driven solutions, including government-supported community gardens and educational initiatives. Participants believed these strategies could help revive traditional food practices and promote healthier eating habits within their communities.

Theme 1: Traditional vs Western diets

Sub-theme 1.1: Contrast between ancient and modern diets

Participants highlighted the stark differences between traditional diets, which consisted of homegrown and nutrient-dense foods, and modern diets filled with processed and Westernised food products. Traditional foods were perceived as healthier and less harmful.

> *"The ancient people did not have diseases because they only ate cultivated food... we eat a lot of fatty things and spices…"* (NMB01, P-5)

This quote underscores a perception that ancient diets, being simpler and more natural, contributed to enhanced health outcomes.

> *"Before, we ate real food from the garden. Now, we are eating from the stores, and it's full of chemicals."* (NMB01, P-2)

> The use of modern additives in cooking was another point the interviewees raised. One of the participants remarked: *"I think it's the spices, the beef stock we use, because in the olden days we were not using them; we only used salt to flavour our food."* (NMB02, P-3)

Sub-theme 1.2: Perceptions of nutritional balance

Participants expressed concerns about the perceived imbalance in modern diets, attributing health problems to the loss of traditional dietary practices.

> *"We use a lot of spices, and in the past, we only used salt. That is why people are not as healthy anymore."* (NMB01, P-3)

> *"Traditional food was nutritious and filled us up without causing illness, but now we just eat empty calories."* (NMB02, P-4)

Sub-theme 1.3: Importance of home gardening

Home gardening was mentioned as a crucial practice in the past when families grew their food, ensuring better quality and healthier diets. Participants lamented the decline in the consumption of homegrown food.

> *"We used to grow everything ourselves—umleqwa* (free-range chicken with tough, flavourful meat)*, spinach. Now, we buy everything."* (NMB01, P-1)

> *"Our gardens provided us with healthy food. Now, people rely on processed food from the shops."* (NMB02, P-6)

Theme 2: Economic and cultural drivers of change

Sub-theme 2.1: Lack of access to nutrition and food knowledge

Participants noted that the lack of education on proper nutrition, especially among younger generations, has led to poor food choices and reliance on fast food.

"The children do not know about traditional food anymore. They prefer chips and fizzy drinks." (NMB01, P-2)

Another participant underscored the necessity of education focused on nutrition: *"…there should be sessions where people will be educated on nutrition, just to emphasise if those things are to be done. Because people really do not know about nutrition so then they get told which is healthy. I think it would make a difference; maybe people now will see that I have this diabetes because I ate food that was high in fat."* (NMB03, P-5)

This statement reflects a belief that targeted educational efforts could significantly enhance community understanding of nutrition and its link to chronic diseases.

Sub-theme 2.2: Reduced disposable income and increased cost of living

Economic challenges were cited as barriers to maintaining a traditional diet. Traditional foods were perceived as more expensive and less affordable than Westernised foods for families living in urban areas.

"Traditional food is expensive, and it takes time to prepare. It's easier to buy bread and margarine." (NMB03, P-4)

"We can't afford traditional food anymore. Things like imifino (wild spinach) *and umngqusho* (samp and beans) *are too costly."* (NMB02, P-3)

Participants also mentioned systemic issues and dependence on support grants as contributing to their financial struggles. One of the participants lamented: *"Because we get paid R350, we don't have any money because Ramaphosa uses our resources. The people he hires, they eat the money, so they don't reach us. There is a budget, but they don't reach us, it ends here in the middle."* (NMB01, P-8)

This quote reveals frustration with the government and resource allocation, exacerbating the economic hardships numerous citizens face.

Even those who are employed find it challenging to afford nutritious food. One of the participants explained: *"Even though we work, the money we get paid is little, it is invisible, so it makes you buy important things, not nutritious food. So, we eat to feed the soul, not to feed our bodies."* (NMB01, P-4)

This statement highlights how low wages compel individuals to prioritise immediate necessities or emotionally comforting items over long-term health considerations.

Sub-theme 2.3: Lack of home gardens and farming land

Urbanisation and the lack of space for home gardens were highlighted as factors contributing to the community's reliance on processed foods.

"In the old days, we had gardens where we grew our own vegetables, but now we live in small houses with no space." (NMB02, P-4)

"If we had more land for gardens, we wouldn't need to depend so much on supermarkets." (NMB01, P-7)

Finally, a participant observed: *"People from back then were into farming, and now since there is no space, they buy, and now there are no more gardens."* (NMB03, P-1)

This statement reflects the broader trend of shifting from self-sustained farming towards a reliance on purchased food due to spatial limitations.

Sub-theme 2.4: Laziness and dependence syndrome

Several participants described a growing dependence on convenient, pre-packaged foods, attributing it to modern lifestyles and laziness.

> *"People are lazy to cook traditional food; they just want something quick from the shop."* (NMB03, P-2)

> *"The younger generation doesn't know how to prepare traditional meals because they are used to fast food."* (NMB01, P-4)

> *"People, they are lazy, they do not have time to cook samp and beans because it will take time."* (NMB01, P-5)

This statement indicates a preference for quicker, less labour-intensive meals.

Theme 3: Health Consequences of Dietary Shifts

Sub-theme 3.1: Foods consumed in communities linked to diseases and ageing

Participants strongly believed that the consumption of Westernised foods had a direct impact on the rise of illnesses such as diabetes and hypertension in their communities.

> *"Our people are getting sick because of these fast foods. We never used to have diabetes in the past."* (NMB02, P-5)

> *"You can see the effects on people's health; they are getting old faster because of what we eat."* (NMB01, P-3)

One of the participants elaborated on the lack of variety and balance, agreeing with the previous statement: *"Number 5 is right when he says starch. Vegetables are not consumed much, we eat white rice. It's rice and AA* (cheap protein alternatives such as chicken feet, chicken livers, and giblets) *or rice and meat. The other one is samp and tripe, whatever, it is never samp with beetroot and pumpkin maybe. It's never potatoes alone; if it's potatoes it will be sqarice* (savoury rice cooked with oil, potatoes, and spices)*."* (NMB01, P-8), referring to another participant in the same discussion.

> *"We eat AA and bread, that is what we commonly use."* (NMB02, P-3)

These quotes underscore the limited presence of vegetables and the repetitive combination of starches with meats or other carbohydrates.

Sub-theme 3.2: Unhealthy dietary choices in communities

The participants acknowledged that numerous individuals in their communities make poor dietary choices, often opting for unhealthy fast food over traditional, home-cooked meals.

> *"The younger ones choose burgers and chips over the healthy food we used to eat."* (NMB01, P-6)

> *"People know they should eat healthier, but it's easier to buy junk food."* (NMB03, P-4)

Sub-theme 3.3: Overconsumption of starch

Participants noted that one of the key problems with their current diet was the

overconsumption of starchy foods, which they linked to health issues such as diabetes.

> *"We eat too much starch. We have bread for breakfast, pap for lunch, and rice for dinner."* (NMB02, P-5)

> *"Starch is the main problem. If you eat too much, it causes diseases like diabetes."* (NMB01, P-5)

Participants' reflections reveal a heavy reliance on starchy foods, often consumed in combination and with minimal inclusion of vegetables or other nutrient-rich foods. This dietary pattern leads to an imbalance, highlighting the need for greater variety and nutritional education to promote a balanced and healthy diet in their communities.

Theme 4: Strategies for Promoting Traditional Diets

Sub-theme 4.1: Government support for community gardens and social relief

Participants called for government intervention in the form of financial support and the establishment of community gardens to help people access healthy, traditional foods.

> *"If the government could help with community gardens, we could grow our own food again."* (NMB02, P-6)

> *"The government should give us land and seeds to grow traditional crops."* (NMB01, P-7)

> A participant mentioned the need for protected spaces for gardening. *"I'm talking about the green fence used for school yards, that one doesn't burn. The government can donate it to us, so that we can farm, and this will put a barrier for thieves as well, from our gardens."* (NMB03, P-5)

This suggestion underlines the need for gardening spaces protected against theft and vandalism, which are barriers to successful community gardening.

Sub-theme 4.2: Community-led food production initiatives

Participants suggested that the community should take the lead in establishing local food production initiatives, such as gardens, to reduce dependence on processed foods.

> *"We need to work together as a community to grow our own food."* (NMB02, P-6)

> *"If we had gardens like in the old days, we would be healthier and not rely on fast food."* (NMB03, P-3)

> One of the participants stressed the fundamental necessity of growing food, stating: *"Gardening is important, we need to plant our own food, there is no other way. We need to plant and not buy from the shops so much."* (NMB02, P-6)

> Another of the participants added: *"To add on what she is saying, we don't plant in our homes anymore, veggies and things like in the olden day. So, it's very easy to buy in the corners because every corner you turn to, especially here at the locations, there is always a woman selling fatcakes, and it's so cheap cheap [sic]."* (NMB03, P-6)

This quote illustrates how street foods' convenience and affordability have replaced traditional home gardening.

Sub-theme 4.3: Educational initiatives to promote balanced diets

Education on healthy eating was seen as a

key factor in promoting traditional diets, with participants expressing the need for targeted educational programmes.

> *"People need to be educated about nutrition and healthy eating."* (NMB03, P -5)

> *"Education is important, especially for young people, so they can learn to appreciate traditional food."* (NMB01, P-6)

> A participant emphasised the impact of educational deficits on dietary choices, remarking: *"I think maybe lack of education, we eat AA, not knowing that it is just full of the skin of the chicken and the skin of the chicken is full of cholesterol. Eating too much of that is going to lead to high blood pressure and cholesterol, so lack of education is a problem. People just think of the now, my children are hungry, I need to feed my children."* (NMB02, P-9)

This quote highlights how immediate food needs often take precedence over long-term health considerations, especially when there is limited education about the health impacts of food choices.

> A participant mentioned the consequences of an educational gap, stating: *"People think food is food, it doesn't matter how people eat as long as there is food and their tummy is full. Even if it's too much starch it doesn't matter, that is why at some stage our children grow malnourished."* (NMB02, P-7)

This quote reflects a pervasive attitude that prioritises satiety over nutritional quality, often resulting in malnutrition despite sufficient energy intake.

DISCUSSION

The study's findings offer critical insights into the perceptions of the nutrition transition among *isiXhosa*-speaking communities in NMB. The data reveal a deep sense of nostalgia for traditional African diets and concern about the adverse health impacts associated with the shift toward Westernised food consumption. These perceptions reflect global patterns in which urbanisation and globalisation contribute to the rise of NCDs such as diabetes and hypertension (Popkin, Adair & Ng 2012). The discussion explores these dynamics and outlines culturally relevant strategies to address the nutrition transition.

Traditional vs Western diets

The clear contrast participants drew between traditional and modern diets is consistent with other studies on the effects of globalisation on African food systems (Steyn & Mchiza 2014; Nnyepi *et al*. 2015). Traditional foods such as *umleqwa*, *imifino*, and *umngqusho* were valued for their nutritional quality and cultural significance. However, their consumption has declined as processed, Westernised foods – perceived as more convenient – have become more dominant. This trend mirrors findings in urban SA, where the consumption of fast food has increased due to its association with modernity and convenience (Laska *et al*. 2015).

Participants expressed concern about the younger generation's growing preference for Western diets, which are rich in fats and sugars and contribute to the erosion of traditional food knowledge. The loss of traditional dietary practices poses a significant risk to cultural identity and health (Trolio, Eckman & Mehta 2016). Interventions aimed at reviving traditional food knowledge, particularly through education and intergenerational learning, could play a vital role in preserving cultural heritage while

promoting healthier dietary habits.

These perceptions align with the social ecological model, which underscores that dietary behaviours are shaped by individual knowledge, interpersonal influences and broader environmental and policy contexts (Lai, Chang, Lee & Liao 2021). The health belief model helps explain participants' motivations, highlighting how perceived risks of diet-related illnesses and perceived benefits of traditional foods inform their food choices (Wang *et al*. 2022; Glick *et al*. 2024).

Economic and cultural drivers of change

Economic constraints emerged as a central factor influencing dietary changes, with participants reporting that traditional foods have become increasingly expensive and time -consuming to prepare. This finding aligns with research highlighting the impact of socioeconomic limitations on food choices (Faber, Laubscher & Laurie 2013). In urban environments, the convenience of fast foods, combined with financial pressures, makes it difficult for families to maintain traditional diets (Jonah & May 2019).

Cultural influences, particularly the impact of urbanisation and Western media, were also significant drivers of dietary change. Fast food is often portrayed as desirable, particularly in advertising targeting young people (Critchlow *et al*. 2020). This mirrors findings from other regions in SA, where fast food has become synonymous with modernity and social status (Steyn & Mchiza 2014). The growing cultural perception of traditional food as outdated or laborious to prepare, presents a challenge for public health strategies. Campaigns that reposition traditional diets as modern and valuable may be effective in encouraging a return to healthier, indigenous eating practices.

Health consequences of dietary shifts

Participants expressed deep concern about the health consequences of the nutrition transition, with many linking the shift towards Westernised diets to the rise of NCDs such as obesity, diabetes and hypertension. These concerns reflect broader trends in sub-Saharan Africa, where the prevalence of diet-related illnesses has surged due to urbanisation and dietary changes (Popkin, Adair & Ng 2012). The increase in NCDs in NMB echoes national health trends, where the consumption of processed foods high in fats and sugars contributes to poor health outcomes (Mbhenyane 2017).

Participants recognised a clear connection between poor dietary choices and illness within their communities. This recognition underscores the importance of public health strategies that extend beyond addressing the nutritional content of food. Comprehensive interventions are required – ones that consider the socioeconomic and cultural factors driving the consumption of unhealthy, Westernised diets. Moreover, the emotional toll of unhealthy eating, as noted by some participants, highlights the importance of incorporating mental health support into dietary interventions. Such an approach would promote not only physical well-being but also emotional resilience.

Strategies for promoting traditional diets

Participants' strong desire to return to traditional diets represents a significant opportunity for public health interventions. Community-driven solutions, such as community gardens and educational programmes to revive traditional food knowledge, were suggested frequently. These strategies align with global recommendations for promoting sustainable, local food systems as a means of addressing the health risks associated with the nutrition transition (Nolan

et al. 2019).

However, participants also emphasised the need for support from the government and institutions to make traditional foods more accessible and affordable. Public health policies that increase the availability of traditional foods in urban areas could play a critical role in reversing the adverse effects of the nutrition transition. Additionally, educational campaigns targeting younger generations, particularly through schools and media, could help reignite interest in traditional diets. The success of these initiatives will depend on their ability to reframe traditional foods as not only nutritious but also modern, convenient, and appealing to the broader public.

Limitations

While this study provides valuable insights, certain limitations should be acknowledged. The focus on urban participants may not fully capture the experiences of those living in rural areas, where traditional food practices might be better preserved. The reliance on self-reported data also introduces potential biases, as participants may have underreported or overemphasised certain aspects of their dietary behaviours. Future research could explore the perceptions of other cultural groups or investigate regional variations in the nutrition transition more comprehensively.

Recommendations

The findings of this study point to several practical recommendations that could help curb the adverse effects of the nutrition transition while promoting healthier, traditional diets among *isiXhosa*-speaking communities.

At the policy level, government action should prioritise improving the accessibility and affordability of traditional foods in urban areas. This can be achieved through investments in local food systems and support for community gardening initiatives that strengthen food security and ensure a consistent supply of indigenous crops.

Community-based strategies are equally important. Establishing community gardens and local markets to grow and sell traditional crops would empower residents to regain access to healthy indigenous foods, while also stimulating local economies and creating job opportunities, especially given that NMB's official unemployment rate stood at 26.4% in Q2 2025 and the expanded rate at 35% (StatsSA 2025). Educational initiatives are also essential. School-based programmes that include cooking classes and nutrition education can help younger generations rediscover the cultural and health value of traditional diets. Complementary media campaigns, particularly on social media, could further promote indigenous foods and counteract the aggressive marketing of highly processed fast foods.

Finally, multi-sectoral collaboration is critical. Partnerships among local government, schools, and community organisations will be necessary to design and sustain interventions that not only promote healthier eating but also preserve cultural identity.

CONCLUSION

This study provides valuable insights into the perceptions of the nutrition transition among *isiXhosa*-speaking communities in NMB, shedding light on the complex dynamics shaping dietary shifts. Participants identified economic hardship, urbanisation, and cultural change as key contributors to dietary shifts, alongside a loss of traditional food knowledge. Despite these challenges, there was a strong desire to return to culturally rooted, healthier eating practices. Empowering communities to reclaim their dietary heritage is not only a path to improved health outcomes but also a means of preserving cultural identity amid

globalisation and urbanisation. These insights are critical for designing culturally appropriate interventions in urban African contexts.

DECLARATION OF GENERATIVE AI AND AI-ASSISTED TECHNOLOGIES IN THE WRITING PROCESS

This article was conceptualised, researched, analysed, and written entirely by the authors. No generative artificial intelligence tools were used in the study design, data collection, analysis, or interpretation of findings. All writing and editing were conducted under the direct supervision and judgment of the authors to ensure accuracy, integrity, and originality.

REFERENCES

Abebe, A. & Alemayehu, M., 2022. Nutritional composition of cowpea (Vigna unguiculata) varieties cultivated in Ethiopia. *Journal of Agriculture and Food Research*, 10(3), 250–258. https://doi.org/10.1016/j.jafr.2022.100383

Affrifah, K., Phillips, R.D. & Saalia, F.K., 2022. Cowpeas: Nutritional profile, processing methods and products—A review. *Legume Science*, 4(3), e131. https://doi.org/10.1002/leg3.131

Afolayan, A.J. & Jimoh, F.O., 2009. Nutritional quality of some wild leafy vegetables in South Africa. *International Journal of Food Sciences and Nutrition*, 60(5), 424–431. https://doi.org/10.1080/09637480701777928

Braun, V. & Clarke, V., 2021. To saturate or not to saturate? Questioning data saturation as a useful concept for thematic analysis and sample-size rationales. *Qualitative Research in Sport, Exercise and Health*, 13(2), 201–216. https://doi.org/10.1080/2159676X.2019.1704846

Burns, N., Grove, S.K. & Gray, J., 2015. *Understanding nursing research: Building an evidence-based practice*. 6th edn. St. Louis, Missouri: Elsevier.

Chamberlain, J., 2015. Prebriefing in nursing simulation: A concept analysis using Rodger's methodology. *Clinical Simulation in Nursing*, 11(7), 318–322. https://doi.org/10.1016/j.ecns.2015.05.003

Creswell, J.W., 2014. *Research design: Qualitative, quantitative and mixed methods approaches*. 4th edn. Thousand Oaks, CA: Sage.

Critchlow, N., Le Vay, J.N., MacKintosh, A.M., Hooper, L., Thomas, C. & Vohra, J., 2020. Adolescents' reactions to adverts for fast-food and confectionery brands high in fat, salt, and/or sugar (HFSS): Findings from a cross-sectional survey in the United Kingdom. *International Journal of Environmental Research and Public Health*, 17(5), 1689. https://doi.org/10.3390/ijerph17051689

Faber, M., Laubscher, R. & Laurie, S., 2013. Availability of, access to and consumption of fruits and vegetables in a peri-urban area in KwaZulu-Natal, South Africa. *Maternal & Child Nutrition*, 9(3), 409–424. https://doi.org/10.1111/j.1740-8709.2011.00372.x

Glick, A.A., Winham, D.M., Heer, M.M. & Shelley, M.C., 2024. Health belief model predicts likelihood of eating nutrient-rich foods among US adults. *Nutrients*, 16(14), 2335. https://doi.org/10.3390/nu16142335

Guest, G., Bunce, A. & Johnson, L., 2006. How many interviews are enough? An experiment with data saturation and variability. *Field Methods*, 18(1), 59–82. https://doi.org/10.1177/1525822X05279903

Guest, G., Namey, E. & McKenna, K., 2017. How many focus groups are enough? Building an evidence base for nonprobability sample sizes. *Field Methods*, 29(1), 3–22. https://doi.org/10.1177/1525822X16639015

Hennink, M.M., Kaiser, B.N. & Marconi, V.C., 2017. Code saturation versus meaning saturation: How many interviews are enough? *Qualitative Health Research*, 27(4), 591–608. https://doi.org/10.1177/1049732316665344

Hennink, M.M. & Kaiser, B.N., 2022. Sample sizes for saturation in qualitative research: A systematic review of empirical tests. *Social*

Science & Medicine, 292, 114523. https://doi.org/10.1016/j.socscimed.2021.114523

Jonah, C.M.P. & May, J.D., 2019. Evidence of the existence of socioeconomic-related inequality in South African diets: A quantitative analysis of the 2017 General Household Survey. *World Nutrition*, 10(4), 27–42. https://doi.org/10.26596/wn.201910427-42

Kamanula, J.F., Munthali, M.W. & Kamanula, J.W., 2022. Nutritional and phytochemical variation of Marula (Sclerocarya birrea) fruit among nine international provenances tested in Malawi. *International Journal of Food Science*, 2022, Article ID 4686368. https://doi.org/10.1155/2022/4686368

Kitzinger, J., 1995. Qualitative research: Introducing focus groups. *BMJ*, 311(7000), 299–302. https://doi.org/10.1136/bmj.311.7000.299

Krueger, R.A. & Casey, M.A., 2015. *Focus groups: A practical guide for applied research*. 5th edn. Thousand Oaks, CA: Sage.

Laska, M.N., Hearst, M.O., Lust, K., Lytle, L.A. & Story, M., 2015. How we eat what we eat: Identifying meal routines and practices associated with dietary factors among young adults. *Public Health Nutrition*, 18(12), 2135–2145. https://doi.org/10.1017/S1368980014002717

Lai, I.J., Chang, L.C., Lee, C.K. & Liao, L.L., 2021. Nutrition literacy mediates the relationships between multi-level factors and college students' healthy eating behaviour: Evidence from a cross-sectional study. *Nutrients*, 13(10), 3451. https://doi.org/10.3390/nu13103451

Lincoln, Y.S. & Guba, E.G., 1985. *Naturalistic inquiry*. Newbury Park, CA: Sage.

Mashau, M.E., Kgatla, T.E., Makhado, M.V., Mikasi, M.S. & Ramashia, S.E., 2022. Nutritional composition, polyphenolic compounds and biological activities of Marula fruit (Sclerocarya birrea) with its potential food applications: a review. *International Journal of Food Properties*, 25(1), 1549–1575. https://doi.org/10.1080/10942912.2022.2064491

Mbhenyane, X.G., 2017. Indigenous foods and their contribution to nutrient requirements. *South African Journal of Clinical Nutrition*, 30 (4), 5–7.

Mayer, I., 2015. Qualitative research with a focus on qualitative data analysis. *International Journal of Sales, Retailing & Marketing*, 4(9), 3–67.

Nelson Mandela Bay Municipality (NMB), 2016. *Annual Report 2011/2012*. Viewed 5 June 2024, from http://www.nelsonmandelabay.gov.za/Content.aspx?objID=274

Nnyepi, M.S., Gwisai, N., Lekgoa, M. & Seru, T., 2015. Evidence of nutrition transition in Southern Africa. *Proceedings of the Nutrition Society*, 74(4), 478–486. https://doi.org/10.1017/S0029665115000051

Nolan, P.B., Carrick-Ranson, G., Stinear, J.W., Reading, S.A. & Dalleck, L.C., 2019. Parent's cardiorespiratory fitness, body mass, and chronic disease status is associated with metabolic syndrome in young adults: A preliminary study. *International Journal of Environmental Research and Public Health*, 16(10), 1768. https://doi.org/10.3390/ijerph16101768

Okafor, C.I., 2012. The metabolic syndrome in Africa: Current trends. *Indian Journal of Endocrinology and Metabolism*, 16(1), 56–66. https://doi.org/10.4103/2230-8210.91191

Onwuegbuzie, A.J., Dickinson, W.B., Leech, N.L. & Zoran, A.G., 2009. A qualitative framework for collecting and analysing data in focus group research. *International Journal of Qualitative Methods*, 8(3), 1–21. https://doi.org/10.1177/160940690900800301

Popkin, B.M., 2002. An overview on the nutrition transition and its health implications: The Bellagio Meeting. *Public Health Nutrition*, 5(1A), 93–103.

Popkin, B.M., Adair, L.S. & Ng, S.W., 2012. Global nutrition transition and the pandemic of obesity in developing countries. *Nutrition Reviews*, 70(1), 3–21. https://doi.org/10.1111/j.1753-4887.2011.00456.x

Ravitch, S.M. & Carl, N.M., 2016. *Qualitative research: Bridging the conceptual, theoretical, and methodological*. Thousand Oaks, CA: Sage.

SAFOODS, n.d. South African Food Data System, viewed 15 August 2023, from https://safoods.mrc.ac.za.

StatsSA, 2025. *Quarterly Labour Force Survey, Quarter 2: 2025 – Expanded and Official Unemployment Rates*. Statistics South Africa, viewed 28 August 2025, from https://www.statssa.gov.za/.

Steyn, N.P. & Mchiza, Z.J., 2014. Obesity and the nutrition transition in Sub-Saharan Africa. *Annals of the New York Academy of Sciences*, 1311(1), 88–101. https://doi.org/10.1111/nyas.12433

Stommel, M. & Wills, C.E., 2004. *Clinical research: Concepts and principles for advanced practice nurses*. Philadelphia: Lippincott Williams & Wilkins.

Tesch, R., 1990. *Qualitative research: Analysis types and software tools*. New York: Falmer.

Tong, A., Sainsbury, P. & Craig, J., 2007. Consolidated criteria for reporting qualitative research (COREQ): A 32-item checklist for interviews and focus groups. *International Journal for Quality in Health Care*, 19(6), 349–357. https://doi.org/10.1093/intqhc/mzm042

Trolio, J., Eckman, M. & Mehta, K., 2016. Leveraging globalisation to revive traditional foods. *Journal of Sustainable Development*, 9 (6), 212–219. https://doi.org/10.5539/jsd.v9n6p212

Uusiku, N.P., Oelofse, A., Duodu, K.G., Bester, M.J. & Faber, M., 2010. Nutritional value of leafy vegetables of sub-Saharan Africa and their potential contribution to human health: A review. *Journal of Food Composition and Analysis*, 23(6), 499–509. https://doi.org/10.1016/j.jfca.2010.05.002

van Jaarsveld, P., Faber, M., van Heerden, I., Wenhold, F., Jansen van Rensburg, W. & van Averbeke, W., 2014. Nutrient content of eight African leafy vegetables and their potential contribution to dietary reference intakes. *Journal of Food Composition and Analysis*, 33 (1), 77–84. https://doi.org/10.1016/j.jfca.2013.11.003

Wang, Y., Wen, X., Zhu, Y., Xiong, Y. & Liu, X., 2022. Chinese residents' healthy eating intentions and behaviours: Based on an extended health belief model. *International Journal of Environmental Research and Public Health*, 19(15), 9037. https://doi.org/10.3390/ijerph19159037