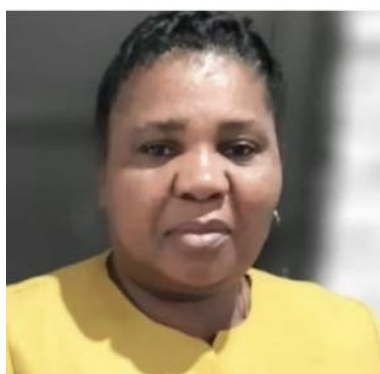


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THE ROLE OF FOOD PRICES AND HOUSEHOLD INCOME IN NUTRITIONAL OUTCOMES: A NARRATIVE REVIEW

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ABSTRACT

South Africa is experiencing a rapid and uneven nutrition transition, marked by rising consumption of ultra-processed foods, persistent micronutrient deficiencies, and the simultaneous occurrence of undernutrition and obesity, reflecting entrenched socio-economic and spatial inequalities. Structural changes in food systems, accelerated urbanisation, income disparities, and lifestyle shifts have driven this transition, yet unequal access to nutritious foods continues to shape dietary behaviours. National data indicate that 27% of children under five are stunted, while adult obesity affects 41% of women and 11% of men, with childhood overweight also rising, highlighting early-life exposure to energy-dense, low-quality diets. Economic constraints, including low household incomes, stagnant wages, and rising food prices, limit the ability of low-income households to maintain diverse and nutrient-rich diets, as fruits, vegetables, legumes, and lean proteins remain costly, whereas ultra-processed foods are cheap, shelf-stable, and widely available. This “substitution pathway” contributes to poor dietary diversity, micronutrient deficiencies, and an increased risk of obesity. Food environments, shaped by supermarket concentration, urban food deserts, informal vendors, and pervasive marketing of unhealthy foods, further influence dietary choices. Drawing on nationally representative datasets, this study develops a conceptual framework linking household income, food prices, and food environments to dietary behaviours and nutritional outcomes, highlighting the structural and behavioural determinants of malnutrition. The study’s novelty lies in integrating economic, environmental, and behavioural determinants into a single framework, offering a comprehensive explanation of how structural pressures translate into undernutrition and obesity. Case studies, including the KwaZulu-Natal School Nutrition Programme and the Western Cape Salt Reduction Initiative, demonstrate how nutrition-sensitive interventions can improve dietary quality, child growth, and local food systems. Key challenges include food price inflation, inequitable access to nutritious foods, and the aggressive marketing of ultra-processed products. Opportunities exist in nutrition-sensitive agriculture, targeted subsidies, strengthened school nutrition programs, regulatory reforms, and behavior-change initiatives. The findings underscore that integrated, multi-sectoral strategies across agriculture, public health, social protection, and policy domains are essential for promoting equitable, affordable, and sustainable nutrition outcomes, providing a practical analytical tool for designing context-specific interventions in South Africa.

Key words: Malnutrition, Dietary diversity, Food prices, Household income, South Africa, Food environment

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INTRODUCTION

South Africa is experiencing a rapid, yet uneven nutrition transition driven by structural changes in food systems, accelerated urbanisation, widening income inequality, and lifestyle shifts. Global literature shows a broad movement away from traditional, minimally processed diets toward energy-dense, ultra-processed foods as countries modernise [1]. However, South Africa's transition is uniquely complex: persistent socio-economic and spatial inequalities shape the affordability, availability, and accessibility of nutritious foods, intensifying the shift toward low-quality diets and producing a pronounced dual burden of malnutrition, in which chronic undernutrition coexists with rising overweight and obesity [2].

National indicators reflect the magnitude and distribution of this burden. The National Food and Nutrition Security Survey reports that 27 per cent of children under five are stunted, 6 per cent wasted, and 5 per cent underweight, with the highest stunting prevalence recorded in Eastern Cape, KwaZulu-Natal, and Limpopo provinces, characterised by rurality, poverty, and limited access to diversified food markets [3]. Simultaneously, South Africa ranks among the countries with the highest adult obesity prevalence worldwide: 41 per cent of women and 11 per cent of men are classified as obese, with rates exceeding 45 per cent in the Western Cape and Free State [4]. Childhood overweight is also rising, affecting 13 per cent of school-aged children, signalling early-life dietary transitions associated with urbanisation and increased exposure to processed foods [5].

A growing body of literature attributes these outcomes to the interaction of economic constraints and changing food environments. Rising food prices, stagnant real wages, and limited livelihood opportunities restrict household purchasing power, prompting low-income households to prioritise satiety over nutritional value [2]. Studies consistently show that nutrient-rich foods, particularly fresh vegetables, fruits, legumes, and lean proteins, are comparatively expensive, while ultra-processed foods are cheap, shelf-stable, and widely available [6]. Household coping strategies, therefore, include substituting nutrient-dense foods with cheap, energy-dense alternatives, a phenomenon exacerbated during periods of inflation and income shocks [7]. This “substitution pathway” has been repeatedly linked to poor dietary diversity, micronutrient deficiencies, and an increase in obesity risk [8].

Despite the growing evidence base, research on South Africa's nutrition transition remains fragmented. Existing studies often focus on single dimensions—poverty and food insecurity, dietary patterns, food pricing, or food environments, without integrating how these factors jointly shape nutritional outcomes [1, 2]. International models, such as Popkin's stages of the nutrition transition, provide useful starting points but fail to capture several structural realities characteristic of South Africa:

extreme spatial inequalities in food access, concentrated supermarket supply chains, aggressive marketing and penetration of ultra-processed foods, and uneven coverage and adequacy of social protection. Consequently, literature still lacks a comprehensive account of how income constraints, food prices, and food environments interact within South Africa's socio-economic structure to produce the observed patterns of undernutrition and obesity. Hence, this study addresses these gaps by offering a holistic and contextually grounded analysis of the structural, economic, behavioural, and policy determinants of malnutrition in South Africa.

Drawing on nationally representative datasets, including the National Food and Nutrition Security Survey [3], Human Sciences Research Council obesity surveillance reports [4], Department of Health micronutrient assessments [5], the Pietermaritzburg Household Affordability Index [7], and Statistics South Africa food price indices [8], the study synthesises evidence across income groups, regions, and demographic categories. It highlights key pathways such as price-induced dietary substitution, market-driven dietary homogenisation, and spatial disparities in food access, while linking empirical patterns to programmatic examples including the KwaZulu-Natal School Nutrition Programme and the Western Cape Salt Reduction Initiative [6].

By consolidating these insights, the paper lays the foundation for an integrated conceptual framework that maps how household income, purchasing power, food prices, and food environments interact to shape dietary behaviour and nutritional outcomes in South Africa. The next section presents this framework and outlines the mechanisms connecting structural constraints to observed malnutrition patterns.

Conceptual Framework

The conceptual framework (Figure 1) positions household income, food prices, and food environments as primary determinants of dietary quality and nutritional outcomes. Income shapes purchasing power, while food prices determine affordability; together, they influence household food choices, dietary diversity, and micronutrient adequacy [7].

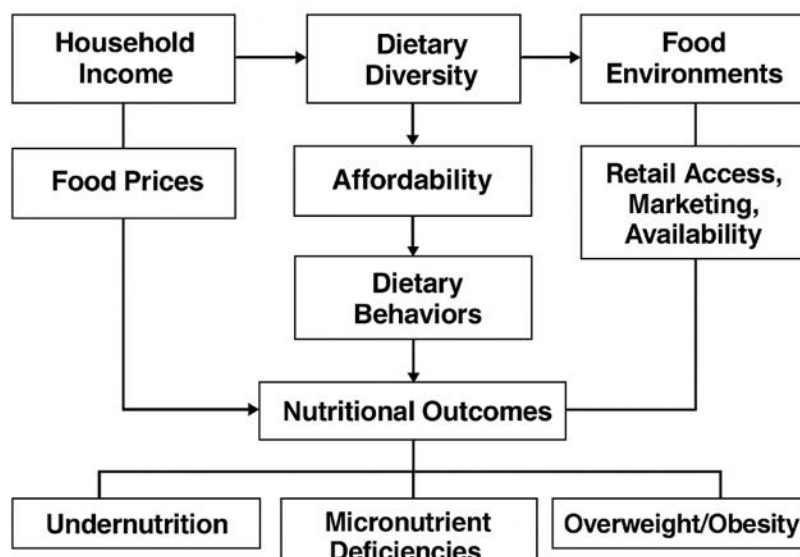


Figure 1: Conceptual Framework Linking Household Income, Food Prices, and Food Environments to Dietary Behaviors and Nutritional Outcomes in South Africa

Low-income households experience a relative cost burden: nutrient-rich foods cost significantly more per kilocalorie than ultra-processed alternatives [7]. Consequently, poorer households prioritise inexpensive staples, such as maize meal, bread, and potatoes, over fruits, vegetables, and proteins. In contrast, higher-income households are more resilient to price shocks and maintain greater dietary diversity [2].

Food environments further mediate dietary behaviour. South Africa's retail landscape is shaped by supermarket concentration, informal vendors, food deserts, and pervasive marketing of unhealthy foods [9]. Policy instruments, including value-added tax (VAT) exemptions, social protection programmes, food fortification regulations, and fiscal tools such as the Health Promotion Levy, modify affordability and consumption patterns [10].

The framework illustrates the dynamic interplay between structural factors (household income and the relative prices of nutritious versus ultra-processed foods) and policy levers designed to influence these conditions. It demonstrates how economic factors shape household purchasing power, constrain or expand food choices, and interact with behavioural responses, including coping strategies, food preferences, and adaptive consumption patterns [6]. Together, these mechanisms help explain how the same food system can simultaneously produce undernutrition among low-income populations with limited access to diverse, nutrient-rich foods, and rising obesity among groups increasingly exposed to cheap, energy-dense, ultra-processed products.

Household Income and Dietary Choices

As portrayed in Table 1, household income strongly predicts dietary quality in South Africa. Low-income households often spend more than 30 per cent of their income on food. In contrast, the Pietermaritzburg Household Affordability Index (7) shows that a nutritionally adequate food basket costs 40–60 per cent more than what minimum-wage households can afford.

Key income-related pathways include:

Reliance on Cheap Energy-Dense Staples

Lower-income households primarily rely on maize meal, bread, potatoes, and other refined carbohydrates to meet their daily caloric needs, reflecting both economic constraints and limited access to diverse, nutrient-rich foods [11–13].

Consumption of Fruits and Vegetables

Only a small proportion of low-income South African households meet the WHO five-a-day guideline, with adherence ranging from 7 per cent to 26 per cent [11–15].

Irregular Protein Intake

Animal-source proteins, which are essential for growth and prevention of stunting, are consumed infrequently by low-income households due to high cost and limited affordability [11–13].

The Undernutrition–Poverty Trap

Poor diets impair immune function, hinder cognitive development during childhood, and reduce adult productivity and lifetime earning potential [16, 17]. By contrast, higher-income households tend to purchase more nutritious and diverse foods and maintain broader dietary diversity, helping them avoid dietary constraints, especially during periods of food price inflation [18, 19].

Food Prices and Dietary Patterns

Food prices are a critical determinant of dietary behaviour in South Africa, where a combination of macroeconomic pressures, structural inequalities, and market dynamics shapes household food choices. Persistent food inflation has disproportionately affected nutrient-rich foods, making them less affordable for low- and middle-income households. Between 2020 and 2023, price changes included:

- Fresh vegetables: +22% (8)
- Chicken: +17% (8)
- Bread and maize: +9% (8)
- Ultra-processed snacks: +6% (8)

The differential price increase has created a situation where households facing constrained budgets increasingly rely on cheaper, calorie-dense, and nutrient-poor foods, exacerbating the risk of both undernutrition and obesity. This dynamic is

particularly pronounced in rural areas and low-income urban settlements, where incomes are stagnant and access to formal retail options is limited [7].

Additional Drivers Intensifying Price Impact

Climate Shocks

South Africa is highly vulnerable to climate variability, including recurrent droughts in Limpopo and Eastern Cape and periodic floods along the KwaZulu-Natal and Western Cape coasts. These events reduce the supply of fresh produce, drive up prices, and create instability in food availability, disproportionately affecting poor households that cannot absorb price shocks [7, 8].

Fuel Costs and Transport Logistics

High fuel prices and inadequate transport infrastructure increase distribution costs, particularly for perishable foods such as fruits, vegetables, and dairy. Rural households and informal settlements often pay more for the same products due to logistical inefficiencies, reinforcing inequalities in food access [8].

Market Concentration

South Africa's retail food market is dominated by a few large supermarket chains, which wield substantial price-setting power. This concentration affects both the affordability and diversity of foods available, often privileging highly processed products over fresh, nutrient-dense alternatives [6].

Urban Food Deserts

In low-income urban areas, residents frequently face limited access to supermarkets or fresh produce markets. These "food deserts" force households to rely on informal vendors or convenience stores, which predominantly sell energy-dense, ultra-processed foods at higher relative prices [9]. Psychological and cultural perceptions further influence consumption patterns. Nutritious foods are commonly perceived as expensive and inaccessible, while ultra-processed products are marketed as convenient, aspirational, and status-enhancing. This combination of economic, spatial, and cultural factors contributes to a growing reliance on low-cost, nutrient-poor foods among vulnerable populations [6].

Dual Burden of Malnutrition in South Africa

South Africa is experiencing a persistent dual burden of malnutrition, in which undernutrition and micronutrient deficiencies coexist with rising overweight and obesity, particularly in urbanised regions [2, 3].

Undernutrition

Despite national efforts to improve child nutrition, undernutrition remains high, especially in provinces characterised by poverty, rural isolation, and limited access to health services. Stunting rates are:

- Eastern Cape: 34% (3)
- KwaZulu-Natal: 31% (3)
- Limpopo: 29% (3)

Micronutrient deficiencies are widespread. Iron deficiency, for example, affects 22 per cent of women of reproductive age and 30 per cent of children under five, with implications for cognitive development, productivity, and maternal health [5]. Inadequate dietary diversity, limited access to fortified foods, and high reliance on staple crops exacerbate these deficiencies [6].

Overweight and Obesity

Simultaneously, adult obesity rates in South Africa rank among the highest in Africa, with women from lower socio-economic groups experiencing the fastest increases [4]. Contributing factors include:

- Economic constraints: Cheaper, energy-dense, ultra-processed foods dominate the diets of low-income households [6]
- High sugar consumption: Sweetened beverages and confectionery are widely available and heavily marketed [6]
- Sedentary urban lifestyles: Urbanisation has increased physical inactivity, with limited recreational spaces in many low-income areas [2]
- Cultural and social norms: Larger body size is often socially desirable, reinforcing patterns of weight gain [2]

The rise in obesity is strongly linked to non-communicable diseases, including hypertension, diabetes, and cardiovascular disease, which collectively account for nearly 60 per cent of adult deaths in South Africa [4]. The coexistence of undernutrition and overnutrition within the same communities, and sometimes the same households, underscores the complexity of South Africa's nutrition challenges, demanding integrated interventions that address both dietary quality and quantity [6]. Table 2 highlights the coexistence of stunting, overweight, and obesity in South Africa, illustrating the country's double burden of malnutrition. The data show that while stunting remains prevalent especially among children rates of overweight and obesity are simultaneously rising across age groups. This pattern reflects long-term nutritional deprivation in early life combined with increased exposure to energy-dense, nutrient-poor diets. Socioeconomic inequality, urbanisation, and limited access to healthy foods contribute significantly to these trends. Overall, the table

underscores the need for integrated nutrition policies that address both undernutrition and overnutrition simultaneously.

Case Studies of Effective Interventions

Case Study 1: KwaZulu-Natal School Nutrition Programme

The KwaZulu-Natal School Nutrition Programme (KZN SNP) provides daily meals to more than 2.3 million learners across the province, focusing on primary and secondary schools in low-income and rural communities. The programme sources a substantial portion of its produce from local smallholder and emerging farmers, supporting local agricultural value chains and promoting economic participation in surrounding communities [6].

Key outcomes observed from programme implementation include:

- Improved school attendance and concentration: Children receiving regular, nutrient-rich meals demonstrate higher attendance rates and better engagement in classroom activities, linked to improved cognitive functioning and learning outcomes [6]
- Modest increases in BMI-for-age: Targeted nutrition interventions help children achieve age-appropriate growth trajectories, particularly in undernourished populations [6]
- Strengthened local food systems: By sourcing from local farmers, the programme enhances community-based agricultural production, fosters market linkages, and promotes sustainable supply chains [6]
- Expanded dietary diversity: Meals include fruits, vegetables, legumes, and fortified staples, contributing to greater micronutrient intake and healthier eating habits among schoolchildren [6]

Challenges include inconsistent food supply due to logistical bottlenecks, seasonal variability in agricultural production, and funding shortages, which sometimes limit the scale and quality of meals provided. Coordination between schools, suppliers, and provincial authorities requires continuous improvement to maintain quality standards and equitable distribution [6].

Case Study 2: Western Cape Salt Reduction Initiative

The Western Cape Salt Reduction Initiative (WCSRI) is a public health intervention aimed at reducing population-level sodium intake through reformulation of widely consumed foods, primarily bread. The initiative involves strategic partnerships with commercial bakeries, small-scale bakers, and restaurants to reduce sodium content in their products, focusing on maintaining taste and consumer acceptability [6].

Key achievements include:



- Reduction in sodium intake: Bread sodium content was reduced by approximately 30 per cent, contributing to lower overall population sodium consumption and mitigating risks of hypertension and cardiovascular disease [6]
- Increased consumer awareness: Public engagement campaigns and educational materials informed consumers about the health risks associated with high sodium intake and encouraged healthier food choices [6]
- Alignment with national reformulation policy: The initiative complemented South Africa's broader regulatory framework on salt reduction and food reformulation, providing a model for coordinated public-private sector interventions [6]

Limitations include limited monitoring and evaluation, making it difficult to assess long-term compliance and population impact accurately. Uneven compliance among smaller bakeries and restaurants constrained the initiative's overall effectiveness [6]. Despite these challenges, the WCSRI demonstrates the potential of collaborative approaches to achieve meaningful public health outcomes [6].

Challenges and Opportunities

Challenges

South Africa faces multiple, interrelated challenges that constrain improvements in dietary quality and nutritional outcomes. One of the most pressing issues is the rising prices of nutrient-dense foods, such as fresh fruits, vegetables, lean proteins, and fortified staples, which disproportionately affect low-income households and limit their ability to maintain diverse and balanced diets [6].

This economic barrier is compounded by structural inequalities and the prevalence of food deserts, particularly in rural areas and low-income urban settlements, where access to formal supermarkets or fresh produce markets is limited. Many households rely on informal vendors or small convenience shops, which primarily stock ultra-processed, energy-dense foods at relatively higher prices [6, 9].

The aggressive marketing of ultra-processed products further reinforces unhealthy dietary behaviours. Television, social media, and in-store promotions heavily target children and low-income consumers, portraying processed foods as convenient, aspirational, and socially desirable, often overshadowing messages about healthier alternatives [6].

Additional barriers include limited nutrition education, particularly among caregivers and school-aged children, which reduces awareness of the importance of dietary diversity and balanced nutrient intake (6). Poor infrastructure for cold storage and distribution also constrains the availability of perishable, nutrient-rich foods in rural and peri-urban areas [6].

Opportunities

Nutrition-sensitive agriculture can increase the local production and availability of fruits, vegetables, legumes, and other nutrient-rich foods while supporting smallholder farmers and rural economies [6]. Subsidies to lower produce prices can enhance affordability for low-income households, helping to reduce reliance on ultra-processed foods [6].

School-based interventions, such as strengthened school nutrition programmes with locally sourced meals, can improve dietary diversity, support child growth and development, and create reliable markets for local producers [6]. Behavioural interventions, including targeted behaviour-change campaigns, can shift consumer perceptions and preferences, making nutrient-rich foods more desirable and culturally aspirational [6].

Emerging technologies, such as digital nutrition monitoring platforms, can track household consumption patterns, provide real-time data for policymakers, and support evidence-based interventions [6]. Public–private reformulation partnerships between government, food manufacturers, and retailers can reduce salt, sugar, and trans-fat content in processed foods while maintaining taste and consumer acceptance [6].

Policy and Economic Interventions

Key Nutrition-Related Policies in South Africa

South Africa's nutrition-related policy landscape reflects an evolving commitment to strengthening food and nutrition security through a multi-sectoral approach (see figure 2). Existing policies include the National Policy on Food and Nutrition Security (NPFNS), the National Food and Nutrition Security Plan (2018–2023), the Roadmap for Nutrition (2013–2017), and various targeted interventions, all of which collectively aim to improve the availability, accessibility, and affordability of nutritious food [6]. These frameworks acknowledge the importance of nutrition in public health, agricultural development, and social protection.

EXISTING POLICIES

- **National Policy on Food and Nutrition Security (NPFNS) approved 2014**
Ensure availability, accessibility, and affordability of safe and nutritious food
- **National Food and Nutrition Security Plan (2018–2023) (NENSP)**
Operationalise the NPFNS via strategic objectives, align policies, and coordinate programmes
- **Roadmap for Nutrition in South Africa (2013–2017)**
Integrate nutrition into the health sector, focus on malnutrition, and strengthen capacity
- **Targeted interventions & programmes**
Support for smallholder agriculture, social-protection safety nets, nutrition education, and food fortification

MERITS

- Comprehensive, multi-sectoral framework
- Integration of nutrition into the health sector
- Emphasis on support for smallholder farmers
- Focus on nutrition education and social protection

DEMERITS

- Weak institutional coordination and governance structure
- Not legally binding—no overarching Framework Act
- Strengthen monitoring, evaluation, and data systems
- Integrate nutrition policy with other sectors

Figure 2: Key Nutrition-Related Policies in South Africa

One of the major strengths of these policies is their broad, multi-sectoral design, which recognises that multiple systems, including health, agriculture, education, and social development, shape nutrition outcomes. The integration of nutrition into the health sector, combined with support for smallholder farmers and a strong focus on nutrition education and social protection measures, demonstrates a holistic understanding of food security challenges (6). This comprehensive approach has enabled South Africa to implement food fortification, expand social safety nets, and enhance awareness of malnutrition and healthy diets [6].

Despite these merits, the policy environment faces persistent structural and institutional challenges. Coordination across government departments remains weak, limiting the effectiveness of multi-sectoral implementation. The absence of a legally binding overarching framework further undermines enforcement and long-term accountability. In addition, monitoring, evaluation, and data systems require significant strengthening to ensure that interventions are evidence-based and impact-focused. Fragmented governance also hinders the integration of nutrition

goals into other key sectors such as education, social development, and local economic development [6].

Opportunities for Improvement

- Strengthen cross-departmental coordination to ensure coherent implementation of nutrition policies
- Develop a legally binding national nutrition framework to guide all sectors
- Expand subsidies and incentives for nutrient-rich foods such as fruits, vegetables, and lean proteins
- Improve monitoring, evaluation, and data systems to track nutrition outcomes more effectively
- Enhance community-level nutrition education and awareness programmes
- Increase support for smallholder farmers to boost local production of diverse, nutritious foods
- Integrate nutrition considerations into broader policies such as urban planning, agriculture, education, and social protection
- Scale up food fortification and biofortification initiatives targeting vulnerable populations

Overall, while South Africa has established a solid foundation of nutrition-related policies, realising their full potential requires stronger governance mechanisms, improved coordination, and more robust systems for monitoring and evaluation. These improvements would support a more resilient and equitable food and nutrition security system, particularly for vulnerable households [6].

Lessons from International Experience

Comparative evidence demonstrates that integrated, nutrition-sensitive policies are more successful than isolated interventions:

- **Mexico:** The Prospera programme improved dietary diversity and reduced stunting through conditional cash transfers paired with nutrition education, enhancing both access to food and caregiver knowledge
- **Brazil:** Bolsa Família, combined with school feeding and primary health care, improved calorie adequacy and increased fruit and vegetable consumption among low-income households
- **United Kingdom:** The Healthy Start voucher programme increased purchases of fruits, vegetables, and milk among low-income families, demonstrating the effectiveness of financial incentives in shaping dietary behaviours

- **Chile:** The implementation of marketing restrictions and front-of-package food warning labels reduced unhealthy food purchases at the population level, illustrating the impact of regulatory measures on consumer behaviour

These international initiatives illustrate the effectiveness of combining financial support, regulatory measures, nutrition education, and transformation of the food environment. The evidence underscores that meaningful improvements require multi-sectoral, nutrition-sensitive approaches rather than reliance on singular interventions [10–13].

CONCLUSION AND RECOMMENDATIONS FOR DEVELOPMENT

South Africa's dual burden of malnutrition is deeply rooted in structural inequalities. Low household incomes, volatile food prices, and unhealthy food environments limit dietary diversity, particularly among low-income communities, children, and women of reproductive age [2, 3, 4]. Even when food is available, it is not always accessible or affordable for maintaining healthy dietary patterns [6].

Addressing these challenges requires integrated, multi-sectoral strategies. Agricultural policies must prioritise affordable, nutritious food production; social protection programmes should buffer households from income shocks and food price inflation; food policies must regulate marketing, placement, and pricing of unhealthy products; and public health interventions must promote healthy eating through education and behaviour-change support [3, 6]. Collaboration across government, civil society, researchers, and the private sector is essential [6].

Enhancing affordability and equity includes supporting smallholder farmers, improving value chains, reforming pricing structures, and investing in resilient food environments that make healthy choices accessible. A holistic, equity-focused approach can ensure that all South Africans, irrespective of income or geography, can access nutritious foods, supporting healthier generations and a more resilient society [2, 6].

Contribution and Novelty

This study contributes to the literature by offering an integrated analytical framework explaining how household income, food prices, and food environments jointly shape dietary behaviours and nutritional outcomes (1,6). Previous research has examined these determinants individually; this study advances understanding by showing how the three pillars interact dynamically to influence dietary diversity, affordability, food choices, and nutritional status [2, 3].

The novelty lies in its multi-level conceptualisation, linking economic constraints (income and prices), environmental factors (retail access, marketing, availability), and behavioural mechanisms (quality, frequency, substitution patterns) into a single

framework capturing the complexity of nutrition decisions in low- and middle-income households [1,6]. By synthesising these pathways, the study provides a comprehensive explanation of how structural and economic pressures translate into undernutrition, micronutrient deficiencies, and obesity, offering a practical tool for targeted, context-specific interventions [6, 14].

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None

Conflict of Interest

None

Table 1: Income-Based Dietary Patterns in South Africa

Dietary Patterns by Income Group				
Income Group	Dominant Foods	Fruit & Vegetable Intake	Protein Consumption	Risk Profile
Low-income	Maize meal, bread, potatoes	5-10%	Irregular	Stunting, micronutrient deficiencies
Middle-income	Mix of staple and processed foods	Moderate	Moderate	Rising obesity
High-income	Diverse diets	Regular	Regular	Nutrition-related NCDs

Table 2: Selected Data on Stunting and Obesity / Overweight in South Africa

Year / Period	Age Group / Population	Indicator & Prevalence	Region / Notes
~2023	Children under 5	Stunting: 27.4 %; Overweight/obesity: 13.3%	National – persistent dual burden [UNICEF, 2020]
2016	Children under 5	Stunting: ~27%	SADHS 2016 – national [ILIFALABANTWANA, 2024]
2008–2017	Children under 5	Stunting declined from ~25% → ~23%	National trend [PMC, 2017]
2024	Adults (all)	Overweight/obesity: ~50%	National – both genders [Alliance for Science, 2024]
2016	Adults	Overweight + obesity: Men ~33%, Women ~68%	National – BMI categories [PMC, 2024]
Recent	Adults 35–84	Obesity: ~39.4%	KwaZulu-Natal province [HSRC, 2023]

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