

Ultra-processed food consumption in sub-Saharan Africa: a narrative review through a gender lens

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Summary

Sub-Saharan Africa (SSA) is experiencing a rise in ultra-processed food (UPF) consumption, with implications for public health nutrition. This paper argues that UPF uptake in SSA must be understood in relation to the gendered organisation of foodwork. Drawing on evidence from across the region, we show that women, despite increasing participation in paid employment, continue to primarily handle tasks such as acquiring food, cooking, and related domestic labour, creating time poverty. Under these circumstances, UPFs emerge as practical coping strategies, with implications for dietary quality and public health. Policy approaches that emphasise home cooking or behaviour change may therefore be ineffective or inequitable if they increase women's unpaid workload. We conclude that addressing UPFs as a public health concern in SSA requires gender-responsive strategies that focus on the organisation of foodwork and the conditions under which food is prepared and consumed in order to reduce time burdens and reshape food environments.

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Introduction

Ultra-processed foods (UPFs) have become an increasingly prominent concern in public health and nutrition transition debates.¹ Here, we use nutrition transition to refer to broad shifts in diets, food environments, and disease patterns associated with urbanisation, rising food purchasing, and changing modes of food production, processing, and consumption.² UPFs, as defined by the NOVA classification, are industrially formulated food products made from multiple ingredients that are usually not found in a typical home kitchen, designed by food manufacturers to enhance palatability, convenience, or shelf life.^{1,3} UPFs are linked with a number of diet-related non-communicable diseases (DR-NCDs) like obesity, type 2 diabetes, cardiovascular disease and certain cancers.¹ Beyond health impacts, a growing body of research has drawn attention to the broader political and economic implications of UPFs, particularly the role of large food corporations in reshaping food environments and displacing traditional diets.⁴ As a result, UPFs are now widely understood not only as a nutritional issue, but also as a challenge for food sovereignty, sustenance of cultural food practices, and public policy.

Despite this expanding literature, the relationship between gender roles in society and UPF uptake has received relatively little attention. Research and policy discussions have largely focused on consumption patterns, health outcomes, and regulatory responses, with limited consideration of how rising UPF consumption intersects with women's labour, time use, and livelihoods. In addition, while HP-UPFs may reduce the immediate time required for food acquisition and preparation, this apparent benefit should be considered alongside the longer-term unpaid care burdens associated with DR-NCDs, which are also likely to fall disproportionately on women.⁵ Rao et al. (2026) examine how global policy measures aimed at reducing UPF consumption often focus on nudging consumers to replace UPFs with fresh, home-cooked, minimally processed foods, without considering how this may further add to women's food preparation and planning burdens.⁶ We apply this argument in the context of SSA, where women are disproportionately responsible for domestic food security, face considerable time-use constraints, and where policy efforts to regulate or reduce UPF consumption remain at a nascent stage.^{7,8}

SSA is a vast and diverse region characterised by wide variation in income levels, degrees of urbanisation,

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Research in context

Evidence before this study

We searched major databases (PubMed, Web of Science, JSTOR, EBSCO, and Google Scholar) and grey literature for studies on ultra-processed food (UPF) consumption, women's foodwork, and women's time use in Sub-Saharan Africa (SSA). Our search, conducted in December 2025, was limited to English-language studies and prioritised recent publications. Previous research has documented the rapid expansion of processed and ultra-processed foods in SSA and their links to nutrition transition, rising non-communicable disease burdens, and changing food environments. Studies have also shown that women in the region remain primarily responsible for household food provisioning while simultaneously increasing their participation in paid work, leading to significant time constraints. However, existing research pays limited attention to how gendered divisions of labour and women's unpaid foodwork shape reliance on highly processed foods and UPFs. Evidence connecting women's employment, time use, caregiving responsibilities, and UPF uptake in SSA remains fragmented and under-analysed, and policy discussions rarely incorporate a gendered perspective on food preparation and household provisioning.

Added value of this study

Prior policy-focused studies on UPFs have largely focused on high- and middle-income countries outside of SSA, emphasising individual consumer choices, behaviour change, and healthy eating. In addition, feminist scholarship in SSA

and beyond has paid limited attention to the connection between UPF consumption, women's time use, and women's unpaid domestic work. Our study fills these gaps by emphasising the need for gender-sensitive policies that address the local food environment and the significant labour demands placed on women. Processed foods often act as substitutes for women's unpaid care work. Our analysis suggests that moving forward, policies addressing UPF consumption in SSA should: (i) recognise the economic and social significance of women's foodwork; (ii) strive to create food environments that facilitate the consumption of nutritionally-balanced foods; (iii) improve access to healthy, culturally relevant convenience foods that support local (including women-led) entrepreneurship; (iv) provide clearer guidance on which healthy foods can be used for fortification; and (v) promote equal participation of men and women in unpaid care and food-related work.

Implications of all the available evidence

Available evidence suggests that urbanisation, modern supply chains, and women's entry into formal labour are contributing to the rise of ultra-processed foods in the region. These trends present both challenges and opportunities to improve diets and reduce reliance on women's unpaid labour. Future policies should be grounded in evidence on the division of domestic labour and prevalent cultural norms to better support women's social and economic empowerment and promote healthier food environments and consumption.

and stages of nutrition transition. In this region and beyond, the nutrition transition has given way to what is known as the triple burden of malnutrition. While some countries and population groups are experiencing rising rates of DR-NCDs (such as obesity), others continue to face high levels of undernutrition, stunting, wasting, micronutrient deficiencies (hidden hunger), and food insecurity. These various forms of malnutrition are increasingly coexisting not only within the same communities but within individual households. For example, an undernourished child might live alongside an overweight or obese adult.^{2,9,10} In connection to processed food consumption, higher-income, coastal countries in SSA have experienced earlier and more rapid uptake compared to lower-income, land-locked countries in the region.¹¹ Recognising this heterogeneity is essential. At the same time, examining SSA as a region remains analytically useful, as many countries share developmental patterns, including rapid urbanisation, the expansion of food processing and retail sectors, and the growing modernisation of food supply chains.¹² These shared dynamics are reshaping food environments across diverse contexts

and contributing to the increasing availability and consumption of UPFs.⁷

Research by Reardon et al. (2021) is currently the most comprehensive empirical work on UPF production and consumption in SSA and provides important contextual evidence for understanding nutrition transition in the region.¹¹ They show that African consumers have been purchasing processed foods for close to fifty years now and that reliance on such foods is widespread across income groups and locations. Importantly, Reardon and colleagues caution that the distinction between *highly processed* and *ultra-processed foods* is not always clear in African contexts due to the limited availability of detailed ingredient-level consumption and compositional data. These may include packaged products such as sugar-sweetened beverages, instant noodles, biscuits and confectionery, and salty snacks.¹¹ They also note that various commercially produced traditional foods, such as *mandazi* (fried bread), contain many ingredients and quantities of sugar, oil, and refined flour comparable to foods produced at an industrial scale, even if they are not packaged or manufactured by large corporations. Therefore,

the use of the term UPF, as defined by Monteiro et al. (2025),^{1,3} may not always be appropriate to use in the SSA context. Consistent with Reardon et al. (2021), in this paper, we use the terms highly processed and ultra-processed foods (HP-UPF) to refer to typically unhealthy industrially produced convenience foods and beverages, whether produced by formal or informal enterprises, and commonly consumed at home and through formal or informal retail outlets.

By examining the rise of and potential regulation of HP-UPFs in SSA through a gender lens, this paper addresses a critical gap in existing research. It argues that efforts to understand and govern HP-UPFs must account not only for nutritional and health outcomes, but also for the gendered organisation of food systems and labour. Situating HP-UPFs in relation to women's foodwork and employment highlights the structural conditions shaping dietary change and underscores the importance of gender-sensitive approaches to nutrition and health policy.

Method

A narrative review methodology was selected to enable an interdisciplinary and conceptually driven synthesis across heterogeneous bodies of literature. Furthermore, such an approach was chosen because it is particularly suited to topics where evidence is diverse, context-dependent, and not readily amenable to systematic aggregation, and where the aim is to provide an interpretive and critical overview rather than an exhaustive synthesis of the current state of the art.¹³

Relevant literature was identified through searches conducted in December 2025 and January 2026 across major databases, including PubMed, Web of Science, JSTOR, EBSCO, and Google Scholar. Search terms included combinations of keywords such as '(ultra-) processed food(s)', 'UPF', 'convenience food', 'away from home meals', 'fast food', 'women', 'food work', 'women's time use', 'carework', 'domestic work', 'maternal feeding', 'women's health', 'food policy', and 'health policy', in combination with 'Sub-Saharan Africa', 'SSA', as well as individual country names. Additional records were identified through snowballing reference lists, citation tracking, as well as reviewing grey literature from sources such as WHO, UN Women, FAO, ATNI, GAIN, and African Centre for Biodiversity reports. Articles published between 2015 and 2025 were considered, with exceptions made for selected foundational or highly relevant earlier and later works. Only English language articles were considered.

Publications were included if they met the following criteria: (1) addressed dimensions of the nutrition transition and/or HP-UPF consumption in relation to women's lives (e.g., foodwork, time use, caregiving, household provisioning, and maternal feeding practices); and (2) focused on one or more countries in SSA

or examined SSA more broadly as a region, or provided relevant conceptual or comparative insights applicable to SSA contexts. The literature search and initial identification of relevant studies were conducted by MR and SOY with BB independently reviewing the search results to support the screening processes. Following this first step, evidence was analysed inductively by MR, BB, SOY and PA using the Atlas.ti software with the aim of identifying prominent themes in the selected studies and reports. Sub-themes relating to the gendered organisation of foodwork, the persistence and intensity of women's unpaid domestic and care responsibilities, and associated time constraints were identified and grouped under the overarching theme 'women's domestic foodwork in Sub-Saharan Africa' (section 3). Sub-themes relating to changing gender roles, time scarcity linked to women's labour force participation, and the increasing reliance on HP-UPFs within evolving food environments were grouped under a second overarching theme of 'changing gender roles and a growing demand for convenience' (section 4). Analysis was considered sufficient when a coherent interpretation of the literature had been developed, and additional analysis did not substantially alter findings. Differences in the outcomes of the analyses conducted by MR, BB, and PA were discussed and resolved through consensus.

Women's domestic foodwork in sub-Saharan Africa

Domestic foodwork refers to the range of activities through which food is acquired, prepared, distributed, and made available to members of a household or community.¹⁴ It includes physical labour such as growing, harvesting, procuring, cooking, processing, and serving food as well as cognitive and emotional labour such as meal planning, budgeting, managing food safety, and responding to household preferences. Feminist political economy scholarship conceptualises foodwork as a central component of social reproduction, i.e., labour that sustains social structures, but also a form of labour that is typically undervalued and excluded from economic accounting.^{15–17}

Women in SSA have long combined income-generating activities with unpaid domestic and carework.¹⁸ Today, this manifests in higher female labour force participation rates in SSA (64.3%) compared to the world average (53.7%) and relative to regions like Latin America (57.4%), South Asia (29.9%), and North Africa and the Middle East (21.4%).¹⁹ However, like in most other parts of the world, foodwork in SSA is primarily performed by women and is structured by gendered division of labour wherein women and girls are assigned the primary responsibility for household food provisioning.²⁰ In contrast to patterns observed in other regions undergoing structural transformation—where rising female labour force participation has been

accompanied by substantial reductions in time spent on home production activities through the substitution of unpaid domestic labour with market-based services—structural change in SSA has thus far not yielded comparable shifts in women's domestic workloads.²¹ Instead, women's increased engagement in paid work has largely coexisted with persistently high levels of unpaid domestic labour, including foodwork, reflecting limited marketisation of home production and the continued centrality of women's labour to household sustenance.²¹ Empirical evidence from across the region shows that women are responsible for the majority of tasks related to food acquisition, preparation, and feeding, including cooking, collecting water and fuel, washing dishes, and caring for children.^{22–26} Domestic foodwork often extends to sustaining household food security through the cultivation of family farms and backyard plots, care of livestock for domestic consumption, and post-harvest processing of subsistence produce.⁸

Even in matrilineal societies such as Ohafia in southeastern Nigeria, foodwork is seen as women's responsibility and extends beyond routine domestic tasks to include control of subsistence crops, management of seasonal food scarcity, and intensified farm and foraging labour when household food supplies decline.²⁷ Furthermore, findings from Ghana, South Africa, Benin, Malawi, and Nigeria show that while engaging in paid employment provides women with a degree of independence and decision making power, it does not free them from traditional expectations of unpaid domestic and care labour.^{28–30} Working from home during the COVID-19 pandemic provided an interesting setting to observe gendered expectations connected to foodwork. Munodawafa & Zengeni (2022) showed that even in dual-career households in Zimbabwe where both partners worked from home, women continued to shoulder primary responsibility for food preparation, childcare, and other domestic tasks, while men's contributions remained limited and were framed as assistance rather than shared responsibility.³¹ Furthermore, as seen in a study conducted in Ghana, domestic responsibilities were considered by some female entrepreneurs to negatively impact their businesses performance and growth prospects.²⁸

Urbanisation is an important phenomenon to consider in this discussion as well. Increasing migration to urban and peri-urban areas has been linked to a growing reliance on purchased food as well as fewer opportunities for subsistence production.¹¹ In these contexts, women, especially those not engaged in formal employment may be viewed as being less burdened by the dual responsibilities of working within and outside the home. However, Mackay's (2019) study focussing on urban Uganda challenges portrayals of the urban housewife as economically inactive, showing that

women who identify as housewives frequently engage in informal income-generating activities such as sewing, washing clothes for others, farming, or preparing food for sale.³² This involvement in the informal sector is often due to the higher flexibility it offers to continue to perform household carework.⁸

Motherhood further compounds women's domestic foodwork related responsibilities. Studies across SSA show that women are positioned as primary caregivers and feeders of children and are held accountable for children's nutrition and food security.^{9,33,34} Research on infant and child feeding similarly documents social expectations that mothers ensure appropriate feeding practices despite constraints related to time, income, and access to resources.³⁵ This moralisation of foodwork adds cognitive and emotional labour to women's already extensive responsibilities.

Women's constraints are reflected not only in the total number of hours spent on foodwork, but also in the intensity and fragmentation of daily routines. Household meal provision often requires real-time co-ordination of multiple tasks throughout the day, including planning meals, budgeting, sourcing ingredients amid fluctuating prices, and adapting to competing household demands. These conditions help explain why HP-UPFs can serve as coping strategies, enabling women to sustain their household feeding routines despite having access to limited time and resources.^{21,36–39} Overall, it is evident that women's domestic labour in SSA is central to sustaining and feeding households. Foodwork remains overwhelmingly women's responsibility and underpins household food security and nutritional status.²⁰ This places a substantial burden on women, particularly given that a large share are simultaneously engaged in work outside the home.²¹ This coexistence of extensive unpaid foodwork and high levels of labour market participation intensifies women's time constraints, can constrain the terms on which they engage in paid work, and reinforces gendered inequalities in the organisation of food provisioning and care.^{20,21,28}

Changing gender roles and a growing demand for convenience

Although HP-UPF consumption is less prevalent in SSA compared to other parts of the world, it is a growing trend, particularly in urban and peri-urban areas.^{40,41} The expansion of food supply chains, including small and medium-sized enterprises operating in processing, wholesale, retail and food service, has increased the availability of packaged and ready-to-eat foods.¹¹ On the demand side, the growing participation of women in paid work in both urban and rural areas has reduced the time available for food preparation at home¹¹; this shift reflects changing gender roles and increasing time poverty, as responsibilities for

household food provisioning continue to coexist with paid employment.

Yet key UPF-focused publications and country- or region-specific studies rarely examine the relationship between women's increased engagement in work outside the home and rising uptake of UPFs in detail.^{7,11,42–45} As a result, the gendered mechanisms linking women's labour participation, time constraints, and dietary change remain under-analysed in the UPF literature. However, findings from studies focused on women's time use, maternal feeding practices, and women's participation in the workforce help to illuminate how the changing gender roles in SSA contribute to women deviating from traditional foodwork expectations and substituting some labour-intensive, freshly prepared foods with HP-UPFs.

Sauer et al. (2021) show that rising engagement of Tanzanian women in non-farm wage employment in urban as well as rural areas is significantly associated with higher consumption of HP-UPFs, including meals away from home.³⁶ The results of their study suggest that women's employment outside the home increases the household's opportunity cost of time for home processing and cooking, which in turn drives demand for labour-saving foods such as HP-UPFs and prepared meals. Furthermore, findings from Nigeria suggest that the growing availability and consumption of HP-UPFs can ease women's time constraints associated with home food processing and preparation.⁴⁶ The authors argue that HP-UPFs function as substitutes for women's unpaid foodwork, thereby freeing time for greater engagement in non-farm wage employment and self-employment. In urban South Africa, time constraints associated with paid work make convenience an important driver of food choice.⁴⁷ Drawing on a sample largely composed of women, the study highlights how household food provisioning is frequently managed through reliance on ready meals, fast food, and other time-saving foods. Together, these findings suggest a two-way relationship in which women's paid work raises demand for labour-saving foods while at the same time, HP-UPFs can also enable women's employment by minimising the time spent on unpaid foodwork. However, the time-saving value of HP-UPFs should not be treated as an unqualified benefit. As recent conceptual work argues, foods that reduce the time needed for acquisition and preparation may ease immediate pressures on women's foodwork, but the deterioration in food quality associated with HP-UPFs can generate medium-to long-term costs in the form of poorer health and increased care needs.⁵ Where DR-NCDs emerge, the labour displaced from food preparation may reappear as unpaid care work, including accompanying relatives for treatment, managing medication, preparing special diets, and providing day-to-day physical and emotional support. In contexts where caregiving remains highly gendered, these later burdens are also likely to be absorbed primarily by women.⁵

Maternal feeding choices provide additional insight into the demand for convenience HP-UPFs. In Addis Ababa, Berhane et al. (2018) found that mothers working full-time lacked the time and energy to cook, making convenience a central consideration in everyday decisions about what to feed their families.³⁷ In urban Kenya, Mutoro et al., (2025) show that increasing female participation in the workforce, combined with persistent caregiving responsibilities, restricts the time women have available to prepare healthy homemade foods.³⁸ They document a shift towards HP-UPFs, including commercially processed complementary foods (CPCFs) marketed to infants and young children, which were often chosen because they offered a convenient option. Research from Senegal similarly reports high prevalence of CPCF consumption, with caregivers emphasising convenience alongside perceptions of safety and nutritional adequacy.³⁹

In response to this growing demand for convenience and in line with women's traditional involvement in food production, women-owned small and medium-scale food processing enterprises are increasingly engaged in the production of processed ingredients such as flours and oils, and HP-UPFs, including snacks, blended foods, and condiments, that reach low-income consumers.^{48,49} However, these enterprises often face limited access to finance, which constrains their ability to meet fortification, labelling, and food safety requirements, resulting in widespread non-compliance and variable product quality.^{48,50} Linking financing conditions to verified compliance with fortification and food safety standards, rather than to production volume alone, could help address this challenge.⁵¹ Gender-linked financing provides a pathway to shift women-owned SMEs from informal, low-quality HP-UPF production towards regulated, fortified, nutrient-rich, and quality-assured HP-UPFs.⁵² Concessional financing for women entrepreneurs, coupled with technical assistance such as training on quality food production and handling, can support investments in fortification equipment, the procurement of micronutrient premixes, quality control systems, improved packaging, and clear labelling.⁵¹

Convenience is repeatedly framed in studies as a practical response to the dual pressure of time constraints and caregiving demands, rather than merely a matter of preference alone. While there is a growing body of research on HP-UPF consumption and on women's empowerment in SSA, the two strands of literature rarely intersect. The examples discussed above represent some of the few instances in which this relationship is explicitly addressed. This gap is not entirely surprising, given the broader paucity of research globally on the labour involved in managing family foodwork within increasingly industrialised food systems.⁵³ Recent scholarship has emphasised that the proliferation of HP-UPFs is closely linked to changes in

the organisation of food preparation and consumption practices under conditions of constrained time.^{5,6} Stevano (2025) argues that UPFs are not simply incorporated into diets as an additional food category but also play a role in reshaping how food practices are organised in relation to paid employment and care obligations.⁵ In line with this reasoning, we posit that rising demand for HP-UPFs in SSA may reflect structural conditions shaping women's foodwork, rather than shifts in preferences or nutritional awareness alone.

Way forward

African scholars like Elaine Salo have argued that women's empowerment agendas must recognise, value, and adequately compensate women's foodwork, including the knowledge and skills through which household and community food security is sustained.²⁰ At the same time, scholars such as Desiree Lewis caution against uncritically applying Western feminist frameworks that may conceptualise foodwork solely as an imposition and drudgery.⁵⁴ Instead, Lewis emphasises the need to acknowledge the layered and varied identities of African women, and to recognise foodwork also as a means of expressing agency, authority, and creativity.^{54,55} Both African women's foodwork and the proliferation of HP-UPFs in SSA are complex phenomena in their own right, and their intersection is likely to be even more so. Yet this intersection remains a largely missing piece in efforts to understand ongoing nutrition transitions in the region.

This review represents a step towards addressing this gap by identifying and synthesising linkages between gendered foodwork, time use, and the rise of HP-UPFs consumption in the region. However, several limitations should be noted. As a narrative review, the synthesis of evidence presented in this paper is inherently interpretive and shaped by the perspectives of the authors. Being a non-systematic review, this study also presents limitations with regard to reproducibility, the comprehensiveness of the literature captured, and the potential for selection bias. Additionally, the review draws exclusively on English-language publications, which may have excluded relevant evidence from francophone and lusophone contexts in SSA as well as any publications in local languages. Finally, considering that few studies explicitly examine the correlation between women's time use and the uptake of HP-UPF in SSA, the findings of this review are constrained by the limited availability of directly relevant empirical evidence.

Despite these limitations, the findings presented in this review offer important insights for policy and practice. On the policy front, the current moment presents an opportunity for SSA governments to adopt more intersectional approaches to addressing the spread of HP-UPFs that might harm public health.

Some governments have already taken steps in this direction. For example, South Africa introduced a tax on sugar-sweetened beverages in 2018⁵⁶ and others may take similar actions in the near future to safeguard public health. Insights from Holdsworth et al.'s (2023) research on policy measures to improve food environments in SSA are relevant for reducing HP-UPF consumption as well.⁵⁷ They identify a range of low-agency measures that place fewer demands on individuals, including food marketing restrictions, school food procurement, upgrading informal markets, mandatory product reformulation, zoning regulations for fast-food vendors, social protection programmes, taxation on unhealthy foods, subsidies on healthy foods, and trade policies that prioritise nutrition. They further argue that these measures should be complemented by higher-agency actions such as dietary guidelines, front-of-pack labelling, regulation of health claims, nutrition education, and incentives for healthier street foods. Additionally, prioritising women-owned SMEs as suppliers in public procurement for nutrition-sensitive social protection programmes, school feeding, maternal nutrition, and emergency food assistance could not only reduce low-quality HP-UPF intake but also empower women-led initiatives.^{58,59} We argue that these policy measures aimed at reducing demand for HP-UPFs and those linked to fortification, food safety, and labelling standards could be further strengthened by designing and implementing them through a gender lens. Women themselves should also be actively involved in the design, implementation, and evaluation of these policy responses, including through consultation with women-led producer groups, traders, and cooperatives of women-owned SMEs.

When designing policy measures, it is important to consider how they might impact women's foodwork related time use. Interventions that nudge consumers to replace HP-UPFs with unprocessed, minimally processed and homemade food might lead to women having to spend more time in the kitchen and increase their cognitive burden. This, in turn, is likely to negatively impact women's time use agency, which Eissler et al. (2022)⁶⁰ argue is an important metric for measuring women's empowerment. Instead, interventions that facilitate access to timesaving, but nutritionally balanced and affordable foods could be prioritised. Women's knowledge of, and involvement in, food processing should be actively leveraged as part of this response, as it offers several interrelated benefits. First, food processing provides employment opportunities for women in forms of work that is socially accepted and embedded in existing social and economic contexts, while also generating income and strengthening women's participation in agri-food systems.^{61–64} At the same time, policy responses should not assess convenience only in terms of short-term reductions in food preparation time. They should also consider whether reliance on HP-UPFs may

contribute to longer-term unpaid care burdens linked to DR-NCDs, which are again likely to fall disproportionately on women. Second, women's engagement in processing draws on their knowledge of local biodiversity, including neglected and underutilised crops that are often more resilient to climate variability and stress, as well as indigenous food practices, which can inform the development of nutritionally and culturally relevant products.^{65–67} Third, strengthening women's participation in food processing can contribute to the expansion of domestic food industries and small and medium-sized enterprises, while offering a counterweight to the growing dominance of multinational food corporations that may contribute to unhealthy diets and the displacement of traditional food cultures.^{68,69} Fourth, women's involvement as processing entrepreneurs, beyond promoting economic independence, enables the provision of safe, properly labelled alternatives to traditional homemade dishes, which are often at risk of food safety failures.⁷⁰

Food fortification is yet another issue that warrants careful consideration as part of a gender-sensitive health policy response to HP-UPF consumption in SSA. In contexts where access to diverse diets remains constrained, fortification continues to be promoted as a means of addressing persistent micronutrient deficiencies, particularly among women of reproductive age.^{65,66} As a policy measure, fortified foods can improve nutritional intake without increasing demands on household food preparation. Food fortification continues to supply most of the region's nutritional needs. Fortification policies also need to better account for the specific micronutrient requirements of women and adolescent girls, while balancing safety, dosage, and the suitability of food vehicles for other household members. Current deficiencies in women's micronutrients include folic acid, iron, vitamin A, zinc, calcium, and vitamin D.^{59,71} Furthermore, across different African countries, there is a lack of formal guidance and enforcement for safety and fortification campaigns, which are essential for improving the nutritional status of both women and men. As endorsed by the Large-Scale Food Fortification project partners, urgent actions include investing in the delivery of fortified foods tailored for women of reproductive age. This requires increased investment to assess the current coverage, compliance, and the population's nutritional status. A gender-sensitive approach should also be coupled with gender-responsive advocacy campaigns to communicate the diverse dietary needs of women.⁵⁹ At the same time, it is important to take cognisance of the risks involved in using HP-UPFs as vehicles of fortification. Existing work on this subject has highlighted the risks of pursuing fortification through foods that are already associated with poor diet quality and rising non-communicable disease burdens if governance is weak or product choice is poorly regulated.^{59,72} Broader

discussions on product reformulation suggest that nutrient-focused interventions can legitimise continued reliance on HP-UPFs when they are not embedded within strong public oversight.⁷³ Procurement policy can mandate compliance with national micronutrient standards, improving food environments while ensuring compliance with fortification regulations.^{74,75} By connecting conditional access to subsidies, tax incentives, or public contracts to healthy fortified food options, food safety, and labelling standards, compliance can be reframed as an economic opportunity rather than a regulatory burden.⁷⁵ In the SSA context, fortification policies therefore need to prioritise appropriate food vehicles, clear regulatory guidance, and public accountability, ensuring that addressing micronutrient deficiencies does not default to corporate-led solutions or reinforce unhealthy food environments.

Finally, challenging prevailing gender norms that place responsibility for domestic foodwork on women can support women's physical and mental wellbeing and has direct implications for patterns of food consumption, including reliance on HP-UPFs.⁷⁶ Even where women, as is common in many SSA societies, continue to undertake much of the foodwork, redistribution of other forms of unpaid care and domestic work can help ease women's time constraints. This, in turn, has implications for diets: reducing women's unpaid care burdens can expand the time and agency available for planning and preparing healthier meals at home, while also making it more feasible for households to rely on safer and more nutritionally balanced foods prepared outside the home where supportive food environments, regulation, and affordable options exist. Governments can also reduce women's unpaid foodwork burdens through investments in basic infrastructure and public services, including reliable water supply, access to clean cooking fuel, and household energy, since these are integral to the daily labour of food acquisition, preparation, and care. According to UN Women Africa's Gender-Responsive Unpaid Care and Domestic Work Advocacy Guidelines, redistribution of carework can be encouraged through policies that promote work-life balance, such as parental leave and flexible work arrangements, as well as through efforts to challenge norms that position caregiving primarily as women's responsibility.⁷⁷ In addition, social protection measures for caregivers and policies that promote investment in formal care services, such as childcare and eldercare, can both support caregivers and expand employment opportunities in the care sector. Finally, the guideline stipulates that encouraging men's participation in caregiving requires challenging entrenched assumptions, educating families about gender equity in carework, and adopting labour market policies that support a more balanced distribution of paid and unpaid work across genders.

Contributors

Conceptualization: MR, SOY. Analysis: MR, BB, PA, SOY. Methodology: MR, BB. Writing—original draft: MR. Writing—review & editing: MR, BB, PA, SOY.

All authors have access to the data included in this manuscript. All authors reviewed and approved the final manuscript for submission. MR and BB verified the included data. MR was finally responsible for the decision to submit for publication.

Data sharing statement

Data can be shared on reasonable request to the authors.

Declaration of interests

The authors declare no competing interests.

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