

Engineering Appetite: Media Manipulation, Ultra-Processed Foods, and the Information Environment in Nigeria and Uganda

Sunday Jimmy Obol

oboljimmy@gmail.com

Ezan \$ Associate

Okechi Eberechukwu Nzedibe

Euclide University Bangui

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Abstract

This article reconceptualizes the rapid growth of ultra-processed products (UPPs) and fast-food chains in Nigeria and Uganda as a transformation of informational power rather than solely a shift in dietary behavior. Utilizing the Information Environment Assessment (IEA) framework, the study examines how commercial actors structure meaning, visibility, and policy discourse across interconnected domains of People and Community; Information Sources; Actors; and Policy, Process, and Enablers. Guided by critical anthropology and the Commercial Determinants of Health (CDoH), the analysis positions media manipulation as a form of epistemic governance embedded in broader political-economic systems.

A qualitative, multi-method research design was conducted across Lagos, Abuja, Port Harcourt, Kampala, and Entebbe. Data included 74 policy, academic, and corporate documents; 312 outdoor and point-of-sale advertisements; 96 hours of radio broadcasting (148 advertisements); 420 digital promotional artifacts across major social media platforms; and spatial mapping of 214 fast-food outlets. In total, 1,168 units were thematically coded to assess structural informational asymmetries.

Findings indicate that media manipulation operates through coordinated multimodal strategies: aspirational urban identity framing, moderation rhetoric, billboard saturation, sports sponsorship, influencer marketing, health-halo packaging, corporate social responsibility campaigns, coalition-building, and policy-dystopia narratives. Rather than disseminating overt falsehoods, these strategies privilege selective truths, emotional association, and risk omission, embedding energy-dense, nutrient-poor consumption within cultural aspiration and economic discourse. Weak advertising regulation, fragmented digital governance, and trade-enabled market expansion further entrench these distortions. The study argues that escalating burdens of obesity, type 2 diabetes, hypertension, cardiovascular disease, and diet-related cancers are inseparable from this structurally distorted information environment. Effective public health intervention therefore requires rebalancing informational infrastructures alongside reforming food systems.

Introduction

Sub-Saharan Africa is undergoing a profound nutrition transition characterized by increasing consumption of ultra-processed foods (UPFs), sugar-sweetened beverages, and fast foods (Baker et al., 2020; Monteiro et al., 2019). Nigeria and Uganda represent key sites within this transformation, as urbanization, foreign direct investment, and trade liberalization reshape food environments. Rising rates of obesity, hypertension, and type 2 diabetes are increasingly documented in both countries (World Health Organization [WHO], 2023).

While public health analyses often focus on pricing, availability, and dietary behavior, less attention has been directed toward the information ecosystems that normalize unhealthy consumption. Fast-food proliferation is accompanied by a dense network of visual, audio, and digital messaging that redefines food meanings. Billboards in Lagos depict “family buckets” as emblems of unity. Radio jingles in

Kampala celebrate sweetened beverages as companions to productivity. Instagram influencers frame pizza outings as markers of aspirational urban life.

This article argues that such messaging constitutes a structured transformation of the information environment. Applying the Information Environment Assessment (IEA) framework, the study conceptualizes media manipulation as a systemic phenomenon shaped by corporate power. Through a critical anthropological lens, it demonstrates that misinformation and disinformation are embedded within broader political-economic arrangements, including corporate whitewashing, corporate capture, coalition management, regulatory deregulation, and discursive framing.

Theoretical Framework

Information Environment Assessment (IEA)

The IEA framework conceptualizes the information ecosystem as an interconnected system of actors, infrastructures, narratives, and regulatory contexts that shape how knowledge is produced, circulated, and legitimized. Rather than treating misinformation and disinformation as discrete false claims, IEA identifies structural distortions that privilege dominant commercial narratives while marginalizing independent, evidence-based perspectives. Infodemic scholarship demonstrates that misleading information spreads not merely through individual misunderstanding but through power asymmetries, institutional weaknesses, and platform dynamics (WHO, 2022; Eysenbach, 2020). Within contemporary food environments, these distortions operate across ultra-processed products (UPPs), internationally recognized fast-food chains, and locally branded fast foods, embedding commercial narratives into everyday communication spaces and contributing to escalating non-communicable diseases (NCDs).

Within the **People and Community** domain, misinformation emerges through identity-driven meaning systems. Fast food is framed as aspirational, hygienic, modern, and globally sophisticated; multinational chains are associated with air-conditioned interiors, digital ordering, and international branding, while local chains foreground national entrepreneurship and convenience. Such framing cultivates perceived social norms that normalize frequent consumption. Research on social identity and belief formation shows that individuals are more likely to accept persuasive narratives aligned with perceived group norms (Van Bavel et al., 2020). When fast food is presented as socially normative or as upward mobility, risk information about excessive salt, sugar, and saturated fat is cognitively discounted, fostering dietary patterns linked to obesity, type 2 diabetes, hypertension, cardiovascular disease, stroke, dyslipidemia, chronic kidney disease, and certain cancers.

The **Information Sources** domain shows amplification via multimodal channels: outdoor billboards, radio jingles, televised sports sponsorships, influencer marketing, and food-delivery app notifications blur entertainment and advertising. Health-halo claims (“fortified,” “grilled,” “natural,” “energy-boosting”) may be technically accurate yet mislead about overall nutritional quality; engagement-based algorithms

further privilege visually appealing, high-calorie foods while public health messaging attains limited reach (WHO, 2022).

Within the **Actors** domain, corporations deploy lobbying, coalition-building, and strategic corporate social responsibility to position themselves as health partners while resisting regulation; industry-sponsored “balanced lifestyle” research redirects attention from structural determinants (Mialon et al., 2018).

Finally, **Policy, Process, and Enablers**, weak advertising restrictions, inadequate influencer disclosure, fragmented digital governance, and insufficient front-of-pack labeling create conditions for persuasive messaging to outpace evidence-based communication, while trade liberalization and market expansion intensify exposure.

Critical Anthropology and Commercial Determinants of Health

Critical anthropology foregrounds asymmetrical power relations in shaping meaning systems. Bourdieu’s (1991) concept of symbolic violence elucidates how domination operates when corporate narratives, positioning fast food as modern, convenient, and aspirational, are misrecognized as natural and legitimate. This normalization conceals the structural drivers of dietary transition and NCD proliferation. Neoliberal health discourse further individualizes responsibility, emphasizing moderation and personal choice while obscuring aggressive marketing saturation and outlet density (Petersen & Lupton, 1996). Consequently, rising rates of obesity, type 2 diabetes, cardiovascular disease, hypertension, stroke, chronic respiratory diseases, certain cancers, and metabolic disorders are framed as personal failures rather than predictable outcomes of engineered food environments.

The Commercial Determinants of Health framework situates these dynamics within corporate practices in marketing, lobbying, policy interference, trade influence, and reputational management that systematically shape health inequities (Kickbusch et al., 2016; Mialon et al., 2018). Through the IEA lens, misinformation and disinformation surrounding ultra-processed products and fast foods are not accidental distortions but structural features of a commercialized information ecosystem. These systemic distortions contribute directly to NCD burdens by normalizing dietary practices that elevate long-term metabolic and cardiovascular risk.

Methodology

This study applied the Information Environment Assessment (IEA) framework using a qualitative, multi-modal design across five metropolitan centers Lagos, Abuja, and Port Harcourt (Nigeria), and Kampala and Entebbe (Uganda). A total of 74 documents were analyzed, including 28 peer-reviewed articles (2020–2024) on commercial determinants of health and corporate political activity (e.g., Baker et al., 2020; Kickbusch et al., 2016; Mialon et al., 2018; Gilmore et al., 2023), 12 WHO and multilateral guidance documents (WHO, 2022; WHO, 2023), 14 national policy and regulatory texts (8 Nigeria; 6 Uganda), and 20 corporate reports and CSR communications (Lacy-Nichols & Williams, 2021; Mialon & da Silva

Gomes, 2023). Documents were purposively selected and coded thematically across the four IEA domains to assess governance enablers, narrative framing, and regulatory conditions shaping food-related information environments.

Empirical media analysis produced 1,094 additional units, generating a total dataset of 1,168 coded items. Structured observation documented 312 outdoor and point-of-sale advertisements (187 billboards; 63 storefront displays; 62 in-store promotions). Audio monitoring included 96 hours of peak radio broadcasting, yielding 148 discrete advertisements. Digital analysis examined 420 promotional artifacts across Instagram (n = 176), TikTok (n = 122), and Facebook (n = 122), coded for sponsorship disclosure, health halo framing, moderation rhetoric, and engagement amplification (Cinelli et al., 2021; Khandpur et al., 2020; Acton et al., 2022; WHO, 2023). Urban mapping identified 214 fast-food outlets (131 multinational; 83 domestic chains), with clustering assessed near schools and transport hubs (Reeve et al., 2023; Glanz et al., 2022). Triangulated thematic coding across all 1,168 units enabled identification of structural informational asymmetries embedded within commercial determinants of health processes (Kickbusch et al., 2016; Gilmore et al., 2023).

People and Community

Aspirational Urbanism and Symbolic Modernity

Across metropolitan centers in Nigeria and Uganda, fast food and ultra-processed products are marketed not simply as convenient meals but as powerful symbols of modernity, hygiene, and global belonging. Multinational chains such as KFC, Domino's, Pizza Hut, and Burger King, alongside local brands like Chicken Republic, Mr. Bigg's, Café Javas, and Chicken Tonight among others occupy highly curated architectural spaces in Lagos', Port Harcourt, Abuja or Kampala's metropolitan districts. Glass façades, digital menu boards, air-conditioned interiors, and carefully designed aesthetics distinguish these outlets from informal vendors, implicitly communicating that branded fast food is safer, more advanced, and socially superior.

Normalization and Individualized Responsibility

Community discourse often reflects moderation rhetoric, presenting fast food as acceptable in balance or as a deserved reward. Corporate slogans such as treat yourself, your moment, and made for your busy day shift responsibility toward individual choice, creating a discursive distortion. This framing is not an explicit falsehood, but it selectively emphasizes personal agency while obscuring structural forces like aggressive marketing, outlet concentration during holidays and back to schools' periods, price promotions, and algorithmic targeting. By individualizing risk, this narrative allows consumers to interpret chronic illness as personal failure, downplaying strong evidence linking routine fast-food intake to major diet related diseases.

Outdoor Advertising and Environmental Saturation

Billboard clustering along the major urban roads in both Nigeria and Uganda main Cities, demonstrates how environmental saturation reinforces normalization. Repetitive imagery of oversized burgers, fried chicken buckets, and “family combo” discounts construct an atmosphere of abundance and affordability. Health halo language “fortified,” “value meal,” “energy boost” may not be factually inaccurate but can mislead by implying nutritional adequacy or vitality benefits.

Repeated exposure increases cognitive familiarity, which psychological research shows enhances perceived truthfulness and acceptability. When adolescents encounter promotional signage daily near schools and transport hubs, ultra-processed foods become embedded in routine life. The absence of equally visible counter-messaging regarding sodium limits, sugar thresholds, or long-term metabolic risks constitutes a structural imbalance in the information ecosystem. This asymmetry fosters consumption patterns associated with escalating rates of obesity, pediatric hypertension, early-onset type 2 diabetes, and future cardiovascular disease.

Broadcast Integration and Cultural Legitimacy

Radio jingles in English, Yoruba, Pidgin, and Luganda employ humor, rhythm, and celebration to embed fast-food brands within communal identity. Sponsorship of football tournaments and youth leagues further integrates brands into emotionally charged cultural institutions. By associating products with athleticism and national pride, advertising constructs a dissonant narrative: energy-dense foods are symbolically linked with vitality and performance, despite strong epidemiological evidence connecting high consumption of ultra-processed products to cardiometabolic disorders.

This form of associative disinformation operates through emotional transference. The positive effect generated by sports is transferred onto the product, obscuring its contribution to risk factors such as elevated Low-Density Lipoproteins (LDL) cholesterol, arterial plaque formation, insulin dysregulation, and chronic inflammation. Over time, these risk pathways culminate in cardiovascular disease, stroke, and other NCDs.

Digital Ecosystems and Algorithmic Amplification

Digital platforms intensify distortion through influencer promotion and engagement driven algorithms that present branded meals as aspirational content. Undisclosed partnerships and push notifications reinforce habitual ordering. Algorithms favor visually appealing fast food while public health messaging receives limited visibility. This imbalance fuels repeated exposure and sustained overconsumption, increasing vulnerability to major nutrition related diseases across the life course.

Structural Informational Asymmetry and Disease Burden

Collectively, aspirational identity framing, moderation rhetoric, environmental saturation, sports sponsorship and digital amplification create a layered system of misinformation. Distortion works through selective emphasis, emotional association and omission of risk, producing structural

informational asymmetry where commercial narratives dominate. As ultra processed foods become normalized, population exposure to excess sodium, sugars and unhealthy fats increases, driving obesity, diabetes, hypertension, cardiovascular disease, stroke and other major nutrition related conditions.

Corporate Whitewashing in Practice

In Nigeria and Uganda, corporate social responsibility (CSR) initiatives are prominently publicized and woven into brand communication. Multinational fast-food chains sponsor back-to-school campaigns with branded notebooks, school bags, and meal vouchers, while festive food donations are televised and amplified on social media alongside executives, community leaders, and public officials. Local fast-food brands partner with youth programs and football academies, embedding logos on jerseys, banners, and digital promotions. Presented as philanthropy, these initiatives often coincide with market expansion, outlet launches, or discount cycles, signaling CSR as reputational management rather than neutral charity (Lacy-Nichols & Williams, 2021; Mialon & da Silva Gomes, 2023). By foregrounding charity and backgrounding epidemiological evidence, corporations recast ultra-processed and fast foods as socially responsible commodities within the IEA Actors domain, dampening scrutiny of their NCD burden.

Corporate Capture and Policy Dystopia in Public Debate

During debates on sugar-sweetened beverage taxation and front-of-pack labeling in Nigeria, industry-aligned representatives emphasized projected job losses and threats to small-scale distributors, while Ugandan consultations framed regulation as hostile to foreign investment and youth employment. Trade associations warned of “economic instability” and declining competitiveness. These narratives exemplify the policy dystopia model, amplifying speculative economic harms to undermine reform (Mialon et al., 2018), a pattern reaffirmed by recent analyses of corporate political activity in regulatory transitions (Gilmore et al., 2023; Lauber et al., 2021). Commissioned impact assessments spotlight short-term revenue losses while obscuring NCD healthcare costs, reframing preventive regulation as economic sabotage and delaying interventions capable of mitigating NCD trajectories.

Coalition Management and Academic Alignment

Corporate actors consolidate influence through coalition building with chambers of commerce, hospitality associations and academic institutions. Industry co-sponsored nutrition symposia emphasize voluntary reformulation, physical activity campaigns and balanced lifestyle messaging, diverting attention from marketing restrictions or taxation. Public private partnership rhetoric such as shared responsibility and multi stakeholder engagement positions corporations as essential actors in health promotion. Scholarship shows coalition management and funding relationships shape research agendas and policy narratives while preserving plausible deniability (Ralston et al., 2022; Mialon and da Silva Gomes, 2023). These selective framings obscure links between frequent ultra processed food consumption and rising NCD burdens within the IEA framework.

IV. Policy, Process, and Enablers

Trade Liberalization and Urban Market Expansion

Nigeria's structural adjustment reforms and Uganda's trade liberalization policies enabled multinational restaurant expansion through tariff reductions and investment protections. Shopping malls in Lagos and Kampala now cluster global franchises with local fast-food outlets, reflecting integration into transnational supply chains (Stuckler et al., 2012; Friel et al., 2023). Within the IEA framework, these macroeconomic processes increase outlet density, heighten advertising visibility, normalize consumption, and reinforce habitual intake of energy dense, nutrient poor foods.

Health Halos and Packaging Claims

Point of sale observations documented frequent use of claims such as “fortified with vitamins,” “grilled option,” and “no added preservatives.” Family bundles foreground added micronutrients or reduced portion choices while retaining elevated sodium and saturated fat. Such selective disclosure produces health halo effects, where consumers infer overall nutritional quality from isolated positives. Experimental evidence confirms that health halos distort risk perception and increase purchase intentions, especially in settings without clear warning labels (Acton et al., 2022; Khandpur et al., 2020). This is misinformation by strategic framing: technically accurate statements that obscure cumulative dietary risks and normalize energy dense, nutrient poor choices. Weak nutrient profiling standards and limited advertising oversight allow these distortions to persist. Within the IEA, Policy, Process, and Enablers interact with Information Sources to sustain these impressions across retail, broadcast, and digital spaces. Collectively, packaging claims and related strategies embed structural misinformation that minimizes links to escalating NCD burdens.

Discussion

Media manipulation surrounding fast food and ultra processed products (UPPs) in Nigeria and Uganda operates through a multimodal architecture that normalizes consumption while generating misinformation that obscures risk. These mechanisms integrate urban space, broadcast media, digital media, and policy into a reinforcing system. Scholarship on the commercial determinants of health shows that corporate power increasingly works through informational dominance, agenda setting, and narrative framing rather than product availability alone (Kickbusch et al., 2016; Gilmore et al., 2023). Within this ecosystem, selective truths, emotional association, and omission of risk drive dietary transitions linked to rising non communicable diseases (NCDs), including obesity, type 2 diabetes, hypertension, cardiovascular disease, stroke, dyslipidemia, chronic kidney disease, and diet related cancers such as colorectal and breast cancer (WHO, 2022).

Visual embedding in urban landscapes is a primary expression of distortion. In Lagos, Abuja, Kampala, and Entebbe, highways and commercial corridors carry billboard advertising for global ultra processed and local fast-food brands. Campaigns emphasize affordability, abundance, and aspirational imagery in hygienic spaces. While not explicitly false, this framing constitutes structural misinformation by associating fast-food and ultra processed meals with safety, modernity, and social mobility while omitting evidence of cardiometabolic risk. Repetition across space increases familiarity and perceived

norms, especially among adolescents, reinforcing normalization while marginalizing long term risk information (Reeve et al., 2023).

Audio reinforcement through radio and sports sponsorship embeds affect. Peak hour jingles combine humor and celebration with discounts to heighten recall. Ultra processed companies sponsor football tournaments and youth leagues, embedding logos in narratives of vitality. Research documents how unhealthy commodity industries align with sports to amplify emotional affinity (McCarthy et al., 2022). This associative strategy functions as disinformation by linking high calorie nutrient poor products to athleticism despite evidence connecting regular consumption of ultra processed foods with cardiometabolic disease.

Digital amplification intensifies distortion through influencer marketing and algorithmic curation. Instagram and TikTok campaigns present fast food consumption as lifestyle content, often without clear disclosure of paid partnerships. Food delivery platforms send push notifications that fold marketing into routines. Engagement driven algorithms privilege visually appealing content, amplifying images of energy dense foods while limiting exposure to evidence-based nutrition messaging (Cinelli et al., 2021; WHO, 2023). This asymmetry creates feedback loops in which ultra processed foods dominate attention economies and normalize patterns linked to insulin resistance, dyslipidemia, obesity, hypertension, and diet related cancers.

Policy processes show how disinformation extends into governance. Industry actors frame proposals for sugar sweetened beverage taxation and front of pack labelling as threats to employment and economic stability, reflecting policy dystopia (Mialon et al., 2018; Lauber et al., 2021). Economic harm narratives ignore escalating healthcare costs attributable to NCDs, foregrounding speculative short-term losses while obscuring longer term burdens. Corporate social responsibility activities such as school donations, food drives, and youth sports sponsorship cultivate reputational capital that shields companies from regulatory critique, diverting attention from structural health consequences (Lacy Nichols and Williams, 2021).

From a critical anthropological perspective, these practices constitute epistemic governance, the reconfiguration of meaning systems to legitimize corporate profit. Through symbolic power, fast food and UPPs are framed as modern, efficient, and aspirational, while traditional dietary practices are marginalized (Bourdieu, 1991). Neoliberal health discourse further individualizes responsibility, presenting chronic illness as a failure of moderation rather than a predictable outcome of saturated marketing environments and trade enabled expansion (Gilmore et al., 2023). Thus, misinformation operates less through overt falsification and more through narrative dominance, selective omission, emotional association, and regulatory reframing.

Taken together, visual saturation, audio reinforcement, digital amplification, and policy capture create a structurally distorted information environment. The Information Environment Assessment clarifies that these processes span actors, infrastructures, and governance domains. In Nigeria and Uganda, ultra processed products and fast foods are normalized through persistent informational asymmetries that

obscure their contribution to NCD burdens. Media manipulation is therefore not peripheral to the NCD epidemic but a central structural driver of its expansion.

An IEA informed approach indicates that policy responses must confront structural misinformation that normalizes harmful consumption. Commercial influence operates simultaneously across urban landscapes, broadcast channels, digital ecosystems, and policy arenas, generating asymmetries that conceal links between routine ultra processed consumption and non-communicable disease (WHO, 2022; Afshin et al., 2019). Interventions must be structurally integrated, multi sectoral, and anticipatory. Scholarship on commercial determinants shows that piecemeal regulation is insufficient when industries deploy coordinated political and communicative strategies (Kickbusch et al., 2016; Gilmore et al., 2023). The objective is to rebalance the information architecture.

Regulation of outdoor advertising that targets adolescents and youth centered settings directly addresses environmental misinformation. Billboard clustering along corridors such as the Lagos or Ibadan and Kampala's major roads, associates fast food with affordability, celebration, and abundance while omitting evidence of cardiometabolic risk. Zoning restrictions that prohibit high fat, high sugar, and high salt advertising within defined school perimeters have reduced youth exposure in other settings (Reeve et al., 2023). These measures counter normalization and help mitigate trajectories for obesity, pediatric hypertension, early onset diabetes, and future cardiovascular disease.

Mandatory disclosure of influencer sponsorship is essential in digitally saturated ecosystems where paid promotions appear as endorsement. In Nigeria and Uganda, Instagram and TikTok campaigns often blur advertising and authenticity. Transparent labelling requirements would disrupt covert persuasion and reduce algorithmically amplified misinformation that presents highly processed foods as routine. Oversight of targeted advertising to minors is urgent given links between repeated exposure, increased consumption intent, and unhealthy dietary patterns (WHO, 2023; Cinelli et al., 2021).

Front of pack warning labels are another corrective instrument. Health halo claims such as fortified, energy boost, or grilled option create misleading impressions of nutritional adequacy despite high sodium, sugar, or saturated fat content. Experimental research confirms that interpretive warning labels outperform voluntary nutrient claims in correcting consumer misperceptions (Khandpur et al., 2020; Acton et al., 2022). Standardized government mandated labels would counter disinformation by communicating links between excessive consumption and risks of hypertension, coronary artery disease, stroke, chronic kidney disease, and diet related cancers. Most commercial complimentary foods are ultra processed and contains multiple additives, like emulsifiers and thickeners, which are linked to inflammation and gut microbiome disruption (Dunford et al., 2026). UPFs also feature higher added sugars and sodium, potentially shaping unhealthy, lifelong dietary habits.

Transparency in research funding and policy engagement can reduce manipulation, supported by disclosure registries and conflict of interest safeguards (Mialon and da Silva Gomes, 2023; Ralston et al., 2022). Restrictions on sports sponsorship by unhealthy food brands are salient because associating fast food with athletic performance and national pride constitutes emotional disinformation that obscures

cardiometabolic risk (McCarthy et al., 2022). Fiscal measures, trade and investment reviews, and public procurement reforms that prioritize minimally processed foods can recalibrate incentives and counteract normalization through institutional purchasing power (Friel et al., 2023).

Digital literacy and media inoculation programs strengthen community resilience against misinformation, particularly among adolescents exposed to digital marketing (WHO, 2023). Embedding media analysis within education curricula empowers students to interrogate influencer marketing and health halo framing. Institutionalizing Rapid IEA assessments within ministries of health would enable continuous monitoring of narrative shifts, advertising density, and policy discourse, creating feedback loops to adjust interventions as commercial strategies evolve.

In sum, effective policy must extend beyond advertising controls to include governance transparency, fiscal reform, trade oversight, digital accountability, and community level resilience. Through an IEA informed lens, these interventions collectively seek to disrupt misinformation ecosystems that promote ultra processed and fast foods, addressing drivers of obesity, type 2 diabetes, hypertension, cardiovascular disease, stroke, chronic kidney disease, and diet related cancers.

Conclusion

This study advances the argument that the rapid proliferation of fast food and ultra-processed products (UPPs) in Nigeria and Uganda is not simply a function of urbanization, globalization, or shifting tastes, but the outcome of a strategically structured information environment. Through the lens of the Information Environment Assessment (IEA) framework, it becomes evident that misinformation and disinformation operate not primarily through blatant falsehoods, but through narrative dominance, selective omission, emotional association, symbolic power, and regulatory influence. Corporate actors do not merely sell products; they shape the epistemic terrain within which those products are interpreted, desired, normalized, and defended.

Across the four IEA domains, informational asymmetry is both systemic and mutually reinforcing. In the *People and Community* domain, aspirational urban narratives recast fast food as modern, hygienic, and socially elevating, while neoliberal moderation rhetoric individualizes responsibility and obscures structural drivers of dietary risk. In the *Information Sources* domain, visual saturation, radio repetition, sports sponsorship, influencer marketing, and algorithmic amplification privilege emotionally compelling commercial content while marginalizing evidence-based public health communication. In the *Actors* domain, corporate social responsibility initiatives, coalition management, and economic dystopia framing strategically legitimize industry presence and dilute regulatory momentum. Within *Policy, Process, and Enablers*, trade liberalization, fragmented advertising oversight, weak disclosure standards, and limited digital governance create fertile conditions for these distortions to persist.

The cumulative consequence is not merely persuasive marketing it is structural normalization. Ultra-processed and fast foods are embedded into daily routines, cultural aspiration, and economic discourse in ways that systematically downplay risk. This informational distortion has direct epidemiological

implications. Rising consumption patterns are strongly associated with obesity, type 2 diabetes, hypertension, cardiovascular disease, coronary artery disease, stroke, dyslipidemia, chronic kidney disease, non-alcoholic fatty liver disease, metabolic syndrome, insulin resistance, and diet-related cancers including colorectal and breast cancer. These non-communicable diseases (NCDs) represent not only clinical outcomes but manifestations of a broader imbalance in informational power.

The findings underscore that the contemporary NCD crisis is, in part, an infodemic crisis. Where commercial narratives enjoy infrastructural reinforcement and regulatory latitude, evidence-based discourse struggles to compete. Addressing this imbalance requires more than consumer education or isolated product reformulation. It demands structural reconfiguration of the information architecture through advertising regulation, digital transparency mandates, front-of-pack warning systems, conflict-of-interest safeguards, fiscal measures, trade-policy review, and institutionalized Rapid IEA monitoring.

Ultimately, safeguarding population health in rapidly urbanizing contexts depends on reclaiming the information environment as a public good. Without deliberate efforts to correct systemic misinformation and disinformation that promote ultra-processed and fast foods, NCD burdens will continue to escalate. Conversely, embedding public health governance within the informational ecosystem offers a pathway to interrupt current trajectories and realign food systems with long-term societal well-being.

Dear editor, below are the point-by-point response as requested.

Abbreviations

UPFs

Ultra-Processed Foods

UPPs

Ultra-Processed Products

IEA

Information Environment Assessment

CDoH

Commercial Determinants of Health

NCDs

Non-Communicable Diseases

WHO

World Health Organization

Declarations

Ethics Approval and Consent to Participate

Ethical approval was not required for this study as it involved analysis of publicly available data and non-human subjects.

Competing Interests

The authors declare that they have no competing interests.

Consent for Publication

Both authors consent to the publication of this manuscript.

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Authors' Contributions

Both authors contributed equally to this work. Obol Sunday Jimmy conceptualized the study, designed the research questions, and led the analytical framework. Both authors contributed to data collection, analysis, and manuscript preparation.

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Data Collection Tool: Information Environment Assessment (IEA)

Data Collection Questions

Section A: General Information

1. Country of observation (Nigeria / Uganda)
2. City/location of observation (Greater Kampala and Lagos)
3. Date of observation (August 2025 to January 2026)
4. Type of data source:
 - Policy document
 - Corporate report
 - Billboard/outdoor advertisement
 - Radio advertisement
 - Social media content
 - Fast-food outlet

- CSR activity

- News/media content

5. Name of company/brand (KFC, Cafe Javas, Chicken tonight, Cocacola, etcetra)

6. Platform or location (e.g., Television, Instagram, roadside billboard, radio station, mall)

Section B: People and Community (Narratives & Social Meaning)

1. Does the content portray fast food or ultra-processed food as modern, aspirational, or urban lifestyle?

2. Does the content associate the product with family, happiness, celebration, or friendship?

3. Does the content associate the product with success, productivity, or convenience?

4. Does the message promote moderation rhetoric (e.g., “treat yourself”, “once in a while”, “balance”)?

5. Does the content target children, youth, students, or families?

6. Are sports, celebrities, influencers, or public figures used in the promotion?

7. Does the content portray fast food as hygienic, safe, or superior to traditional food?

Section C: Information Sources (Media and Communication Channels)

1. What type of media channel is used?

- Billboard

- Radio

- Television

- Social media

- Influencer marketing

- Food delivery app

- Store promotion

2. Is there price promotion or discount messaging?

3. Is there health-related messaging (e.g., fortified, grilled, natural, energy)?

4. Is nutrition information provided?

5. Is risk information (sugar, salt, fat warnings) provided?
7. Is sponsorship disclosure visible (for influencers)?
8. Is the advertisement repeated frequently in the same location/platform?

Section D: Actors (Corporate Practices and Influence)

1. Is there evidence of corporate social responsibility (CSR) activity?
 - School donations
 - Sports sponsorship
 - Community events
 - Food donations
2. Does the company partner with government, NGOs, or schools?
3. Does the company sponsor sports teams or youth programs?
4. Does the company fund research, conferences, or nutrition programs?
5. Is the company messaging focused on “balanced lifestyle” or physical activity rather than diet?

Section E: Policy, Process, and Enablers

1. Are there regulations on food advertising in this location?
2. Are advertisements located near schools, hospitals, or transport hubs?
3. Are front-of-pack nutrition labels visible?
4. Are warning labels visible?
5. Are influencer advertisements regulated or labelled?
6. Are there public health counter-advertisements visible?
7. Does policy discussion mention economic impacts like jobs or investment?
8. Are industry actors involved in policy discussions?

Section F: Spatial Mapping (Fast-Food Outlets)

1. Name of fast-food outlet

2. Type of outlet:

- Multinational chain
- Domestic chain

3. Location type:

- Mall
- Roadside
- Near school
- Near transport hub
- Residential area

4. Distance from nearest school (approx.)

5. Are promotional posters visible outside the outlet?

6. Are combo meals or large portion promotions advertised?

7. Are health claims displayed in the outlet?

Section G: Overall Assessment

1. Does this content promote fast food/ultra-processed food consumption?

2. Does this content include health messaging?

3. Does this content omit health risks?

4. Does this content associate the product with positive emotions?

5. Overall classification:

- Informational
- Promotional
- CSR/Reputation building
- Policy influence
- Sponsorship

Short Methodology Sentence for Paper

Data were collected using a structured Information Environment Assessment (IEA) tool that captured variables across media narratives, communication channels, corporate practices, policy environment, and spatial distribution of fast-food outlets. The tool included structured observational and document review questions covering advertising framing, health messaging, sponsorship, corporate social responsibility, regulatory context, and outlet location characteristics.

Availability of data and materials

Table: Data Disaggregation by Country and Data Type

Data Category	Nigeria	Uganda	Total Units	Description
Policy and regulatory documents	8	6	14	National nutrition, advertising, trade, and health policy documents
Academic and institutional documents	15	13	28	Peer-reviewed literature and institutional reports
Corporate reports and CSR documents	12	8	20	Corporate communications, CSR reports, industry publications
Outdoor and point-of-sale advertisements	187	125	312	Billboards, storefront displays, in-store promotions
Radio advertisements	82	66	148	Advertisements recorded from peak radio broadcasting
Social media promotional content	230	190	420	Instagram, TikTok, Facebook promotional materials
Fast-food outlet spatial mapping	131	83	214	Mapped multinational and domestic fast-food outlets
Total Units Coded	665	491	1,168	Total dataset analyzed in the study

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