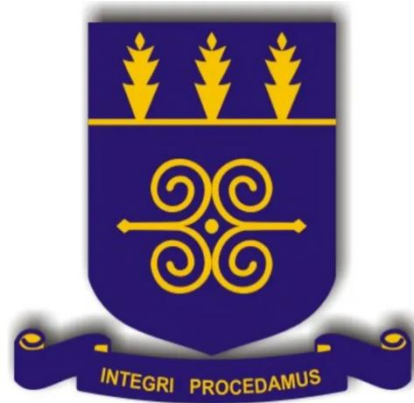


**SCHOOL OF PUBLIC HEALTH
COLLEGE OF HEALTH SCIENCES
UNIVERSITY OF GHANA**



**EXAMINING ETHICAL TENSIONS INHERENT IN NON-COMMUNICABLE
DISEASES PREVENTION INTERVENTIONS IN GHANA**

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**THIS DISSERTATION IS SUBMITTED TO THE UNIVERSITY OF GHANA,
LEGON
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MASTER OF SCIENCE (MSc) IN BIOETHICS**

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DECLARATION

I declare that with the exception of the references to other people’s work, which have been duly acknowledged, this research work is my own work done under supervision. I also declare that this research work, partly or in whole, has not been submitted to any University for the award of any degree.

Ernest Dovlo



15/09/2024

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ABSTRACT

Background: Non-communicable diseases (NCDs) account for 71% of global deaths, raising concerns about their classification as "non-communicable," given some can spread through social network. In low- and middle-income countries, factors like dietary shifts to processed foods and declining physical activity contribute to the rising NCD burden. In Ghana, policies such as the Framework Convention on Tobacco Control (FCTC) and the National Alcohol Policy aim to combat NCDs. Recent initiatives, including the Food-Based Dietary Guidelines for Ghana (2023) and a sugar-sweetened beverages tax, reflect efforts to address these health challenges along nutrition lines. However, as interventions like the Healthier Diets for Healthy Lives (HD4HL) intervention seek to create a policy bundle addressing food marketing, labelling, and public procurement, ethical tensions around health initiatives and the rights of individuals in making dietary choices among others emerge. Ethical tensions, defined as decision-making situations where one must choose between two or more moral imperatives, none of which are clearly adequate (ten Have et al., 2012), arise in NCD prevention efforts. This study aims to explore these ethical dilemmas within the context of Ghana's NCD prevention initiatives, using the HD4HL intervention as a case study.

Objectives: To evaluate the ethical dimensions of the HD4HL NCD prevention intervention in Ghana by focusing on tensions in its policy bundle.

Methods: The data for this study were sourced from three secondary documentary materials of the Healthier Diets for Healthy Lives (HD4HL) intervention in Ghana: (1) the technical proposal, outlining objectives and policy strategies (HD4HL Technical Proposal, 2022); (2) the project framework, detailing the conceptual structure and implementation pathways (HD4HL Project Framework, 2022); and (3) the guiding

principles, articulating the intervention's foundational values (HD4HL Guiding Principles, 2022) (Available on publicly on project website). These documents were selected as they comprehensively represent the HD4HL policy bundle on food marketing, labelling, fiscal policies, and public procurement. Data analysis utilized normative content analysis within a qualitative research design, guided by the ethical framework of ten Have et al. (2012), titled "An ethical framework for the prevention of overweight and obesity." In Part I, document content was systematically coded against the framework's reflective questions, mapping text segments to eight ethical values (e.g., liberty, equality). For example, sections on fiscal policies were coded for "equality" to identify potential disproportionate impacts. In Part II, coded themes were evaluated to identify ethical tensions, such as autonomy versus health promotion, using a matrix to categorize unique and shared tensions. An audit trail ensured transparency, with iterative cross-referencing to resolve ambiguities.

Results: The research reveals 12 unique ethical tensions within the HD4HL food policy bundle. Key among them include tensions between economic impact and equality, as taxes on unhealthy foods disproportionately affect low-income groups. Ethical concerns include balancing transparency with anxiety, as nutritional labels can stress certain consumers. Unequal access to information due to literacy levels, and misleading marketing practices that exploit label trust, are also issues. Tensions between cultural sensitivity and standardized nutritional guidelines may exclude culturally specific foods. Relying on public institutions for healthy food reduces personal responsibility, while healthy eating policies may stigmatize overweight persons. Conflicts between health promotion and cultural values arise when advertising restrictions clash with cultural values. Tensions also include balancing corporate responsibility with consumer accountability and limiting individual freedom through strict regulations.

Common ethical tensions across the food policy package include struggles with equality and accessibility, informed choice vs. perceived autonomy, and cultural sensitivity vs. standardized health goals. Privacy concerns related to data collection for policy monitoring also present ethical challenges.

Conclusion: While the HD4HL intervention promotes health, it risks infringing on personal choice and cultural autonomy, especially in lower-income communities. In settings where high-calorie, processed foods are common due to affordability, policies may limit individuals' freedom without fully addressing the root causes of unhealthy diets, such as food deserts or economic barriers.



DEDICATION

This work is dedicated to all who are tired, confused and see no sense in not giving up. To persons who have become victims of circumstances. Trust that there is God. It is also dedicated to family, to Judith Senam Aku-Sika Afeku and to all I cannot mention for their support through all the changing scenes of my academic life.



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CHAPTER ONE

INTRODUCTION

1.0 Background

Non-communicable Diseases (NCDs) are chronic medical problems often not contagious and not brought on by infectious agents (Ogoina et al, 2019) The World Health Organization (WHO) estimates that NCDs are the leading contributor to deaths worldwide, contributing 71% of fatalities in 2019 (WHO, 2020). According to forecasts, NCDs account for 36 million yearly deaths, and by 2030, fatalities from NCDs will surpass 75% of all deaths from communicable illnesses. (WHO, 2020; Ramesh & Kosalram, 2023).

In low-and middle-income countries, several factors, often indicative of economic development, have contributed to the shift from infectious diseases to NCDs: a switch from unprocessed or minimally processed traditional foods to processed ones high in fat, salt, and sugar; a decline in physical activity due to sedentary lifestyles; and altered cultural norms, such as the rise in the number of women who smoke, (Budreviciute et al., 2020). Because of ageing populations and shifting lifestyles in many nations, the burden of NCDs is predicted to rise in the upcoming years (WHO, 2020; Ramesh & Kosalram, 2023).

Ethical tensions, defined as decision-making situations where one must choose between two or more moral imperatives, none of which are clearly adequate (ten Have et al., 2012), arise in NCD prevention efforts. These tensions often involve balancing public health goals with individual autonomy, equity, and cultural values (Venkatapuram et al., 2012). For instance, interventions may inadvertently infringe on personal freedoms or exacerbate inequalities if not ethically framed (Pandit, 2023).

In Ghana, NCDs such as diabetes, hypertension, and cardiovascular diseases are linked to modifiable risk factors like poor nutrition and tobacco use (Peprah et al., 2023). International guidelines such as the WHO Global Framework Convention on Tobacco Control (FCTC) and local policies such the National Alcohol Policy aim to address these, but nutrition-focused interventions reveal ethical gaps (Ministry of Health Ghana, 2022; Fraser, 2021).

The 2022 National Policy for the Prevention and Control of Chronic Non-Communicable Diseases emphasizes population-wide dietary restrictions, such as reducing salt and sugar intake, but lacks sufficient consideration of socio-cultural dietary practices and equitable access to healthy food alternatives, potentially undermining individual autonomy and cultural relevance (Ministry of Health Ghana, 2022). Fraser (2021) highlights that weak enforcement of nutrition policies, driven by industry lobbying, raises ethical concerns about justice and transparency, as interventions may disproportionately affect vulnerable populations without addressing economic barriers or ensuring inclusive stakeholder engagement, thus risking inequity and limited effectiveness.

Ghana's National Policy for the Prevention and Control of Chronic Non-Communicable Diseases, first introduced in 2012, provided a foundational framework for addressing NCDs through primary prevention, early detection, treatment, and rehabilitation. It emphasized reducing exposure to risk factors such as tobacco use, harmful alcohol consumption, unhealthy diets, and physical inactivity, while aiming to lower NCD incidence, morbidity, and related disabilities (Ministry of Health Ghana, 2012).

The policy promoted multi-sectoral collaboration, community involvement, and integration into primary healthcare, but faced challenges in implementation due to limited resources and enforcement mechanisms. The updated 2022 version, the second edition aligned with the WHO Global Action Plan for NCD Prevention and Control (2013-2030), builds on this by incorporating a strategic plan for 2022-2026. It strengthens focus on evidence-based interventions, surveillance, and health system integration, with enhanced emphasis on mental health, palliative care, and sustainable financing to address rising NCD burdens amid demographic shifts (Ministry of Health Ghana, 2022). Key updates include targets for reducing premature NCD mortality by 25% by 2025 and integrating NCD services into universal health coverage.

Complementing these policies, the Excise Duty Amendment Act, 2023 (Act 1093) introduced fiscal measures to curb NCD risk factors, notably a 10% tax on sugar-sweetened beverages (SSBs) effective April 2023, alongside revisions to excise duties on tobacco products and other excisable goods. This act aims to discourage consumption of unhealthy products, generate revenue for health initiatives, and align with global best practices for obesity and diabetes prevention, though early implementation has shown mixed revenue outcomes and calls for stronger monitoring to ensure equity and effectiveness (Ghana Revenue Authority, 2023).

Reviews of Ghana's food environment policies, such as the Food Environment Policy Index (FOOD-EPI) assessment by Laar et al. (2020), identified significant gaps in government action, including weak regulations on food marketing to children, inadequate nutrition labeling standards, limited fiscal policies like taxes on unhealthy foods, and insufficient public procurement guidelines for healthy foods in schools and institutions. These findings were expanded by Laar et al. (2021), which highlighted implementation barriers in urban African food systems, such as industry influence undermining policy

enforcement and inequities in access to healthy foods, recommending bundled interventions to make unhealthy options less attractive. Further, Laar et al. (2023) on health taxes underscored gaps in existing fiscal measures, noting inconsistent application, evasion risks, and the need for earmarking revenues toward NCD prevention, while advocating for progressive tax designs to avoid regressive impacts on low-income groups.

Ghana has adopted about 10 distinct (some stronger and fully operational, others still draft or partial) policy interventions for primary prevention of NCDs in areas such as tobacco, alcohol, physical activities and immunization, Osei et al, (2023). Examples are the (FCTC) and the National Alcohol Policy (NAP) aimed at reducing morbidity and mortality (Ministry of Health of Ghana [MOH], National policy for the prevention and control, 2012, 2022). The WHO - FCTC offers a framework for tobacco control initiatives, such as restrictions on tobacco advertising, levies, smoke-free laws, and packaging and labelling guidelines. It establishes international norms for lowering tobacco use, fosters cooperation, and supports comprehensive tobacco control policies across national boundaries. Enforcement practices differ between nations. The literature further reveals that National Alcohol Policies vary by country but generally aim to mitigate the harmful effects of alcohol consumption on public health. These policies may include regulations on advertising, pricing and taxation, availability, and public health education. Effective NAPs can reduce alcohol-related morbidity and mortality by addressing consumption patterns and promoting responsible drinking behaviours. Challenges include varying levels of implementation and enforcement across regions, influence from alcohol industries, and cultural acceptance of alcohol consumption.

Both policies target significant public health issues. Thus, tobacco and alcohol consumption, which contribute significantly to global morbidity and mortality. While the FCTC provides a robust international framework for tobacco control, NAPs are more localized and tailored to national contexts regarding alcohol regulation. Weaknesses in both policies often stem from insufficient enforcement, industry influence, and the complexities of altering societal behaviours related to substance use. Fraser, (2021).

In the area of diets, the first dietary guidelines for Ghana known as “Food-Based Dietary Guidelines for Ghana” were published in 2023 (Ministry of Food and Agriculture & University of Ghana School of Public Health, 2023). Other guidelines such as the “Nutrition Facts for Ghanaian families” was published in 2009, followed by the “Dietary and Physical Activity Guidelines for Ghana” in 2010. The “Food-Based Dietary Guidelines for Ghana offers comprehensive recommendations tailored to promote optimal health and prevent nutrition-related diseases within the country's cultural and socio-economic context.

Developed by the Ministry of Food and Agriculture and the School of Public Health of the University of Ghana, these guidelines emphasize the consumption of a diverse range of locally available foods, including staple crops like maize, millet, and cassava, alongside vegetables, fruits, legumes, and lean proteins such as fish and poultry. They advocate for moderation in the intake of fats, sugars, and salt, while encouraging the use of traditional cooking methods and emphasizing the importance of breastfeeding for infants. The guidelines also prioritize the promotion of safe food handling practices and adequate hydration.

Recent legislative actions include the introduction of a sugar-sweetened beverages (SSB) tax in April 2023, aligning with global trends in fiscal interventions to combat obesity and related NCDs, (Excise Duty Amendment Act, 2023 (Act 1093). To help reduce the rising cases of NCDs comprehensively, a coalition of stakeholders in Ghana, as part of the Healthier Diets for Healthy Lives (HD4HL) Project is advocating for evidence-based policies, using tools like nutrient profiling models to guide food policies and monitor their impact. Addressing data gaps and inertia in policy implementation are identified as critical tasks for advancing public health goals.

The (HD4HL) NCD prevention intervention looks to gather data and inspire multi-stakeholder action on interventions around food marketing regulation, labelling, fiscal policies, and public food procurement and services toward a policy bundle for healthier and more equitable consumer food environments that reduce the double burden of malnutrition. Though such interventions are for the greater good, Chrisinger (2017) argues that it is important to consider the ethical implications around the development and implementation of same. He is of the view that numerous policy initiatives raise ethical tensions between public health agencies and individual autonomy. For instance, banning some foods could be seen as a de facto dietary restriction than a gentle encouragement to choose healthier choices.

The debate on sustainable diets is a significant challenge, with gaps in measuring it in the face of population pressures, economic crises, and inequitable food production (Fanzo, 2015). As Carter et al. (2011) point out, "evidence and ethics are implicitly related: evidence-based practice may be more ethical, and ethically sensitive practice more effective"(p.465). The current public health nutrition guidance faces ethical tensions due to concerns of its effectiveness, as aggregate population data may overlook genetic, economic and social factors influencing health, including those intertwined with

diet (Hite, 2017). Understanding why these policies, which affect vulnerable populations, are favoured over potential alternatives and distinguishing between moralistic and health-driven policies are imperative (Chrisinger, 2017). Hence, this study aims to identify and analyse the ethical tensions inherent in policy packages initiated by the HD4HL project.

1.1 Problem Statement

The escalating burden of non-communicable diseases (NCDs) in Ghana necessitates robust public health interventions, yet the ethical design and implementation of these strategies reveal significant shortcomings that undermine their effectiveness, equity, and cultural appropriateness. This study is motivated by critical gaps identified in the ethical framework of NCD prevention policies, particularly those advanced through the Healthier Diets for Healthy Lives (HD4HL) Project.

Current nutrition-focused interventions, as outlined in the 2022 National Policy for the Prevention and Control of Chronic Non-Communicable Diseases, emphasize population-level dietary modifications, such as reductions in salt and sugar consumption. However, these policies often fail to integrate socio-cultural dietary practices and ensure equitable access to healthy food alternatives, thereby risking infringement on individual autonomy and cultural relevance (Ministry of Health Ghana, 2022). Additionally, weak policy enforcement, driven by industry lobbying, compromises transparency and justice, leading to interventions that disproportionately impact vulnerable populations without addressing economic barriers, thus exacerbating health inequities (Fraser, 2021). Furthermore, the absence of systematic methodologies for embedding ethical considerations into the design and implementation of NCD prevention strategies limits the ability to balance public health objectives with individual rights and equity (Fraser, 2021; Ministry of Health Ghana, 2022).

This research seeks to address these deficiencies by examining the ethical tensions inherent in the HD4HL NCD prevention interventions in Ghana. Through the development of actionable recommendations, the study aims to enhance the ethical integrity, equity, and effectiveness of future public health initiatives, contributing to improved health outcomes and more equitable healthcare delivery.

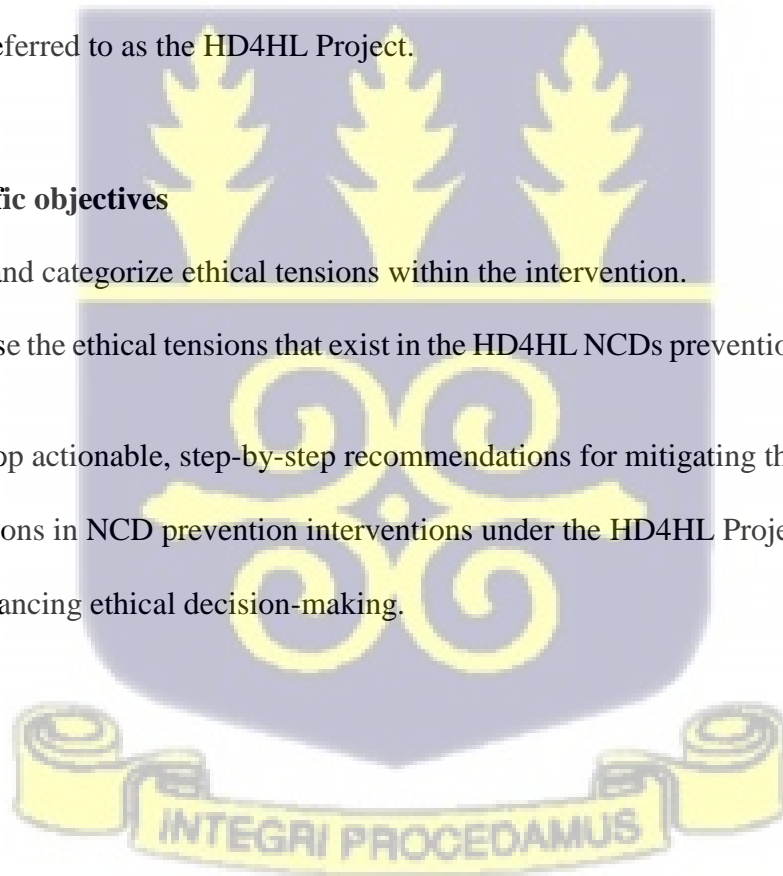
1.2 Objectives of the Study

1.2.1 General objective

The study aimed to evaluate the ethical dimensions of one NCD Prevention Intervention in Ghana, referred to as the HD4HL Project.

1.2.2 Specific objectives

1. Identify and categorize ethical tensions within the intervention.
2. To analyse the ethical tensions that exist in the HD4HL NCDs prevention intervention.
3. To develop actionable, step-by-step recommendations for mitigating the identified ethical tensions in NCD prevention interventions under the HD4HL Project in Ghana, thereby enhancing ethical decision-making.



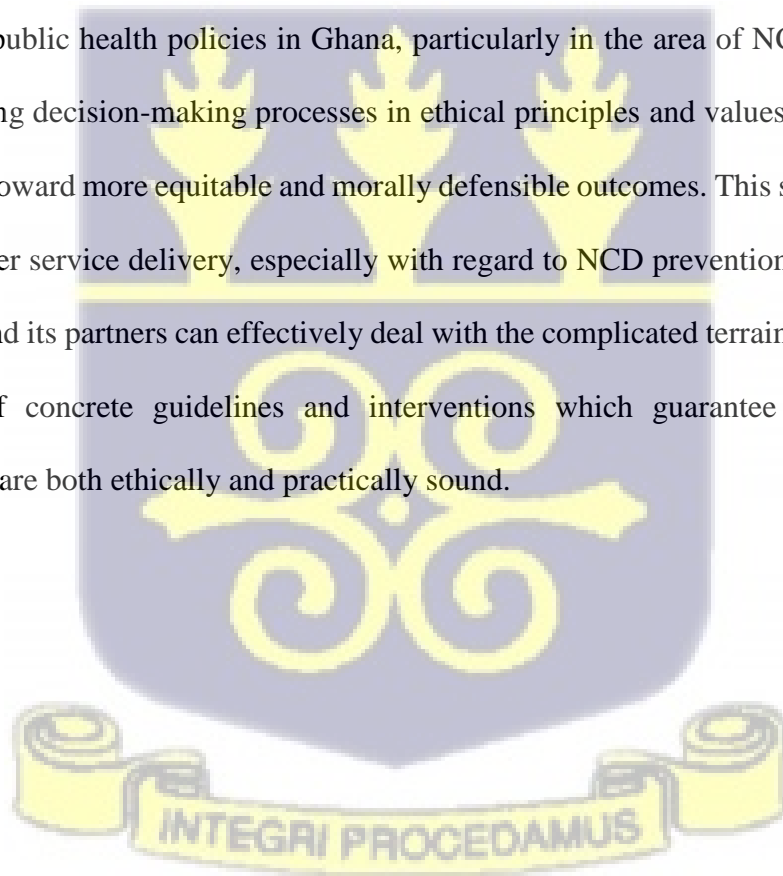
1.3 Justification of the Study

According to (Gostin, 1986,) human rights and public health policy have long been intersected - In his book titled “The future of Public Health,” he highlights a lack of consideration for the consequences of public health policies for human rights. In another study, (Gostin & Mann,1994) noted that human right concepts were to a large extent, left out of the discussion when it comes to the field of public health. According to the US Dietary Guidelines Advisory Committee (DGAC 2010), Americans' inadequate compliance to DGAC advise was the cause overweight prevalence recorded in the country.

Even though some Americans seem to have made some progress toward following the Dietary Guidelines Advisory recommendations ethical challenges were not considered (Cohen et al. 2015). From this viewpoint, Americans' unwillingness to follow the DGAC recommendations restricted the efficacy of the Dietary Guidelines Advisory, rather than worries about the guidelines' ethical implications or evidence base. However, there was a need to reconsider the ethical difficulties raised by the Dietary Guidelines Advisory, as earlier opponents had raised, given the flawed presumptions surrounding the policy's execution despite the DGA's sound scientific basis. Reversals and failures are guaranteed when ethical issues are ignored when developing preventative public health programs (Hite, 2017). What this means is that, important policy outcomes will result from understanding the ethical tensions in NCD preventive interventions. The results of this study can aid in creating ethical frameworks and guidelines that direct the implementation and assessment of NCD prevention initiatives in Ghana. It will promote ethical health system programming by offering evidence-based suggestions.

This study, which focuses on Ghana's NCD response methods, builds on an array of historical reflections and current difficulties to chart a path towards a public health environment that is more influenced by ethics. Through an examination of the intervention in focus, this study highlights ethical gaps in the nation's NCD prevention strategy and policy framework. It not only points out these moral ambiguities but also offers a path forward for incorporating pre-existing ethical frameworks into decision-making procedures at all levels.

Moreover, the practical implications outlined in this study extend beyond mere theoretical discourse. They serve as a compass for designing, implementing, and evaluating public health policies in Ghana, particularly in the area of NCD prevention. By grounding decision-making processes in ethical principles and values, policymakers are guided toward more equitable and morally defensible outcomes. This study opens the door to better service delivery, especially with regard to NCD prevention. The Ministry of Health and its partners can effectively deal with the complicated terrain of NCDs with the help of concrete guidelines and interventions which guarantee that response approaches are both ethically and practically sound.



1.4 Definitions of Operational terms

- a. **Ethical tension:** refers is a decision-making situation in which one must choose between two or more moral imperatives, none of which are clearly adequate.
- b. **Ethical implication:** refers to the implicit moral consequences of a certain action or choice.
- c. **Non-communicable Diseases (NCDs):** refer to long-term and avoidable illnesses that are not directly transmitted from person to person. Common examples are cardiovascular disorders (heart attacks, strokes), malignancies, chronic respiratory diseases (such as asthma), and diabetes.
- d. **Food marketing regulation-** refers to regulations and procedures that govern the advertising, labelling, and promotion of foods and beverages in order to protect public health.
- e. **Labelling-** refers to the information supplied on food packaging, such as ingredients, nutritional content, allergens, and other pertinent information.
- f. **Fiscal policies** refer to government actions that alter consumption patterns by taxing unhealthy foods (for example, sugary drinks) or providing subsidies for healthier options.
- g. **Public food procurement and services** - refer to the sourcing, preparation, and delivery of food by public institutions.
- h. **Healthier Diets:** Nutritional patterns and food choices aimed at improving health outcomes and preventing NCDs.
- i. **Intervention:** The specific action or strategy implemented to promote healthier diets and prevent NCDs within the project.
- j. **Public Health Ethics:** Ethical considerations specific to population-level health interventions, policies, and practices.

- k. Social Determinants of Health:** Ethical consideration of the broader social and economic factors influencing health outcomes, including access to healthy diets.
- l. Health Equity:** Ethical principle emphasizing the fair distribution of health resources and opportunities to achieve optimal health outcomes for all individuals and communities.
- m. Ethical Frameworks:** Established systems of ethical principles, theories, or used to analyse and evaluate ethical tensions, dilemmas, and considerations.



CHAPTER TWO

LITERATURE REVIEW

2.0 Introduction

In the pursuit of understanding the ethical tensions inherent in NCD prevention interventions, it is essential to delve into the existing body of knowledge and scholarly discourse that surrounds this multifaceted field. This literature review aims to analyse and synthesize research conducted in this area. By examining key ethical principles, related studies, and ethics of diet-related NCD prevention interventions, among others, this chapter seeks to provide a foundation upon which the current study builds.

2.1 Key Ethical Principles

Eskilsson (2020) defines autonomy as the freedom of individuals to freely choose their health-related behaviours without being forced to do so while noting that providing accurate and easily comprehensible information about nutrition and health risks of food and food products upholds autonomy in the context of diet-related NCD preventive programmes. Sunpath (2022) makes a case that diet-related NCD interventions should, for instance, give top priority to informational efforts that enable people to make informed food choices. In addition, policies that help people understand the health effects of the foods they choose, such as transparent nutrition labels and objective health education initiatives, promote autonomy.

The principle of beneficence emphasises the obligation to promote the well-being of individuals and communities. In diet-related NCD prevention, beneficence is applied through interventions aimed at improving dietary patterns and reducing the incidence of chronic diseases.

Interventions include promoting access to affordable healthy foods, implementing nutrition education programs in schools and communities, and advocating for policies that support healthier food environments. Beneficence also involves addressing health disparities by targeting interventions to underserved populations who may face barriers to healthy eating, Cheraghi et al, (2023).

Non-maleficence requires avoiding harm or minimizing risks associated with interventions (Elton, 2021). In diet-related NCD prevention, this principle guides the development of policies and programs that mitigate potential harms such as food insecurity, dietary stigmatization, or unintended consequences of public health messaging (Sheather et al, 2023). For instance, interventions should be designed to avoid exacerbating inequalities or promoting unhealthy attitudes towards food and body image. Careful consideration of unintended consequences ensures that interventions uphold non-maleficence while promoting positive health outcomes (Budreviciute et al., 2020).

Justice focuses on fairness and equity in the distribution of health benefits and burdens of populations (Creutzig et al., 2020). In diet-related NCD prevention, justice is upheld by ensuring equitable access to resources that promote healthy eating, such as nutritious foods, healthcare services, and educational opportunities. Policies should address social determinants of health that contribute to dietary disparities, including income inequality, food insecurity, and structural barriers to accessing healthy foods. Ethical considerations also include addressing cultural diversity and respecting the rights of vulnerable populations in designing and implementing interventions (Zorbas et al., 2021).

Banatvala et al, (2023) define transparency as openness and clarity in decision-making processes and communication. Transparency is essential for building trust among stakeholders, including the public, policymakers, and industry partners in diet-related

NCD prevention interventions. It includes disclosing conflicts of interest, providing evidence-based information to support interventions, and engaging stakeholders in the development and evaluation of policies. Transparent communication about the rationale, goals, and potential impacts of interventions fosters accountability, Mounsey et al, (2022)

2.2 Theoretical Framework

The theoretical framework, built upon the ethical principles above as well as ten Have and colleagues' ethical framework for the prevention of overweight and obesity offers a systematic approach to understanding and addressing the ethical challenges intrinsic to NCD prevention in Ghana. The framework developed by ten Have and colleagues with Responsibility, Social & Cultural Values, Liberty, Privacy, Informed Choice, Equality, Physical Health, and Psychosocial Wellbeing as ethical standards is highly relevant to ensuring a more ethically accepted NCD prevention intervention. Each element within the framework plays a crucial role in addressing ethical considerations and promoting the effectiveness of NCD prevention strategies.

2.2.1 Responsibility

The framework promotes concentrating on the roles that different parties play in NCDs prevention. This covers the obligations placed on people to make moral decisions, on healthcare professionals to provide ethically accepted treatment, and on legislators to create and carry out just and efficient policies among others (Osokpo et al., 2021).

2.2.2 Social & Cultural Values

Preventing NCDs requires an understanding of and respect for various social and cultural norms. The population's cultural background and values increase the likelihood that an intervention will be accepted and successful.

Taking into account cultural differences guarantees that interventions are considerate of the unique needs and viewpoints of various populations (Ruthsatz et al., 2020)

2.2.3 Liberty

The idea of liberty places a strong emphasis on people's liberties and their ability to make independent decisions regarding their health. Respecting people's rights is essential to preventing NCDs because it promotes interventions that give people more authority instead of using coercive tactics, which instils a sense of accountability and ownership over health decisions (Kalra et al., 2020).

2.2.4 Privacy

A key component of moral NCD prevention is privacy protection. This entails maintaining privacy, upholding limits, and protecting personal health information. Preserving privacy fosters open communication and cooperation in preventive initiatives by increasing confidence between patients or populations and healthcare professionals (Monaco et al., 2021).

2.2.5 Informed Choice

Making an informed decision emphasises how crucial it is to give people thorough and comprehensible information on preventive treatments. Giving people the information they need to make educated decisions about their health promotes autonomy and helps NCD preventive initiatives gain ethical acceptance (Constantin et al., 2021).

2.2.6 Equality

Fair distribution of opportunities and resources is emphasised by equality. It advocates for measures that do not worsen already-existing health inequities in the context of NCD prevention. By addressing equality, we may promote social justice and fairness by

ensuring that disadvantaged and vulnerable groups have equal access to preventative care (Kassa et al., 2022).

2.2.7 Physical Health

The framework's emphasis on physical health draws attention to the main goal of NCD prevention. Assuring that interventions are evidence-based and in line with the objective of lowering the burden of non-communicable illnesses, ethical interventions give priority to interventions that really improve physical health outcomes (Budreviciute et al., 2020)

2.2.8 Psychosocial Well-being

Taking psychosocial well-being into account recognises the whole aspect of health. Since physical and mental health are intertwined, ethical NCD preventive approaches promote overall well-being techniques and acknowledge the psychosocial elements impacting health behaviours (Bokolo et al., 2023).

2.3 Ethical Issues in Ghana's Healthcare Policy and Implementation

Several NCDs are linked to modifiable risk factors, including tobacco use, poor nutrition, physical inactivity, and harmful alcohol consumption (Budreviciute et al., 2020). Moreover, rapid urbanization promotes sedentary behaviors and reduced physical activity levels (Popkin et al., 2022). Consequently, urban populations are increasingly reliant on motorized transport and exhibit lower engagement in physical exercise, heightening NCD vulnerability (Reardon et al., 2021; Akowuah & Kobia-Acquah, 2020).

Bhattacharya et al. (2020) attribute the global rise in NCD prevalence to the adoption of Western lifestyles, particularly dietary shifts toward processed and fast foods. In Ghana and other African contexts, traditional diets have similarly transitioned to Westernized patterns rich in processed foods, sugary beverages, and fast foods, directly contributing

to diet-related NCDs such as diabetes, hypertension, cardiovascular diseases, stroke, chronic obstructive pulmonary disease, chronic renal disease, cancer, mental disorders, and trauma named as the leading causes of morbidity and disability (Peprah et al., 2023; Ramesh & Kosalram, 2023).

The research landscape on ethical tensions in healthcare policy and implementation in Ghana provides critical insights that directly inform the present study on ethical dimensions of NCD prevention under the Healthier Diets for Healthy Lives (HD4HL) Project. For instance, Laar (2014) examined the ethical appropriateness of Ghana's HIV epidemic response through a systematic review of national plans, policies, and protocols. The study revealed that while these documents ostensibly supported public health services for key populations (e.g., men who have sex with men, sex workers, and people who inject drugs), they neglected to ensure ethical soundness or user-friendliness. Specifically, policies acknowledged criminalization and stigmatization but omitted practical measures to decriminalize behaviors or safeguard rights, thereby restricting access to services and perpetuating inequities. Laar concluded that integrating ethical frameworks into policy development is essential to prioritize the rights and needs of vulnerable groups.

This ethical analysis of HIV policies is highly relevant to the current work on NCD prevention in Ghana, as both domains involve public health interventions targeting behavioral risk factors in resource-constrained settings. In the HD4HL context, nutrition-focused policies such as fiscal measures on sugar-sweetened beverages or food marketing regulations may similarly infringe on individual autonomy or cultural dietary practices if not ethically framed, potentially stigmatizing certain communities (e.g., low-income groups reliant on affordable processed foods) and exacerbating access barriers to healthier alternatives. Just as Laar's findings highlight the need for rights-based

approaches in HIV strategies to mitigate stigma and enhance equity, this study applies analogous principles to NCD interventions, advocating for ethical integration to balance public health goals with cultural sensitivity and justice, thereby addressing gaps in policy design that could hinder effective implementation and uptake among vulnerable populations.

Complementing this, Nyaaba et al. (2020) offer a direct lens on NCD policy implementation in Ghana through an explanatory, cross-sectional grounded theory approach, involving in-depth interviews with 39 health policymakers and implementers at national and sub-national levels. The research identified interconnected barriers, including limited policy awareness, poor intersectoral coordination, insufficient funding, and unclear mechanisms for translating national directives into local actions. To overcome these, the authors recommended adaptive strategies such as sustainable financing, enhanced coordination, policy sensitization, and capacity building for health professionals, emphasizing the role of governmental and international investments in achieving population-level NCD reductions in low-resource environments.

These implementation challenges resonate with the ethical tensions explored in this thesis, as barriers like funding shortages and coordination failures often manifest ethical dilemmas such as inequitable resource allocation that disproportionately affects marginalized groups or overlooks community engagement in policy rollout.

In the HD4HL framework, where bundled interventions (e.g., nutrient profiling and public procurement policies) aim to foster healthier food environments, Nyaaba et al.'s insights underscore the ethical imperative to address these gaps through transparent, inclusive processes that ensure equity and effectiveness. By drawing on both Laar (2014) and Nyaaba et al. (2020), this study bridges ethical analyses from infectious disease

contexts to NCD prevention, highlighting how unaddressed ethical deficiencies in policy implementation can perpetuate health disparities, and proposing methodologies to embed ethics systematically for more just and impactful interventions in Ghana.

2.4 Ethics of Diet-Related NCD Prevention Interventions

2.4.1 Autonomy and Paternalism

Mozaffarian, D, in a 2016 study titled "Dietary and policy priorities for cardiovascular disease, diabetes, and obesity: a comprehensive review" argues that policies and interventions targeted at altering dietary practices to lower the risk NCDs are crucial. Buchanan 2008 reports that those who oppose these measures claim that for example, imposing taxes on sugar-sweetened beverages, prohibiting the promotion of unhealthy food to minors, and requiring nutritional labelling could restrict personal freedom of choice. Afshin et al, 2014 and Thow et al, 2014 agree with Mozaffarian in saying that these actions are required to promote healthier choices that people might not otherwise make because of things like an addiction to high-fat or high-sugar meals and to counterbalance the influence of marketing strategies used by the food industry.

2.4.2 Equity and Justice

Mendis, S. (2010) is of the view that it is essential that interventions aimed at preventing NCDs related to food must take justice and equity into account. He notes that socioeconomically disadvantaged groups are frequently disproportionately affected by NCDs because they have less access to nutrient-dense meals because of things like food deserts, poor incomes, and cultural obstacles. In order to alleviate these gaps, he notes that interventions must guarantee that everyone has fair access to reasonably priced, healthful foods.

2.4.3 Beneficence and Non-Maleficence

The concepts of beneficence, or optimising health benefits, and non-maleficence, or minimising harm, must be balanced in interventions meant to encourage healthier eating. Effective tactics include food reformulation regulations that encourage lowering the amount of salt, sugar, and trans fats in processed foods, school-based programmes that promote healthy eating habits, and nutrition education campaigns (Koooverjee, 2018). Barnhill et al, 2020 note that unintended consequences including food instability, dietary stigma, and the possibility of people developing disordered eating behaviours in response to promoting public health raise ethical questions.

Human Rights Approaches: The intersection of human rights and non-communicable disease (NCD) prevention is a critical area of public health ethics. Ensuring that individuals' fundamental human rights are respected while implementing NCD prevention measures is crucial. Durojaye et al. (2022) have emphasized the need to address several human rights aspects, which include the right to information, bodily integrity, and the right to health. These rights play a pivotal role in ethical NCD prevention strategies and are supported by academic research.

2.4.4 Right to Information

The right to information is a fundamental human right that empowers individuals to make informed decisions about their health and lifestyle. In the context of NCD prevention, this right encompasses access to clear and understandable information about nutrition, physical activity, and the health risks associated with behaviours such as tobacco and alcohol consumption. Academic research supports the significance of this right in promoting health literacy and behaviour change. The importance of health literacy in empowering individuals to make informed choices regarding their health. Health literacy includes the ability to access, understand, and use health information effectively.

Ensuring that individuals have access to comprehensible information about the risks and benefits of various lifestyle choices is essential in promoting NCD prevention. Food labelling is one specific area where clear and informative information can influence individuals' dietary decisions (Durojaye et al. 2022).

2.4.5 Right to Bodily Integrity

The right to bodily integrity entails protection from harm and risks that can affect an individual's physical well-being. In NCD prevention, this right is exemplified by the protection from exposure to second-hand smoke, especially in public places. Academic research underscores the adverse health effects of exposure to second-hand smoke and the ethical necessity of protecting individuals from such harm. A comprehensive study conducted by Oberg et al. (2011) provides compelling evidence regarding the health risks associated with second-hand smoke exposure.

Their research highlights that exposure to second-hand smoke is linked to various NCDs, including heart disease and lung cancer. Protecting individuals from these risks by implementing smoke-free policies in public spaces aligns with the right to bodily integrity and reflects ethical principles of non-maleficence and protection from harm.

2.4.6 Right to Health

The right to health is a fundamental human right recognized by international agreements. It encompasses access to necessary medications and healthcare services, which are critical in NCD prevention and management. Academic research demonstrates the ethical imperative of ensuring equitable access to healthcare and medications to combat NCDs effectively. A study by Forman et al. (2019) discusses the right to health in the context of NCDs. It emphasizes the importance of access to medications for chronic conditions such as diabetes and hypertension. Ensuring that individuals, particularly in underserved

communities, have access to essential medications is an ethical requirement to address health disparities and promote health equity.

2.4.7 Social Determinants

Social determinants encompass a wide range of factors, including economic, political, social, behavioural, and environmental influences that affect an individual's health and well-being. These determinants influence risk factors for NCDs and the broader systems that address the conditions in which people live. The complex interplay of these factors significantly contributes to the development and progression of NCDs (Martínez-Córdoba et al., 2022).³⁰ The World Health Organization (WHO) and various regional declarations, like the 2011 Brazzaville declaration, acknowledge the importance of addressing social determinants in NCD prevention. These declarations emphasize the need to consider the broader context in which individuals live and the social conditions that impact their health. For instance, the Brazzaville declaration recognizes that risk factors and systems to address NCDs are shaped by a multitude of determinants, including political, social, behavioural, environmental, and economic factors. Academic research supports the significance of social determinants in NCD prevention. Studies have consistently shown that socioeconomic status, education, and access to healthcare services are linked to NCD risk factors and outcomes. For example, research by Marmot et al. (2008) on health inequalities emphasizes that social determinants, such as income and education, have a profound impact on health disparities, including those related to NCDs. Furthermore, environmental factors, such as air quality and access to green spaces, can influence lifestyle behaviours associated with NCDs. A study by Dadvand et al. (2016) investigated the impact of green spaces on physical activity and found that access to such environments is associated with increased physical activity and reduced

NCD risk. The political and economic determinants that shape healthcare policies and resource allocation are critical considerations.

Research by Heymann and McNeill (2013) delves into the role of politics and economic forces in shaping healthcare policies and their impact on NCD prevention. They emphasize the need for a political commitment to addressing NCDs and the allocation of resources to achieve this goal. 2.10.5 Funding Governments must balance the demands of their people and their responsibilities to other nations. Funding is a critical component of addressing non-communicable diseases (NCDs) on a global scale, and it poses several challenges and ethical considerations. The allocation of resources for NCD prevention and treatment involves balancing domestic priorities and responsibilities to the international community. This section expands on the discussion of funding for NCDs and its global implications. Disparities in NCD burden and available resources exist on a global scale. High-income countries typically have more resources and better healthcare infrastructure to manage NCDs.

In contrast, low- and middle-income countries often struggle with limited resources and inadequate healthcare systems to address the growing NCD burden. This inequality highlights a fundamental ethical issue – the responsibility of affluent nations to assist developing countries in combating NCDs. Academic research, as indicated by Khoo et al. (2022), underscores the importance of recognizing the global dimension of NCDs. While domestic priorities are critical, it is increasingly important for affluent nations to acknowledge their role in supporting international efforts to combat NCDs, especially in resource-poor settings. One of the ethical dilemmas related to funding for NCDs involves the redirection of financial resources. Donors, both domestic and international, must make challenging decisions about allocating funds for various health priorities. Redirecting money originally allocated for infectious diseases to NCDs is a complex

issue. While NCDs are a growing concern, infectious diseases continue to pose significant threats, and taking funds away from one area to support another can be contentious. Academic research, such as the work by Kentikelenis et al. (2022), suggests a potential solution to this issue. Shifting the focus from disease-specific programs to building robust health systems can benefit both infectious disease control and NCD prevention. Strengthening healthcare infrastructure and primary healthcare services can create a more resilient and adaptable system capable of addressing a wide range of health challenges. The World Health Organization (WHO) recognizes the need to include NCDs in international development goals. This reflects a global commitment to addressing the NCD burden across countries. However, there are different views on how this financial support should be structured. These discrepancies highlight the complexity of global funding for NCDs. Funding for NCD prevention and treatment is a complex issue with ethical implications. It involves balancing domestic priorities with international responsibilities, redirecting financial resources, and finding innovative approaches to address both NCDs and infectious diseases.

The global community's commitment to including NCDs in international development goals signifies a shared recognition of the importance of tackling this growing health challenge. However, how this financial support is structured and distributed remains a topic of discussion and debate in the academic and policy spheres, (Luna et al, 2020)

2.5 Review of Related Studies

Globally, there is increasing research on ethical issues, tensions, and dilemmas in public health, particularly concerning the prevention and management of NCDs. Venkatapuram, McKee, and Stuckler (2012) investigated the declarations from WHO regional meetings leading up to the UN high-level meeting on NCDs using a systematic review method. Their study found significant ethical tensions, including the scope of NCDs, financial

strategies, disease prioritization, and balancing care and prevention. They concluded that resolving these tensions is crucial for translating high-level commitments into effective actions and detailing the need for enhanced international cooperation and resource allocation. Using a qualitative case study approach, Saeed, Schwartz, and Hunt (2022) explored the ethical considerations associated with closing NCD prevention interventions in a humanitarian setting. Findings suggested that the closure of such programs presents challenges related to quality of care, sustainability, and unintended harms. They concluded that effective strategies are necessary to mitigate the negative impacts on affected populations when NCD programs are closed.

A similar study by Pandit (2023) critically discussed the ethical tensions arising from public health interventions aimed at preventing diabetes. The study highlighted ethical dilemmas such as affordability and accessibility issues, conflicts between human rights and corporate interests, and the implications of early genetic testing for diabetes. Pandit concluded that addressing these unique ethical dilemmas requires a comprehensive approach that goes beyond traditional medicine-centric strategies, stressing the importance of social determinants, fair resource distribution, and ethical considerations in genetic testing and surveillance. Adding to the body of knowledge on ethical issues, Tulchinsky (2018) revealed the historical context of ethical failures in public health and underscored the necessity of ethical standards in contemporary practice. Tulchinsky recognized integrating ethics into public health education and policy programs, advocating for ongoing professional development and public awareness efforts to promote ethical standards.

In 2017, Hurlimann et al. conducted a scoping review titled "Ethical Issues in Nutrition-Related Public Health Policies and Interventions," revealing the complexity of ethical issues in nutrition-related public health interventions. The study underscored the need for targeted ethical frameworks tailored to specific interventions and contexts. The researchers concluded that further research is essential to develop practical ethical frameworks to guide policymakers and public health personnel in navigating these challenges.

Boyland's (2023) study titled "Is it Ethical to Advertise Unhealthy Foods to Children?" examined the ethical dimensions of marketing high-fat, salt, and sugar (HFSS) foods to children. The study found significant evidence linking HFSS food marketing to negative dietary behaviours in children, contributing to increased obesity rates. Boyland concluded that effective regulation and ethical marketing practices are necessary to protect children's health and rights, acknowledging the need for a balanced approach that considers the perspectives of various stakeholders.

Studies focusing on Africa have also highlighted significant ethical tensions in public health. Mzombwe et al. (2019) examined the ethical imperative of providing NCD medical care to research participants in Africa. Given the chronic nature of NCDs and the limited access to care, the study explored whether researchers have a responsibility to offer ancillary NCD services during their studies. They underlined the need for researchers to strive for the "highest achievable standard" of ancillary care, balancing feasibility with the ethical imperative to reduce health inequities. The study also discussed the importance of continuous reassessment of standards, planning, and partnerships with local communities to ensure ethical and practical provisions for NCD care (Mzombwe et al., 2019).

Shayo et al. (2020) addressed the ethical issues in intervention studies on the prevention and management of diabetes and hypertension in sub-Saharan Africa. The study highlighted the significant challenge posed by the sharp rise in diabetes and hypertension prevalence, alongside a high burden of HIV infection. It discussed the inequities in the provision of chronic disease services and the ethical dilemmas in ensuring an equitable supply of medicines during research. The study pointed out the need for uninterrupted medicine supplies for the duration of research and addressed the ethical implications of purchasing medicines for participants. Moreover, it considered the obligation to non-trial participants and the potential ethical issues arising from prioritizing medicines for research subjects in settings with unreliable supply chains. The study concluded that a pragmatic approach, involving collaboration with key stakeholders, is necessary to address these ethical dilemmas and ensure meaningful and sustainable research outcomes (Shayo et al., 2020).

2.6 Identified Research Gaps

While significant research has explored ethical tensions in public health interventions, particularly in managing and preventing NCDs, notable gaps remain. For instance, Hurlimann et al. (2017) conducted a comprehensive review of ethical issues in nutrition-related public health policies and interventions, providing valuable insights into the complexities involved. However, no study has specifically addressed the ethical dimensions of NCD prevention interventions in the Ghanaian context, particularly those focusing on nutrition-related strategies. Previous studies such as Mzombwe et al. (2019), Pandit (2023), and Shayo et al. (2020) have examined various ethical challenges, yet their findings are limited in scope regarding specific NCD interventions, especially in low-resource settings like Ghana. For example, Mzombwe et al. (2019) explored the ethical

imperatives of providing NCD care in Africa, but did not focus on nutrition-related interventions. Similarly, Pandit (2023) highlighted ethical dilemmas in diabetes prevention but did not address these within the Ghanaian context. Shayo et al. (2020) discussed ethical issues in diabetes and hypertension management but did not delve into the ethical challenges unique to nutrition-focused NCD prevention.

In the Ghanaian context, while Laar (2014) investigated the ethicality of HIV epidemic response strategies, there is a clear lack of studies examining the ethicality of NCD prevention interventions, particularly those related to nutrition. This presents a significant gap, as nutrition plays a crucial role in managing and preventing NCDs, yet the ethical considerations specific to these interventions remain unexplored. This study aims to address these gaps by investigating the ethical tensions inherent in the HD4HL NCD prevention intervention in Ghana. It will focus on understanding how ethical principles are applied in nutrition-related NCD interventions and identify any challenges or inconsistencies that may arise in this specific context.

2.7 Conceptual Framework

This conceptual framework visually represents the interplay between the proposed food-related policies, the intended improvements in food environments, health outcomes, and the ethical tensions that arise from these initiatives. The framework begins with the four key policies of the intervention—labelling systems, public procurement/food provision, fiscal policy, and marketing regulation. Each policy is designed to influence food consumption patterns by promoting healthier options while discouraging unhealthy ones. The collective impact of these policies is aimed at shaping a favourable food environment. This environment includes the accessibility and availability of healthy food options, as well as the regulation of unhealthy food marketing. An improved food environment is expected to lead to better health and nutrition outcomes. This includes

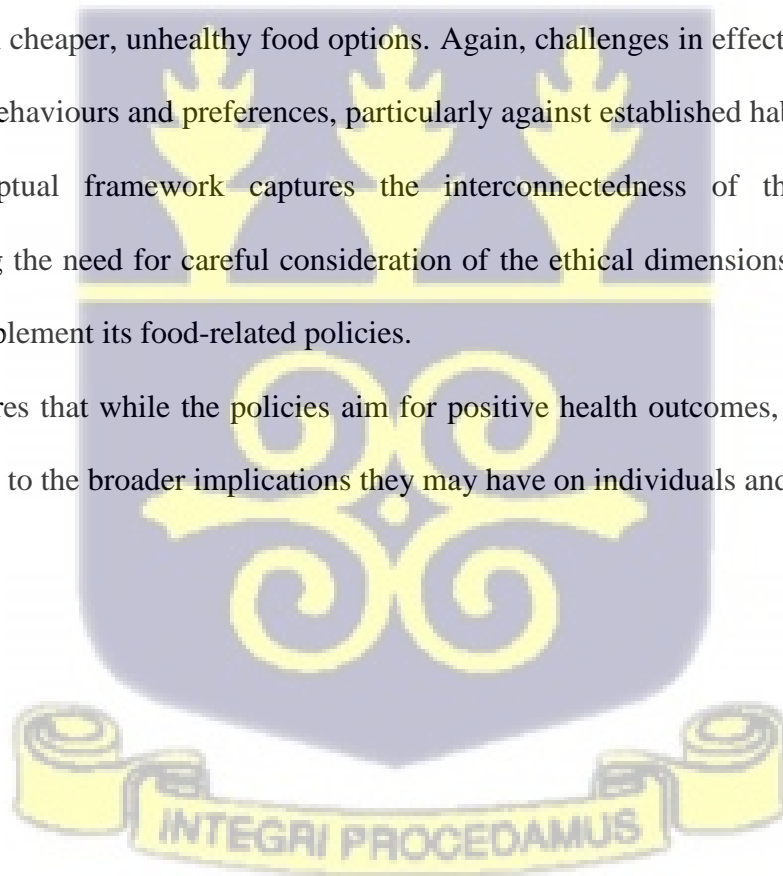
reductions in diet-related diseases, improved dietary patterns, and overall enhanced public health.

The ultimate goal of the proposed policies is to foster healthier lives among the population by promoting well-being and reducing health disparities. While the framework outlines the positive outcomes of these policies, it also acknowledges the ethical tensions that may arise. These include: Socio-Cultural Implications. Thus, potential conflicts with cultural food practices and preferences.

Another is the risk that policies might disproportionately impact low-income populations who rely on cheaper, unhealthy food options. Again, challenges in effectively changing consumer behaviours and preferences, particularly against established habits may arise.

The conceptual framework captures the interconnectedness of these elements, highlighting the need for careful consideration of the ethical dimensions as the project seeks to implement its food-related policies.

It underscores that while the policies aim for positive health outcomes, attention must also be paid to the broader implications they may have on individuals and communities.



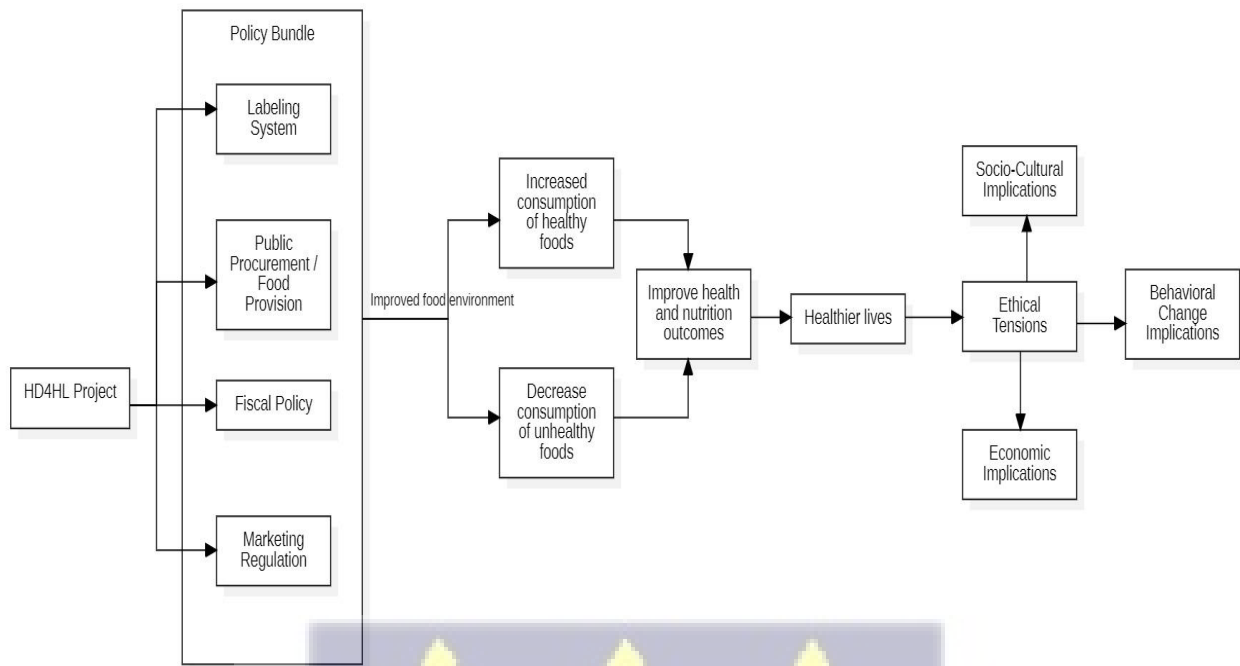


Figure 1. Conceptual Framework



CHAPTER THREE

METHODOLOGY

3.0 Introduction

This chapter outlines the methodology employed in conducting a normative content analysis of the intervention aimed at building evidence and mobilizing multi-stakeholder actions towards healthier and more equitable consumer food environments in Ghana. This chapter details the research design, data collection methods, data analysis procedures, and ethical considerations involved in the study.

3.1 Research Approach and Design

The study was a content analysis, a qualitative research technique used to interpret and code textual material systematically. This method allows the researcher to identify patterns, themes, biases, and meanings within qualitative data. Hsieh and Shannon (2005) describe qualitative content analysis as focusing on identifying patterns and themes through the systematic coding and categorization of textual data. Content analysis provides a systematic and objective means to describe and quantify phenomena, as outlined by Elo and Kyngäs (2008). Within the framework of content analysis, the study uses normative content analysis. Normative content analysis is a specialized form that focuses on identifying and evaluating normative statements and ethical principles within the data. This approach is particularly useful for understanding the moral and ethical dimensions of policies and interventions, aligning them with ethical standards and principles. The rationale for using normative content analysis lies in its ability to provide a nuanced exploration of ethical issues, which is essential for the study's objectives of examining ethical tensions in NCD prevention interventions.

To identify ethical tensions, ethics deficiencies, ethics sensitivity of the intervention under study, the HD4HL intervention's technical proposal, project framework and guiding principles were systematically examined through the lenses of an ethics framework proposed by ten Have et al, 2012; An ethical framework for the prevention of overweight and obesity: A tool for thinking through a programme's ethical aspects. Taken in turn, the contents of the three documents (Technical proposal, project framework and guiding principles) were compared to the ethical principles, recommendations, and the truths delineated in the stated ethical framework.

The ethical framework developed by ten Have et al. is divided into two components. The first section includes primary and secondary questions to guide deliberation. It is vital to notice that all of the primary questions are equally relevant. The second section recommends steps for implementing the framework.

Part I- Eight primary questions and follow up (secondary) questions

1. How does the intervention impact physical health?

Is there evidence of its effectiveness? Is it cost effective? Does it have unforeseen negative health consequences?

2. How does the intervention impact psychosocial wellbeing?

Does it have (unintended) detrimental psychological consequences? Is the program contributing to the stigma of overweight and obesity?

3. How does the intervention promote equality?

Are there any groups in the population that have a higher frequency of being overweight or obese? How does the intervention effect these groups differently than others? Is the program reducing or increasing health inequalities? Does the program unjustly discriminate?

4. How does the program affect informed choice?

Does the program promote informed choice or does it “involve inadequate information and provide unclear, exaggerated, oversimplified, subjective, false or incomplete messages?”

5. How does the program influence social and cultural values?

Does it include "measures that aim to modify personal lifestyles in ways that might interfere with the social and cultural significance of food"?

6. How does the program impact privacy?

Does it request personal information? Who collects this information, and by what methods? Are there confidentiality concerns?

7. How does the program influence the distribution of responsibilities?

Are responsibilities equitably shared among individuals, groups, and society?

8. How does the program affect freedom?

Does it restrict freedom, or does it empower individuals or communities?

Part II- Applying the framework in eight steps

1. Describe the primary ethical limitations of the intervention.
2. Describe the key ethical advantages of the intervention.
3. Consider whether adjustments could enhance the intervention's strengths and reduce its limitations.
4. Evaluate the intervention's potential effectiveness in reducing overweight and obesity.
5. Assess if the intervention's benefits outweigh its limitations.
6. Examine if there is an alternative intervention with fewer ethical challenges.
7. Determine if a strong rationale can be provided for any remaining ethical concerns.

8. Define whether and under what conditions the intervention is acceptable from an ethical point of view.

From these examinations emerged deficiencies, ethical tensions, violations or insensitivity.

3.2 Quality Control

To make sure I covered a wide range of relevant sources, I carried out a literature study by reading relevant texts on normative content analysis, the most recent findings on the prevention of non-communicable diseases (NCDs), and significant ethical frameworks pertaining to my field of study. I was able to identify gaps in the literature and obtain a thorough grasp of the body of knowledge by including both historical and modern sources, especially those that dealt with ethical concerns in public health treatments. I used stringent evaluation criteria to make sure the literature was reliable and relevant. I evaluated sources according to their scholarly significance, methodological soundness, and relevance to the moral dimensions of NCD prevention. Peer-reviewed journals, reputable books, and recent empirical studies were prioritized in order to guarantee the accuracy and reliability of the material.

Using a well-defined normative content analysis, I investigated ethical issues with NCD prevention interventions. I examined the ethical tensions in detail by focusing on normative statements and ethical principles using the ethics framework developed by Ten Have et al. (2012). To uncover any ethical tensions, I examined the technical proposal, project framework, and guiding principles of the HD4HL intervention.

I selected normative content analysis because it is a useful tool for identifying and assessing normative assertions found in data. The methodology developed by Ten Have et al. was chosen due to its comprehensive approach to evaluating the ethical implications of the interventions.

I investigated and answered counterarguments in my analysis by looking into different perspectives on the ethicality of NCD preventive efforts. This required reading criticisms of the ethical framework I choose and thinking about how my analysis might be affected by various ethical viewpoints.

I assessed a number of normative theories, including deontological ethics, virtue ethics, and utilitarianism, in order to fully understand the ethical terrain. Examining several ethical theories and contrasting how they applied to the HD4HL intervention's environment was part of this. I did this in an effort to make sure my conclusions were well-rounded and backed by a variety of ethical perspectives.

3.3 Rigorous Ethical Reasoning

I evaluated the HD4HL intervention using ethical standards based on the Ten Have et al. framework. During this procedure, the intervention's compliance with accepted ethical norms and guidelines was examined. In order to guarantee that my cultural and personal prejudices did not impact the research, I employed a methodical approach to normative analysis. I made sure that my judgement was founded on objective standards and that it was based on a well-established ethical framework. Also, I made a conscious effort to recognize and deal with any possible biases that might have arisen during the assessment procedure.

3.4 Reflexivity

Reflexivity and positionality are critical in ensuring the rigor and transparency of this qualitative study on the ethical dimensions of non-communicable disease (NCD) prevention policies within the Healthier Diets for Healthy Lives (HD4HL) Project in Ghana (Finlay, 2002). This section addresses key concerns, including potential conflicts of interest due to funding and personal biases, and outlines strategies to mitigate their impact on the research process.

Declaration of Funding and Conflict of Interest

This dissertation was funded by the HD4HL Project, supported by the International Development Research Centre (IDRC-Canada) and the Rockefeller Foundation (Grant # 109864-001; PI: Laar, 02/01/2022–01/31/2025). As the study analyzes HD4HL's NCD prevention policies, this funding arrangement raises a potential conflict of interest, where biases could emerge, such as overly favorable interpretations of the project's interventions or reluctance to highlight ethical gaps like weak policy enforcement (Fraser, 2021). I declare that the funders had no role in the study design, data collection, analysis, interpretation, or writing. However, I acknowledge that funding ties might subtly influence perspectives, necessitating reflexive mitigation.

Positionality

I am an insider to the Ghanaian context, familiar with its cultural, historical, and economic factors, such as the shift toward processed foods driven by urbanization (Peprah et al., 2023). My involvement with HD4HL as a [specify role, e.g., researcher] provides access to project dynamics but risks bias toward its goals, potentially downplaying issues like cultural insensitivity in dietary guidelines (Ministry of Health Ghana, 2022). My urban, educated background may also skew interpretations toward

elite perspectives, marginalizing rural or low-income voices. Professionally, my reliance on grants like HD4HL introduces power dynamics that could align findings with funder priorities, though my commitment to ethical principles (e.g., justice, equity) guides this work.

Addressing Biases

I critically reflected on two key biases. Thus, confirmation bias, where familiarity with HD4HL might lead to lenient assessments, and sponsor bias, where funding ties could favor project narratives. To counter these, I maintained a reflexive journal to document and challenge assumptions (e.g., initial views of the 2023 Excise Duty Amendment Act as wholly beneficial), ensuring data-driven conclusions. Peer debriefing with independent colleagues unaffiliated with HD4HL helped scrutinize findings for objectivity.

Mitigation Strategies

To enhance rigor, I employed regular entries to track biases and assumptions. Reviews by external colleagues to ensure objectivity. Cross-verification using multiple data sources and adherence to institutional ethics guidelines, disclosing funding in all processes. By addressing funding-related conflicts and personal biases through these strategies, I ensured the study's independence and credibility, offering a balanced critique of HD4HL's ethical tensions to advance equitable NCD prevention in Ghana.

3.5 Ethical Considerations

This study did not directly gather primary data from living participants; instead, it relied solely on documents obtained from the HD4HL intervention. This ensured that the research adhered to ethical standards of good data management (Corti, et al, 2000).

The intervention had already received ethical approval from the Ethics Review Committee of the Humanities at the University of Ghana (Approval #ECH 325/21-22).



CHAPTER FOUR

ANALYSIS AND FINDINGS

4.0 Introduction

This chapter presents the ethical analysis of the HD4HL policy intervention to promote healthier and more equitable consumer food environments in Ghana. Guided by the ‘Ethical Framework for the Prevention of Overweight and Obesity’ by ten Have et al. (2012), this chapter explores the ethical dimensions identified in the HD4HL policy interventions. The analysis focused on identifying and categorising ethical tensions and considerations across policy areas to show how these interventions address various challenges.

4.1 Identification of the Ethical Tensions Existing in The HD4HL NCDs Prevention Intervention

The HD4HL Project delivered four key work packages:

- *Landscaping and Context Analyses: This package examines Ghana’s food environment policies to ensure policy coherence, focusing on the political economy, stakeholder roles, health policy processes, and the dynamics of policymaking.*
- *Food Composition Data and Nutrient Profile Model: This package compiles data on processed and packaged foods to develop a Nutrient Profiling Model, supporting policy enforcement and compliance monitoring by state actors.*
- *Development of a Food-Based Policy Bundle: This package designs a comprehensive policy package for the food environment, following*

established guidelines like Ghana's National Public Policy Formulation Guidelines.

- *Advocacy, Scholar Activism, and Capability Strengthening: This package empowers civil society, including marginalized groups, to advocate for evidence-based policies and hold stakeholders accountable in the food environment.*

(Healthier Diets for Healthy Lives (HD4HL) Project Brochure, 2022)

This work concentrated on the third work package (albeit the other work packages are interconnected and were included in the analysis): the creation and implementation of the food-based policy bundle. This work package produced four policy interventions: *Fiscal Policy, Labelling Systems, Public food Procurement/Food Provision, and Marketing Regulation*. The goal of this policy toolkit was to improve the food environment by promoting increased consumption of healthy foods and reducing the intake of unhealthy foods, leading to better health and nutrition and healthier lives for the Ghanaian population.

As presented in the literature review section of this thesis (chapter 2) on ten Have et al's 2012 'Ethical Framework for the Prevention of Overweight and Obesity', the framework is based on a set of eight questions about a program's ethical relevant aspects, including its impact on *physical health, psychosocial well-being, informed choice, cultural values, equality, privacy, responsibility, and liberty*. The answers to these questions map out the potential ethical tensions of a program or an intervention, which can be applied to assess the ethical tensions in the HD4HL project policy interventions.

Although Ten Have et al.'s framework primarily addresses interventions aimed at preventing obesity, it is also useful for identifying and analysing potential ethical tension within the food-based policy package aimed at promoting healthy lifestyles and preventing malnutrition such obesity and underweight.

4.1.1 Ethical Tension Associated with Food-related Fiscal Policy

Food-related fiscal policy intervention entails using financial mechanisms, such as taxes and subsidies, to affect food purchases, thereby taxing unhealthy foods (e.g., those high in sugar, salt, and saturated fats) and providing subsidies or price reductions on healthier options (e.g., fruits, vegetables, and whole grains). Fiscal policy aims to make nourishing foods more affordable and discourage people from consuming unhealthy items.

“Food-related fiscal policies aim to align with health outcomes by helping to make healthy eating choices easier and cheaper. The instruments of government for this purpose are taxes and subsidies (e.g. taxing unhealthy foods and availing subsidies on healthy foods), or income transfers (cash, vouchers, or in-kind)” (Technical Report #1 of the HD4HL Project., 2022a, p.3).

How does the food-related fiscal policy affect physical health?

The impact of an intervention on physical health should be evaluated based on three major factors: whether there is evidence of its effectiveness, whether it is cost-effective, and whether it has any unanticipated negative health consequences (ten Have et al., 2012).

Implementing food-related fiscal policy can have a positive impact on the population's physical health. In this regard, by making nutritious foods more affordable and accessible, this approach aims to reduce consumption of high-sugar, high-fat, and high-

sodium foods associated with obesity, diabetes, cardiovascular disease, and other chronic health issues. Over time, modifying dietary patterns to include more fruits, vegetables, and whole grains can minimize these health risks, resulting in better overall physical health. Investigations suggest that fiscal policies can cause modest yet significant shifts in dietary behaviour, especially when combined with public education initiatives to raise awareness about the health concerns of specific foods.

Evidence demonstrates that a tax on sugary drinks that raises prices by 20% can lead to a significant reduction in consumption, hence averting obesity and diabetes. (Powell, et al., 2013; Itria, et al. ,2021)

Meanwhile, tax revenue from these fiscal measures can be reinvested in public health programs, providing a long-term funding source for additional health promotion, and cutting healthcare costs by reducing the incidence of diet-related disorders.

However, employing these fiscal policies can create ethical concerns. Consumers may opt for untaxed, yet still unhealthy, alternatives, such as cheap, calorie-dense foods that are not subject to the tax because they are not sold in typical retail shops. Additionally, high taxes on unhealthy foods could send a mixed or misleading message that undermines the value of the fiscal policies being implemented. Many consumers in Ghana, who have experienced inflation multiple times, might blame the soaring prices of these foods on inflation. Also, some adolescents and young adults may view the higher-priced foods as a sign of better quality, assuming they are made with premium ingredients, and may even regard them as "elite" due to their cost. This could encourage the continued consumption of unhealthy, high-fat, and high-sugar foods despite their expensive prices.

How does the food-related fiscal policy affect psychosocial well-being?

Food-related fiscal policies that improve physical health can also enhance mental health, boost self-esteem, and contribute to overall well-being. However, despite these benefits, such policies may also create fear and anxiety among consumers, particularly in communities where processed and unhealthy foods are the norm. In many urban areas, where unhealthy food options are more accessible and culturally ingrained, choosing healthier foods can make individuals feel out of place or socially marginalized. For example, individuals who choose healthier foods may fear judgment or feel alienated, especially if their choices stand out from those of their peers. Also, in social or family settings, the fear of being scrutinized or labelled as "better" or "healthier" can lead to embarrassment or a lack of social acceptance, Steinmetz et al, (2022). This issue can be seen in how vegetarians and others on alternative diets are frequently stigmatized. As highlighted in the article "To stand out or to conform: Stereotypes and meta-stereotypes as barriers in the transition to sustainable diets" by Wehbe et al. (2024), study participants shared sentiments that reflect these social pressures:

- *“People can sometimes have a negative opinion about vegans, which could put some people off further lowering their consumption.”*

- *“Also, my friends often bring up financial reasons when I try to introduce a vegetarian diet for them; they say they’re too poor to become vegetarians and maintain a healthy diet.”*

- *“I think people think vegans are a bit weird and judge them a lot. Something like that doesn't sound easy to go through when trying to change a diet. It may make them give it up.”*

Social stigma associated with food choices might make people feel uncomfortable or helpless, undercutting the policy's intended effects. As a result, while fiscal policy seeks to enhance physical health, its psychosocial influence may be more complicated, with unintended emotional consequences that must be carefully considered.

How does the food-related fiscal policy affect equality?

Food-related fiscal policies, when designed effectively, can help reduce health disparities between higher- and lower-income groups and vulnerable Groups (children, elderly, etc). Lower-income households are more likely to rely on cheaper, calorie-dense, and nutrient-poor foods, and they often have limited access to healthier food options (Ohri-Vachaspati, et al., 2019). Fiscal policies encourage improved eating habits by making nutritious food more affordable and accessible through the subsidization of healthy foods. Furthermore, a charge on unhealthy foods can deter excessive use of goods that disproportionately cause health issues in these populations.

Wealthier populations have greater access to nutritious foods and the means to keep up with a healthy diet (Darmon & Drewnowski, 2008). Since they can already afford these options, they could not directly benefit from price reductions for nutritious meals. Additionally, since they might not buy unhealthy foods as frequently, they are less likely to be swayed by taxes on them. As a result, compared to lower-income groups, wealthier groups may see less of an immediate adjustment in their purchase patterns.

Food-related fiscal policies may have substantial benefits for vulnerable populations, including the elderly and children. These policies can enhance dietary choices by making healthier food options more available and inexpensive, especially in government-subsidized settings like public cafeterias or schools. For populations that are more

vulnerable to diet-related health problems, this may result in improved long-term health results.

However, fiscal policies run the danger of making inequality worse if they are not created with equity in mind. Low-income people may not completely benefit from the program, for example, if the subsidy for healthy meals is insufficient to cover the higher costs in some locations (such as rural or food desert regions) or if healthier food options are not readily available in these areas. In this instance, the policy change may inadvertently lead to bias against specific groups or increase the disparity in health between various socioeconomic groups, Thow et al, (2014)

How does the food-related fiscal policy affect informed choice?

Food-related fiscal policies use financial incentives for food to affect consumer behaviour. By raising the cost of unhealthy foods and lowering the cost of healthier options, these policies can "nudge" people toward better eating habits and help them make decisions that will lead to better health outcomes. Furthermore, fiscal policy-related educational initiatives can raise public knowledge of the negative health effects of unhealthy eating patterns and the advantages of a balanced diet, enabling individuals to make better food choices, Powel et al, (2020), Thow et al, (2014).

However, while fiscal policies can make healthier foods more affordable, they do not automatically guarantee that individuals are fully aware of the range of healthy alternatives or how to incorporate them into their diets. For instance, people might not know how to prepare nutritious meals or may lack information on the specific nutritional benefits of different food items. This lack of knowledge can limit the effectiveness of fiscal policies, as individuals may still struggle to make informed dietary choices despite the financial incentives in place, Charlton et al, (2020).

Furthermore, if fiscal strategies place an undue emphasis on diet, they may unintentionally oversimplify the numerous factors that affect general health. People may overlook other important components of a healthy lifestyle, such as regular physical activity, abstaining from dangerous substances like alcohol and tobacco, and managing stress, if they believe that nutrition is the only factor that determines their well-being.

How does the food-related fiscal policy affect social and cultural values?

Food-related fiscal policies, such as taxes on sugary drinks and fatty foods, as well as subsidies for healthier meals, can influence what people consider "acceptable" or "normal" diets. In certain societies, food is more than just nourishment; it also plays a vital role in social events, family rituals, and cultural identification. Policies that push people toward certain types of foods or away from others may clash with established social practices, potentially creating tensions between traditional eating habits and new dietary norms.

According to Marcus (2013), coconut oil contains approximately 92% saturated fatty acids, palm kernel oil around 82%, and palm oil about 50%. In societies where high-fat ingredients, like these oils, are integral to culturally significant foods consumed during social events such as festivals and marriage ceremonies, the imposition of taxes on such foods could lead to resistance. This is because individuals may perceive these taxes as an infringement on their traditional food practices, potentially evoking feelings of loss or cultural disconnection. Such policies could inadvertently create tension between public health goals and the preservation of cultural heritage surrounding food. This is also relevant in communities where sugar sweetened beverages choice, such as Sobolo, Palm wine, Brukina, Asana, and Akpeteshie, are deeply intertwined with cultural traditions. Taxing or discouraging the consumption of these drinks can be perceived as an attack on cultural identity, potentially sparking strong resistance. Such measures may evoke a

sense of infringement on cultural practices, leading to feelings of alienation and a rejection of public health policies that are seen as disregarding cultural values.

How does the food-related fiscal policy affect privacy?

While food-related fiscal policies do not collect personal information directly from customers, government agencies or third-party groups may collect data to study the impact and success of these policies. This may contain aggregate data on food shopping habits, health consequences, and demographic changes in specific localities.

These assessments frequently depend on existing data sources, including national health surveys, retail purchasing data, and consumption statistics. For example, anonymised data from grocery stores or tax records on specific products could be used to analyse changes in purchase behaviours following policy adoption.

In certain circumstances, fiscal policies are supplemented by targeted health initiatives designed to educate specific groups (for example, low-income areas or at-risk populations). These programs may indirectly collect personal data for specialized outreach purposes, raising privacy concerns. For example, if a community health program focuses on those who are at a higher risk of obesity, it may include health screenings or questionnaires that collect personal information. Although this is done voluntarily and for public health reasons, anonymity is needed, and individuals should be informed about data usage and storage.

How does the food-related fiscal policy affect the attribution of responsibilities?

Food-related fiscal policies influencing health and food environments necessarily have an impact on how people, communities, and society share responsibility for healthy eating and well-being.

These policies, by changing the economic landscape surrounding food, reconfigure who is perceived to be responsible for making healthy food choices and who is responsible for assuring access to these options.

Food-related fiscal policies suppose that, if given the correct incentives, people will prioritize their health when making food decisions. Individuals who are financially incentivized to choose healthier diets may have a greater feeling of personal responsibility for choosing "good" choices.

When fiscal policies lessen the cost barrier to healthy foods, the underlying message is that people now have more access, and thus more responsibility, to make health-conscious decisions. However, this can be problematic if people face other barriers, such as a lack of nutrition knowledge, time constraints, or poor cooking abilities, which may limit their capacity to choose healthier choices even when offered incentives.

Fiscal policies increase governments' duty for establishing supporting settings for healthy living. This collective approach emphasizes society's role in facilitating healthy choices, rather than placing responsibility on individuals for poor health outcomes caused by an unsupportive environment.

Fiscal policies also impose indirect responsibility on the food business, which is urged to respond to variations in customer demand driven by price changes. When unhealthy items are taxed, producers may restructure their offerings to make them healthier and more desirable in a new market context. Similarly, incentives for healthy foods might encourage food producers and retailers to expand the availability and diversity of nutritional products.

However, the food industry operating within the demand and supply framework, may respond to subsidies by increasing the prices of healthy foods, taking advantage of the

higher demand and public dependency on these subsidized options. As a result, the intended affordability of healthier food choices could be compromised, leaving consumers still facing unaffordable prices despite the policy's subsidies. This could perpetuate profit-driven incentives rather than fostering a genuine commitment to public health

How does the food-related fiscal policy affect liberty?

Food and health-related fiscal policies have a multifaceted impact on individual and societal liberty, restraining and enabling many forms of freedoms. These policies, which use price increases to direct choices toward healthier options, may have an impact on individuals' ability to select freely based on their own preferences.

Fiscal policies that tax unhealthy foods or subsidize healthy ones aim to affect consumer behaviour by making some options more economically desirable than others. While this strategy does not completely prohibit people from purchasing unhealthy meals, it does influence the environment in which decisions are made. By changing costs, the policy creates a "nudge," encouraging consumers to choose healthier products but not prohibiting harmful ones.

Some people may perceive these nudges as a restriction on personal freedom, particularly if they believe the government is interfering with their private eating selections. People may feel pushed into making decisions that are more aligned with public health goals than with their personal preferences, which these unhealthy foods may be tastier and more attractive (Kunz et al., 2024).

4.1.2 Ethical Tension Associated with Labelling System Policy

The Labelling System is a policy initiative that aims to increase transparency and assist customers in making educated food choices. Clear and consistent labelling on packaged foods, such as front-of-package labels or nutrient content claims, enables customers to easily select healthier alternatives (Hawkes, et al., 2015; Cecchini & Warin, 2016). This policy includes mandated nutritional disclosure about calorie content, sugar levels, salt, and other principal elements.

How does the labelling system affect physical health?

According to research, clear, easily available labelling can inspire consumers to consume less sugar, salt, and fat. For example, traffic light labelling (in which red, yellow, and green indicate quantities of unhealthy nutrients) make it easier to identify healthier options immediately, typically encouraging consumers to select items with fewer red indicators (Packer, et al., 2021).

In Chile, a front-of-package warning label system for high-sugar, salt, and saturated fat items reduced calorie purchases by 23.8%, sodium by 36.7%, and sugar by 26.7%. (Taillie, et al., 2021).

Moreover, labelling systems are considered cost-effective compared to other public health interventions, as they are inexpensive to implement and reach a broad audience without ongoing operational costs.

While labelling systems are typically effective, their effects can vary depending on factors such as literacy levels, nutrition education, and socioeconomic position. Some customers may not fully grasp or prioritize the labels while making purchasing decisions. Furthermore, products bearing certain labels may produce a "health halo," in which customers believe them to be healthy, even if only specific characteristics (for example,

low fat) are better. This can lead to overeating or preferring processed foods over entire, unprocessed alternatives, thereby undermining the labelling system's goal. Another potential pitfall is that, over time, people may become accustomed to the labels and pay less attention to them, diminishing their usefulness in maintaining better habits.

How does the labelling system affect psychosocial well-being?

Clear labelling can give consumers a sense of empowerment, as they feel more capable of managing their own health through their food choices. This can support a positive mindset around self-care and healthy living. However, constant reminders about the nutritional quality of foods may create anxiety, especially for people who feel pressured to follow specific dietary guidelines. For example, individuals with a history of disordered eating may feel overwhelmed by labelling systems that categorize foods as "good" or "bad." Besides, labelling systems can encourage an excessive focus on calorie counting, nutrient tracking, and health metrics. While awareness can be beneficial, an overemphasis can lead some individuals toward an unhealthy obsession with dietary control, sometimes contributing to conditions such as orthorexia, where there is an unhealthy fixation on eating "pure" or "healthy" foods.

How does the labelling system affect equality?

Despite potential benefits, labelling can inadvertently widen health inequalities. Lower-income individuals may find it harder to act on the information provided by labels if healthier foods remain unaffordable. Additionally, people who struggle with nutrition literacy may be less equipped to interpret labels, limiting their usefulness. If labels primarily benefit those who already have the resources to make healthier choices, they risk reinforcing existing disparities.

Some people, particularly those from underprivileged backgrounds, may lack the health literacy required to comprehend labelling systems. This can constitute an unintentional barrier to effective label use, which is not always the case for higher-income groups who have greater access to nutrition information and resources.

How does the labelling system affect informed choice?

Labelling systems, especially those with clear indicators (like “high in sugar” warnings, front-of-package labels, or color-coded systems), can help consumers make quicker and more informed choices. Labels make it simple for people to compare products and make selections that are in line with their health goals by emphasizing essential nutritional facts.

However, nutritional labels can sometimes be misleading, especially when multiple labelling systems and marketing terms are used. For example, phrases like “zero sugar” might imply that a product is inherently healthier or wholesome, even if it still contains other potentially unhealthy components, such as carbonation and artificial additives -as is the case with drinks like Coca-Cola Zero Sugar. This selective emphasis on “zero sugar” can create an incomplete picture of the product’s health impact, potentially leading consumers to overlook other factors that might be harmful if consumed regularly.

Also, Consumers may sometimes feel overwhelmed or confused by the information presented on nutritional labels, which can lead to frustration or even disregard for labelling altogether. For instance, the abundance of conflicting nutritional advice or the presence of multiple labelling systems can make it challenging for people to understand what constitutes a healthy choice. A product might display moderate sugar content, but also include warnings about the risks of excessive consumption, creating mixed messages that are difficult to interpret. This complexity can hinder consumers’ ability to make well-

informed decisions, as they may struggle to navigate and trust the array of information provided.

How does the labelling system affect social and cultural values?

Food labelling systems, while useful for public health, can produce subtle pressures that undermine the social and cultural value of food choice. Labelling systems are often based on Western nutritional science, which may not fully account for or appreciate the health benefits of diverse food practices from other cultures.

With an increased focus on labelled “healthy” options, people may move away from traditional diets toward more “standardized” or “modern” foods that meet labelling criteria. For instance, the Ghanaian foods that are traditionally home prepared from locally sourced farm products may not be adequately represented within the labelling system, which primarily focuses on packaged and processed foods. Over time, this could lead to a shift in consumer preferences, with individuals increasingly opting for packaged foods that are labelled, potentially even when they are less nutritious than their homemade counterparts. This shift may undermine the local food environment by diminishing the demand for organic, locally grown foods, while reinforcing a reliance on packaged products. As a result, the labelling system, while promoting awareness of food quality in some sectors, could unintentionally erode traditional food practices and negatively impact local food systems.

How does the labelling system affect privacy?

Food labelling systems have no direct impact on individual privacy because they focus on giving product-specific information to consumers rather than collecting personal data. However, there are a few secondary privacy problems associated to the overall

development and potential use of labelling systems, especially when they are part of a wider health project.

In some cases, digital solutions, such as apps or online platforms (MyNet Diary Calorie Counter, MyPlate Calorie Counter, PlateJoy Lifesum: Healthy Eating), may leverage labelling data to deliver personalised health advice. If these platforms collect personal dietary information or purchase history to customize dietary advice, privacy concerns may arise. Confidentiality and data protection are vital in this case since third parties may store, exchange, or analyse the user's information.

How does the labelling system affect the attribution of responsibilities?

A key responsibility is placed on food manufacturers and the food industry to accurately label products and ensure that the information provided is clear and truthful. By requiring food manufacturers to disclose ingredients, nutritional facts, and other relevant details, labelling systems hold the industry accountable for the products they sell. This is important for promoting transparency and helping consumers make informed choices.

While food labelling empowers individuals with knowledge, society as a whole share the responsibility of creating environments that promote healthy eating. Governments and policymakers must ensure that the availability of healthy food options is widespread, affordable, and accessible to all individuals, especially in underserved or low-income areas.

However, labels alone are insufficient if healthy foods are not widely available or if unhealthy goods dominate the market because of commercial entities' powerful marketing efforts such as 'buy-one, get-one free.'

How does the labelling system affect liberty?

When customers are given the necessary information to make better choices, they can choose how to approach their nutrition. Labels can emphasize healthier alternatives or provide more information about the potential risks of specific items, enhancing an individual's control over their food choices.

Labels, on the other hand, have the potential to "nudge" customers toward specific behaviours or dietary choices, thereby infringing on individual liberty if it results in subtle pressures to comply to certain eating habits. For example, if labels prominently display "unhealthy" or "high calorie" labels, some consumers may feel compelled to avoid specific items, even if they believe those foods are detrimental in moderation. This could gently influence individual preferences and choices, limiting the freedom to make dietary decisions based entirely on personal taste and situation.

4.1.3 Ethical Tension Associated with Public Food Procurement/Food Provision Policy

Public food procurement and provision policies are intended to improve physical health by assuring access to nutritious foods at institutions such as schools, hospitals, and government offices.

“Public settings, such as schools, childcare centres, nursing homes, hospitals, correctional facilities (eg. prisons) and all other canteens of public institutions, can play a key role in ensuring people are provided with healthy food and helping prevent millions of annual deaths caused by unhealthy diets. Healthy public food procurement and service policies set nutrition criteria for food served and sold in public settings. Policies can cover the entire process of purchase, provision, distribution,

preparation, service, and sale of food to ensure each step meets healthy criteria” (Technical Report #1 of the HD4HL Project., 2022b, p. 3).

How does the public food procurement/food provision affect physical health?

Research shows that public food procurement strategies in schools, businesses, and other institutions boost consumption of nutritious foods such as fruits and vegetables (Durão et al., 2024). Furthermore, policies requiring healthier options in public spaces, such as parks and leisure centres, have been linked to improved nutritional habits in the general population. This method has also showed potential for improving public health by lowering overall calorie intake and boosting availability to critical nutrients (Dixon et al., 2021).

Public food procurement strategies can reduce healthcare expenditures eventually by encouraging healthier eating habits and decreasing the prevalence of diet-related disorders. According to research, increasing nutrition in schools can lower healthcare expenditures associated with juvenile obesity, with the potential for long-term savings as healthier dietary patterns persist into adulthood (Graziose et al., 2017).

However, if public food procurement strategies are overly focused on certain health goals, such as calorie reduction or ingredient restriction, they may accidentally lead to meals deficient in diversity or key nutrients. Low-sodium or low-fat alternatives, for example, may fall short of meeting the nutritional needs of youngsters, the elderly, or others with special health requirements. Furthermore, persons with specific dietary requirements may be disregarded in food procurement programs that prioritize providing generalist meal alternatives for the entire community. While such programs strive to enhance general dietary quality, they may fail to address the nutritional needs of those who have specific dietary restrictions, such as those with allergies, diabetes, or other

health concerns. This lack of customization may limit these groups' access to appropriate foods, jeopardizing the policy's inclusivity and efficacy in fulfilling the different requirements of the entire community.

How does the public food procurement/food provision affect psychosocial well-being?

When healthier food options are established in group contexts such as schools or workplaces, people can experience a sense of shared purpose. Eating together in environments that promote nutritious foods can improve social cohesion, establish good social norms surrounding healthy living, and alleviate the pressure that people may feel if they desire to make healthier choices in social contexts where harmful foods are commonly consumed.

In contrast, low-income people may feel uneasy about food policies that encourage unfamiliar foods. Individuals may feel alienated or resentful if healthier solutions are positioned as "superior" but come at a higher cost or demand preparation skills that they do not have. This may cause emotions of inadequacy or frustration, especially if they are unable to completely engage in better eating owing to budgetary constraints or a lack of resources.

Furthermore, school-based food policies that promote healthy eating may contribute to stigmatization of children, particularly those who are overweight. Students who feel singled out by programs that promote healthy eating may endure anxiety, social isolation, or peer bullying if they are perceived as requiring "special" help for healthier eating. Stigmatization can have long-term consequences for young people's self-esteem, mental health, and social relationships.

How does the public food procurement/food provision affect equality?

Obesity and accompanying health disorders are more common in certain populations, such as low-income people, ethnic minorities, and those who live in cities or are food insecure. Food procurement strategies that bring healthier meals into schools, businesses, and community spaces can be especially useful for these high-risk populations because they increase access to healthy foods that might otherwise be unavailable or prohibitively expensive. This method is vital for those who may not have access to better meals outside of these programs, hence promoting weight management and lowering the prevalence of diet-related diseases.

However, policies that require modifications in food procurement may mistakenly target specific demographics, resulting in the inclusion of certain meals over others based on population characteristics rather than individual preference. For example, if certain foods are more widely given or prohibited in areas with greater obesity rates, this method may be regarded as discriminatory because it targets specific communities or populations for restriction. Although such policies are designed to address health disparities, they run the risk of reinforcing stereotypes and stigmatizing specific populations, leading to feelings of unfairness and inequity in how food choices and dietary treatments are applied across demographic areas.

How does the public food procurement/food provision affect informed choice?

Public food procurement rules that normalize access to healthier foods can promote awareness and encourage people to think about the health consequences of their decisions. Individuals with limited experience to nutritional education may benefit from such policies, which provide opportunity to learn about healthy eating in accessible ways.

In contrast, information offered through food procurement regulations may ignore individual dietary choices, leading to a one-size-fits-all approach.

In certain circumstances, the messaging surrounding healthy foods may be imprecise or generic, leading to confusion. For example, a cafeteria may label myriad items as "heart-healthy" without describing what that term means or how it relates to an individual's unique health goals. Uncertain or wide labels may not effectively express the benefits, leaving people unsure about their options.

How does the public food procurement/food provision affect social and cultural values?

Public food provision regulations in schools, hospitals, and workplaces can alter the dynamics of communal meals, in which people assemble to share food that reflects their values, tastes, and cultural traditions. Standardized meal alternatives may make it difficult for people to share food that reflects their cultural identity, thus leading to a loss of community and shared experience at meals. For example, several traditional cuisines that are staples in many cultures may fail to meet established health criteria, resulting in their removal from menus. This may alienate those whose traditional meals are not represented, reducing the program's effectiveness in improving health among all groups.

How does the public food procurement/food provision affect privacy?

Public food procurement rules do not typically need personal information from individual consumers because its major objective is to provide healthier food options in settings such as schools, businesses, hospitals, and public cafeterias. This strategy typically does not entail tracking people's eating habits; therefore, privacy is less directly impacted.

Institutions, such as schools or government-run facilities, may gather aggregate data to assess the efficiency of food providing policies.

To measure program involvement, schools may track how many students choose healthy meal selections. While this data is normally anonymized and aggregated, some privacy concerns may arise if individual demographic or behavioural patterns are investigated.

How does the public food procurement/food provision affect the attribution of responsibilities?

Individuals are relieved of the whole burden of selecting healthful meals in particular settings, such as schools and workplaces, where they may have few options.

Schools, hospitals, and businesses are responsible for enacting food purchase procedures. This enables these groups to take a proactive role in influencing their members' health behaviours, which can have a larger impact on community health. For example, schools that provide balanced meals instruct children about healthy eating from an early age, developing habits that may extend beyond the school setting.

Public food service providers and vendors who collaborate with these institutions must also adhere to the health requirements outlined in procurement regulations. This includes cooking meals that adhere to nutritional criteria, which shifts responsibility lower down the food supply chain. Compliance with these requirements is required to guarantee that policy objectives are achieved.

One potential disadvantage of procurement rules is that they may lead to an over-reliance on institutions to supply healthy options, reducing individuals' drive to make healthy choices in other situations. For example, if people are accustomed to receiving nutritious meals at work, they may be less proactive in organizing healthy meals outside of that context.

How does the public food procurement/food provision affect liberty?

Public food procurement rules promote liberty by making it easier for people to choose healthful foods without having to travel out of their way or pay more money. Many people find this freeing since it makes health-related choices more accessible and feasible.

However, in contexts where food procurement restrictions are tightly implemented, people may discover that some familiar or culturally important foods are unavailable. For example, rules that restrict access to processed foods or sugary beverages in schools or workplaces may feel restricting to those who favour or rely on these options.

The strategy may put subtle pressure on individuals to align their eating habits with greater health goals, which may seem confining, especially if people believe their own preferences are being neglected. Individuals who value high-calorie traditional meals, for example, may feel confined in their ability to eat freely if those items are discouraged or unavailable owing to policy requirements.

4.1.4 Ethical Tension Associated with Market Regulations Policy

Market regulation policies aim to enhance physical health by restricting how food products are marketed, with a focus on products rich in sugar, salt, and harmful fats. These rules may include limits on advertising unhealthy meals, particularly to minors, as well as guidelines for product placement, portion sizes, and nutritional claims.



How does the market regulations policy affect physical health?

Market regulations reduce the appeal of unhealthy foods, particularly among susceptible populations such as children, who are heavily impacted by advertising. These rules can assist reduce consumption of sugary snacks or fast food by limiting exposure to targeted advertisements, lowering the incidence of obesity, diabetes, and heart disease.

Some market laws encourage healthier options by making them more prominent. Policies that encourage the advertising of fruits, vegetables, and other nutritious foods, for example, create a balanced representation of food options and can help people adopt healthier eating habits.

Marketing restrictions are effective in altering consumer behaviour. For instance, studies in countries with strict food marketing policies, such as the United Kingdom and Chile, have shown a reduction in children's exposure to unhealthy food ads and a subsequent decrease in unhealthy food consumption (Taillie, et al., 2019; Dillman Carpentier et al., 2020)

Market rules are frequently regarded as a cost-effective intervention since they target behaviour modification without needing significant governmental investment. Preventing obesity and related disorders through regulation lessens the economic load on healthcare systems, as the long-term benefits from fewer incidences of chronic diseases such as diabetes and heart disease can outweigh the initial expenses of implementing these policies.

However, if restrictions are extremely tight, there is a risk of limiting consumer choices, which may unintentionally result in a lack of nutritional variety. For example, if promotion of specific foods is too limited without providing alternatives, individuals may

be left with limited options that do not meet all nutritional demands, potentially impacting overall diet quality. Additionally, there is a possibility that food firms would react to the laws by shifting their marketing activities to unregulated platforms or channels, such as social media influencers or online content, where regulations may be less stringent. For instance, social media influencers and content creators on platforms like TikTok or in movies often promote products by consuming them on-screen or mentioning them casually in their content. This subtle form of product placement serves as a powerful, latent advertising method, drawing the attention of their audiences to these items. When influencers or actors promote unhealthy foods in this way, it can normalize or even glamorize consumption of these products, especially among impressionable viewers, indirectly encouraging unhealthy dietary choices without overtly appearing as an advertisement.

How does the market regulations policy affect psychosocial well-being?

Market restrictions that reduce exposure to unhealthy food advertising can empower individuals to choose healthier food choices without the stress of constant marketing. This can contribute to a sense of control and well-being, especially when people feel more confident in their dietary choices and are not persuaded by targeted advertising. Consumers may feel more confident in their capacity to make health-conscious decisions and may gain self-esteem because of their attempts to live a better lifestyle.

One of the unintentional negative psychosocial consequences of market regulatory measures is the possible stigmatization of overweight or obese people. By emphasizing the marketing and consumption of unhealthy foods as the source of poor health, there is a risk that people who are battling with weight issues would be ignored or blamed for their situation.

For example, if advertisements use images of obese people alongside cautions about bad diets, this strategy may unintentionally stigmatize those who eat these foods. Those who see themselves reflected in these images may feel judged or socially excluded. Self-blame can lead to psychological problems, such as anxiety, sadness, and disordered eating.

How does the market regulations policy affect equality?

Market regulatory laws, such as curbs on the marketing of unhealthy foods, can serve to alleviate the burden of unhealthy eating in these high-risk populations. Limiting the marketing of sugary snacks or fast food to children in low-income neighbourhoods, for example, could minimize their exposure to unhealthy food options while encouraging healthier eating habits. In locations where availability to healthy meals is limited, these measures may spur a larger push for better alternatives by making them more visible or accessible.

Furthermore, rules that make unhealthy meals less tempting, such as clearer labelling or bans on unhealthy food advertisements, can benefit groups that are more vulnerable to marketing's persuasive power, such as children and low-income families. This could help reduce obesity rates in high-risk populations, thereby narrowing health disparities over time.

However, if the policies do not address structural concerns like poverty and food insecurity, they may worsen health disparities. For example, unless enough support is provided to make healthy food more affordable or accessible to low-income families, these policies may fail to provide the desired advantages for all populations. Furthermore, if market regulations disproportionately harm low-income groups due to a lack of healthy alternatives, they may exacerbate existing imbalances.

How does the market regulations policy affect informed choice?

Market laws that prohibit misleading or deceptive marketing methods, particularly those aimed at vulnerable populations such as children or low-income groups, can also help people make educated decisions. These policies, by limiting the number of unhealthy products marketed, can lessen the temptation or effect of marketing that pushes people toward poor dietary habits. Regulations that limit junk food promotion during children's programming or on social media platforms, for example, can assist children and their parents in making healthier decisions.

Despite this, there is concern regarding the possibility of overstatement in the messaging utilized in marketing rules. For example, items labelled as "natural" or "organic" may be advertised as healthier alternatives despite having high calorie counts or unhealthy additives. If market regulations do not properly monitor such claims, they may induce consumers to make judgments based on subjective or ambiguous notions of "healthy." This may impede informed decision-making by providing false assurances about the health benefits of specific products. Market laws may potentially fail to promote informed decisions if they are not combined with proper public education initiatives. Labelling a product or prohibiting promotion is insufficient to ensure that consumers completely understand the facts. Many people may require additional direction on how to read nutritional labels, what the health concerns of specific components are, and how to adopt better foods into their everyday lives. Consumers may struggle to make educated decisions in the absence of associated educational programs, even if the information is technically available.

How does the market regulations policy affect social and cultural values?

While these regulations are primarily intended to enhance public health, they can also have an impact on how food is viewed, consumed, and valued in various communities and cultural situations.

If market rules force people to switch from traditional, culturally meaningful foods to more standardized, "healthy" alternatives, this could be interpreted as a sort of cultural homogenization. Regulations that strongly promote low-fat or plant-based diets, for instance, may collide with traditional dietary habits that place a premium on animal products or other regional mainstays. As a result, people may believe that their cultural dietary habits are being devalued or weakened in favour of a "globalized" definition of healthy eating.

How does the market regulations policy affect privacy?

Because market regulatory laws rarely directly collect personal information from consumers, confidentiality problems are low. However, when personal data is obtained (for example, through surveys, loyalty programs, or online tracking), confidentiality may be compromised. If personal data (such as purchasing patterns or demographic information) is acquired, sufficient protections must be in place to ensure that it is kept secure and used only for its intended purpose.

How does the market regulations policy affect the attribution of responsibilities?

Market rules may impose some responsibility on individuals to adopt healthier choices as healthier options become more accessible or appealing. Individuals may not feel empowered to make educated decisions if the policy simply provides limited options or fails to effectively modify the market landscape. In this context, individuals' accountability may be perceived as unjust if societal and environmental forces (e.g.,

availability of unhealthy options, marketing pressures) continue to undercut their capacity to choose healthier items.

The fairness of attribution of responsibility is determined by how well the policy takes into consideration the numerous elements that influence health outcomes. If market laws inflict an undue burden on individuals without addressing the underlying reasons of poor eating habits (for example, an abundance of inexpensive, unhealthy food options or aggressive marketing), the policy may be criticized for shifting too much responsibility onto individuals. Similarly, if firms and retailers are not held accountable for their roles in creating unhealthy food environments, the legislation may fail to address the underlying causes of unhealthy eating.

How does the market regulations policy affect liberty?

The Market Regulations Policy can limit and enable liberty, depending on how it is implemented and perceived by various parties.

Governments enforcing severe market controls may be perceived as paternalistic, leading to debates about state overreach. People may believe that the state is overstepping its borders by mandating personal lifestyle choices, such as food consumption.

4.2 Categorization of ethical tensions identified in the HD4HL policy bundle

During these ethical discussions, multiple ethical tensions emerge, both unique to each individual policy and shared by the entire food policy package.

4.2.1 Unique Ethical Tensions in the Food Policy Bundle

In Fiscal Policy, several ethical tensions arise. One tension is between *Economic Impact vs Equality*, as financial measures such as taxes and subsidies disproportionately impact lower-income groups, which conflicts with the aim of making healthy foods more

accessible. Another issue is *Cultural Identity vs. Public Health*, where imposing taxes on culturally significant but unhealthy foods could be seen as an infringement on traditional practices. Lastly, *Consumer Autonomy vs. Nudge* presents a concern, as manipulating prices to influence consumer behaviour can challenge individual autonomy, making people feel nudged rather than freely choosing.

In the Labelling System, several ethical tensions arise. One tension is between Transparency and Anxiety, as providing nutritional information can empower consumers but may also cause stress, particularly among those sensitive to dietary restrictions. Another issue is *Equality in Access to Information*, where lower literacy levels or a lack of nutritional knowledge can prevent some groups from benefiting from labelling systems. Lastly, *Choice vs. Misleading Marketing* presents a concern, as labels may lead consumers to trust products that highlight specific health claims while potentially ignoring other unhealthy ingredients.

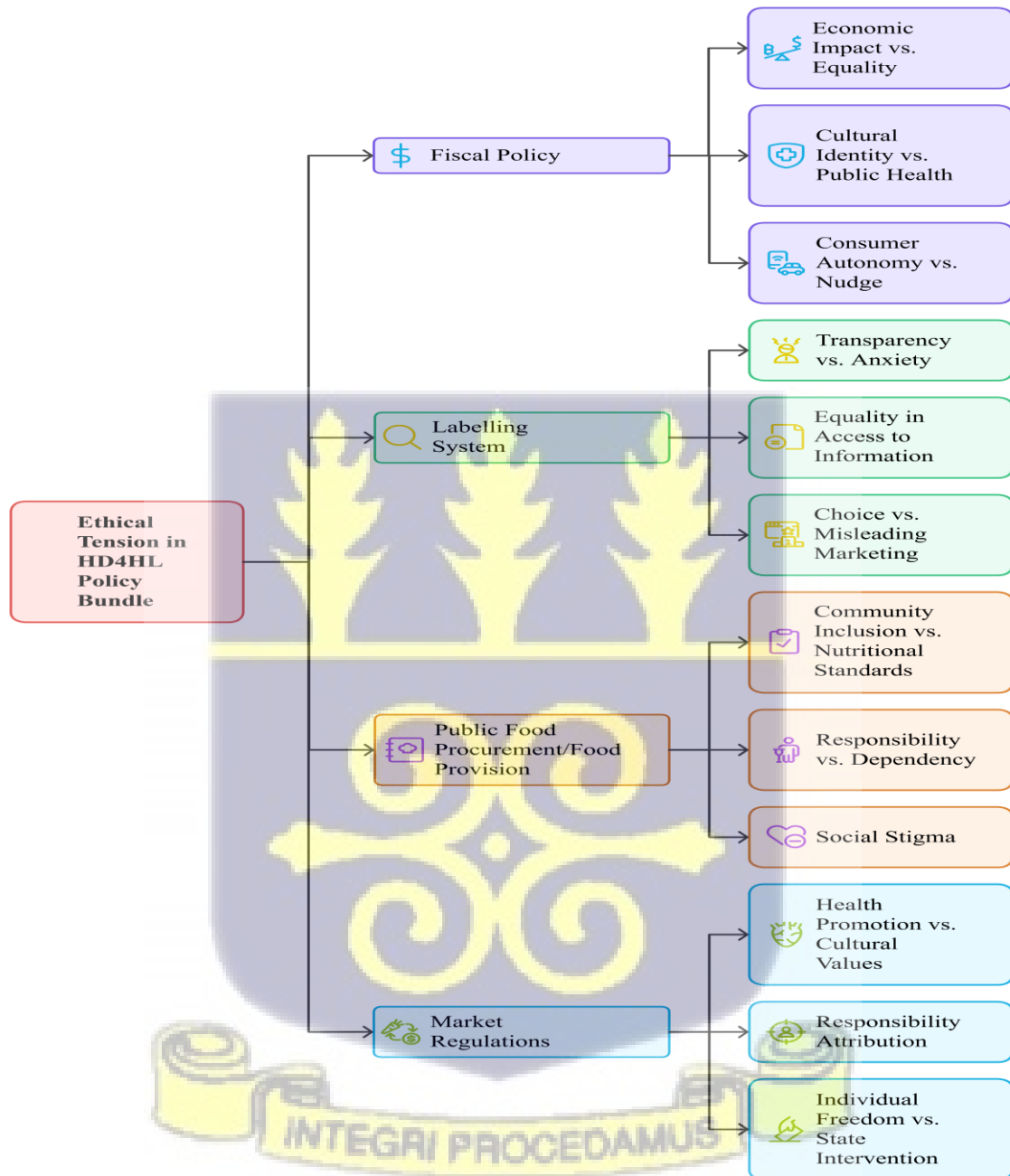
In Public Food Procurement/Food Provision, several ethical tensions arise. One tension is between *Community Inclusion and Nutritional Standards*, as standardized menus in schools or public institutions may exclude culturally specific foods or personalized nutrition. Another issue is *Responsibility vs. Dependency*, where relying on institutions for healthy food could reduce individual responsibility for making dietary choices outside these environments. Lastly, *social stigma* is a concern, as school-based food policies promoting healthy eating may contribute to the stigmatization of children, especially those who are overweight, by singling them out in healthy eating programs.

In Market Regulations, several ethical tensions arise. One tension is between *Health Promotion and Cultural Values*, as restricting advertisements for culturally significant but unhealthy foods could create friction by challenging cultural norms. Another issue is *Corporate Responsibility vs. Consumer Accountability*, where market regulations may

hold companies accountable for marketing unhealthy products, but they can also place responsibility on consumers for their food choices. Lastly, *Individual Freedom vs. State Intervention* presents a concern, as strict advertising restrictions may be perceived as intrusive, limiting consumer choice by reducing available options.



Figure 2 Unique Ethical Tensions and the Ethical Values They Challenge



4.2.2 Shared Ethical Tensions across the Food Policy Bundle

The food policy package shared ethical tensions such as *equality and accessibility*, which strive to promote health equity but confront obstacles in providing equal access to better options. Tensions develop between the programs' goals to aid vulnerable groups and the possibility of introducing new injustices because of issues such as affordability, accessibility, or cultural distance.

Another issue is *Informed Choice vs. Perceived Autonomy*, in which policies that provide information through labelling, fiscal incentives, and controlled marketing are meant to encourage informed choices but may appear coercive. These policies may mistakenly influence people toward certain choices, undermining their feeling of autonomy.

A third tension is *Cultural Sensitivity vs. Standardized Health Goals*, which arises when rules like as labelling, fiscal policy, and public procurement clash with local and traditional dietary practices. While boosting health, these regulations may unintentionally harm traditional food practices, causing a conflict between public health objectives and respect for cultural variety.

Finally, *Privacy Concerns Regarding Policy Monitoring* is an issue. Certain policies require monitoring to determine effectiveness, which may indirectly lead to data collection on consumer behaviour (e.g., purchase patterns). Despite being anonymised, this raises questions regarding customer privacy and informed permission in data use.

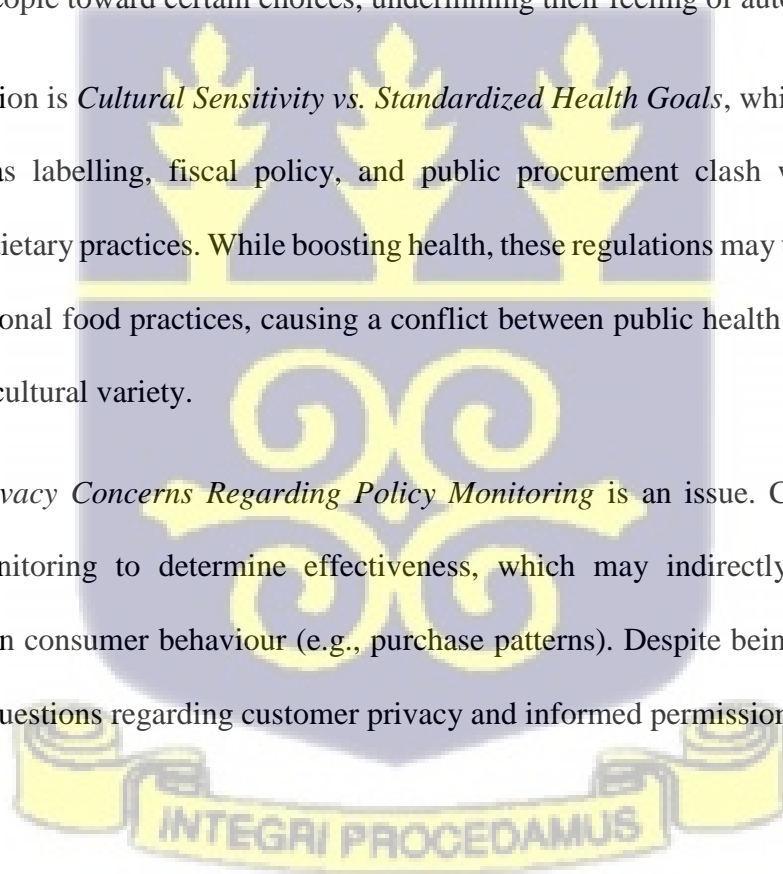
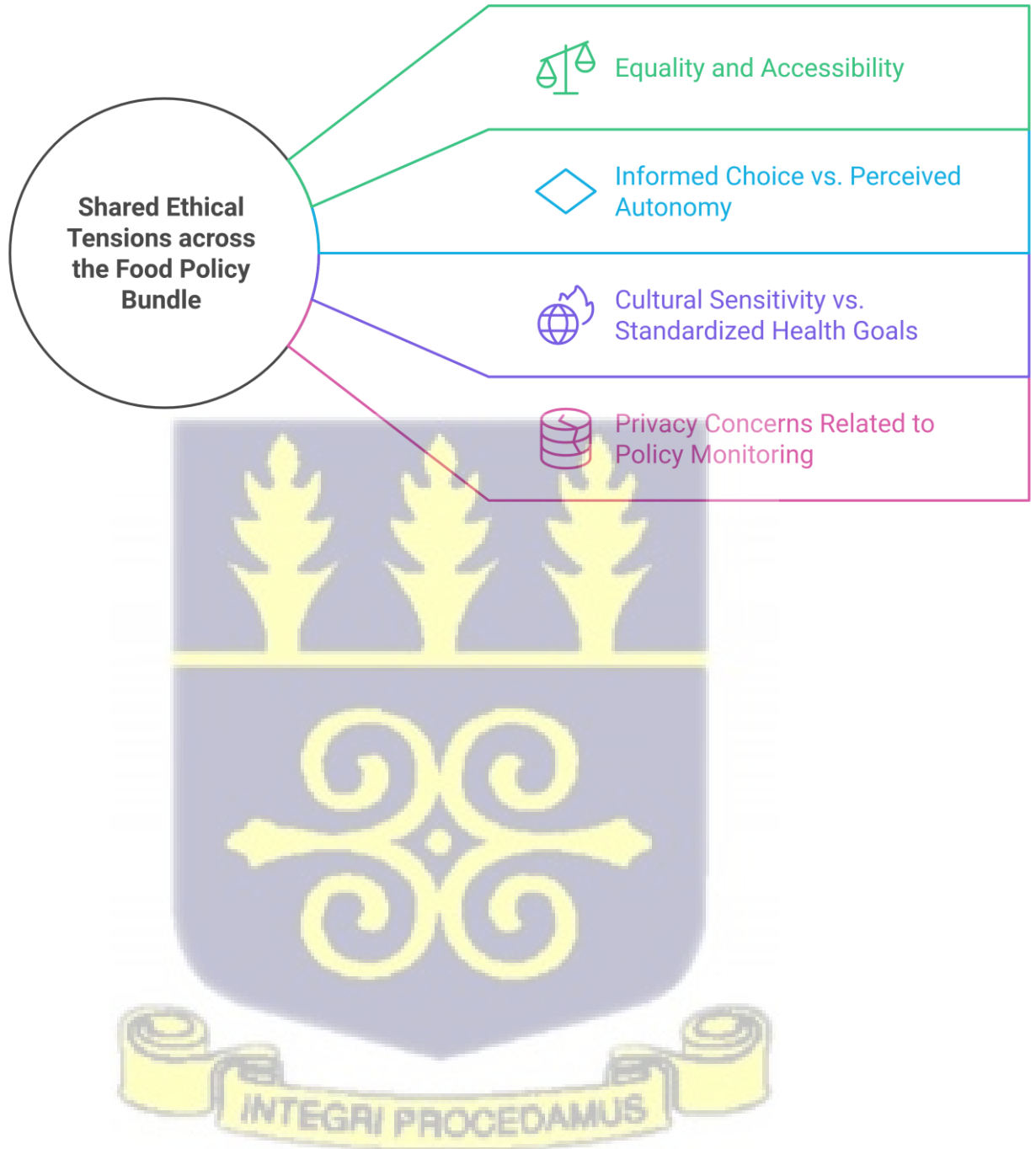


Figure 3 Shared ethical tensions across the food policy bundle



CHAPTER FIVE

DISCUSSION

5.0 Introduction

This chapter provides an ethical assessment of the identified ethical tensions in the HD4HL policy bundle, evaluating the policy's effectiveness, weighing it against the ethical scale, discussing the policy's need for revision and limitation of analysis.

5.1 Main ethical tensions of the food environment policy bundle in HD4HL project

The ethical tensions in the HD4HL food environment policy bundle emerge from the influence of interventions such as fiscal policies, labelling systems, public food procurement, and market regulation.

Fiscal policies, such as taxes on high-fat or sugary foods, may be interpreted as an infringement on cultural norms, especially in areas where such items are central to social and cultural events. Communities may see these measures as damaging their cultural identity, particularly if basics such as coconut oil, palm oil or traditional beverages are taxed.

Moreover, policies aimed at high-risk populations may unintentionally reinforce prejudices. Targeted procurement practices may appear biased if they selectively promote specific foods in regions with higher obesity incidence. Furthermore, fiscal policies may worsen inequality if better food options remain inaccessible or pricey, particularly in rural or low-income communities.

Nevertheless, public health campaigns and fiscal incentives pose questions regarding data collecting and individual accountability. When targeted outreach efforts indirectly collect personal information, privacy concerns may arise. Furthermore, food regulations

may transfer the notion of responsibility for making healthy choices from a collective social effort to an individual level, perhaps overlooking hurdles such as a lack of nutrition education or time constraints.

Lastly, policies that nudge people to adopt healthier dietary choices may be interpreted as limiting personal freedom. Fiscal and labelling systems seek to influence choices without imposing explicit limits, but some people may see this as government overreach, particularly if familiar foods become unaffordable or stigmatized.

5.2 Main Ethical Strengths of the food environment policy bundle in the HD4HL Project

Despite the ethical tensions listed above, the HD4HL policy bundle possesses some ethical characteristics that promote public health and informed decision. Labelling systems, for example, provide explicit nutritional information, allowing customers to make healthier choices. By making information widely accessible, these labels promote autonomy and assist individuals in aligning their diets with personal health goals.

Fiscal and public food procurement policies attempt to increase disadvantaged groups' access to healthful foods, hence reducing health inequities. Subsidizing nutritious foods and requiring healthy food procurement in schools and hospitals, for example, can help populations who do not have access to affordable, better options.

Individuals, institutions, and industries are all expected to share responsibility under these policies. For example, public procurement regulations hold schools and other organizations accountable for supplying nutritious food, relieving individuals of the responsibility of choosing healthy choices in situations where they have few options.

Market regulations and fiscal policies aim to reduce diet-related diseases, which improves long-term health results. These programs address chronic conditions such as obesity, diabetes, and heart disease by rewarding healthy food patterns and potentially lowering healthcare expenses and increasing wellbeing.

5.3 Adjustment of Policy Bundles

With some focused modifications, the HD4HL program can be adjusted to magnify its benefits while minimizing its drawbacks. By making these changes, the HD4HL intervention may leverage its ethical assets, such as empowerment, public health promotion, and communal accountability.

First, cultural sensitivity and community engagement will need to be improved, and the intervention could be tweaked to take into account local food patterns and social practices. Engaging communities in conversations and incorporating culturally relevant meals in healthier options will increase acceptability. Working with local leaders and health advocates can transform economic strategies into collaborative health efforts, boosting the program's cultural sensitivity.

Furthermore, improving access to healthy meals might readily address equity concerns by expanding subsidies to cover a broader range of nutritious foods, ensuring that better options are affordable and available in all regions, including rural and low-income ones. Implementing mobile markets or collaborating with local grocers to supply fresh produce to poor regions will assist to bridge the accessibility gap that fiscal policies might cause.

Also, safeguarding individual liberty while encouraging healthy choices is critical. Thus, labelling and fiscal policies might be positioned as instruments to help informed decision-making rather than coercive measures. Educational initiatives that explain the reasoning

behind rules and promote voluntary participation may minimize perceptions of government overreach. Furthermore, offering replacements or exemptions for traditional ethnic foods helps preserve individual choice while encouraging healthier diets overall.

5.4 Effectiveness of Policy Bundle

The HD4HL initiative has the potential to be beneficial in avoiding malnutrition, particularly as policies are carefully designed to target the many types of malnutrition, such as undernutrition, and overnutrition.

Public food procurement and market control policies, when implemented with an emphasis on price and accessibility, can assist combat undernutrition by making healthy food more readily available in public institutions such as schools and hospitals. Subsidies for critical foods and collaborations with local farmers to get fresh produce can help needy communities get the calories and nutrients they need (Hendriks et al., 2023).

Labelling measures and fiscal policies (such as taxes on sugary beverages and ultra-processed foods) are expected to be beneficial in lowering micronutrient deficiencies and overnutrition, especially in areas with high incidence of malnutrition and diet-related disorders. This strategy can be effective if combined with educational initiatives that raise consumer awareness of the hazards associated with high-calorie, low-nutrient foods (Hamulka, et al., 2018; Wang, et al., 2022).

To maintain their effectiveness, HD4HL interventions must be adaptable to changing dietary patterns and food systems. Regular assessments can uncover gaps and areas that require improvement, allowing adaptations to address developing types of malnutrition or shifts in consumer behaviour (Brouwer, et al., 2020; Bhagtani, et al., 2022).

5.5 Weighing with an Ethical Scale

The HD4HL intervention's strengths generally outweigh its weaknesses, especially in terms of its potential to improve public health. Its policy bundle, including fiscal measures, labelling, and public food procurement, provides a multifaceted approach to encourage healthier diets. However, balancing its strengths and weaknesses depends on addressing cultural, economic, and personal freedom concerns.

The intervention's key features include an emphasis on educated decision-making, assistance for vulnerable populations, and promotion of long-term public health benefits. These qualities address some of the underlying causes of malnutrition and food-related chronic diseases by expanding access to nutritious foods and instilling a shared sense of responsibility for public health. Weaknesses, such as potential violations of traditional dietary habits, perceived constraints on personal liberty, and potential economic burden on low-income communities, pose obstacles. However, with focused changes (for example, culturally relevant food choices, clear communication about the benefits of policy, and guaranteeing affordability), these flaws could be addressed. This adaptability enables the program to remain focused on its primary capabilities while reducing ethical concerns.

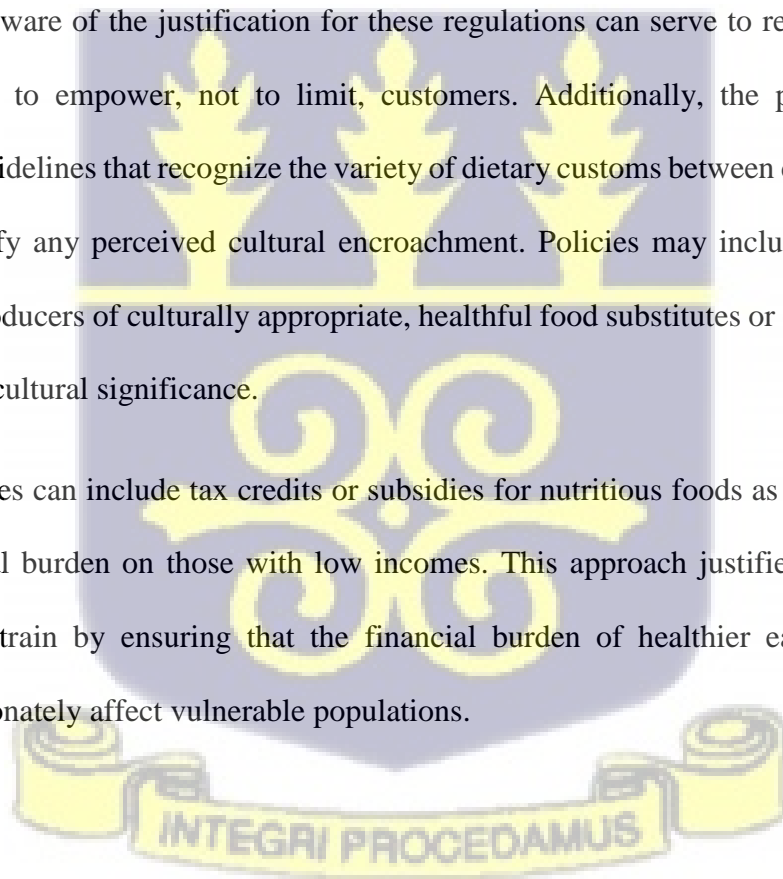
A voluntary and community-led strategy that focuses on education, awareness, and rewards could be a more ethically sound alternative. Local community-led nutrition education programs and volunteer initiatives may achieve similar goals of promoting healthy eating. However, without regulatory and economic components, the reach and effectiveness of such initiatives may be limited, particularly among high-risk or marginalized communities. Again, providing financial incentives or subsidies for healthy foods (rather than taxing unhealthy ones) may decrease concerns about individual freedom and economic pressure.

However, incentives alone may not provide the regulatory strength required to treat systemic malnutrition and diet-related disorders at scale.

Although these substitutes might raise less ethical questions, their efficacy and reach are constrained, especially when it comes to tackling pervasive problems like obesity and chronic illnesses. Some ethical flaws can be rationally justified, especially if these policies are presented as essential compromises for larger improvements in public health.

Fiscal measures are justified by the larger objective of lowering preventable health problems, which put a burden on public healthcare systems and have an impact on community well-being, even though some may view them as restricting choice. Making the public aware of the justification for these regulations can serve to reaffirm that the intention is to empower, not to limit, customers. Additionally, the program might establish guidelines that recognize the variety of dietary customs between cultures, which would justify any perceived cultural encroachment. Policies may include funding for regional producers of culturally appropriate, healthful food substitutes or exemptions for foods with cultural significance.

Also, policies can include tax credits or subsidies for nutritious foods as ways to lessen the financial burden on those with low incomes. This approach justifies the potential economic strain by ensuring that the financial burden of healthier eating does not disproportionately affect vulnerable populations.



5.6 Limitation of the analysis

This analysis faces several key limitations. First, the ethical framework applied, while robust, is primarily designed for obesity prevention and may not fully address the complexities of the broader food environment policy bundle aimed at malnutrition in Ghana. This potential limitation may affect the depth of insights regarding non-obesity-related aspects of malnutrition.

Second, the reliance on secondary data, including project reports and technical papers, limits the ability to evaluate the effectiveness of interventions in real-time. The findings may therefore be influenced by reporting biases and may not accurately capture the immediate impacts on various demographic groups, especially marginalized communities.

Third, cultural sensitivity and the diversity of social norms surrounding food practices present challenges to a comprehensive ethical assessment. Although efforts were made to account for cultural values, the analysis may not fully reflect the nuances of local food traditions or the implications of policy changes for social cohesion in affected communities.

Lastly, the interdisciplinary nature of food policy, which spans health, economics, and ethics, complicates a cohesive evaluation. Balancing these dimensions is challenging, and this analysis may not entirely encapsulate the intricate interactions between economic incentives, personal freedom, and public health outcomes, particularly over time. Future research could benefit from longitudinal studies and direct community engagement to enhance understanding of these interactions.

CHAPTER SIX

CONCLUSIONS

6.0 Summary

The study investigated ethical tensions in Ghana's NCD prevention efforts using the HD4HL project as a case study. The HD4HL intervention seeks to develop policies to improve food environments, promoting healthier dietary choices and reducing malnutrition. The HD4HL project, part of Ghana's broader health policy strategy, emphasizes policies that regulate food marketing, product labelling, public procurement, and fiscal measures like sugar-sweetened beverage taxes. However, these interventions raise ethical questions concerning individual rights, cultural practices, and equity in health choices.

The study used a normative content analysis, guided by an ethical framework proposed by Ten Have et al., which emphasizes eight ethical considerations, including physical and psychosocial health, equality, privacy, responsibility, liberty, and cultural values. The framework is applied to HD4HL's main documents, including the project's technical proposal and guiding principles, to evaluate ethical compliance and identify potential conflicts.

The study revealed ethical tensions in balancing public health goals with individual rights, cultural values, and socioeconomic factors. While the HD4HL project promotes health, it risks infringing on personal choice and cultural autonomy, especially in lower-income communities. In settings where high-calorie, processed foods are common due to affordability, policies may limit individuals' freedom without fully addressing the root causes of unhealthy diets, such as food deserts or economic barriers.

The study suggests that addressing NCD prevention ethically requires a balance between effective public health strategies and respect for individual autonomy, social equity, and cultural contexts.

6.1 Recommendation

To address the ethical gaps identified in the Healthier Diets for Healthy Lives (HD4HL) Project's NCD prevention interventions in Ghana, namely, insufficient integration of socio-cultural contexts, weak policy enforcement due to industry influence, and lack of systematic ethical frameworks, this study proposes actionable recommendations. These are organized into three categories for further research, for policy, and for practice, aligning with Objective 3 of providing step-by-step guidance to mitigate ethical tensions. Each recommendation identifies specific stakeholders responsible for implementation to ensure accountability and impact.

For Further Research

Investigate Socio-Cultural Impacts of Nutrition Policies.

To address the gap of insufficient integration of socio-cultural contexts, research should explore how dietary interventions affect diverse Ghanaian communities, particularly rural and ethnic minority groups, whose traditional food practices may conflict with standardized guidelines. Studies should employ qualitative methods, such as focus groups with community members, to assess cultural acceptability and barriers to adopting recommended diets.

Stakeholder: Academic institutions (e.g., University of Ghana School of Public Health) and research organizations

Action: Fund and conduct mixed-methods studies to map cultural dietary practices and their alignment with policies like the 2023 Food-Based Dietary Guidelines for Ghana, ensuring findings inform future policy revisions.

Evaluate Industry Influence on Policy Enforcement

To tackle weak enforcement due to industry lobbying, further research is needed to quantify the extent and mechanisms of food and beverage industry interference in NCD policy implementation, such as resistance to sugar-sweetened beverage (SSB) taxes (Fraser, 2021). This could involve case studies analyzing industry tactics and their impact on policy outcomes.

Stakeholder: Independent research bodies and civil society organizations (e.g., Ghana Public Health Association).

Action: Initiate longitudinal studies to monitor industry influence, publishing findings to advocate for stronger regulatory protections and transparency.

Develop Ethical Frameworks for Policy Design

To address the lack of systematic ethical frameworks, research should focus on creating and testing methodologies for embedding ethical principles (e.g., justice, autonomy) into NCD policy development, drawing on frameworks like Ubuntu for cultural relevance (Carter et al., 2011).

Stakeholder: Academic researchers and ethics boards (e.g., Noguchi Memorial Institute for Medical Research).

Action: Design pilot studies to test ethical decision-making tools in policy formulation, sharing results with policymakers to refine HD4HL interventions.

For Policy

Integrate Cultural Sensitivity into Nutrition Guidelines

To ensure socio-cultural contexts are respected, policies like the 2023 Food-Based Dietary Guidelines for Ghana should include exemptions or special considerations for culturally significant foods (e.g., traditional staples like kenkey or fufu) to avoid undermining cultural identities. Policymakers must collaborate with cultural representatives to co-design guidelines.

Stakeholder: Ministry of Health Ghana and Ministry of Food and Agriculture.

Action: Revise dietary guidelines through participatory workshops with ethnic community leaders, ensuring policies reflect diverse food practices and are accessible to all demographics.

Strengthen Regulatory Mechanisms Against Industry Influence

To counter weak enforcement due to industry lobbying, policies should mandate transparency in industry-government interactions, such as public disclosure of lobbying activities related to the 2023 Excise Duty Amendment Act. Earmarking SSB tax revenues for NCD prevention programs can also reduce industry leverage by aligning fiscal measures with public health goals.

Stakeholder: Ghana Revenue Authority and Parliament of Ghana.

Action: Enact legislation requiring lobbying transparency and establish an independent oversight committee to monitor policy implementation, ensuring equitable enforcement.

Embed Ethical Principles in Policy Frameworks

To address the absence of systematic ethical frameworks, policymakers should adopt structured ethical guidelines for NCD interventions, ensuring respect for autonomy, equity, and cultural values. This includes regular assessments and public forums to adapt policies based on community feedback.

Stakeholder: Ministry of Health Ghana and National Development Planning Commission.

Action: Integrate ethical checklists (e.g., based on WHO ethical guidelines) into policy development processes, mandating stakeholder consultations and periodic policy evaluations.

For Practice

Community Engagement for Culturally Relevant Interventions.

To enhance cultural sensitivity, HD4HL implementers should partner with community leaders and local health workers to promote nutrition policies, ensuring interventions like food labeling empower consumers without alienating cultural practices.

Community education campaigns should explain policy rationales (e.g., SSB taxes) in local languages.

Stakeholder: District Health Directorates and community-based organizations.

Action: Conduct outreach programs and workshops to co-create implementation strategies, ensuring accessibility and cultural alignment of interventions.

Capacity Building to Counter Industry Influence

To strengthen enforcement, practitioners should train health officials and regulators on countering industry tactics, such as lobbying against fiscal measures. This includes building capacity for monitoring compliance with policies like the 2023 Excise Duty Amendment Act.

Stakeholder: Ghana Health Service and Food and Drugs Authority.

Action: Organize training programs on regulatory enforcement, supported by technical assistance from WHO or regional health bodies, to ensure robust policy adherence.

Implement Privacy and Feedback Mechanisms

To address ethical gaps, practitioners should ensure interventions respect individual privacy by collecting only essential data with clear consent (e.g., for dietary surveillance). Open forums for public feedback should be established to adapt interventions to community needs, enhancing trust and effectiveness.

Stakeholder: Local government authorities and HD4HL project coordinators.

Action: Develop data protection protocols aligned with Ghana's Data Protection Act and host quarterly community forums to gather feedback and adjust implementation strategies.

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