

# IPH response to a consultation a new Food Strategy for Northern Ireland

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The Institute of Public Health in Ireland www.publichealth.ie

Dublin Office:

700 South Circular Road Dublin 8 Ireland D08 NH90 Ph: + 353 1 478 6300

#### **Belfast Office:**

City Exchange 11-13 Gloucester Street Belfast BT1 4LS Ph: + 44 28 9064 8494

### **Synopsis of IPH submission**

### Introduction

The Institute of Public Health informs public policy to support healthier populations in the Republic of Ireland and Northern Ireland.

Our key priorities are promoting health and wellbeing, improving health equity, and reducing health inequalities through evidence, policy, and partnership.

The Institute responded to a <u>consultation</u> on the Northern Ireland Food Strategy Framework launched by the Department of Agriculture, Environment and Rural Affairs (DAERA) in September 2021.

The Framework sets out a long-term vision to develop a food system that protects natural resources for future generations, is economically and environmentally sustainable and provides safe, nourishing, accessible food enabling people to make informed healthy choices.

### **Key Observations**

The Institute made a series of recommendations on the Food Strategy Framework for Northern Ireland.

IPH would welcome a public health approach to food policy reflecting the principle of proportionate universalism, as well as the development of a regulatory framework for food products with an explicit policy goal of creating a healthier, more sustainable food environment that is accessible across the social gradient.

A rights-based approach is needed to address food poverty and insecurity in Northern Ireland, as well as to mitigate the global syndemic of obesity, undernutrition and climate change. The Institute would welcome the development of a cross-departmental taskforce to address food insecurity and health inequalities in Northern Ireland, and a commitment to carry out a Health Impact Assessment prior to implementation of the Framework.

The Institute recommends that ownership of this strategy is crossdepartmental, includes public health at a strategic level and is given independent oversight to tackle public health harms arising from the food system. We would caution against narrowing the scope of the strategy to focus on the agriculture policy agenda, as this could lead to a disproportionate focus on food supply, manufacturing and industry rather than considering food through a public health lens.

### **IPH Response**

### Northern Ireland Food Strategy Framework Consultation

QUESTION 1. Do you agree with taking a food systems, whole of government approach through a NI Food Strategy Framework?

- Completely agree
- Agree
- Neither agree/disagree
- Disagree
- Completely disagree

### QUESTION 2. Please outline your views on taking a Food Systems "whole of government" approach through a NI Food Strategy Framework?

The Institute recommend that there is greater clarity on how health outcomes will be prioritised within the Framework and questions how the 'whole of government' approach will be achieved. The current emphasis in the Framework appears to be on the policy priorities of the Department of Agriculture, Environment and Rural Affairs (DAERA), as the sponsoring Department to policy development, and the health components of the framework are underdeveloped.

The Institute agrees with the cross-government approach to the strategy as healthy accessible food is a foundation stone of public health and wellbeing. The Institute welcomes the commitment to a food systems, whole of government approach leading to the development of a cross-departmental Food Strategy Framework. We recognise that decisions made in one Department and the implementation of Department-specific actions, have significant scope to impact other Departmental priorities. For example, decision making on regulation of agri-food and food supply chain will impact on outcomes of environmental sustainability and climate protection. Decisions on regulation of the food industry in the domains of food formulation and reformulation, marketing, pricing, and taxation will impact on health outcomes. While the framework proposes coherence between the differing elements of food policy and their outcomes, there is insufficient detail provided on how policy coherence will be achieved, how compromises will be negotiated, how conflicts of interest which may arise will be managed and how critical health outcomes will be valued and prioritised within these processes.

We suggest that the strategy should not be owned by any single government department

thereby ensuring independent oversight and equal contribution to the strategy across departments. A whole system approach is needed to tackle the substantial harms to public health arising from our dysfunctional food system -these issues cannot be solved by simplistic approaches reliant on health education and campaigns promoting healthy eating and physical activity (1). This will require a broad range of integrated policies from numerous government departments and other important sectors such as the food industry in an integrated fashion in order to safeguard health outcomes from conflicting agendas (1).

# The Institute would welcome a Framework which adopts a public health approach to food policy as part of the cross-departmental agenda. The Institute would welcome a stronger commitment to address inequalities as a central action of the food policy.

The Institute note that the Framework intends to place 'significant focus on the changing values and behaviours of consumers' and that the vision refers to 'informed healthy choices.'

There is a concern that the framing in the policy is tending towards placing most of the responsibility for food choices on the individual's personal responsibility and self-discipline rather than consideration of the role statutory regulation and policy instruments in creating healthy food environments to make the healthy choice, the easy choice. The wider determinants of health are a diverse range of social, economic, and environmental factors which influence health- both physical and mental. This is encapsulated well in the Lancet Series on obesity: 'A series of environmental factors are exploiting biological, psychological, social, and economic vulnerabilities of people in ways that undermine their ability to act in their long-term self-interest. The high profits that come from the successful exploitation of vulnerabilities are often the driving force behind environmental changes that promote overconsumption of food' (2).

#### Food as a determinant of health, and a major contributor to disease, in NI

Food is a key determinant of health, and as such, a dysfunctional food system is contributing to ill-health, most notably in the rising levels of overweight and obesity but also in the context of diabetes, anaemia, oral health, osteoporosis, and cancer. The food system can negatively impact diet and contribute to the prevalence of chronic disease and mortality worldwide. Poor diets can hold many forms, such as excessive intakes of energy, saturated and trans-unsaturated (trans) fatty acids, sodium and free sugars and low intakes of fruits, vegetables, and polyunsaturated fatty acids. They are linked to metabolic risk factors for non-communicable diseases such as high blood pressure, high body mass index (BMI), high fasting plasma glucose and high total cholesterol (3). As such, the risk increases for developing chronic diseases such as type 2 diabetes mellitus, cardiovascular disease, and some types of cancer. Diets high in salt are also linked to kidney disease, stroke, stomach cancer and osteoporosis (4).

On the island of Ireland, obesity is a major public health challenge. 25% of adults in

Northern Ireland are obese. In Ireland, the prevalence of overweight and obesity in children was 32.8%, compared to 17.7% in non-disadvantaged schools (5). Obese people are at higher risk of developing chronic diseases; for example, they are three times more likely to develop colon cancer, 2.5 times more likely to develop high blood pressure and five times more likely to develop Type 2 diabetes (6).

Further impacts of a poor diet can include anaemia and neural tube defects (6). There are associations with diet and mental health and unhealthy diets place a disproportionate impact on people with mental illness, which is already a particular challenge in Northern Ireland when compared to the UK. Malnutrition is not limited to developing countries-previous estimates for malnutrition in Northern Ireland found that it impacts 5% of the population and 14% of people aged over 65. (7).

#### Characteristics of the food system which contribute directly to ill-health

There is 1.7 times more food being produced per person than in 1960, and this food has become more processed, cheaper and more calorie dense. Ultra-processed and high fat, salt, sugar foods (HFSS) are currently over-produced and heavily promoted by the food industry. Foods are increasingly formulated with excessive sugar, fat, and salt, along with flavour enhancers and additives (2, 4). There is a large market for unhealthy foods- coined 'high in fat, sugar and salt' (HFSS)- which has driven up the price of healthier food to be more expensive per calorie and therefore less accessible across the socioeconomic gradient (4). This has a disproportionate impact on lower income households, who are more likely to be impacted by fluctuations in food prices and as such at higher risk of food insecurity (4). This has been compounded by the modern food retail environment which typically prioritises shelf space and in-store promotions for HFSS foods (3).

The marketing of food has been shown to impact food choices, with studies finding advertising of food and drink to be linked to increased calorie intake in children. Food labelling is an importance source of information for consumers to make informed dietary decisions and in 2016 the European Union mandated the use of 'nutrient declarations' on pre-packed foods (3). However, research has found that consumer understanding of nutrient declarations is poor due to the poor placement (typically on the back of the product), small print size and complexity of the information (3).

### Characteristics of the food system which threaten public health through climate and environmental destruction

Food waste is another challenge, with over one quarter of all food grown in the UK never being eaten- a waste that accounts for approximately 6-7% of UK greenhouse gas emissions (4). Furthermore, the food system is responsible for 20-30% of global greenhouse gas emissions with every stage of the food production exacerbating carbon emissions. In particular, the agriculture industry is responsible for 40% of greenhouse gas emissions from the food system in the UK (4).

The independent review of the National Food Strategy outlines a series of diet-related

changes that are required to meet health and climate change commitments, which are based on advice from the Scientific Advisory Committee on Nutrition and Eatwell recommendations:

- 30% increase in fruit and vegetables;
- 50% increase in fibre;
- 25% reduction in consumption of HFSS foods; and
- 30% reduction in meat

The Institute are supportive of the need for a national shift in diet to reflect commitments to health, sustainable development goals and climate change, and would welcome an explicit commitment to this in the Framework.

#### The Institute would recommend that a Health Impact Assessment is conducted by an independent body prior to implementation of the Framework

The International Association for Impact Assessment defines Health Impact Assessment (HIA) as a process which systematically judges the potential, and sometimes unintended, effects of a project, programme, plan, policy or strategy on the health of a population and the distribution of those effects within the population. This would be welcomed prior to the implementation of the Framework and will assist with the identification of appropriate actions to mitigate health risks and to promote health opportunities. HIA can also help to guide the establishment of a framework for monitoring and evaluating changes in health as part of sustainable development (8).

HIA can be done as a standalone assessment, or health outcomes can be considered as part of environmental assessments, such as Strategic Environmental Assessment (SEA) and Environmental Impact Assessment (EIA). HIA can inform, or be informed by, other assessment instruments, such as Poverty Impact Assessment, Human Rights Impact Assessment, Equality Impact Assessment, Regulatory Impact Analysis/Assessment and Social Impact Assessment.

Guidance on Health Impact Assessment was recently launched by the Institute and can be accessed on our website: <u>Health Impact Assessment - Institute of Public Health.</u>

#### **QUESTION 3.** What are your views on the strategic context identified?

The strategic context identifies 'building connections between health, wellbeing and food' as a strategic priority but the Framework does not incorporate a public health approach to food policy.

The National Food Strategy published in July 2021 articulates the need for transformation of the food system at all levels- from structures to the individual- to address major challenges to public health such as climate change, health inequality and diet related disease such as obesity. While it recognises the challenges that will pose for industries whose business models rely on the current food system, it recommends that the future food system must improve health and reduce inequalities, be environmentally sustainable

and address climate change (4). The need for this shift has been made more apparent by the COVID-19 pandemic, which may have increased levels of food insecurity. However, some commentators assert that the pandemic only served to reveal the food insecurity that was already evident in disadvantaged communities but had not previously come to the attention of local support agencies and services. We note the intention to keep food as a 'devolved matter' rather than aligning with the principles of the National Food Strategy as outlined in the consultation document FAQs, however, to maximise public health and wellbeing and reduce health inequalities in Northern Ireland, the Institute would recommend that these principles are prioritised (9).

Given the far-reaching consequences that this strategy holds for public health and wellbeing, the Institute would welcome ownership and oversight not residing with a single department. Furthermore, we note that these documents will be the basis for the prioritisation of resources. Again, the Institute believe that this narrows the scope of the strategy by placing a greater emphasis on the economy and agricultural industry, rather than striking a balance between the economy and public health and wellbeing, both vital to each other.

The Institute proposes the strategy should consider a whole of government approach that provides parity to public health and wellbeing and the prioritisation of resource to those with greatest need.

#### The Institute would caution against basing the Framework solely on the draft Green Growth Strategy and Independent Strategic Review of the Agri-Food Sector

The Institute notes that the Framework and five-year action plans will be informed by the Green Growth strategy and recommendations from the Independent Strategic Review of the Agri-Food Sector (led by Sir Peter Kendall), which will consider 'the challenges facing both the food processing and primary agriculture industries as well as making recommendations on how to take full advantage of new opportunities' (10). We also note that this Framework will be a dedicated programme within the Green Growth strategy and governed by an inter-Ministerial Group chaired by the DAERA Minister, whilst acting as a 'sister strategy' to a new agriculture strategy.

Subsequent action plans resulting from the Framework should prioritise improving population health and reducing health inequalities. We are concerned that basing the action plan on these documents narrows the scope of the framework and puts disproportionate emphasis on agriculture industry, which holds clear tensions with the climate crisis and public health agenda.

The Green Growth strategy has been prepared by DAERA who have also sponsored the Climate Change (No. 2) Bill. The Institute engaged with the consultation process on the No.2 Bill and submitted written evidence to the Northern Ireland Assembly's Committee for Agriculture, Environment and Rural Affairs (AERA) as part of the consultation process. Based on current scientific evidence, the emissions target proposed in the Bill of 'at least an 82% reduction' in total greenhouse gas (GHG) emissions by 2050 is insufficient and not in line with international scientific evidence. The Institute endorses recommendations from

the WHO and the United Nation's Intergovernmental Panel on Climate Change (IPCC) to take urgent action to reach 'net zero' greenhouse gas emissions as quickly as possible, before 2050, and limit global warming to 1.5°C. Therefore, the Institute is concerned that current proposals from this Department may not reflect what is in the best interests for population health. The Institute recommends that the Framework and five-year action plans are developed across departments using the best available scientific evidence on the impact of the food system on population health and health inequalities. This viewpoint echoes that of The Lancet, which recommends that governments should adopt and institutionalise clear, transparent, and robust guidelines on conflicts of interest and processes for policy development and implementation (11).

#### The Institute strongly recommend that the Framework incorporate a rights-based approach and makes clearer recommendations to address food poverty and food insecurity

Food systems have the potential to provide direct health benefits through the nutritional quality of the foods they supply. However, access to nutritious food is not equal along the socioeconomic gradient. Research conducted by the Food Standards Agency (FSA) on the cost of a food basket in Northern Ireland found that some low-income families need to spend up to 46% of their net pay to afford a basic food basket that meets nutritional needs and the Minimal Essential Standard of Living (MESL) (12). Food therefore becomes a 'flexible' component of financial budgets. This research found that amongst people who experienced worry about the cost of food, ran out of food before being able to buy more, or could not afford balanced meals, 28% skipped meals because they did not have enough money and 8% also reported losing weight (13).

The Households Below Average Income report produced by the Department for Work and Pensions (DWP) in 2014 provided regional poverty figures. Northern Ireland had the highest poverty rate in the UK at 20% (before housing costs) which was higher than the UK average of 15%. A research study on food bank usage in Northern Ireland found that 'low income' was the main reason that people were referred to food banks (14). When considering the nutritional content of food bank parcels, they are considered inadequate (14). The All-Island Poverty Food Network webinar on Food Poverty and Health Inequalities found that a nutritious diet is three times more expensive than the emergency food parcels distributed by foodbanks and that food parcels on a whole do not align with UK dietary recommendations, with people seeking calorie dense foods to maximise food budgets (15).

The World Food Summit in 1996 defined food security as follows: 'Food security exists when all people, at all times, have physical and economic access to sufficient, safe and nutritious food that meets their dietary needs and food preferences for an active and healthy life' (16). Over a fifth of people in Northern Ireland (22%) live in marginal or low food security, and 10% of people in Northern Ireland live in low food security (13). Almost a quarter of people with low food security status said household income and the cost of healthy food were barriers to eating healthily in comparison to 10% of people with high

food security, which echoes NI Health Survey findings in which 10% of households in the lowest deprivation quintile missed a meal because of lack of money in 2016/17 (13).

The use of international human rights law was recommended by The Lancet Commission on addressing the 'global syndemic' of obesity, undernutrition, and climate change (11). The Universal Declaration of Human Rights, Article 25, states that 'Everyone has the right to a standard of living adequate for the health and well-being of himself and of his family, including food...' (17). The 1966 International Covenant on Economic, Social and Cultural Rights (ICESCR) is legally binding and explicitly names adequate food and freedom from hunger as economic, social, and cultural rights to recognise 'the inherent dignity of the human person' (18). The UN Convention of the Rights of the Child, Article 24, states that 'every child has the right to the best possible health. Governments must provide good quality health care, clean water, nutritious food, and a clean environment and education on health and well-being so that children can stay healthy. Richer countries must help poorer countries achieve this' (19).

The Institute endorses recommendations from the Marmot review 'Fair Society, Healthy Lives' which included recommendations to improve the food environment in local areas across the social gradient by improving the accessibility of affordable, nutritious and sustainably produced food. Building on the learning from the work of DAERA and the Department of Communities on protecting food security during the pandemic, we recommend that the strategy commit to convene a cross-Departmental Northern Ireland Food Insecurity Taskforce including high level representation from the Department of Health and Public Health Agency. The taskforce could be tasked with developing government recommendations on the following:

(1) The level, nature, and extent of food insecurity in the region

(2) The health, social, economic and child development impacts of food insecurity in the region

(3) Gaps in data and research and how to address them

(4) Priority actions to address food insecurity in the context of regional and global changes in food supply caused by the pandemic and Brexit and imminent changes to social welfare systems

(5) Priority actions to enhance a cross government response to reduce food insecurity in the short, medium, and long-term

The Institute would welcome a Framework which commits to the development of robust statutory social programmes to improve access to affordable nutritious food. The collection of data to assess and monitor the prevalence and demographics of people suffering from food insecurity would be useful to evaluate the effectiveness of policy implementation.

### QUESTION 4. From your perspective, are there any other NI government policy linkages which you feel are relevant?

The Institute would encourage the Department to develop a regulatory framework for food products that has an explicit policy goal of creating a healthier food environment and tackling inequalities in food access and quality. Fiscal measures and policy action to prevent obesity is gaining traction, with measures such as taxation on sugar sweetened drinks, food labelling and regulation of marketing being introduced internationally (11). In 2012, the Institute carried out a HIA of a proposed tax on sugar sweetened beverages (SSBs) in Ireland, which was then implemented in 2018 (20). As of January 2020, more than 40 countries have implemented nationwide taxes on SSBs, and evidence is beginning to show that these approaches work (21). For example, in 2018 the UK implemented a soft drinks industry levy (SDIL), designed to incentivise manufacturers of sugar sweetened beverages to reduce sugar content (22). One year after implementation, the volume of soft drinks purchased per household in Britain did not change (23). However, the amount of sugar in those drinks was 30 g, or 10%, lower per household per week (23). The Institute would welcome a Northern Ireland-specific evaluation of the impacts of the SDIL.

The Lancet Commission consider obesity, undernutrition and climate change to be the three gravest threats to human health and have constituted them as a 'Global Syndemic' due to their epidemiological similarities and common large-scale societal drivers and determinants (11). The Commission advised that there is a need to strengthen feedback loops that constrain the production and marketing of foods and beverages that promote ill-health, for example front-of-pack labelling signposts such as warning labels for products high in sugar and salt. The Institute would also recommend that the Framework includes a commitment to implement strategies that improve the availability, accessibility, and affordability of healthy foods across the food system.

There is an opportunity in this Framework for the Government to prioritise the health and wellbeing of children by strengthening action on some commercial determinants of health, such as food labelling and advertising. There has been progress on this in Ireland, with a recommendation to 'ban on advertising to children online, including, at the very minimum, advertisements of junk food, alcohol, high fat/salt/sugar (HFSS) foods, and gambling' as part of the new Online Safety and Media Regulation Bill, as well as recommendation that the Bill "should also include a moratorium on advertising infant formula products online and the prohibition of any form of profiling or tracking children's data." Furthermore, the Framework is an opportunity to facilitate the development of a National Food System Data Programme by requiring large businesses to publish data on the health and environmental impact of their product portfolios.

This example demonstrates the potential for the Framework to create food policy that directly influences the health and wellbeing of adults and children in Northern Ireland through action on the commercial determinants of health. The Institute would welcome information on how the Framework will address these and improve the food environment to one that is supportive to living healthy lives.

The Department of Health are developing a new Obesity Prevention Strategy to replace the current strategy 'A Fitter Future For All 2012-2022'. The Institute would recommend that a mapping exercise be undertaken to ensure that the actions in the Food Strategy contribute to the achievement of goals of this policy, particularly as they relate to regulation of the food industry.

The consultation document proposes that Obesity Prevention Strategy should align with the Framework. This suggests an implicit power differential within the policy landscape where food strategy is dominant over obesity policy. We would welcome detail on the interface between the two policies and, in the context of the policies stated principle of inclusive and open government, clarity on how obesity prevention will be actively considered within decision making on food policy. The Institute would recommend that the Framework aligns with the vision and principles of the Obesity Prevention Strategy and utilises the evidence base on obesity prevention that will underpin it.

# The Institute recommend that the Framework commits to ensuring systems are in place to progress legislation relevant to food at speed in line with UK government policy changes, and that monitoring systems are in place to determine outcomes. For example, with the UK decision to fortify flour with folic acid.

The UK government recently announced the decision to fortify flour with folic acid, which the Institute welcomes. However, legislation to allow for implementation in Northern Ireland is still to be developed. There is convincing direct evidence that this measure will reduce the incidence of neural tube defects (NTDs) in the UK (24). NTDs are one of the most common congenital malformations in neonates worldwide and are caused by incomplete closure of the neural tube within 28 days of conception (25). The most common forms are anencephaly, spina bifida and encephalocele. Northern Ireland has been prominent in this debate with Lord Dodds of Duncairn having acted as co-chair of the All-Party Parliamentary Group on Folic Acid Fortification in Westminster.

There is convincing indirect evidence that this legislation will be of particular benefit to Northern Ireland. We take this view in light of:

- Higher levels of social deprivation in Northern Ireland compared to many other regions of the United Kingdom – a factor increasing population risk (26)

- Evidence of a less nutritious diet among women of childbearing age in Northern Ireland compared to most other regions of the United Kingdom (27)

- Evidence of lower serum folate levels among women of childbearing age in Northern Ireland compared to other regions of the United Kingdom indicated a lower level of protection (28)

#### The Institute recommends that the Food Strategy Framework formally recognises human breastmilk as a natural resource and commits to alignment with the Breastfeeding Strategy for Northern Ireland (2013-2023)

The Institute note that breastfeeding is not mentioned in the Framework. Breastfeeding provides all the nutrients a baby needs for healthy growth and development for the first six months of life. It is associated with many health benefits for both mother and baby and has an important role in reducing health inequalities. The Department of Health has adopted the World Health Organization guidance recommending exclusive breastfeeding for at least the first six months of an infant's life (29). It is also beneficial to increase breast

feeding rates for environmental reasons, as recent studies have highlighted that disinvestment in breastfeeding services can lead to environmental costs (30). Breastfeeding is considered a renewable natural resource and produces minimal or zero waste, whereas mass production of infant formula exacerbates environmental damage and carbon emissions globally (30, 31).

However, Northern Ireland continues to have the lowest breastfeeding rates in the UK, with breastfeeding rates being markedly lower in the most deprived areas. The Institute recommend that the Framework aligns closely with Department of Health targets to improve breastfeeding rates and protects society from inappropriate marketing of breast milk substitutes (32).

In particular, the Food Strategy Framework could include a high-level commitment to monitor and enforce adherence to codes governing the marketing of breast milk substitutes (WHO Code on Marketing of Breast Milk Substitutes). We recommend that reporting on this is included within the monitoring of the Strategy Framework as it relates to the Northern Ireland population but also in the context of developing countries where its products are exported to protect against exploitation of the rights and health of mothers and babies in developing countries.

We note that a consultation on infant food labelling and marketing in the UK is imminent. It is unclear whether this includes infant formula however the Institute would recommend consideration of enhanced regulation on the advertising, promotion, and introduction of Front of Pack Nutrition Labelling (FOPNL) of infant formula. FOPNL is contrary to provisions set out in the International Code of Marketing of Breastmilk Substitutes as they are considered promotional and may lead to public perception of government endorsement of these products. This may influence breastfeeding decisions, leading to the introduction of highly processed food products as part of early weaning which negatively impacts on infant and child health (33).

We recommend that the Food Strategy Framework specify a timeline for the re-introduction of the UK Infant Feeding Survey in Northern Ireland in line with recent commitments made in Westminster to re-introduce the survey across the UK 4 nations.

#### The Institute recommends more detail on the structures for alignment between the Framework and policies that focus on improving diet and health in Early Years and school settings being overseen by the Department of Health and Department of Education

The Institute welcome the references made in the Framework to improving food education and implementing projects to increase consumption of fruit and vegetables in schools. We recommend that the Framework commit to resourcing the further development of these programmes with the goals of enhancing child health, development and educational outcomes and the reduction of child and family poverty. This commitment could be actioned within the Framework in terms of including explicit and measurable indicators or outcomes relating to the school meals programme. The Framework could make an explicit commitment, to protect the current level of eligibility and the nutritional standards for school food. A programme of review in terms of programme development is also recommended – this would resource innovation and development to support school gardens, cooking skills and sustainable diets.

To ensure these adequately reflect the latest evidence on nutrition and health, the Institute would encourage close policy working between the DoH and DoE. Several recommendations were made in the review of the National Food Strategy in England which could be considered (4):

- Launch a new "Eat and Learn" initiative for schools which includes a range of measures such as curriculum changes, partnership with accredited schemes that aim to improve food and food education in schools, increased government funding to support cooking lessons and schemes similar to the School Fruit and Vegetable scheme in England
- Extend eligibility for free school meals
- Introduce or maximise existing government funded schemes to support households experiencing food insecurity- for example by providing support during holiday periods and financial support (vouchers and coupons) to purchase healthy food similar to the 'Healthy Start Scheme' in England
- Strengthen Government procurement rules to ensure that taxpayer money is spent on healthy and sustainable food.

The All Party Group on Children & Young People outlined the pressures faced by lowincome families during holiday periods in the report 'Holiday Hunger Evidence Session' (34). The findings summarised clearly outlined the challenges faced by families to feed their children without support from schools:

- There was 17% increase in foodbank use during the summer school holidays
- A local survey found that 46% of parents missed a meal to prioritise feedings their children and 79% were concerned about being able to afford healthy food during the holidays

The APG recommended that the Free School Meals payment scheme criteria should be protected and enhanced. The Institute agrees with this recommendation and would welcome a commitment in the Framework to periodically review eligibility to ensure that all who require access to this support are receiving it. We also support the recommendation for free Universal Infant School meals to be introduced in Northern Ireland, as is the case in England. The Framework should also continue to support school-based food programmes in Northern Ireland, for example the 'School food: top marks' programme (35). The Institute would also welcome a strong commitment in the Framework to support families who require financial assistance during holiday periods to avoid food insecurity, a time when financial concerns can be further exacerbated by the need to pay for childcare.

### **QUESTION 5.** What are your views on the proposed ambition of the NI Food Strategy Framework?

The current ambition of the Framework does not sufficiently articulate an ambition for health improvement and is dominated by an ambition for enhancing the efficiency and quality of the food supply chain.

The proposed ambition appears to be focused on developing an 'award-winning' food production system rather than recognising food as a determinant of health and inequalities. As discussed above, the Institute would welcome a Framework that recognises food as a determinant of health and outlines a strong commitment to addressing the existing health inequalities that threaten to widen if action is not taken to improve the food environment.

### QUESTION 6. What are your views on the proposed scope of the NI Food Strategy Framework?

The scope of the framework is limited, as it frames policy problems and responses as issues of food supply chain and the retailer consumer relationship. In this way, the focus of policy actions is based within the food manufacturing process and 'consumer values and behaviours that influence these processes.'

This scope does not consider food as a human rights issue, as a key determinant of health and wellbeing or the social, cultural, or psychological significance of food in modern society. The scope does not currently recognise in a meaningful way the contribution of the current food system to climate and environmental destruction from emissions to air and water pollution.

The Institute would welcome a re-balancing of the ambition of the framework by the introduction of strong evidence-based policy measures designed to improve health and prevent chronic disease.

### QUESTION 7. What are your views on the proposed vision of the NI Food Strategy Framework?

The Institute supports the vision of a sustainable food system, the current definition of 'sustainable' used in the Framework vision does not include consideration of health or health inequalities. The definition of a sustainable food system in this consultation is limited. The Institute recommend that this definition needs to go further to improve public health and wellbeing, reduce diet-related disease and to meet climate change goals by encapsulating the United Nations 17 Sustainable Development Goals- the first three of which are 'No Poverty', 'Zero Hunger' and 'Good Health and Well-being' (36).

The Institute welcome the vision to provide 'nourishing accessible food to people,' particularly given the social inequalities that exist in relation to access to nutritious food. However, action to mitigate this is not reflected in Framework as it stands.

Instead, the Institute suggest the following vision to accompany the Framework:

'Population-wide, equitable access to safe, affordable and nutritious food provided by an environmentally sustainable food system that protects natural resources and invests in the

health and wellbeing of current and future generations.'

The Institute note that strategic actions to support this vision have not been considered in this Framework, and would recommend that these should include but not be limited to:

- 1. Statutory regulation of the food industry including labelling, food promotions, pricing and reformulation of food products, as well as transparency surrounding potential conflicts of interest in food policy decision-making
- 2. Strategic action at Government level to address food insecurity, accessibility, affordability, and quality, and in turn, health inequalities
- 3. Strategic commitment to support a more sustainable diet, including a shift towards more plant-based diets that are high in fruit and vegetables as part of our national response to the climate change emergency
- 4. Progress legislation that supports a commitment to improved health outcomes, such as the fortification of flour with folic acid
- 5. Sustained and enhanced investment for early years and school-based programmes as well as consideration of Universal Provision of school meals to prevent and mitigate the impact of food poverty, particularly during high-risk periods such as school holidays.

### **QUESTION 8.** What are your views on the proposed aim of the NI Food Strategy Framework?

The Institute agrees that the Framework must be cross-departmental, and therefore would recommend that the governance system overseeing Framework development, implementation and monitoring is not led by a single Department. The Institute notes that the Framework will adopt a 'whole food supply chain approach' and involve strong alignment across 'linked policy areas such as agricultural, environmental and land use policies.' There is a concern that health issues will not receive parity of attention and resource within the strategic direction and governance of the Framework. Instead, the Institute would recommend that a 'Health in all Policies' approach is taken, which places the onus on the whole of government and civic society to take action on food as a social determinant of health (37). The Institute recommend that a HIA is carried out on this Framework. A HIA would assess the potential impact of the Framework on the health of the community and help to ensure that the Framework is more inclusive, more equitable, and more sustainable for everyone. HIA is part of a 'Health in All Policies' approach and supports government strategies, such as Making Life Better, to improve population health and health equity.

Guidance on Health Impact Assessment was recently launched by the Institute and can be accessed on our website: <u>Health Impact Assessment - Institute of Public Health.</u>

#### **QUESTION 9.** Do you agree with the proposed six strategic priorities?

- Strongly agree
- Agree
- Neither agree/disagree
- Disagree
- Completely disagree

### QUESTION 10. Are there any amendments or refinements that you would like to make to these priorities?

<u>RE: Strategic priority one - building connections between health / wellbeing and food</u> Building connections between health and food is insufficient- policy action to improve the food environment is required

The Institute agrees that issues raised under Priority One, such as obesity and food poverty, are substantial and need to urgently addressed by the NI government. However, this cannot be addressed by 'building connections' between health and food alone. The Institute would welcome a firm commitment in the Framework to address these public health challenges through robust strategic oversight at a Ministerial level and upstream action such as policy development, legislation and regulation to improve the food environment and support people to make healthy choices.

<u>RE: Strategic Priority Two: building sustainable economic prosperity</u> and Strategic Priority Three - building a food culture and food conscious society

### Increase the scope of 'sustainability' in the framework from economic growth to include the sustainable development goals and sustainable diets

As discussed in Question 7, the definition of sustainability used in this Framework disproportionately focuses on economic growth. The Institute would welcome the incorporation of the UN SDGs into the Framework.

Whilst the Institute recognise the importance of economic growth, we recommend that the Framework should include economic costs of disease caused by poor nutrition in its consideration of economic prosperity. As outlined in our response, poor diet is associated with a range of chronic diseases which are costly to the health service. For example, the direct and indirect costs of overweight and obesity in 2009 were estimated at £370 million (38).

### The Institute would recommend that the Framework prepares for a shift towards sustainable diets in line with best evidence to respond to climate crisis.

Strategic Priority Three envisages success as 'increased local, national and international demand encouraged by co-ordinated NI agri-food market awareness and promotion.' Agriculture, with a large contribution from livestock production, is responsible for up to 25%

of anthropogenic greenhouse gas emissions (39). Sustainable diets are associated with substantial co-benefits for the environment, but also for health. A large study including over 400,000 participants from the European Prospective Investigation into Cancer and Nutrition (EPIC) study estimated the health impacts for all-cause and cause-specific mortality and cancer rates from greenhouse gas emissions and land use using detailed dietary information from more than 11,000 food items, and identified the impact on the health and the environment by adopting a sustainable alternative diet- the EAT–Lancet diet.

This is defined as 'a universal healthy reference diet, based on an increase in consumption of healthy foods (such as vegetables, fruits, whole grains, legumes, and nuts), and a decrease in consumption of unhealthy foods (such as red meat, sugar, and refined grains) that would provide major health benefits, and also increase the likelihood of attainment of the Sustainable Development Goals' (40).

The study found that all-cause mortality and cancer rates could be substantially reduced by adopting a sustainable diet like that of 'EAT Lancet,' alongside a potential reduction in greenhouse gas emissions and land use. Another study conducted in the UK found that replacing 50% of meat and dairy consumption with a combination of fruit, vegetables and cereals could reduce dietary greenhouse gas emissions by 19% and avert approximately 37,000 premature deaths from cardiovascular disease per year (41).

The UK Health Alliance- an alliance that advocates for responses to climate change that protects public health and includes members such as the Academy of Medical Royal Colleges, the British Medical Association, and the Lancet, to name a few- recently launched a report on the impacts of climate change on public health (42). It recommended that an increase in the consumption of fruit and vegetables and a shift away from diets high in meat and dairy would bring health benefits and reduce greenhouse gas emissions. It quantifies this, stating that 'if average UK diets met nutritional guidelines set out by the World Health Organization (including less meat and more fruits and vegetables) dietary GHG emissions could be reduced by around 17% and almost 7 million years of life lost prematurely would be saved over 30 years' (42).

The Institute would therefore welcome a Framework that embraces the evidence-base which recommends a phased shift towards an increase in plant-based foods and reduction in consumption of animal products.

#### RE Strategic Priority Four - protecting and enhancing our natural resources

Whilst the Institute welcomes the focus on environmental sustainability, and measures such as reducing food waste and reducing single use plastics/increasing use of recycled materials in food packaging, this priority area reflects only one aspect of the wider evidence base on actions needed to address the interface of climate change and health.

The Institute endorses the need to reach net zero as quickly as possible before 2050. This is based on high-level evidence from the World Health Organization, who in a recent report summarised the key messages from the Working Group on Health in Climate Change and outline the urgency of the current situation and advise to strive for net zero by 2050. The faster net zero is reached the better due to the significant health co-benefits from climate

action, including improved air quality, a more physically active population and healthier sustainable diets, among others. Reducing greenhouse gas (GHG) emissions, particularly long-lived pollutants such as carbon dioxide (CO2), to net zero by 2050 is highly preferable as research has shown that GHG emissions and climate change have a profoundly negative impact on the social and environmental determinants of health and consequently health outcomes. The IPCC advised the following in a special report on global warming of 1.5°C: 'The lower the emissions in 2030, the lower the challenge in limiting global warming to 1.5°C after 2030 with no or limited overshoot. The challenges from delayed actions to reduce greenhouse gas emissions include the risk of cost escalation, lock-in in carbon-emitting infrastructure, stranded assets, and reduced flexibility in future response options in the medium to long term' (43). Therefore, it is highly preferable to reach zero GHG emissions targets need to go much further and endorses recommendations from the WHO and IPCC to take urgent action to reach net zero as quickly as possible, before 2050, and limit global warming to 1.5°C.

#### RE: Strategic Priority Five - building healthy lives through food education

The Institute recognises the role that food education can play as one element of multicomponent strategies to shift dietary patterns at population level. However, the role of health education is limited in its reach and potential effect size, and severely limited, when deployed as a singular strategy (4). The emphasis on food education is contradictory to the articulated vision of a whole systems approach and the emphasis on accessibility and changes to the food environment. The Institute suggests rewording this strategic priority as follows:

'Building a healthier diet in Northern Ireland through coherent cross-departmental leadership and action focussed on better health through better nutrition'

A fundamental revision of this strategic priority is recommended in order that the actions of all government Departments are aligned towards a health improvement agenda. This will go beyond food education to address issues of food pricing, promotion, quality, formulation, misinformation, labelling, health claims etc.

#### <u>RE: Strategic Priority Six - building and maintaining appropriate emergency contingency</u> plans across the supply chain.

The Institute agree that new and challenging risks to food supply can be expected with the impact of climate change. As summarised in Strategic Priority Five, the Institute recommends ambitious action on climate change mitigation to limit global warming and reduce disruption to the food supply chain. Furthermore, the Framework must incorporate pandemic preparedness planning and testing to ensure system resilience in the event of a future pandemic or other cause of global disruption to food supply.

### QUESTION 11. From your perspective, are there any strategic priorities that are missing from the NI Food Strategy Framework? If 'yes', what are they and why?

The Institute have provided a series of suggested amendments and additional strategic priorities in the answer to the previous question.

### QUESTION 12. What are your views on the proposed guiding principles to be used to guide the development of future policy interventions?

The Institute generally support the decision-making principles proposed however we have suggested some amendments and additional principles.

On Principle 1, we welcome the commitment to inclusivity and openness. However, we also acknowledge the challenges implicit in the alignment of priorities in cross-departmental strategy and the potential for external actors, including commercial entities, to influence decision making on food strategy (44). We recommend that the Framework include an explicit protocol regarding the management of conflicts of interest.

The Institute would welcome an amendment to Principle 5 to reflect the United Nations 17 Sustainable Development Goals. WHO consider the SDGs to be 'powerful mechanisms to improve health and to reduce health inequities,' and specific SDGs can be considered social determinants of health, including 'No Poverty,' 'Good Health and Wellbeing,' 'Reduced Inequalities,' 'Sustainable Cities and Communities' and 'Partnerships for the Goals.'

### QUESTION 13. From your perspective, are there any guiding principles missing? If yes, what are they and why?

The Institute would recommend that the following principles are included in the Framework:

#### PROPORTIONATE UNIVERALISM

Given the disparities that exist surrounding food, the Institute recommends a higher-level commitment to tackle health and social inequities in the principles of the Framework. We recommend greater emphasis on equity focussed measures at both strategic and operational level driven by an over-riding principle of proportionate universalism. This involves taking universal action but with a scale and intensity that is proportionate to the level of social disadvantage (45). This could be made tangible through actions such as a commitment in the Framework to convene an expert advisory group to make recommendations on equity focussed measures, strategic commitment to conduct a health equity audit as part of a mid-term or final review alongside periodic health equity audits of strategy actions. Proportionate universalism can also be applied in the allocation of resources and in decisions on priorities for research and monitoring.

#### HEALTH IN ALL POLICIES

Given the well-established connection between food and health, the Institute would welcome the inclusion of a 'Health in all Policies' principle. This is defined as 'a collaborative approach to improving the health of all people by incorporating health

considerations into decision-making across sectors and policy areas.'

#### LIFE-COURSE APPROACH

We note that the Framework aims to link to the Programme for Government outcome 'Our children and young people have the best start in life,' however this is not reflected in the draft principles. The Institute would recommend the inclusion of the 'life-course approach' as a key principle, which is defined as follows:

'The life-course approach aims at increasing the effectiveness of interventions throughout a person's life. It focuses on a healthy start to life and targets the needs of people at critical periods throughout their lifetime. It promotes timely investments with a high rate of return for public health and the economy by addressing the causes, not the consequences, of ill health' (46).

Primary prevention in early years has been recognised as a best buy for investing in population health and reducing health inequalities and a central strand of the 'Making Life Better' framework. This definition is in line with the NI public health strategic framework 'Making Life Better,' particularly with themes "Giving Every Child the Best Start" and "Equipped Throughout Life" which take account of needs across the life-course with emphasis given to children and young people.

#### COLLABORATION AND COOPERATION ON AN ALL-ISLAND AND UK-WIDE BASIS

Similar to climate change, the public health impacts of the food system do not respect geographical borders. There are many benefits to be gained from working collaboratively North-South on the island of Ireland and across the UK four nations to develop food strategy that delivers on health outcomes. This work can build on the existing structures for cooperation on food safety, health, environment including the work of the North-South bodies established under the Good Friday Agreement and the British Irish Council structures. These opportunities include:

- Enhanced communication of evidence and research on developing food strategy to deliver on health outcomes including periodic discussion at the North South Ministerial Council (NSMC)
- Resourcing to support enhanced knowledge sharing, learning and communication on food policy matters with a focus on direct and indirect health impacts, building on existing structures and North- South implementation bodies
- Evaluation of outcomes from policy changes in Ireland and Northern Ireland through jointly commissioned studies co-ordinated by the Food Standards Agency Northern Ireland, Safe Food and the Food Safety Authority of Ireland.
- Structured engagement between the Departments of Health in the four UK regions and the Public Health Agency NI, Public Health Scotland, Public Health Wales and the Office for Health Improvement and Health Disparities in England.

### QUESTION 14. Do you agree with the high-level vision, principles, and strategic areas contained in the proposed NI Food Strategy Framework?

- Completely agree
- Agree
- Neither agree/disagree
- Disagree
- Completely disagree

### **QUESTION 15.** Have you any other comments on the proposed NI Food Strategy Framework?

The Framework does not make clear how fidelity to values and principles will be monitored during implementation, or in other words, how these principles will be 'kept in mind' during operational decision making. The Institute would invite the Department to consider the following questions:

- What processes are to be put in place to ensure that values and principles are considered in planning and delivery of the Framework?
- What are the opportunities for review and challenge when decisions diverge from these values and principles?
- What is the scope for involvement of stakeholders in assessing the alignment of principles with delivery?

# QUESTION 16. What are your views on the proposed approach to implementation, i.e., five-year action plans will be developed and implemented in collaboration with key stakeholders and partners?

As outlined previously in our response, population health and wellbeing are central to this Framework. International evidence points to the need for a societal change towards sustainable diets that are primarily plant-based for both health and environmental reasons. We note that DAERA will chair the Inter-Ministerial Group and provide overall governance of this Framework.

It is not clear, and a cause of concern, how inevitable conflicts of interest in policy agendas between government departments and between state and commercial actors will be managed. The 'New Decade, New Approach Deal' proposed that the NI Executive would establish an independent Environmental Protection Agency to provide oversight on the work of the NI Government regarding Climate Change. The Institute would welcome robust governance arrangements with strategic leadership at Ministerial level, informed by the best available scientific evidence and co-ordinated by an independent oversight group.

#### QUESTION 17. What are your views on the establishment of a Food Programme Board that is embedded within the governance arrangements for Green Growth?

The Institute would welcome the inclusion of a Food Programme Board and stakeholder engagement, however caution against limiting stakeholders to those listed in the

Framework as these do not include representatives from the Public Health Agency/specialists in public health, nutrition or climate change. We would also welcome information on the membership of the Food Programme Board.

The Institute would suggest regular engagement with expertise from international health bodies such as the WHO, Public Health England, UK Faculty of Public Health, and other Royal Colleges. On a local level, there is a wide range of expertise available from a range of partners, including the Food Standards Agency, Institute of Public Health in Ireland, Public Health Agency, Queen's University Belfast, and Belfast Healthy Cities. Overall, the Institute suggests wider engagement with local and international partners who have the expertise to inform food policy, as well as the development of an independent advisory committee to provide advice that is tailored to local needs in Northern Ireland.

#### QUESTION 18. Do you have any comments on future arrangements for engagement with stakeholders about implementation and delivery of the NI Food Strategy Framework?

Please see response to the previous question. The Institute also recommend that periodic progress reports on the implementation of the strategy are provided to the Minister for Health and Chief Medical Officer (CMO) office.

### QUESTION 19. Have you any other comments on how to achieve a diverse and inclusive process for public engagement?

The Institute strongly recommend that the Framework includes measures to ensure transparency in policy making in order to manage conflicts of interest that could arise in engagements with commercial actors in the food industry.

Research on public perceptions and beliefs regarding the nutritional content, health and environmental impact of food and food systems would be welcomed to inform public communications. Positive public engagement is another crucial component to improving the success of upstream policy action. Widespread misinformation can act as a barrier to meaningful public engagement, improving individual behaviour and improving population health. The Institute suggest that research on public perceptions and beliefs in Northern Ireland would assist with ensuring public communication strategies are impactful, particularly for complex issues relating to food such as impacts on health and climate change.

The Framework does not detail how it intends to increase inclusivity or accessibility of engagement with hard-to-reach groups or minority ethnic groups. The Institute has several suggestions which could help improve accessibility of the Framework and enable inclusion:

- Consider health literacy in the design and delivery of the Framework at the regional and local level, particularly when communicating with local communities
- Develop a Plain Language Summary of the proposed Framework to foster greater engagement as the it is developed

• Ensure that all communications are accessible in language to reduce barriers for those who experience accessibility issues; for example, those do not speak English as a first language, are visually impaired or have learning difficulties.

### QUESTION 20. Do you agree with the potential benefits to be derived from taking a Food Strategy Framework approach?

The Institute support the ambition for the strategy to contribute to the 17 Sustainable Development Goals. We would also welcome a commitment to key strategic objectives outlined in public health strategic framework 'Making Life Better' and believe this to be a possible benefit of the Framework if it is designed with improving population health and reducing health inequalities as a fundamental aim, value, principle, and strategic priority. The Institute would recommend strengthening the Food Strategy governance arrangements as outlined in our response to Questions 16 and 17 in order to assist with achieving these benefits. We also support Recommendation 14 in the independent review of the National Food Plan in England, which recommends that the Government should set a long-term statutory target to improve diet-related health, and create a new governance structure for food policy, through a Good Food Bill. The aim of this Bill would be to support a consistent approach to improving the health and sustainability of the food system across

the whole public sector, and throughout the food industry.

Furthermore, to measure the effectiveness of the implementation, both process and outcome evaluation are needed. The Institute recommend that robust evaluation methodology is used throughout the implementation process.

### QUESTION 21. Are there any rural needs comments that you wish to raise at this point about the impact of the NI Food Strategy Framework on Rural areas?

### Do you have any evidence that would be useful to Departments? If so, can you describe the evidence and provide a copy.

This will be covered in the Institute's response to Question 27. The impact on the health of people living in rural areas needs further attention. We would also add that the Framework is likely to impact on 'poverty in rural areas' and 'deprivation in rural areas', and we note that the Department has not commented on why it believes that these rural policy areas will not be impacted.

### QUESTION 22. Are there any equality comments that you wish to raise at this point? Do you have any evidence that would be useful to Departments? If so, can you describe the evidence and provide a copy.

This will be covered in the Institute's response to Question 27.

#### QUESTION 23. Are there any environmental impact comments that you wish to raise at this point? Do you have any evidence that would be useful to Departments? If so, can you describe the evidence and provide a copy.

This will be covered in the Institute's response to Question 27.

## QUESTION 24. Are there any other comments you wish to make or any other evidence of need that you think Departments would find helpful? Please submit any evidence with your response.

The Institute recommend a Health Impact Assessment is conducted on the Framework. This may add important considerations regarding health and health equity to the impact assessments that have already been carried out on rural needs and equality.

#### References

1. Government Office for Science. Tackling Obesities: Future Choices – Summary of Key Messages. London; 2007.

2. Roberto CA, Swinburn B, Hawkes C, Huang TT, Costa SA, Ashe M, et al. Patchy progress on obesity prevention: emerging examples, entrenched barriers, and new thinking. Lancet. 2015;385(9985):2400-9.

3. Kelly B, Jewell J. What is the evidence on the policy specifications, development processes and effectiveness of existing front-of-pack food labelling policies in the WHO European Region? Copenhagen; 2018.

4. The National Food Strategy. The Plan. 2021.

5. Safe Food. Whole systems approach to childhood obesity: A review of the evidence. Cork; 2021.

6. Public Health England. Health matters: obesity and the food environment 2017 [Available from: <u>https://www.gov.uk/government/publications/health-matters-obesity-and-the-food-environment/health-matters-obesity-and-the-food-environment--2</u>.

7. Department of Health Northern Ireland. Food poverty in Northern Ireland is an issue we all must help tackle – Hamilton 2015 [Available from: <u>https://www.health-ni.gov.uk/news/food-poverty-northern-ireland-issue-we-all-must-help-tackle-%E2%80%93-hamilton</u>.

8. Winkler MS, Viliani F, Knoblauch A, Cave B. Health impact assessment international best practice principles (International Association for Impact Assessment). Fargo; 2021.

9. Department of Agriculture Environment and Rural Affairs. Northern Ireland Food Strategy Framework: Frequently Asked Questions Belfast: Department of Agriculture, Environment and Rural Affairs; 2021 [Available from: <u>https://www.daera-</u> <u>ni.gov.uk/sites/default/files/consultations/daera/NI%20FOOD%20STRATEGY%20FRAM</u>

EWORK%20FAQs.pdf.

10. Department for the Economy. Poots and Dodds announce review into future of agri-food sector 2021 [Available from: <u>https://www.economy-ni.gov.uk/news/poots-and-dodds-announce-review-future-agri-food-sector-1</u>.

11. Swinburn BA, Kraak VI, Allender S, Atkins VJ, Baker PI, Bogard JR, et al. The Global Syndemic of Obesity, Undernutrition, and Climate Change: The Lancet Commission report. Lancet. 2019;393(10173):791-846.

12. Food Standards Agency and Safe Food. The cost of a healthy food basket in Northern Ireland in 2020: Food Standard Agency; 2021 [Available from: <a href="https://www.food.gov.uk/research/research-projects/the-cost-of-a-healthy-food-basket-in-northern-ireland-in-2020">https://www.food.gov.uk/research/research-projects/the-cost-of-a-healthy-food-basket-in-northern-ireland-in-2020</a>.

13. NatCen Social Research. Food Security, Food Purchasing, and Nutritional Intake in Northern Ireland: Food and You Waves 1-4 Briefing paper 5. 2018.

14. Northern Ireland Statistics and Research Agency, Welfare Changes. An insight into Food Banks in Northern Ireland. Belfast; 2015.

15. Safe Food, editor Food Poverty and Health Inequalities2021.

16. Food and Agriculture Organization of the United Nations. Report of the World Food Summit. Rome; 1996.

17. UN General Assembly. Universal Declaration of Human Rights. 1948.

18. UN General Assembly. International Covenant on Economic, Social and Cultural Rights. 1966.

19. UNICEF United Kingdom. A summary of the UN Convention on the Rights of the Child London: UNICEF UK; 2019 [Available from: <u>https://www.unicef.org.uk/what-we-do/un-convention-child-rights/</u>.

20. The Institute of Public Health in Ireland. Proposed Sugar Sweetened Drinks Tax: Health Impact Assessment (HIA) Technical Report. Dublin; 2012.

21. World Bank. Taxes on Sugar Sweetened Beverages: International Evidence and Experiences. Washington, DC; 2020.

22. HM Revenue & Customs. Soft Drinks Industry Levy. 2016.

23. Pell D, Mytton O, Penney TL, Briggs A, Cummins S, Penn-Jones C, et al. Changes in soft drinks purchased by British households associated with the UK soft drinks industry levy: controlled interrupted time series analysis. Bmj. 2021;372:n254.

24. Morris JK, Rankin J, Draper ES, Kurinczuk JJ, Springett A, Tucker D, et al. Prevention of neural tube defects in the UK: a missed opportunity. Arch Dis Child. 2016;101(7):604-7.

25. National Institute for Health and Care Excellence (NICE). Neural tube defects (prevention in pregnancy) 2021 [Available from: <u>https://bnf.nice.org.uk/treatment-summary/neural-tube-defects-prevention-in-pregnancy.html</u>.

26. Abel GA, Barclay ME, Payne RA. Adjusted indices of multiple deprivation to enable comparisons within and between constituent countries of the UK including an illustration using mortality rates. BMJ Open. 2016;6(11):e012750.

27. Food Standards Agency, Public Health England. National Diet and Nutrition Survey (NDNS RP): Results for Years 5 to 9 (combined) of the Rolling Programme for Northern Ireland (2012/13 - 2016/17) and time trend and income analysis (Years 1 to 9; 2008/09 - 2016/17). Belfast; 2019.

28. Public Health England. National Diet and Nutrition Survey Rolling Programme (NDNS RP): Supplementary report: blood folate results for the UK as a whole, Scotland, Northern Ireland (Years 1 to 4 combined) and Wales (Years 2 to 5 combined). London; 2017.

29. Department of Health Northern Ireland. Breastfeeding 2021 [Available from: <u>https://www.health-ni.gov.uk/articles/breastfeeding</u>.

30. Joffe N, Webster F, Shenker N. Support for breastfeeding is an environmental imperative. Bmj. 2019;367:I5646.

31. Weinstein L. Breast milk--a natural resource. Am J Obstet Gynecol. 1980;136(8):973-5.

32. Department of Health Social Services and Public Safety. Breastfeeding - A Great Start: A Strategy for Northern Ireland 2013-2023. Belfast; 2013.

33. Scientific Advisory Committee on Nutrition (SACN). Feeding in the First Year of Life. London; 2018.

34. All Party Group on Children & Young People. Holiday Hunger Evidence Session. Belfast; 2017.

35. Gilmore G, Gossrau-Breen D, MacDonald L, Taylor L, McGowan L. School food: top marks. A summary report on food in schools research in Northern Ireland. Belfast; 2010.

36. United Nations Department of Economic and Social Affairs. Sustainable Development: The 17 Goals [Available from: <u>https://sdgs.un.org/goals</u>.

37. World Health Organization Regional Office for Europe. Health in All Policies (HiAP): A whole-government system approach to tackle health inequities [Available from: <a href="https://www.euro.who.int/en/health-topics/health-determinants/social-determinants/social-determinants/policy/entry-points-for-addressing-socially-determined-health-inequities/health-in-all-policies-hiap.">https://www.euro.who.int/en/health-topics/health-determinants/social-determinants/social-determinants/policy/entry-points-for-addressing-socially-determined-health-inequities/health-in-all-policies-hiap.</a>

38. Safe Food. The cost of overweight and obesity on the island of Ireland - Executive Summary. Cork; 2012.

39. Laine JE, Huybrechts I, Gunter MJ, Ferrari P, Weiderpass E, Tsilidis K, et al. Cobenefits from sustainable dietary shifts for population and environmental health: an assessment from a large European cohort study. Lancet Planet Health. 2021;5(11):e786e96.

40. Willett W, Rockström J, Loken B, Springmann M, Lang T, Vermeulen S, et al. Food in the Anthropocene: the EAT-Lancet Commission on healthy diets from sustainable food systems. Lancet. 2019;393(10170):447-92.

41. Scarborough P, Allender S, Clarke D, Wickramasinghe K, Rayner M. Modelling the health impact of environmentally sustainable dietary scenarios in the UK. Eur J Clin Nutr. 2012;66(6):710-5.

42. The Climate Coalition, Priestley International Centre for Climate, The UK Health Alliance on Climate Change. This Report Comes With A Health Warning: The Impacts of Climate Change on Public Health. London.

43. The Intergovernmental Panel on Climate Change (IPCC). Summary for Policymakers. In: Global Warming of 1.5°C. An IPCC Special Report. Geneva; 2018.

44. Lauber K, McGee D, Gilmore AB. Commercial use of evidence in public health policy: a critical assessment of food industry submissions to global-level consultations on non-communicable disease prevention. BMJ Glob Health. 2021;6(8).

45. Marmot M. Fair society, healthy lives: the Marmot Review: strategic review of health inequalities in England post-2010. London; 2010.

46. World Health Organization Regional Office for Europe. Life-course approach Copenhagen: World Health Organization Regional Office for Europe; 2021 [Available from: <u>https://www.euro.who.int/en/health-topics/Life-stages</u>.