



**GIG**  
CYMRU  
**NHS**  
WALES

Iechyd Cyhoeddus  
Cymru  
Public Health  
Wales



Iechyd Rhyngwladol  
International Health

# International Horizon Scanning and Learning Report

## Universal Primary Free School Meals

Report 44, June 2023

Canolfan Gydwethredol Sefydliad  
Iechyd y Byd ar Fuddsoddi  
ar gyfer Iechyd a Llesiant



World Health Organization  
Collaborating Centre on Investment  
for Health and Well-being

## Overview

The International Horizon Scanning and Learning reports were initiated as part of the COVID-19 public health response, to support dynamic response and recovery measures and planning in Wales. They varied in focus and scope, depending on the evolving COVID-19 situation and public health/policy needs at that time. The reports focussed on COVID-19 international evidence, data, experience, policy and public health measures, transition and recovery approaches. Learning and intelligence was collated and synthesized to understand and explore solutions for addressing the ongoing and emerging health, well-being, social, economic and environmental impacts (potential harms and benefits) of the pandemic.

The scope of the reports was expanded in spring 2022 to cover priority public health topics, including in the areas of health improvement and promotion, health protection, and health care public health. The report topics and findings are aligned with and help inform decision-making and on-going work in Welsh Government, the NHS and Public Health Wales. They are also disseminated to wider network of (public) health professionals and partners nationally and internationally.

This is part of a wider Public Health Wales' systematic approach to intelligence gathering and evidence translation into policy and practice, supporting coherent, inclusive and evidence-informed action, which progresses implementation of the Wellbeing of Future Generations (Wales) Act and A Healthier Wales strategic plan towards a healthier, more equal, resilient, prosperous and globally responsible Wales.

**Disclaimer:** The reports provide a high-level summary of learning from real life experiences from selected countries, and from a variety of scientific and grey literature, including sources of information to allow further exploration. The reports are not comprehensive and are not aimed at providing detailed, robust or in-depth evidence review, analysis or quality assurance. They are meant to offer a brief snapshot or current evidence, policy and practice, sharing relevant country examples and key (reputable) international bodies' guidance and principles.

## In focus

 **Universal primary free school meals**

## Contents

<b>At a glance: summary of international learning</b> .....	<b>3</b>
<b>Universal primary free school meals: Overview</b> .....	<b>5</b>
<b>Country insights</b> .....	<b>11</b>
<b>Brazil</b> .....	<b>11</b>
<b>Lesotho</b> .....	<b>13</b>
<b>Finland</b> .....	<b>14</b>
<b>Sweden</b> .....	<b>15</b>

## At a glance: summary of international learning

*“Offering free meals for all is an investment in equality and the future”  
(Education Finland)<sup>1</sup>*

### Universal primary free school meals

- ✚ **Free school meals (FSM)** programmes include **Universal Primary Free School Meals (UPFSM)** where all primary school age children receive school meals at no cost regardless of socioeconomic status; and **targeted (means tested)**
- ✚ The **type and number of meals provided vary** between countries and programmes; and the **age ranges included vary** according to the national education system
- ✚ Compared to means tested FSM programmes, **UPFSM have shown increased up-take**, suggesting that wider provision **reduces stigma and other barriers**
- ✚ **Funding constraints are potential barriers** to UPFSM programmes implementation
- ✚ Expanding FSM can bring **economies of scale**
- ✚ UPFSM is considered an **investment in human capital** and has a **positive impact on national and local economies, promoting economic growth**
- ✚ Evidence suggests that UPFSM have a positive impact on the **wider determinants of health and can reduce inequalities**
- ✚ Evidence shows **substantial economic, social, educational, health and environmental returns of UPFSM** programmes, including:
  - Promoting nutritional, balanced diet and healthy eating habits, helping to prevent and reduce childhood obesity
  - Helping to reduce adult obesity, diet-related disease and disability, saving costs to the health sector
  - Supporting children’s growth and development
  - Promoting development of social and emotional learning and skills
  - Improving educational attainment, learning and school performance, while reducing absenteeism and saving costs to the educational sector
  - Increasing parents’ workplace participation, particularly for women, also enhancing gender equality
  - Increasing students’ lifetime earning potential, improving productivity and employment
  - Reducing food insecurity, balancing food budgets and alleviating poverty, particularly for low-income families
  - Positive impact on environmental and climate sustainability, and the foundational economy, through promotion of local procurement and green production practices
  - Promoting active citizenship, trust and participation in bringing change
- ✚ **Effective implementation** of UPFSM programmes requires appropriate infrastructure, equipment and workforce to deliver and monitoring food quality standards
- ✚ School meals provide additional support and **protection to children during times of crisis**

<sup>1</sup> [School meals: the Finnish model | Education Finland](#)

## Country insights

### Brazil

- ✚ The world's second largest universal school feeding programme (largest one in India), with an estimated 40 million children in more than 160,000 schools, across 5,570 municipalities
- ✚ Prioritises **local procurement, sustainable practices** and **reducing food waste**
- ✚ Public schools required to spend at least 30% of their meal budget on family farmers produce
- ✚ School gardens provide the opportunity to grow produce on vacant land and school yards, promoting healthy eating practices, local produce and sustainability

### Lesotho

- ✚ Developing a school feeding programme to **address inequality, poverty, food and nutrition insecurity, and eradicate hunger**
- ✚ The programme assisted 51,000 children with school meals in 2,500 preschools
- ✚ The home-grown school feeding programme links smallholder farmers to schools and other markets
- ✚ A national policy that aims to ensure that school meals contribute to a healthy well-developed workforce, improving nutrition and allowing further education

### Finland and Sweden

- ✚ Nearly 850,000 students between the ages of 6 to 18 are entitled to free school lunch in Finland
- ✚ Provision of FSM is required by law and offered daily to all children aged 6-16 and most students aged 16-19 in Sweden
- ✚ Ensuring **student, teacher and parent participation in decision-making** to maximise social outcomes
- ✚ Schools encouraged to **provide nutritionally, educationally and ecologically sustainable school lunches**
- ✚ National guidelines for school meals include recommendations for environmental sustainability through conscious choices and reduced food waste
- ✚ School mealtimes are a space for social learning assisted by eating in the company of teachers
- ✚ Meal breaks allow students to enjoy meals in a calm, socially interactive, enjoyable manner

## Universal Primary Free School Meals: Overview

### Introduction<sup>2,3</sup>

- Free school meals (FSM) programmes include universal primary free school meals (UPFSM) where all primary school age children receive school meals at no cost to families, regardless of socioeconomic status; and targeted/means tested
- Primary school age ranges vary between countries depending on their education system
- The type and number of meals provided vary between countries and their programmes
- It is important to ensure UPFSM provision is appropriate, and children are consuming meals
- Children eligible for means-tested FSM are more likely to take up school meals under UPFSM, suggesting wider provision reduces stigma and other barriers
- Funding constraints are potential barriers to UPFSM programmes: expanding FSM provision would increase funding requirements annually, in addition to capital expenditures required to expand school kitchen facilities

### Benefits of UPFSM programmes

#### 1) Health and well-being, and equity<sup>4,5,6,7</sup>

- Providing UPFSM maximises the opportunity for all children to **access the same nutritious food**, regardless of where they live or family circumstances
- This is particularly impactful for families living on lower incomes and in neighbourhoods with more unhealthy food options, thereby helping to **reduce inequalities**
- UPFSM can **improve children's health outcomes**, including:
  - ✓ Improving children's health and reducing incidence of childhood obesity via better nutritional balance of food consumed during the day and eating habits at school
  - ✓ Reducing incidence of adult obesity, diet-related disease and disability, saving costs for health systems long-term
- Children taking packed lunches to school were found to consume a lower-quality diet over the day, including higher levels of sugar and sodium, and fewer vegetables

#### 2) Economic returns

- UPFSM is considered an **investment in human capital and has a positive impact on national and local economies**<sup>5,8</sup>
  - ✓ They help **build equity between children and support equality of parents** as they make it easier for them to enter the workforce, promoting economic growth
  - ✓ They **enhance gender equality and female workforce participation**
- Health outcomes (e.g. reduced obesity) and quality of life years resulting from long-term, good-quality provision of FSM offer positive economic return on investment<sup>7,9</sup>
- Increased demand for school catering can **increase employment opportunities and spending in the school food economy**<sup>7</sup>
- Evidence suggests that expanding school catering supply chains can help strengthen local and wider economies via local procurement of food and supplies<sup>7</sup>

<sup>2</sup> [A qualitative process evaluation of universal free school meal provision in two London secondary schools | BMC Public Health | Full Text \(biomedcentral.com\)](#)

<sup>3</sup> [The Calls for Expansion of Free School Meals are Timely and Warranted - NIESR](#)

<sup>4</sup> [Expanding access to free school meals - Impact on Urban Health](#)

<sup>5</sup> [School meals | Education Finland](#)

<sup>6</sup> [Nutrients | Free Full-Text | Promoting Healthy Eating among Young People—A Review of the Evidence of the Impact of School-Based Interventions \(mdpi.com\)](#)

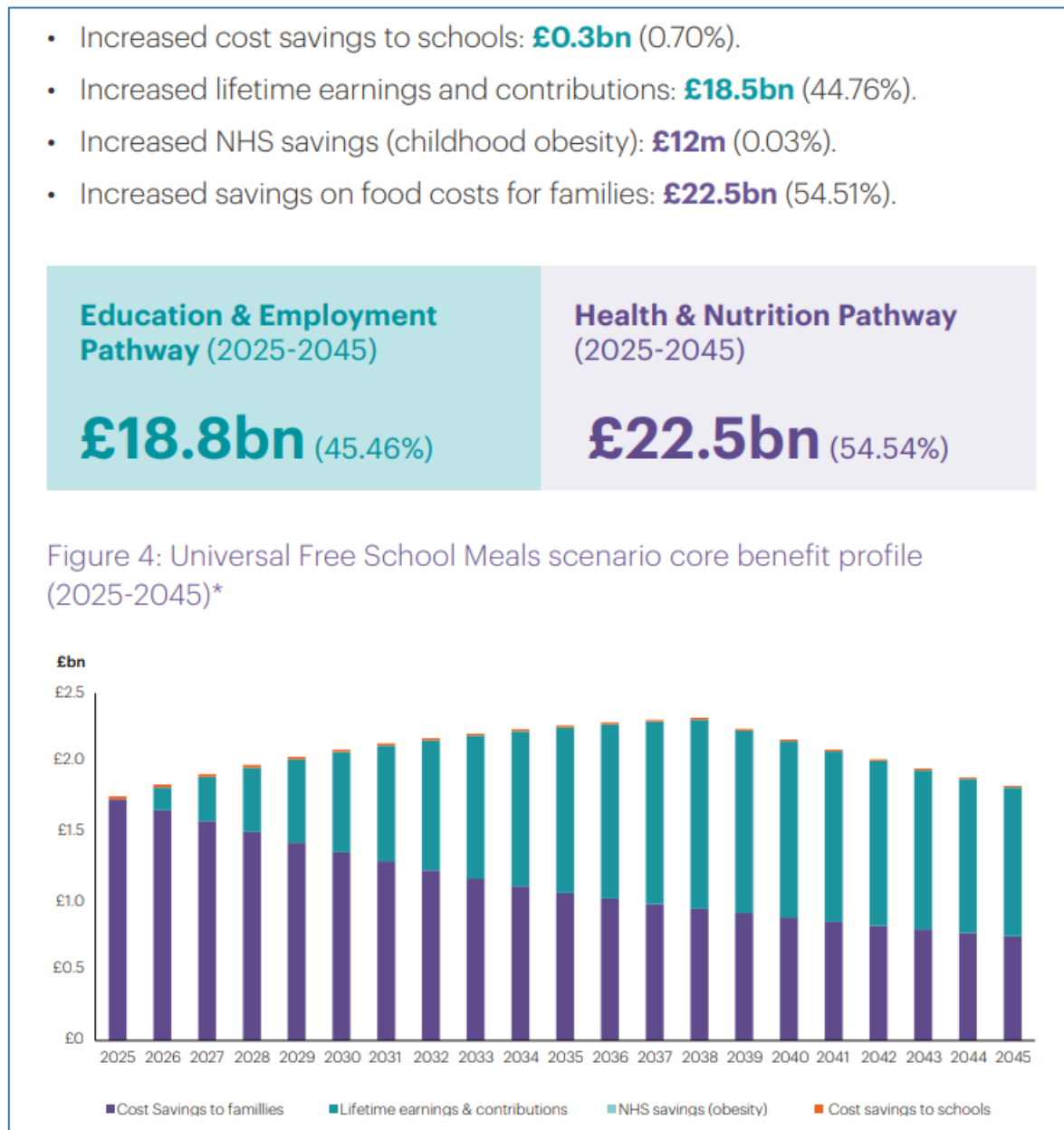
<sup>7</sup> [FSM-Executive-Summary.pdf \(urbanhealth.org.uk\)](#)

<sup>8</sup> [56e80172-0c9a-8eee-a697-098777c8ad73 \(um.fi\)](#)

<sup>9</sup> [School food cost-benefits: England | Public Health Nutrition | Cambridge Core](#)

- Expanding FSM may provide substantial economic return, research shows (*Figure 1*)<sup>10,11</sup>
  - ✓ A cost benefit analysis (CBA) modelled potential return on investment of FSM provision for all state school pupils over a twenty-year period (2025-2045) in England
  - ✓ The CBA estimated £41.3 billion of core benefits, generating £1.71 return for each £1 invested

**Figure 1. Breakdown of total discounted benefit for the Universal FSM scenario between 2025-2045 in England. Source: Impact on Urban Health<sup>10</sup>**



<sup>10</sup> [Expanding access to free school meals - Impact on Urban Health](#)  
<sup>11</sup> [FSM-Executive-Summary.pdf \(urbanhealth.org.uk\)](#)

### 3) Food security<sup>12,13</sup>

- Household food security is defined as ‘a situation in which all those in the household have physical, social and economic access to sufficient, safe and nutritious food at all times that meet dietary needs and food preferences for an active and healthy life’
- Experiencing **food insecurity is associated with poorer diet quality in children**
- Evidence shows that food insecurity impacts children’s physical health (chronic conditions), social well-being, mental and emotional health (externalising and internalising behaviours, aggression, hyperactivity, impaired social skills) and academic outcomes
- UPFSM **may lower costs for food provision and reduce financial pressures for households** living on lower incomes, increasing their ability to purchase more nutritious food at home
  - ✓ This can **improve household food security** in the medium-term, contributing to improved dietary choices and habits into adulthood
  - ✓ It also requires behaviour change to shift re-allocation of funds to more nutritious food

### 4) Social value

- Attaching **practical conditions to UPFSM funding can maximise social value**; for example:<sup>14</sup>
  - ✓ Requiring minimum payment of living wages for school kitchen workforce;
  - ✓ Reporting on the number of children taking up the free lunch offer; and
  - ✓ Ensuring all food being served meets national school food standards
- **Schools can promote active citizenship and participation** by creating a culture where students bring about change in their immediate environment and everyday life. It is important that students can trust and influence the quality of school catering<sup>15</sup>
- UPFSM have been **linked to the development of social and emotional learning and skills**: while eating formally, pupils learn to be sociable and develop interaction skills<sup>16</sup> (*Figure 2*)

### 5) Educational attainment and school performance

- UPFSM **improve children’s educational outcomes**<sup>17</sup>
- Evidence suggests UPFSM can<sup>13</sup>:
  - ✓ **Improve children’s ability to learn and reduce absenteeism** in the short term, which is linked to reduced costs on schools
  - ✓ **Improve educational attainment** in the medium-term, leading to improved productivity and employment, which could lead to improved lifetime earnings
- Evidence suggests children who eat a nutritional balanced lunch may find it easier to concentrate and behave well in class, helping them (and their classmates) learn more in the afternoons<sup>18</sup>

### 6) Climate and sustainability

- UPFSM help educate children about healthy diets and support local production<sup>17</sup>
- Mealtimes can be **used to learn about healthy and sustainable food choices**<sup>19</sup>

<sup>12</sup> [A qualitative process evaluation of universal free school meal provision in two London secondary schools | BMC Public Health | Full Text \(biomedcentral.com\)](#)

<sup>13</sup> [FSM-Executive-Summary.pdf \(urbanhealth.org.uk\)](#)

<sup>14</sup> [Expanding access to free school meals - Impact on Urban Health](#)

<sup>15</sup> [School meals in Finland | Finnish National Agency for Education \(oph.fi\)](#)

<sup>16</sup> <https://onlinelibrary.wiley.com/doi/10.1111/chso.12700?af=R>

<sup>17</sup> [School meals | Education Finland](#)






<sup>18</sup> [The policy menu for school lunches: options and trade-offs in expanding free school meals in England | Institute for Fiscal Studies \(ifs.org.uk\)](#)

<sup>19</sup> [School meals: what we offer | Education Finland](#)



- School meals can be designed based on local food culture, quality and cost-efficiency<sup>19</sup>
- Catering services at schools can drive a reduction in consumption-based climate impact<sup>20</sup>
- Engaging pupils in tasting and developing new climate-friendly foods is key to increasing uptake and acceptability<sup>21</sup>

**Figure 2. Linking school nutrition policies to social and emotional learning core competencies in the US.** Source: CDC<sup>22</sup>

Social and Emotional Learning Core Competencies*	School Nutrition Policies and Practices that Support Social and Emotional Learning Core Competencies
<p><b>Self-awareness:</b> The ability to accurately recognize one's emotions and thoughts and their influence on behavior.</p> 	<ul style="list-style-type: none"> <li>• Nutrition education teaches students               <ul style="list-style-type: none"> <li>» to be aware of how it feels to be full and how it feels to be hungry.<sup>5</sup></li> <li>» to recognize how healthy diet influences emotional well being and how emotions may influence eating habits.</li> </ul> </li> </ul>
<p><b>Self-management:</b> The ability to regulate one's emotions, thoughts, and behaviors effectively in different situations.</p> 	<ul style="list-style-type: none"> <li>• Nutrition education teaches skills, including               <ul style="list-style-type: none"> <li>» how to politely accept or turn down food.</li> <li>» how to stop eating voluntarily, according to internal cues.<sup>5</sup></li> </ul> </li> <li>• School does not use food (e.g., candy) as a reward for good behavior or academic performance, because this can interfere with developing intrinsic motivation.<sup>2</sup></li> <li>• School limits food-based fundraisers and celebrations, which can encourage students to ignore internal hunger cues.</li> </ul>
<p><b>Social Awareness:</b> The ability to take the perspective of and empathize with others from diverse backgrounds and cultures, to understand social and ethical norms for behavior, and to recognize family, school, and community resources and supports.</p> 	<ul style="list-style-type: none"> <li>• Cooking demonstrations or taste test activities are an opportunity for students to try new foods and be reminded that people differ in what they like to eat and that that's okay.</li> <li>• School meals are an opportunity to practice politely accepting or turning down food.</li> <li>• School policies address weight-based bullying and teasing.<sup>2</sup></li> <li>• Nutrition promotion materials feature students who are reflective of the student body, including diverse race/ethnicity, students with disabilities, and different body shapes and sizes.</li> </ul>
<p><b>Relationship Skills:</b> The ability to establish and maintain healthy and rewarding relationships with diverse individuals and groups.</p> 	<ul style="list-style-type: none"> <li>• Adequate seat time during school meals allows students to both eat a nutritious meal and socialize with peers.<sup>2</sup></li> <li>• Providing meals in the classroom can promote a sense of social responsibility if students take turns helping with tasks, including helping to deliver and distribute meals and cleaning up spills.<sup>6</sup></li> <li>• When teachers eat meals with students, students can connect with a supportive and caring adult.<sup>6</sup></li> <li>• School gardens and cooking classes can foster teamwork and strengthen relationships between peers and with teachers.</li> </ul>
<p><b>Responsible Decision-making:</b> The ability to make constructive choices by considering ethics, safety, social norms, potential consequences, and the well-being of self and others.</p> 	<ul style="list-style-type: none"> <li>• Nutrition education teaches about food marketing strategies to influence decisions and making healthy choices.<sup>5</sup></li> <li>• School promotes use of share-tables to help reduce food waste.<sup>7</sup></li> <li>• Self-serve options (e.g., salad bar) encourage students to take only what they will eat.</li> </ul>

### Lessons for effective implementation<sup>23,24</sup>

- **Identify additional needs or adjustments for school kitchens** in terms of infrastructure, equipment and workforce to deliver UPFSM programmes

<sup>20</sup> [JustFood > School meals matter](#)

<sup>21</sup> [JustFood > School meals matter](#)

<sup>22</sup> [https://www.cdc.gov/healthyschools/nutrition/pdf/321123-A\\_FS\\_SchoolNutrition.pdf](https://www.cdc.gov/healthyschools/nutrition/pdf/321123-A_FS_SchoolNutrition.pdf)

<sup>23</sup> [Expanding access to free school meals - Impact on Urban Health](#)

<sup>24</sup> [Frontiers | A Review of Nutritional Guidelines and Menu Compositions for School Feeding Programs in 12 Countries \(frontiersin.org\)](#)



- Given continued high rates of inflation for food and utilities, changes in the cost of delivering meals could be counteracted by economies of scale that expanded provision can enable
- To maximise benefits, the provision of school meals **should be accompanied by systems for monitoring the implementation of quality standards**

### International approaches to UPFSM

- **European Union (EU) school scheme established in 2017** supports the distribution of milk, fruit and vegetables to millions of children, from nursery to secondary school, across Europe (Table 1):<sup>25</sup>
  - ✓ EU countries approve a list of products in collaboration with health and nutrition authorities, helping to support the objective of children following a healthy diet
  - ✓ The scheme supports educational measures including lessons and funding farm visits, school gardens, and tasting and cooking workshops
  - ✓ Issues such as local food chains, organic farming, sustainable production or food waste may be covered
  - ✓ Activities may involve teachers and parents as role models for children’s healthy eating habits
- **Farm to Fork Strategy**, at the heart of the European Green Deal, seeks to make food systems fair, healthy and environmentally friendly, and increase sustainability and resilience to crises such as COVID-19<sup>26</sup>

**Table 1. FSM provision in the EU<sup>27</sup>**

Universal primary free school meals	Estonia, Finland, Sweden
Universal free school meals for some age groups	Lithuania, Latvia
Targeted free school meals across the whole country	Cyprus, Czechia, Germany, Hungary, Luxembourg, Malta, Portugal, Slovakia, Slovenia, Spain
Subsidised school meals and/or free school meals not covering the whole country	Austria, Belgium, Bulgaria, Greece, France, Croatia, Ireland, Italy, Poland, Romania
No provision	Denmark, Netherlands

### Case study: Portugal<sup>28,29</sup>

- Students aged 6 to 18 years attending public schools have access to a FSM programme that provides a daily hot meal
- School meals cost €1.46, and depending on the family's income, students pay full price, 50%, or have their school food expenses covered by public funds
- The programme is a crucial tool to fight food insecurity and promote social inclusion, associated with improvements in academic performance and attendance
- Schools in Portugal play an important role in determining the quantity and quality of food, contributing to the alleviation of social dimensions of food poverty and providing informal support to low-income families
- Qualitative research also highlights the importance of school meals in balancing food budgets among low-income families and their role in poverty alleviation

<sup>25</sup> [https://agriculture.ec.europa.eu/common-agricultural-policy/market-measures/school-fruit-vegetables-and-milk-scheme/school-scheme-explained\\_en](https://agriculture.ec.europa.eu/common-agricultural-policy/market-measures/school-fruit-vegetables-and-milk-scheme/school-scheme-explained_en)

<sup>26</sup> [https://food.ec.europa.eu/horizontal-topics/farm-fork-strategy\\_en](https://food.ec.europa.eu/horizontal-topics/farm-fork-strategy_en)

<sup>27</sup> <https://onlinelibrary.wiley.com/doi/10.1111/chso.12700?af=R>

<sup>28</sup> *School Meals and Food Poverty: Children’s Views, Parents’ Perspectives and the Role of School - Cardoso - 2019 - Children & Society - Wiley Online Library*

<sup>29</sup> *Full article: School meals as a resource for low-income families in three European countries: a comparative case approach (tandfonline.com)*

## United Kingdom<sup>30,31</sup>:

- Welsh Government announced plans to offer a phased roll-out of UPFSM from Sept 2022
- Scotland moved from a means tested system to UPFSM for children aged 4-7 years (Primary year 1-3) in 2015; and recently extended universal provision up to children aged 9 years (Primary year 5)
- In England, children aged 5 to 16 years in full time education are eligible for FSM if their parents/carers receive state benefits (e.g. Child Tax Credit or Universal Credit)<sup>32</sup>
- In Northern Ireland, FSM is means-tested for all ages<sup>33</sup>
- The Mayor of London announced all primary school children in London would receive FSM for the 2023/2024 academic year<sup>34</sup>

### Case study: expanding FSM in response to major global events

School meals provide a crucial means to support and protect children during times of crisis<sup>35</sup>

#### Expansion of FSM programmes in response to the COVID-19 pandemic

- During the COVID-19 pandemic, eligible children in England were not provided free school lunches while at home, exacerbating the economic strain on low-income families<sup>36</sup>
  - ✓ UK Government introduced substitute methods in England, including £15/week supermarket vouchers
  - ✓ After reports of families not accessing vouchers or receiving inadequate food parcels, the campaign to continue FSM through the school holidays was championed
  - ✓ This resulted in FSM being provided throughout the Easter and Summer holidays
- Several US states expanded FSM provision in response to the COVID-19 pandemic<sup>37</sup>
  - ✓ California passed UPFSM legislation during the pandemic, and it is now permanent policy. Breakfast and lunch are provided for students aged 5 to 18 years at all public and charter schools
  - ✓ Colorado's 'Healthy Meals for All Public School Students' statute offers public schools the option to provide UPFSM (breakfast and lunch) in the 2023/24 school year. Participating schools will be reimbursed for the full cost of all meals
  - ✓ Maine's universal free school breakfast and lunch programme was made permanent after pandemic-era federal funding for meals ended
  - ✓ Massachusetts, Nevada and Vermont passed UPFSM for the 2022/23 school year
  - ✓ Twenty-one states are planning, drafting, discussing, or negotiating UPFSM legislation

#### Redistribution of 2022/23 funding to support displaced Ukrainian children<sup>38</sup>

- For the 2022/23 school year, the European Commission invited EU countries to review their requests for aid under the EU school scheme (see above)
- The Commission called for solidarity between EU countries to ease the burden on those providing for displaced Ukrainian children
- EU countries submitted the additional amount requested under the scheme or the amount of their national allocation that was not needed
  - ✓ Unused amounts were redirected to countries with the highest number of Ukrainian children
  - ✓ €2.9 million was redistributed to meet the needs of displaced Ukrainian children in schools

<sup>30</sup> [Free school meals \(publishing.service.gov.uk\)](https://publishing.service.gov.uk)

<sup>31</sup> [A qualitative process evaluation of universal free school meal provision in two London secondary schools | BMC Public Health | Full Text \(biomedcentral.com\)](https://www.ncbi.nlm.nih.gov/pmc/articles/PMC8177777/)

<sup>32</sup> [Free school meals \(publishing.service.gov.uk\)](https://publishing.service.gov.uk)

<sup>33</sup> [A qualitative process evaluation of universal free school meal provision in two London secondary schools | BMC Public Health | Full Text \(biomedcentral.com\)](https://www.ncbi.nlm.nih.gov/pmc/articles/PMC8177777/)

<sup>34</sup> [Expanding access to free school meals - Impact on Urban Health](https://www.um.fi/)

<sup>35</sup> [56e80172-0c9a-8eea-a697-098777c8ad73 \(um.fi\)](https://www.um.fi/)

<sup>36</sup> [Did children get their free school meals during lockdown? | Understanding Society](https://www.understandingsociety.org/)

<sup>37</sup> <https://www.nycfoodpolicy.org/states-that-have-passed-universal-free-school-meals/>

<sup>38</sup> [https://agriculture.ec.europa.eu/common-agricultural-policy/market-measures/school-fruit-vegetables-and-milk-scheme/school-scheme-explained\\_en](https://agriculture.ec.europa.eu/common-agricultural-policy/market-measures/school-fruit-vegetables-and-milk-scheme/school-scheme-explained_en)

## Country insights

The country insights selected for this report provide examples of effective and/or innovative UPFSM programmes:

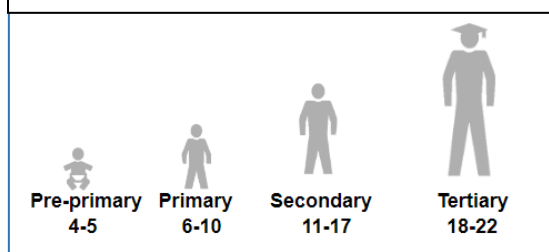
- Brazil prioritises local procurement and sustainable practices
- Lesotho collaborates with the World Food Programme (WFP) to address high rates of inequality, poverty and food insecurity
- Finland and Sweden ensure student, teacher and parent participation in decision-making to maximise social outcomes

## Brazil

### Programme overview

- The Brazilian education system is divided into four levels: pre-primary, primary, secondary and tertiary (Figure 3)<sup>39</sup>
- School feeding in Brazil is a **universal right of students enrolled in public basic education and a duty of the State**, granted by the Constitution<sup>40</sup>

**Figure 3. Official school ages by level of education.** Source: UNESCO<sup>39</sup>



- *Programa Nacional de Alimentação Escolar* (PNAE) is the **world's second largest school feeding programme**<sup>41,42,43,44</sup>
  - ✓ An estimated **40 million children in more than 160,000 schools, across 5,570 Brazilian municipalities** receive school meals<sup>40</sup>
  - ✓ Started in 1957 as a targeted food aid programme designed to fight undernutrition and low levels of education, PNAE expanded in 1988 to offer the universal right to FSM for public primary school students
  - ✓ In 2003, school feeding was integrated into the 'National Zero Hunger Programme', a project centred on overcoming food and nutritional insecurity through the mobilisation of various public and private efforts
  - ✓ In 2009 the Brazilian government enacted the 'School Feeding Law', which institutionalised school feeding at federal level and extended the right to universal free school meals to all students enrolled in all public and community schools in the basic education system from the age of 6 months
- The programme is run by the National Fund for Education Development (FNDE), an independent body within the Ministry of Education, planned by more than 8,000 nutritionists and monitored by 80,000 School Feeding Board members<sup>45</sup>
- PNAE **ensures the provision of a healthy and varied diet to all students** in public education, and the **promotion of healthy eating habits**<sup>45</sup>

<sup>39</sup> [Brazil | UNESCO UIS](https://docs.wfp.org/api/documents/WFP-0000123923/download/?_ga=2.3023155.2062978120.1681197488-1163460436.1656928936)

<sup>40</sup> [https://docs.wfp.org/api/documents/WFP-0000123923/download/?\\_ga=2.234956289.1429000151.1677839956-1163460436.1656928936](https://docs.wfp.org/api/documents/WFP-0000123923/download/?_ga=2.234956289.1429000151.1677839956-1163460436.1656928936)

<sup>41</sup> [https://docs.wfp.org/api/documents/WFP-0000123923/download/?\\_ga=2.234956289.1429000151.1677839956-1163460436.1656928936](https://docs.wfp.org/api/documents/WFP-0000123923/download/?_ga=2.234956289.1429000151.1677839956-1163460436.1656928936)

<sup>42</sup> [The Brazilian school feeding programme: an example of an integrated programme in support of food and nutrition security | Public Health Nutrition | Cambridge Core](https://www.scielo.br/i/csc/a/7VCwppwHhVpB8KxQYdqBb35M/?format=pdf&lang=en)

<sup>43</sup> [The Fome Zero \(Zero Hunger Program\) : The Brazilian experience \(fao.org\)](https://www.scielo.br/i/csc/a/7VCwppwHhVpB8KxQYdqBb35M/?format=pdf&lang=en)

<sup>44</sup> <https://www.scielo.br/i/csc/a/7VCwppwHhVpB8KxQYdqBb35M/?format=pdf&lang=en>

<sup>45</sup> [https://docs.wfp.org/api/documents/WFP-0000123923/download/?\\_ga=2.3023155.2062978120.1681197488-1163460436.1656928936](https://docs.wfp.org/api/documents/WFP-0000123923/download/?_ga=2.3023155.2062978120.1681197488-1163460436.1656928936)

## Sustainability

### 1) Local procurement

- Due to the size of Brazil's UPFSM programme, the supply market was traditionally dominated by big food companies and middlemen
- In 2009, the federal government **required cities to spend at least 30% of their school meal budget on produce from family farmers**; this was mandatory for all public schools and enabled local farmers to bid directly with the city government to supply local schools<sup>46,47</sup>
- This **provided food and nutrition security to students in poor communities and boosted local agriculture**, helping close to 4 million small farmers<sup>48</sup>
- In 2016, due to its success, the direct acquisition of food from family farming became mandatory for all public institutional food services, including universities and hospitals<sup>49</sup>

### 2) Food waste<sup>50</sup>

- Brazil wastes roughly 30% of its food
- **The way the schools buy, prepare and serve food sets an example for school children**
- The FNDE in partnership with the United Nations (UN) World Food Programme's Centre of Excellence against Hunger conduct a 'Best School Feeding Recipes' contest, which aims to highlight the use of wasted ingredients in meals
  - ✓ Winning recipes are added to schools' regular menu to help reduce food waste
  - ✓ Nutritionists often help to develop these recipes and educate children and parents on ingredients used in meals and how food waste can be reduced within their homes

### 3) Climate change and school gardens

- Brazil has a double burden of malnutrition and obesity
- Low-income families often struggle to access healthy, nutritious food
- **School gardens provide opportunities to grow produce on vacant land and school yards, promoting healthy eating practices, local produce and sustainability**<sup>51,52</sup>
  - ✓ In Sao Paulo, 'cities without hunger' helped develop over 40 school gardens, reaching more than 14,500 children
  - ✓ Gardens provide fresh fruit and vegetables and a 'green classroom' introducing children to environmental education, nutrition, biology and gardening
  - ✓ Children are encouraged to take surplus produce home to benefit their family too

The **'Sustainable School Programme'** 2019, an initiative of the State Public Ministry of Bahia, introduced low-carbon meals, twice a week across 155 schools. This sought to adapt 'conventional meals' into 'sustainable meals' and analyse whether such an intervention could reduce greenhouse gas emissions. Meals consisted of vegetables produced by local farmers. Results of the pilot study indicated a reduction of up to 17% in greenhouse gas emissions among individuals over 6 years of age. This suggests that a substantial reduction in climate impact is feasible through school feeding programmes<sup>53</sup>.

<sup>46</sup> [Brazil's School Lunch Program Is Putting Food on the Table for the Country's Small Farmers | Pulitzer Center](#)

<sup>47</sup> [https://docs.wfp.org/api/documents/WFP-0000123923/download/?\\_ga=2.3023155.2062978120.1681197488-1163460436.1656928936](https://docs.wfp.org/api/documents/WFP-0000123923/download/?_ga=2.3023155.2062978120.1681197488-1163460436.1656928936)

<sup>48</sup> [Free school meals in Brazil help local farmers stay on the land | Reuters](#)

<sup>49</sup> [Foods | Free Full-Text | Government Policy for the Procurement of Food from Local Family Farming in Brazilian Public Institutions \(mdpi.com\)](#)

<sup>50</sup> [Would-Be-Trash Veggies Get New Life in Brazil's School Meals \(wfpusa.org\)](#)

<sup>51</sup> [School Lunches in Brazil: From Local Farms to Children's Plates | Pulitzer Center](#)

<sup>52</sup> [Cities Without Hunger: School Gardens Grow Food and Knowledge in São Paulo's East Zone | Linacre College \(ox.ac.uk\)](#)

<sup>53</sup> [An environmental and nutritional evaluation of school food menus in Bahia, Brazil that contribute to local public policy to promote sustainability \(whiterose.ac.uk\)](#)

## Lesotho

### Context<sup>54,55</sup>

- 49.7% of Lesotho's population lives below the poverty line, especially in rural areas
- It is landlocked in South Africa, and is vulnerable to disasters, food insecurity and modifiable disease outbreaks
- Lesotho is ranked in the top 10 of the most unequal countries in the world
- Chronic insecurity, low agricultural productivity, poverty, and malnutrition aggregate vulnerability to natural hazards
- Lesotho loses 7.13% of its GDP to chronic malnutrition, and around 33% of children under the age of 5 years are stunted, with a low height for their age
- In 2019, an estimated 33% (40% female; 26% male) were unemployed



### Programme overview<sup>56</sup>

- The World Food Programme (WFP) has several operation activities in Lesotho which aim to **address root causes of food poverty, build resilience and respond to crises**
- WFP provided technical assistance to the Government in the planning and implementation of gender-responsive social protection programmes, such as school feeding, **that contribute to hunger eradication and long-term food and nutrition security**

### Impacts<sup>56</sup>

- The school feeding programme **assists 51,000 children with school meals in 2,500 preschools**
- WFP strengthened government capacity to manage the home-grown school feeding programme, which **links smallholder farmers to schools and other markets**
- WFP supported the review of the national school feeding policy that **aims to ensure school meals contribute to establishing a healthy, well-developed human workforce** by improving children's nutrition and allowing them to further their education providing children a basis to further their education and lead healthy lives
- Additional WFP budget was approved in December 2022 to scale-up activities by adding canned fish to the school feeding food basket and introducing the commodity voucher transfer mechanism for school feeding

<sup>54</sup> [Lesotho | World Food Programme \(wfp.org\)](#)

<sup>55</sup> [SO-case-study-2020.pdf \(unicef.org\)](#)

<sup>56</sup> [https://docs.wfp.org/api/documents/WFP-0000147970/download/?\\_ga=2.98425439.1998842579.1683289973-1824784467.1677675813](https://docs.wfp.org/api/documents/WFP-0000147970/download/?_ga=2.98425439.1998842579.1683289973-1824784467.1677675813)

## Finland

### Programme overview<sup>57,58,59</sup>

- Finland has the **longest-running FSM programme in the world established in 1943**
  - ✓ Initially, school meals aimed to address post-war poverty and malnutrition
  - ✓ The programme has become an important part of Finland's education success story
- Students attending pre-primary, basic and upper secondary education - **nearly 850,000 students between the ages of 6 to 18**, are entitled to free school lunches
- Children taking part in before- and after- school activities are entitled to a snack, which take into consideration Finnish nutritional guidelines as well as children's individual needs
- National and local regulations govern school meal practices through education acts and decrees as well as through the national and local curricula
  - ✓ Municipalities and education providers are responsible for implementing UPFSM and allocate financing and resources for school catering
  - ✓ Delivery, quality and effectiveness of school catering is monitored continuously. Students are encouraged to actively participate in the evaluation

### The Finnish National Core Curriculum for Basic Education Norms<sup>58</sup>

- A pupil attending basic education must be provided with a balanced and appropriately organised and supervised meal every school day
- The lunch break is important for pupils
- School meals support pupils' healthy growth and development
- The health-related and social role of school meals, the objectives of nutritional education and learning of manners, as well as the recreational aspect of lunch breaks will be taken into account when arranging school meals and any snacks that may be offered
- Pupils will be provided with the opportunity to participate in planning and implementing school meals, which fosters involvement and community spirit
- Organisation of school meals requires cooperation between schools and personnel responsible. Support and monitoring concerning pupils' individual nutritional and health issues are to be agreed in cooperation between the students, their parents or guardians and school health care staff

### Wider determinants<sup>57,58,60</sup>

- In some areas, school canteen personnel report that Monday is the day when pupils eat more than on other days, a sign of not getting sufficient food at home at weekends
- The UPFSM programme works to **build equity between children from different backgrounds, strengthening equal opportunities**
- The Finnish National Board of Education recommends that sweets, sugary drinks and energy drinks should not be made regularly available in educational settings
- **Foods rich in fat, sugar and salt are not recommended as daily choices**

### Social impacts

- Equal access to education and FSM programmes play an important part in strengthening economic growth and transforming Finland into a knowledge-based society<sup>61</sup>

<sup>57</sup> [School meals: the Finnish model | Education Finland](#)

<sup>58</sup> [School meals in Finland | Finnish National Agency for Education \(oph.fi\)](#)

<sup>59</sup> [The Finnish education system \(infofinland.fi\)](#)

<sup>60</sup> [56e80172-0c9a-8eea-a697-098777c8ad73 \(um.fi\)](#)

<sup>61</sup> [School meals | Education Finland](#)



- It is recognised that meal breaks should **allow students to enjoy their meals in a calm, enjoyable and unhurried manner**. They should also give students a chance to interact with others and take a break from teaching lessons<sup>62</sup>

### Innovative approaches

- **Parents / guardians are consulted** about acquiring vending machines or setting up kiosks; and have the right to decide what marketing their under-aged children are exposed to<sup>62</sup>
- Schools that provide nutritionally, educationally and ecologically sustainable school lunches are awarded the School Lunch Diploma, which certifies the school's commitment to the national standards and recommendations set for high-quality school lunches<sup>63</sup>

## Sweden

### Programme overview<sup>64,65</sup>

- School meals are **offered daily to all** children aged 6-16 years; and to most students age 16-19 years
- School meals are regulated by the Education Act stating *'all primary school children are entitled to free and nutritious school meals, regardless of parental income or school form'*
- In 2011, an amendment stipulated that school **meals must be rich in nutrients and equal a third of the recommended daily intake of energy and nutrients**
- The National Food Agency's national advice details six aspects of a 'good meal', as illustrated through the 'Meal Model' (*Figure 4*)
  - ✓ Primary schools can assess all six areas affecting meal quality through a free, web-based system *SkolmatSverige (School Food Sweden)*
  - ✓ The system enables schools to document, review and improve the quality of school meals in accordance with national guidelines through the repeated use of surveys

### Wider determinants

- Swedish school food policy contains multiple objectives **focused on nutrition, learning healthy habits, reducing/preventing obesity, tackling health inequalities and improving attainment** (*Figure 5*)<sup>66</sup>
- Swedish Government adopted a national action plan to implement the European Child Guarantee and to ensure continuous monitoring and reporting<sup>67</sup>
  - ✓ **European Child Guarantee is a policy initiative to prevent and combat social exclusion** by guaranteeing free access to key services, including early childhood education and care, education and school-based activities, and at least one healthy meal per school day<sup>67,68</sup>
  - ✓ The first report (published March 2022) recommended: supporting access to health meals outside of school days, including through in-kind or financial support and

<sup>62</sup> [School meals in Finland | Finnish National Agency for Education \(oph.fi\)](#)

<sup>63</sup> [The School Lunch Diploma - Kouluruokadiplomi](#)

<sup>64</sup> [Free lunch in Swedish schools - Nationales Qualitätszentrum für Ernährung in Kita und Schule \(nqz.de\)](#)

<sup>65</sup> [maltdismodellen\\_en.jpg \(700x551\) \(livsmedelsverket.se\)](#)

<sup>66</sup> [SE - Sweden - FactSheet \(europa.eu\)](#)

<sup>67</sup> [European Child Guarantee to be implemented in Sweden - Government.se](#)

<sup>68</sup> [National Action Plan to implement the European Child Guarantee - Government.se](#)

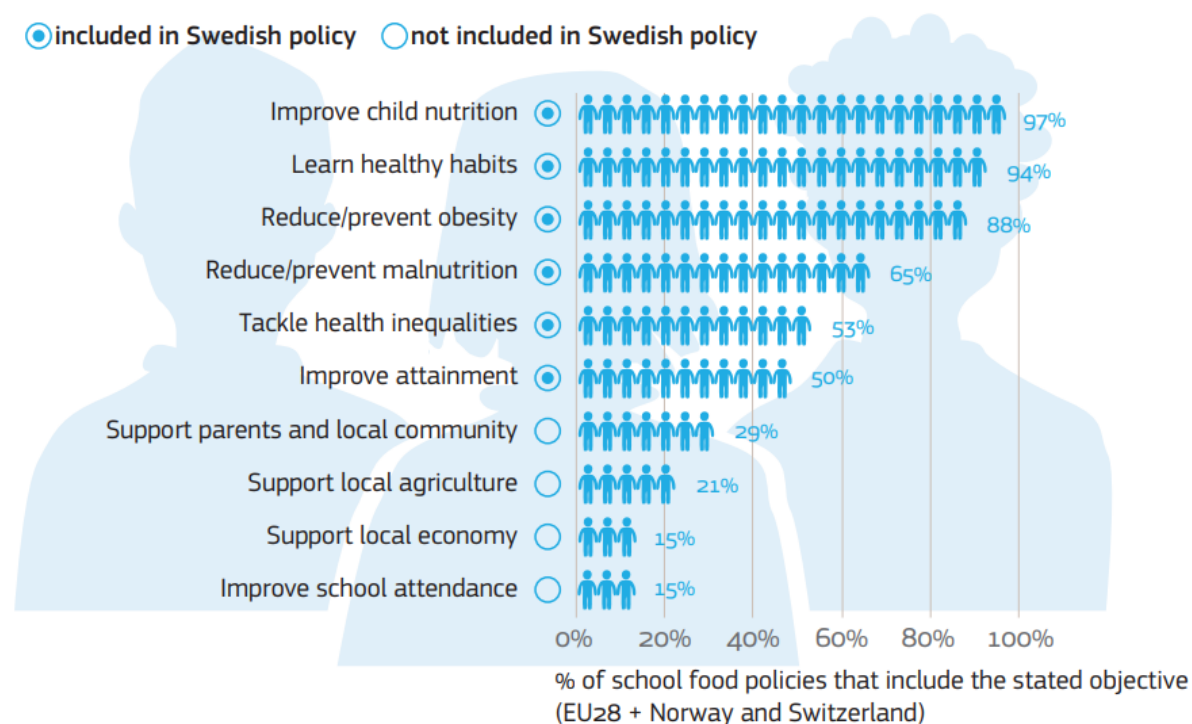


ensuring that nutrition standards in early childhood education and care and education establishments address specific dietary requirements<sup>69</sup>

Figure 4. Swedish School Meal Model. Source: European Commission<sup>70</sup>



Figure 5. School Food Policy objectives. Source: European Commission<sup>71</sup>



<sup>69</sup> [Nationell handlingsplan Barngarantin \(government.se\)](http://nationell.handlingsplan.barngarantin.government.se)

<sup>70</sup> [matlidsmodellen\\_en.jpg \(700x551\) \(livsmedelsverket.se\)](http://matlidsmodellen_en.jpg(700x551)(livsmedelsverket.se))

<sup>71</sup> [SE Sweden FactSheet \(europa.eu\)](http://se-sweden.factsheet.europa.eu)

## Sustainability

- National guidelines for school meals include **recommendations for environmental sustainability through conscious choices and reduced food waste** to reduce environmental impact and drive good conditions for humans and animals<sup>72</sup>
- Stockholm introduced a pilot where 3 primary schools took part in a 4-week trial with 6 out of the 40 meals (15%) being plant-based, resulting in a 40% reduction in CO2 emissions and a 14% cost reduction<sup>73</sup>

## Innovative approaches<sup>74</sup>

- School mealtimes have been identified as a **space for social learning, where pupils can learn behavioural and social skills** and how to be part of a group and an organised community
- **Eating in the company of teachers is common practice** and seen a way of fulfilling this type of learning
- Teachers can lead by example in terms of healthy eating, showing a positive attitude towards food and facilitating conversation and learning around key food-related topics included in the Swedish curriculum

### Benefits of pedagogical school meals

- Multiple studies have assessed teachers' role and attitudes towards school lunches as a pedagogical activity and found:
  - ✓ Positive views among teachers, emphasising the role of social interaction and the possibility of meeting pupils in a more informal setting<sup>74</sup>
  - ✓ Pedagogical lunches can contribute to curriculum goals including health and the environment<sup>75</sup>
  - ✓ Teachers often see themselves as role models of how to behave during mealtime<sup>76</sup>
  - ✓ Teachers are not always provided with favourable conditions to enable and enhance school lunch interactions<sup>77</sup>
- Research suggests that education integrated into school meals can contribute to increased learning around consumption, sustainability, and health, creating an environment for children to develop social and practical skills<sup>78</sup>

<sup>72</sup> [School lunches. \(livsmedelsverket.se\)](https://www.livsmedelsverket.se)

<sup>73</sup> [An environmental and nutritional evaluation of school food menus in Bahia, Brazil that contribute to local public policy to promote sustainability \(whiterose.ac.uk\)](https://www.whiterose.ac.uk)

<sup>74</sup> [Between good intentions and practical constraints: Swedish teachers' perceptions of school lunch \(tandfonline.com\)](https://tandfonline.com)

<sup>75</sup> [School lunch as a break or an educational activity: A quantitative study of Swedish teacher perspectives | Emerald Insight](https://www.emeraldinsight.com)

<sup>76</sup> [preschool-staff-perception-of-the-pedagogical-meal.pdf \(hkr.se\)](https://hkr.se)

<sup>77</sup> [Between good intentions and practical constraints: Swedish teachers' perceptions of school lunch \(tandfonline.com\)](https://tandfonline.com)

<sup>78</sup> [Are school meals a viable and sustainable tool to improve the healthiness and sustainability of children's diet and food consumption? A cross-national comparative perspective \(tandfonline.com\)](https://tandfonline.com)

The International Horizon Scanning and Learning reports are developed by the International Health Team / the International Health Coordination Centre (IHCC) at the WHO Collaborating Centre on Investment for Health and Well-being (WHO CC), Public Health Wales  
Acting National Director of Policy and International Health, WHO CC: Sumina Azam  
International health lead and WHO CC Deputy Director: Mariana Dyakova  
Authors and contributors: Leah Silva, Abigail Malcolm, Lauren Couzens, Sara Cooklin Urbano, Emily Clark, Mariana Dyakova

Contacts: [Leah.Silva@wales.nhs.uk](mailto:Leah.Silva@wales.nhs.uk); [Mariana.Dyakova@wales.nhs.uk](mailto:Mariana.Dyakova@wales.nhs.uk)

All reports are available at: <https://phwwhocc.co.uk/covid-19/international-horizon-scanning/>

[phwwhocc.co.uk](https://phwwhocc.co.uk)

 [@phwwhocc](https://twitter.com/phwwhocc)

 [/Phwwhocc](https://www.facebook.com/Phwwhocc)

Canolfan Gydwethredol Sefydliad  
Iechyd y Byd ar Fuddsoddi  
ar gyfer Iechyd a Llesiant



World Health Organization  
Collaborating Centre on Investment  
for Health and Well-being