

Table S1. Summary of content analysis of articles retrieved.

Author	Year	Objective	Setting	Content analysis of main findings
	Country		Target population	
	Type of Document			
Champ CE, Larrobino NA & Haskins CP [43]	2019	To quantify vending machines in hospitals, and analyse how they correspond with dietary recommendations	Hospital	<ul style="list-style-type: none"> - Governance and decision-making power of the organization instead of the industry on food supply. - Transition from “for profit” to “leading by example” vision. - Long-term approach for supply and education strategies.
	USA		Service users of the Hospitals	
	Research article			
Reinhardt S. & Salvador RJ [53]	2018	To explain the role of clinicians as food procurement advocates. To describe Institutional Food Procurement as a Public Health Strategy	Healthcare institutions	<ul style="list-style-type: none"> - Governance: create a multi-level and multidisciplinary and transversal team to partner in policy development. - Commitment. - Communication of the food strategy transitions to the general public to raise awareness. - External certification useful in the process for change. - Investments with a long-term approach (i.e. savings in healthcare).
	USA		Healthcare professionals and clinicians	
	Policy Forum			
Pitts SJ, Schwartz B, et al. [56]	2018	To synthesize information on best practices on sustainability of healthy food service guidelines	Hospital cafeterias	<ul style="list-style-type: none"> - Investment: training, equipment, supply capacity... - Food service: control of portion sizes, innovative menus, continuous evaluation of dishes, awareness. - Process approach: a progressive journey for transition. - Marketing to introduce sustainable and healthy foods profitably. - Communication with staff, visitors, patients to maintain motivation.
	USA		Food service Directors	
	Research article			

Goggins G. [55]	2017	To explore the organizational culture, procurement practices and other contextual factors that influence food provisioning in large organizations	Large organizations from the west of Ireland	<ul style="list-style-type: none"> - Gender approach. - “Leading by example” vs. “Value for money” - Long-term approach: investments required. - Food service and food supply: on-site catering and sourcing aligned to local food systems. - Governance: transversal and multilevel. - Communication, awareness and relationship building with stakeholders. - Training in-house staff and producers, with multilevel perspective; social, economic, and environmental impacts of food choices. - Evaluation of the strategy and cost efficiency.
	Ireland		Key decision makers on procurement management	
	Research article			
Gray S, Orme J, et al. [44]	2017	To evaluate the impact and challenges of implementing a Food for Life approach	NHS Trusts in England	<ul style="list-style-type: none"> - External certification aid in the development and the commitment. - Process approach step-by-step (i.e. easier to start changing cafeteria food). - Holistic approach: system approach. - Long-term focus. - Leadership is a key factor for commitment and to mobilise a multidisciplinary group - Governance: multidisciplinary team. - Training, awareness for community engagement and education. - Investment at various levels (including on-site cooking infrastructures). - “Lead-by-example” also in vending machines.
	UK		Strategic managers, sustainability leaders and staff well-being coordinators	
	Research article			
Sørensen NN, Tetens I, et al. [54]	2016	To measure the effect of the Danish Organic Action Plan 2020.	Danish public kitchens	<ul style="list-style-type: none"> - External certification: to set targets and as drivers for change. - Training of kitchen staff for organic conversion. Increasing knowledge leads to increase commitment. - Multidisciplinary and holistic approach to training and curriculum design. - Commitment of the organization required for success in food conversion.
	Denmark	To map key curriculum components towards organic food conversion.	Public kitchen workers	
	Research article			

Sørensen NN, Løje H, Tetens I, <i>et al.</i> [63]	2015	To measure physical and psychological well-being among kitchen workers involved in the Danish Organic Action Plan 2020	Danish public kitchens	<ul style="list-style-type: none"> - Gender approach. - Training as a key tool to increase commitment, improve beliefs, attitudes and motivation among kitchen workers. - Sense of ownership of the organic conversion process among kitchen workers is key for success. - No differences between baseline and follow-up on psychological well-being. - Only general body fatigue was highlighted. - Positive impact on the job satisfaction, on joy and motivation to work.
	Denmark		Public Kitchen workers	
Research article				

Bloomfield C. [45]	2015	To understand how the structures and processes of governance on hospital food provision enable and constrain the ability of actors to frame and put sustainability into practice across the institutional structures of the National Health Service (NHS)	NHS hospital in Wales	<ul style="list-style-type: none"> - Evaluation of processes on Sustainable Procurement. - Communication and relationship building. - Food service. Assistance, impact on food waste. Development of recipes and menus with seasonal and local ingredients - External leadership to aid in the transition. - Food supply: flexible approach to tender procedures and contract innovation, relaxed food safety accreditation; nutritional standards as qualitative elements to favour local-fresh produce; customer service and setting a fixed price. - Investment: offering infrastructure to SMEs to facilitate distribution. - Leadership: a public procurement approach that encourages leadership and learning through governance structures in collaboration. - Governance: vertical and horizontal collaboration.
	UK		Those involved in public procurement or provision	
Research article				

Cohen G. [46]	2015	To underline the lack of food care in the health system and raise the economic and social importance of a health system that takes care of food	Hospital cafeteria	<ul style="list-style-type: none"> - Holistic approach: sustainable and healthy food as treatment and prevention. - Leadership and commitment by managerial and medical staff and workers. - Sustainable food supply: relocalization of food procurement impacts on community economy and health. - Training. - Sustainable food service. Also in retail and vending with sustainable food. - Peer-to-peer and communication. - Hospitals can team-up with other industries where food and health are inextricably linked to build a powerful sustainable food model.
	USA		Hospital food system management	
Perline A., Heuscher A., <i>et al.</i> [47]	2015	To compare and contrast the perceptions and attitudes of food producers and distributors, as well as hospital staff involved in food procurement and management.	Hospital cafeterias	<ul style="list-style-type: none"> - Gender approach. - Communication and partnership between producer and institution. - Long term commitment in contracts, investments... (i.e. processing facilities) - Training and networking for staff to increase commitment and enthusiasm - Food supply: the demand should fit the capacity of local production and seasonality. - Leadership necessary.
	USA		Hospital food procurement, management staff, local food producers and distributors	
Beer & Lemmer [62]	2011	To understand the nature of the food supply chain and the way that environmental "costs" are accumulated	Catering sector	<ul style="list-style-type: none"> - Holistic approach to evaluate the impacts of the food system. - Evaluation strategy for cost implications. - Investments. Make Farm-to-Hospital Partnerships more productive (staff, infrastructure...).
	UK		Agents interested in food procurement	

Sonnino R. & McWilliam S. [23]	2011	To contribute to the emerging sustainable food system debate through a focus on the links between hospital food waste, catering practices and public procurement strategies	Hospitals in Wales	<ul style="list-style-type: none"> - Holistic approach to food waste. - Governance: integral approach with key actors for waste-sensitive public procurement strategies. - Food service (i.e. protected mealtimes, bulk <i>vs.</i> plated food, <i>etc.</i>) and food quality linked to waste. - Evaluation: food quality, food waste monitoring, economic impact... - Communication between patient and staff to define the reasons behind food wastage - Training gaps on food waste issues. - Commitment of staff and institutions to buying sustainably. - Investments in infrastructure, staff and time.
	UK		Catering managers, dietetic assistants and nurses	
		Research article		

Wilson ED & Garcia AC [48]	2011	To explore the beliefs, attitudes, and behaviours related to environmentally friendly practices in health care food services	Hospitals	<ul style="list-style-type: none"> - Gender approach. - Training of staff from a holistic approach. Low scores in the beliefs, behaviours and attitudes on food category could be due to lack of knowledge. Need for education on environmental impacts of food choices. - Marketing and awareness campaigns to increase impact in belief in and behaviour towards sustainable diets. - Leadership to support environmentally friendly practices. Food experts as leaders of food strategy. - Governance with green focus decision-making. - Investment. - Evaluation of the situation.
	Canada		Food service managers, clinical dietitians, food service technicians, senior leaders	
		Research article		

<p>DG Environment. European Commission [29]</p>	<p>2016 Belgium Policy handbook</p>	<p>To help public authorities successfully plan and implement GPP, under the 2014 Procurement Directives</p>	<p>Public institutions Public authorities, corporate purchasers, suppliers and service providers – particularly SMEs</p>	<ul style="list-style-type: none"> - Process approach with clear targets and time frames. - Governance: multidisciplinary team to design, plan and develop a food procurement process from a green perspective (i.e. MEAT, minimum percentage of organic...). Contract requirements and awarding criteria have to be verifiable. - Training at various levels: strategy development, tendering application. - Peer-to-peer network to pass on the knowledge. - Managerial Leadership and support. High-level support is an important factor for the success of GPP. - Evaluation and monitoring system.
<p>Hajnalka P., et al. [51]</p>	<p>2018 EU Policy guidance</p>	<p>To provide support to stakeholders in the design and implementation of public food procurement initiatives that aim to facilitate food purchases from smallholder farmers</p>	<p>Global public institutions Policymakers</p>	<ul style="list-style-type: none"> - Food supply: scale up of smallholder farmers into PFP procedures (to be competitive against large food traders). Planning and preparing of procurement requirements bearing in mind the local capacity and characteristics. - Advantages for smallholders: preferential treatment, on-time payments, access to tender information. - Training smallholder farmers to tender. - Investment in business capacity for smallholder farmer. - Holistic approach: avoid silo mentality in the workplace - Governance: Multi-sector, multi-level structures with an integral approach to the food system.
<p>Hernández-Olivan, P [59]</p>	<p>2019 Belgium Factsheet</p>	<p>To provide guidelines for healthcare organisations to procure healthier and sustainable vending services</p>	<p>Health care services Vending food procurement authority</p>	<ul style="list-style-type: none"> - Lead by example in vending machines. - Communication/awareness: healthy options, recycling, sustainability culture in vending. - Trustful relationship: engage with suppliers. - Investment: energy efficient equipment. - Food service: with waste strategy. - Food supply: organic and fair trade products. Drinking water freely available - Peer-to-peer: share knowledge.

Hernández-Olivan, P [50]	<p>2018</p> <hr/> <p>Belgium</p> <hr/> <p>Factsheet</p>	<p>Facilitate recommendations for Sustainable Food Procurement (SFP) strategy</p>	<p>Health care services</p> <hr/> <p>Policy makers, Hospitals' Sustainable procurement management team</p>	<ul style="list-style-type: none"> -Governance: multidisciplinary, multilevel group to develop and evaluate the SFP and food waste strategy. -Food supply: local, fresh, organic, seasonal. -Food service: as an educative tool. -Food service that avoids food waste: ordering, portion size, assistance to eat, creative menu, flexible food ordering system, creative use of leftovers... -Training and awareness for health professionals on healthy, sustainable food and food waste. -Peer-to-peer learning and networks to leverage the purchasing power. -Communication for networking (between local producers, staff...). -Marketing, celebrate successes. -Evaluation of SFP strategy: surveys, food waste control...
HCWH Europe [49]	<p>2008</p> <hr/> <p>Czech Republic</p> <hr/> <p>Factsheet</p>	<p>To explain how hospitals have succeeded in providing patients with more appetising and nutritious meals, made with more local and organic ingredients.</p>	<p>Health care services.</p> <hr/> <p>Policymakers, Hospitals' Sustainable procurement management team.</p>	<ul style="list-style-type: none"> -Evaluation: research and planning. -Communication and marketing of activities. Publicity to attract suppliers. -Managerial leadership. -Process approach, with a range of stakeholders in the planning. -Governance: multi-disciplinary. Use tenders/contracts to define the sustainability criteria. Split contracts into lots. -Food service: short supply chains improve quality of menus. -Food supply: make a strong network of local and organic suppliers and cooperatives. -Training small producers on public-sector procurement. -Trustful relationship with suppliers. -Investments: training and infrastructure. -External third party partner to help in process development and evaluation. Partnerships to create economies of scale and avoid waste.

Barling D. <i>et al.</i> [52]	2013	To explore the changes happening in public food procurement through inspiring cases of various European cities (Malmö, East Earshyre, Copenhagen, Vienna)	Hospitals and schools	<ul style="list-style-type: none"> - Managerial leadership - Commitment of key actors. Political will to change. - Process approach. Setting clear goals and dates. Adopting an incremental approach. - Governance: inclusive, open to discussion. Engage civil society. - Contracts with Life-Cycle evaluation approach. - Evaluation (monitor targets). Food waste. Economic control. - External certification. - Training to commit to change towards SFP. Inspire commitment and ensure skills - Investment. SME infrastructure for competitiveness (support ability for distribution and tendering). - Food supply: local capacity to match demand. - Food service: on site facilities. New menus. - Awareness: Community engagement.
	UK		Procurement decision-makers, health professionals, policymakers	Project report
Michaels, S. [57]	2006	To summarise the key factors in sustainable procurement practice.	Public Food procurement sector	<ul style="list-style-type: none"> - Investment: kitchen, Cooperative ventures. - Holistic approach: SFP strategy multiplier effect. - Trustful relations through proactivity. Fair treatment of suppliers, mainly in payment terms. Grow confidence. - Food supply: match the needs to local capacity. Local suppliers more responsive. Proactive buying organisations to seek out local producers. - Governance: facilitate small producers' information and access to tender (i.e. split contracts into lots, match supply needs to local capacity, contract based on MEAT). - Food service: local, seasonal, nutritious menus. - Awareness: on sustainable food and healthy eating. - Training: motivation and skilling up staff, producers. - Evaluation and monitoring by a third party. - External leadership: NGOs.
	UK		Purchasing decision-makers	

<p>Boyano, A., et al. [61]</p>	<p>2019</p> <hr/> <p>Luxembourg</p> <hr/> <p>Technical report</p>	<p>To summarize the revision process of the Green Public Procurement (GPP) criteria for Food procurement and catering services.</p>	<p>Health care services.</p> <hr/> <p>Procurement decision-makers, health professionals, policy makers</p>	<ul style="list-style-type: none"> - Governance: in EU GPP is a voluntary instrument. - Food supply: contract specifications to seek a SFPS. - Food service: food, catering, vending machines. - Training on GPP procedures for suppliers and staff. - Support small suppliers to fulfil the criteria and verifications for the GPP procedure to be successful. - GPP criteria for food: organic products labelling; Marine Conservation Society (MCS) red list; seasonal products labelling; fair and ethical trade products in accordance with the ILO; environmentally responsible vegetable fats; geographical indications. - GPP criteria for catering services: verify competences and experience of the company; EU GPP criteria for food; plant-based menus; food and general waste strategy; chemical products with EU Ecolabel; SOP for kitchen equipment; staff training. - GPP criteria for vending machines: organic food and Fair Trade products; environmentally responsible vegetable fats; smart controls; annual energy consumption; GWP of refrigerants; reusable cups; contract performance (acquire new vending machines). - Evaluation of procedures.
<p>Health Care Without Harm [26]</p>	<p>2016</p> <hr/> <p>Italy</p> <hr/> <p>Project report</p>	<p>To offer evidence-based proposals for good practice on how to deliver sustainable and healthy food in hospitals.</p>	<p>Healthcare institutions</p> <hr/> <p>Responsible roles for sustainable and healthy practice.</p>	<ul style="list-style-type: none"> - Food supply: invest time and resources to identify suppliers. - Investment: equipment, personnel and products. - Evaluation: monitoring and satisfaction surveys. Economic control to adjust budget. - Food service: local, seasonal and organic. Healthy vending. Less meat. Food waste plan. - Awareness: educative role in many aspects. - Training

Jochelson K., <i>et al.</i> [58]	2005		Hospitals	<ul style="list-style-type: none"> - Food supply: policies based on sustainability. - Holistic approach to food policy. - Training suppliers and staff. - “Health for profit” vs. “leading by example”. - Leadership and commitment. - Trustful relations between institution and suppliers. Advice on tendering process. Relax the tendering process for smallholder producers. A fairer process. - Communication on SFP strategy to all users. Advertise upcoming contracts. - Food service: develop patient menus using local and seasonal ingredients, buy organic beef. Develop healthier vending machines. Food ordering system to avoid food waste. - Evaluation of economic costs. - External party input in food strategy development, with expertise in local food chains and public procurement. - Peer-to-peer training. Exploit and develop the expertise of regional procurement groups. - Certifications and assurance schemes. Enable the inclusion of food products with assurance schemes promoting sustainable agriculture.
	UK	To identify opportunities for managing food procurement sustainably and promoting healthy eating in acute hospitals.	Procurement management, hospital staff, as well as policy makers	
	Project report			
Rimington M. & Carlton Smith J [60]	2005		Public institutions	<ul style="list-style-type: none"> - Evaluation: monitor progress, cost analysis and budget strategy. - Long term commitment - Awareness of the rise of SFP demand and culture. - Investment in training and in equipment. - Trustful relation: map local producers. - Training: skill up of SFP - Food supply: policy for SFP that relaxes procedures for SME and food producers (i.e. Tendering, contracts, food safety certifications). - Holistic approach on policies, action plans and targets.
	UK	To evaluate obstacles and to identify opportunities for a sustainable approach in public sector’s food procurement and catering services.	Food procurement managers and policymakers	
	Technical report			

Cioci G., et al. [28]	2016	To highlight the common challenges in implementing healthy and sustainable food policies in European hospitals, and to provide good examples to encourage others.	Healthcare institutions	<ul style="list-style-type: none"> - Awareness: hospital food as an educative tool. - Holistic approach: key for SFP success. - Governance: clear objectives and targets. Develop a food waste strategy. Working group establishment. - Food service: menu variations. SFP stimulates appetite and recovery. Tap water is encouraged. - Training on food waste and food safety (traceability). Geographical Indicator labelling useful for traceability and quality of products. - Food supply: on-site kitchens guarantee control over menu and food quality. Continuous provision is difficult for small producers. - Evaluation: budget control. - Trustful relation: close partnership between supplier and hospital for best ingredients.
	Belgium		Procurement management staff, healthcare professionals, policymakers.	
European Union [32]	2014	To set out the criteria for Public Procurement to be followed by all the member states	Public Institution	<ul style="list-style-type: none"> - Food Supply Governance: adapt EU policy to introduce SMEs. - Holistic approach: contract performance with various dimensions. - Trustful relation and training: assure that SMEs know requirements (i.e. certifications) and bureaucratic steps. - Must comply with the <i>Treaty on the Functioning of the EU</i>. - Art. 5: Lot values of less than €80 000 are not subject to the provisions of the Directive. The sum value of lots shall not exceed 20% of the total. - Art. 18: equal treatment. - Art. 46: contracting authorities encouraged to break contracts into lots. - Art. 57 to 64 criteria for qualitative selection. Quality assurance and environmental management standards certified by accredited bodies. - Art. 67: contract award → MEAT (not compulsory) or price/cost only. - Art. 68: life-cycle costing (<i>indicate method used</i>) covers: (a) costs, borne by the contracting authority; (b) costs of environmental externalities. - Art. 70: contract performance may include economic, innovation-related, environmental, social or employment-related considerations.
	European Union		Policy makers and National Governments	
	Directive Legislative act 2014/24/EU			