Table S1. Indexers used to select publications

PubMed **1269**	("food services"[MeSH Terms] OR ("food services"[MeSH Terms] OR ("food"[All Fields] AND "services"[All Fields]) OR "food services"[All Fields] OR ("services"[All Fields] AND "food"[All Fields]) OR "services food"[All Fields]) OR ("food services"[MeSH Terms] OR ("food"[All Fields] AND "services"[All Fields]) OR "food services"[All Fields] OR ("food"[All Fields] AND "service"[All Fields]) OR "food service"[All Fields]) OR ("food services"[MeSH Terms] OR ("food"[All Fields] AND "services"[All Fields]) OR "food services"[All Fields] OR ("service"[All Fields] AND "food"[All Fields]) OR "service food"[All Fields]) OR ("food services"[MeSH Terms] OR ("food"[All Fields] AND "services"[All Fields]) OR "food services"[All Fields] OR ("meal"[All Fields] AND "wheels"[All Fields])) OR ("food services"[MeSH Terms] OR ("food"[All Fields] AND "services"[All Fields]) OR "food services"[All Fields] OR ("meals"[All Fields] AND "wheels"[All Fields]) OR "meals on wheels"[All Fields]) OR "food service, hospital"[MeSH Terms] OR ("food service, hospital"[MeSH Terms] OR ("food"[All Fields] AND "service"[All Fields] AND "hospital"[All Fields]) OR "hospital food service"[All Fields] OR ("service"[All Fields] AND "hospital"[All Fields] AND "food"[All Fields])) OR ("food service, hospital"[MeSH Terms] OR ("food"[All Fields] AND "service"[All Fields] AND "hospital"[All Fields]) OR "hospital food service"[All Fields] OR ("food"[All Fields] AND "services"[All Fields] AND "hospital"[All Fields])) OR ("food service, hospital"[MeSH Terms] OR ("food"[All Fields] AND "service"[All Fields] AND "hospital"[All Fields]) OR "hospital food service"[All Fields] OR ("hospital"[All Fields] AND "food"[All Fields] AND "services"[All Fields]) OR "hospital food services"[All Fields]) OR ("food service, hospital"[MeSH Terms] OR ("food"[All Fields] AND "service"[All Fields] AND "hospital"[All Fields]) OR "hospital food service"[All Fields] OR ("services"[All Fields] AND "hospital"[All Fields] AND "food"[All Fields])) OR ("food service, hospital"[MeSH Terms] OR ("food"[All Fields] AND "service"[All Fields] AND "hospital"[All Fields]) OR "hospital food service"[All Fields] OR ("hospital"[All Fields] AND "food"[All Fields] AND "service"[All Fields])) OR "restaurants"[MeSH Terms] OR ("restaurant s"[All Fields] OR "restaurants"[MeSH Terms] OR "restaurants"[All Fields] OR "restaurant"[All Fields])) AND ("Sustainable practices"[All Fields] OR "Sustainability"[All Fields] OR "Environmental sustainability"[All Fields])
Embase **1013**	#8 #4 AND #7 #7 #5 OR #6 #6 'environmental sustainability'/exp OR 'envinonmental sustainability' #5 'sustainability'/exp OR sustainability #4 #1 OR #2 OR #3 #3 'food services'/exp OR 'food services'/syn #2 'restaurant'/exp OR 'restaurant'/syn #1

	'hospital food service'/exp OR 'hospital food service'/syn
LILACS (by BVS) **1767**	"Serviços de Alimentação" OR " Food Services" OR "Servicios de Alimentación" OR "Services alimentaires" OR "Serviço Hospitalar de Nutrição" OR "Food Service, Hospital" OR "Servicio de Alimentación en Hospital" OR " Restaurantes" OR "Restaurants" AND (db:("LILACS"))
Other databases: « IBECS" OR "BINACIS" OR "BDENF" OR "CUMED" OR "BDNPAR" OR "ARGMSAL" OR "SDG" **410**	"Serviços de Alimentação" OR " Food Services" OR "Servicios de Alimentación" OR "Services alimentaires" OR "Serviço Hospitalar de Nutrição" OR "Food Service, Hospital" OR "Servicio de Alimentación en Hospital" OR " Restaurantes" OR "Restaurants" AND (db:("IBECS" OR "BINACIS" OR "BDENF" OR "CUMED" OR "BDNPAR" OR "ARGMSAL" OR "SDG"))

Table S2. JBI Critical Appraisal Checklist (Risk of Bias)

Type study design	YES	NO	UNCLEAR
Cohort Studies	49.59%	14.88%	35.54%
Case Control Studies	80.0%	0%	20.0%
Quasi – Experimental Studies	77.78%	22.22%	0%
Case Series Studies	70.0%	0%	30.0%
Cross Sectional Studies	75.0%	0%	25.0%

Table S3. Full-text excluded articles and reasons

Author (year)	Title	Exclusion Motif
Afzal et al., 2022*	Quantifying Food Waste in the Hospitality Sector and Exploring Its Underlying Reasons-A Case Study of Lahore, Pakistan	3
Alamar et al., 2017	Minimising food waste: a call for multidisciplinary research	1
Alharbi (2020)*	Towards Sustainable Food Services in Hospitals: Expanding the Concept of 'Plate Waste' to 'Tray Waste'	3
Aranha et al., 2018	Avaliação do desperdício de alimentos em uma unidade de alimentação e nutrição na cidade de Botucatu, SP	3
Araújo et al., 2023	Avaliação qualitativa das preparações servidas em um restaurante popular e os impactos do cenário pandêmico da covid-19	1
Armendro (2021)	Valorização de resíduos orgânicos e redução de desperdício no ramo industrial de fornecimento de suprimentos alimentares para restaurantes do tipo "fast-food"	1
Augustini et al., 2008	Avaliação do índice de resto-ingesta e sobras em unidade de alimentação e nutrição (UAN) de uma empresa metalúrgica na cidade de Piracicaba/SP	3
Baldwin et al., 2010	Restaurant and food service life cycle assessment and development of a sustainability standard	1

Balzaretti et al., 2018	Improving the overall sustainability of the school meal chain: the role of portion sizes.	1
Barbosa et al., 2021	Avaliação do resto e ingesta de refeições em um restaurante de empresa privada	3
Bardini et al., 2014	Determinação do índice de resto-ingestão em Unidade de Alimentação e Nutriçao do município de Tubarão, SC	3
Bassin et al., 2019	Avaliação do controle de fator de correção de hortifrutis em uma Unidade de Alimentação e Nutrição na Baixada Fluminense do Rio de Janeiro	1
Berardy et al., 2022*	Comparison of Plate Waste between Vegetarian and Meat-Containing Meals in a Hospital Setting: Environmental and Nutritional Considerations	1
Betz (2015)*	Food waste in the Swiss food service industry – Magnitude and potential for reduction	1
Biasini et al., 2024*	Nutritional, environmental and economic implications of children plate waste at school: a comparison between two Italian case studies	3
Bilska et al., 2022*	The Management of Meals in Food Service Establishments in the Context of Food Waste—Results of Focus Group Interviews with Employees and Owners	5
Bölükbaş et al., 2021*	Analysis of food waste and sustainability behavior in Turkish television cooking shows	4
Boutler et al., 2021	The attitudes and experience of workplace catering staffregarding food sustainability: A qualitative study	1
Brito et al., 2023	Avaliação de índice de resto-ingesta em uma unidade de alimentação e nutrição de um restaurante universitário	3
Burey et al., 2020*	Food Waste and Food for Thought	4
Carvalho et al., 2013	Avaliação do índice de resto-ingestão e sobras em uma Unidade Produtora de Refeição (UPR)	3
Carvalho et al., 2018	Práticas educativas de gestão ambiental nos serviços de alimentação permissionários dos campi de Universidade Pública do Estado do Rio de Janeiro	1
Castro (2011)	Intervenção educativa para promoção do consumo de frutas e hortaliças sob a perspectiva de gestores de unidades de alimentação e nutrição	1
Chan et al., 2013*	Analysis of Food Waste Resources Available for Sustainable Energy Production in the Finger Lakes Region of New York State	7
Chatti et al., 2024*	Closing the Loop: Exploring Food Waste Management in the Near East and North Africa (NENA) Region during the COVID-19 Pandemic	7
Coimbra et al., 2019	Índice de resto-ingestão e Avaliação Qualitativa das Preparações do Cardápio de um Restaurante Universitário do município de Barreiras-BA	3
Collins e Porter (2023)*	Quantifying waste and its costs in hospital foodservices	3
Collins et al., 2022	Quantifying waste and its costs in hospital foodservices.	3
Connors et al., 2023*	College students observe waste of edible food, and make recommendations	7

Cook Hoons et al., 2022	It's a constant changing environment, and we're just playing catch up': Hospital food services, food waste, and COVID-19.	1
Corrêa et al., 2006	Índice de resto-ingestão antes e durante a campanha contra o desperdício, em uma unidade de alimentação e nutrição	1
Cristobal et al., 2017	Prioritizing and optimizing sustainable measures for food waste prevention and management	1
Derqui e Filimonau (2024)*	The (de)motives for using food waste reduction apps among hospitality providers	7
Derqui et al., 2017	The opportunity of tracking food waste in school canteens: Guidelines for self-assessment.	1
Di Pierro et al., 2023	Setting the sustainable development targets for restaurants and Italian HoReCa sector.	1
Dogdu et al., 2024	Hidden realities: Food waste from servings in mini size packaging.	1
Elnakib et al., 2021	Food Waste in Schools: A Pre-/Post-test Study Design Examining the Impact of a Food Service Training Intervention to Reduce Food Waste.	1
Eriksson et al., 2020*	Quantities and Quantification Methodologies of Food Waste in Swedish Hospitals	3
Etchepare et al., 2015	Relação de aceitabilidade de dieta hospitalar com o índice de resto-ingesta	3
Fassina et al., 2019	Análise qualitativa das preparações do cardápio de duas unidades de alimentação e nutrição	1
Ferraz et al., 2023*	Meals Production And Sustainability: Assessment Of Waste Generation In An University Restaurant	10
Filho et al., 2023*	Toward food waste reduction at universities	5
Filimonau (2020)*	The determinants of consumer engagement in restaurant food waste mitigation in Poland: An exploratory study	5
Filimonau et al., 2023*	Food waste and its management in the foodservice sector of a developing economy: An exploratory and preliminary study of a sample of restaurants in Iraq	5
Fonseca et al., 2022*	Evaluation of factors responsible for waste and environmental impacts arising from the production of meals in food services	4
Galego et al., 2014	Avaliação do índice de desperdício do refeitório de uma UAN do município de Guarapuava/PR	3
García-Herrero, 2021*	Eating away at sustainability. Food consumption and waste patterns in a US school canteen	3
Gruia et al., 2021*	Reducing environmental risk by applying a polyvalent model of waste management in the restaurant industry	7
Hannibal et al., 2018	Throwing it out: Introducing a nexus perspective in examining citizen perceptions of organizational food waste in the U.S.	1
Heikkila et al., 2016*	Elements affecting food waste in the food service sector	9
Heller et al., 2015	Manejo de resíduos em uma unidade de alimentação e nutrição	1
Hentschke et al., 2015	Análise de resto e sobra limpa em restaurantes	3
Hidalgo-Víquez et al., 2021	Cuantificación del desperdicio de alimentos en servicios de alimentación de la Universidad de Costa Rica	1
Islam et al., 2023*	Do food delivery apps influence food waste generation? A stimulus-organism-behavior-consequence (SOBC) exploration	7

Ismail et al., 2019	The importance of menu variety experience for public health sustainability at higher education institution	1
Jia et al., 2023	Scale and Environmental Impacts of Food Loss and Waste in China—A Material Flow Analysis	1
Jones et al., 2012	Food sustainability education as a route to healthier eating: evaluation of a multi-component school programme in English primary schools.	1
Junkrachang et al., 2024*	Investigating guest reactions to plate waste reduction strategies: A field experiment in a casual-dining restaurant	1
Juvan et al., 2023*	Waste production patterns in hotels and restaurants: An intra-sectoral segmentation approach	7
Kampo et al., 2024*	Financial and Credit Regulation as a Tool for Attracting Investments in Tourism and the Hotel and Restaurant Business of Ukraine	7
Kestava (2019)*	Food waste and sustainability in a Finnish restaurant	7
Khalid et al., 2023	Food waste: causes and economic losses estimation at household level in Pakistan	2
Kuntscher et al., 2022*	Food waste reduction in the food services sector - practical recommendations for courses of action	5
L´ evesque et al., 2024	Identifying the factors affecting the implementation of food waste reduction strategies in independent restaurants: Moving towards eco- efficiency	5
Lacerda et al., 2019	Avaliação do percentual de sobras em um Restaurante Universitário do município de Barreiras-BA	3
Lima et al., 2016	Análise nutricional, desperdício e custos em unidade de alimentação e nutrição hospitalar em Fortaleza-CE	3
Lindberg e Jensen (2014)*	How could a lower temperature in the cold chain affect food waste?	7
Lins et al., 2021	Eco-Inefficiency Formula: A Method to Verify the Cost of the Economic, Environmental, and Social Impact of Waste in Food Services.	1
Love et al., 2023	Aquatic food loss and waste rate in the United States is half of earlier estimates	1
Lu et al., 2023	Sustainable Preparation Behavior for Kitchen Staff in Order to Limit Food Waste.	1
Malefors et al., 2022*	Food waste changes in the Swedish public catering sector in relation to global reduction targets	7
Marais et al., 2017	Are the attitudes and practices of food service managers, catering personnel and students contributing to excessive food wastage at Stellenbosch university?	3
Marques et al., 2008	Controle de sobra limpa no processo de produção de refeições em restaurantes	3
Martin-Rios (2019)	Food waste management innovations in the foodservice industry	1
Martin-Rios et al., 2022*	Sustainable waste management solutions for the foodservice industry: A Delphi study.	1
Martindale et al., 2017	The impact of food preservation on food waste.	1
Martinho et al., 2022*	Environmental, Economic, and Nutritional Impact of Food Waste in a Portuguese University Canteen	3

Mathisen et al., 2022	The Impact of Smartphone Apps Designed to Reduce Food Waste on Improving Healthy Eating, Financial Expenses and Personal Food Waste: Crossover Pilot Intervention Trial Studying Students' User Experiences.	1
Matzembacher et al., 2020	Consumer's food waste in different restaurants configuration: A comparison between different levels of incentive and interaction	3
McAdams (2023)*	Investigating food waste generation at long-term care facilities in Ontario	6
Medeiros et al., 2014	Avaliação do índice de resto e sobras em serviços de alimentação	3
Medeiros et al., 2022	Avaliação dos Serviços de Alimentação de uma Universidade Pública do Rio de Janeiro na Pandemia de COVID-19	1
Mello et al., 2011	Avaliação do desperdício de alimentos em unidade de alimentação e nutrição localizada em um clube da cidade do Rio de Janeiro	3
Milindi et al., 2022*	Food waste-Energy-Water-Emissions (FEWE) nexus in the food service sector: Comparing a restaurant meal from imported ingredients versus an imported ready-to-eat meal	1
Monteiro et al., 2014	Estudo qualitativo e quantitativo de restaurantes universitários das capitais brasileiras	1
Musicus et al., 2019	Implementation of a Rooftop Farm Integrated With a Teaching Kitchen and Preventive Food Pantry in a Hospital Setting.	1
Nonino Borges et al., 2006	Desperdício de alimentos intra-hospitalar	3
Ñunque et al., 2015	Análisis cuali-cuantitativo de menús infantiles ofrecidos en restoranes familiares y de comida rápida en Santiago de Chile	1
O'Connor et al., 2022	Vulnerable vegetables and efficient fishers: A study of primary production food losses and waste in Ireland	1
Ögel et al., 2023	Identifying the leading retailer-based food waste causes in different perishable fast-moving consumer goods' categories: application of the F-LBWA methodology	2
OoNorasak et al., 2022*	Evaluation of a sustainable student-led initiative on a college campus addressing food waste and food insecurity	7
Osei-Owusu et al., 2023	Potential Energy and Environmental Footprint Savings from Reducing Food Loss and Waste in Europe: A Scenario-Based Multiregional Input-Output Analysis.	1
Palmer et al., 2021	A Systems Examination of Food Packaging and Other Single-Use Item Waste in School Nutrition Programs.	1
Pandian (2019)*	Food waste management – Survey on current trends around Erode, Tamil Nadu.	8
Pereira et al., 2019	Construção e implementação de fichas técnicas de preparação de unidade de alimentação e nutrição	1
Petchoo et al., 2022*	Nutritional quality of lunch meals and plate waste in school lunch programme in Southern Thailand	3
Pettinger et al., 2023	Collaborative leadership to support sustainability in practice for dietitians as allied health professionals.	1
Pinard et al., 2014	National Chain Restaurant Practices Supporting Food Sustainability	1
Pistorello et al., 2015	Geração de resíduos sólidos em um restaurante de um Hotel da Serra Gaúcha, Rio Grande do Sul, Brasil	3

Porter e Collins (2021)*	A Qualitative Study Exploring Hospital Food Waste From the Patient Perspective	5
Prescott et al., 2019	Resources, Barriers, and Tradeoffs: A Mixed Methods Analysis of School Pre-Consumer Food Waste.	1
Principato (2023)*	Introducing digital tools for sustainable food supply management: Tackling food loss and waste in industrial canteens	4
Principato et al., 2018	Adopting the circular economy approach on food loss and waste: The case of Italian pasta production	1
Rabelo et al., 2016	Avaliação do percentual de resto-ingestão e sobra alimentar em uma unidade de alimentação e nutrição institucional	3
Robison et al., 2024*	Assessing the current sustainability initiatives of Canadian SME restaurants	5
Rocha et al., 2012	Desperdício de alimentos em uma unidade de alimentação e nutrição de uma instituição pública de ensino de Teresina, PI	3
Rodrigues et al., 2015	Estudo do desperdício de alimentos em um restaurante popular de Belém - PA: foco na sustentabilidade e qualidade de vida	3
Rodrigues et al., 2024*	Machine learning models for short-term demand forecasting in food catering services: A solution to reduce food waste	7
Sabino et al., 2016	Pesquisa de resto-ingesta em uma unidade de alimentação e nutrição hospitalar de Teófilo Otoni - MG	3
Santana et al., 2019	Análise do índice de resto-ingesta e de sobra suja em uma UAN hospitalar de Recife - PE	3
Santos et al., 2005	Aplicação da gestão de qualidade no restaurante da Universidade Estadual de Londrina: desperdício de alimentos	3
Saputri et al., 2019	Nutritional impact of plate waste in university canteens: An assessment at Mulawarman University, Indonesia	3
Schuster et al., 2022*	Do meal boxes reduce food waste from households?	7
Seabra et al., 2013	Meals production and sustainability: Assessment of waste generation in an university restaurant	3
Silva et al., 2013	Avaliação do desperdício de hortifrutis em Unidade de Alimentação e Nutrição na cidade de São Paulo, SP	1
Silva et al., 2024*	Inadequacy of Meals Served and Food Waste in a Portuguese University Canteen	9
Snyder et al., 2024*	Environmental and Economic Analysis of Reusable and Single-Use Food Packaging Formats in University Campus Food Services	4
Soares et al., 2011	Quantificação e análise do custo da sobra limpa em unidades de alimentação e nutrição de uma empresa de grande porte	3
Souza et al., 2018	Adequação nutricional e desperdício de alimentos em Centros de Educação Infantil	3
Strapazzon et al., 2016	Sobras e resto ingesta: uma avaliação do desperdício	3
Strasburg et al., 2023	Calidad nutricional e impacto en medio ambiente por los insumos de un comedor universitario en Uruguay	1
Strotmann et al., 2017*	Comparing Food Provided and Wasted before and after Implementing Measures against Food Waste in Three Healthcare Food Service Facilities	7

Strotmann et al., 2022	Generation and prevention of food waste in the German food service sector in the COVID-19 pandemic - Digital approaches to encounter the pandemic related crisis.	1
Sucheran, 2021*	Food Waste Management of Restaurants in KwaZulu-Natal South Africa	3
Sudin et al., 2024*	From plate to waste: Composition of school meal waste and associated carbon footprint and nutrient loss	9
Tenser et al., 2007	Ações contra o desperdício em restaurantes e similares	1
Thies et al., 2021*	The Meat We Do Not Eat. A Survey of Meat Waste in German Hospitality and Food Service Businesses	1
Tomaszewska (2022)*	Behavior of Polish Consumers in Relation to Meals Ordered in Food Service Establishments in the Context of Plate Waste	5
Utter et al., 2024*	Celebrating Australian native foods through hospital foodservices: Engaging patients, staff and the broader community	7
Vandermeersch et al., 2014*	Environmental Sustainability Assessment of Food Waste Valorization Options	10
Vázquez et al., 2020	Development of Technologies for Local Composting of Food Waste from Universities.	3
Viana et al., 2017	Avaliação do desperdício de alimentos em unidade de alimentação e nutrição cidade de Januária, MG.	3
Vidal-Mones et al., 2022*	From evaluation to action: Testing nudging strategies to prevent food waste in school canteens	1
Weijers et al., 2024*	Nudging towards sustainable dining: Exploring menu nudges to promote vegetarian meal choices in restaurants	7
Whitehair et al., 2013	Written messages improve edible food waste behaviors in a university dining facility.	1
Yazdankhah et al., 2020	Behavioral approach to food consumption and waste production: A quasi-experimental study.	1
Zandonadi et al., 2012	Avaliação do índice de resto-ingesta, de refeições consumidas por trabalhadores da construção civil no município de Cuiabá, MT	3
Zhang e Zhang (2024)*	Factors affecting food waste at food festivals: the moderating effect of "Camera Eats First"	7
Zohourfazeli et al., 2023*	THE ROLE OF I4.0 TECHNOLOGIES IN RESTAURANT FOOD WASTE MANAGEMENT	7
Zubbilaga et al., 2022*	Diagnosis and strategies for kitchen and food waste management in as institutional canteen in Buenos Aires, Argentina	9

Legend – Exclusion criteria: 1 - Does not include data on intake (n= 54); 2 - No access, authors contacted without reply (n= 2); 3 - No intervention (n= 43); 4 – Type study (n= 5); 5 – Qualitative research (n= 9); 6 - Duplicated (n= 1); 7 – Not waste plate (n= 19); 8 - Waste disposal methods (n= 1); 9 - Did not implement strategies and evaluate follow-up (n= 4); 10 - Survey of sustainable practices (n= 2); *Studies evaluated in the update (n=57).