Appendix B – Tables with descriptive information on all included reviews/meta-analyses and AMSTER rating, CAPOC

Table 1 – Overview and characteristics of the included articles in fiscal policies section

Reference & Type	Studies (N, design, country)	Policy type (exposure)	Year of implementation/Duration of policy	Outcome	Aim and Analyses	Total no. cases	Strengths	Limits	Quality (AMSTER tool)
CAPOC umbrella review — Andreyeva et al. 2022 [1] SLR & MA	N = 86 where 62 were included in the meta-analysis. A total of 61 peer-reviewed articles and 25 reports/dissertations/grey lit. Study design: all non-experimental: not any more	SSB taxes: single-tier volume-based excise tax, tiered volume based excise tax, sales tax, tiered sugar-based excise tax Most studies assessed 1 tax policy for multiple outcomes, most were evaluations	NA	Critical outcomes: price changes, taxed and untaxed beverage sales, consumption (taxed SSB and untaxed substitutes) and diet. Important outcomes: Product change (reformulation), unintended consequences (jobs, cross-	Aim: to assess the associations of implemented SSB taxes with prices, sales, consumption, diet, body weight, product changes unintended consequences, health and pregnancy outcomes (a part of a broader systematic review commissioned by the WHO on fiscal and pricing policies on foods and non-alcoholic beverages) Metaanalyses were made using 3-level random-effects model. Meta-analyses were made at: 1) changes in prices (tax pass-trough), 2) percentage change in demand measured by SSB sales, 3) SSB sales (price elasticity), 4) sales of	The general population of children and adults (ages ≥ 18 years)	Managaes to capture a quiet broad range of real life implemented tax policies at different levels and not simulation studies Removes studies with outliers and checking for heterogen	Points out a need for more research/knowledge about associations to diet and health outcomes Does not manage to look into the heterogeneity of how SSB taxes affect heterogenic consumers High heterogenity Results might change after more years Representative studies for both	Critically low (Amster) Internally in the study, quality was assessed at outcome level: a high variation among the studies. Studies measuring consumption were

Reference & Type	Studies (N, design, country)	Policy type (exposure)	Year of implementation/Duration of policy	Outcome	Aim and Analyses	Total no. cases	Strengths	Limits	Quality (AMSTER tool)
	information availeble. Mexico (17), UK (7), France (4), Chile (3), Denmark (3), Barbados (2), Portugal (2), Finland (1), Hungary (1), Soudi Arabia (1), South Africa(1). Local: Philidelphia,, Pennsylvania (13), Berkeley, California (11) State: USA (8), Oakland,	of national taxes (n=44), and the rest (n=42) studies evaluated local, state-level or reginal SSB taxes		border shopping), body weight status, diet-related NCD's, undernutrition and pregnancy No studies reported on pregnancy, undernutrition and diet-related NCD's	substitute products (cross-price elasticity, 5) percentage change in demand and/or SBB consumption, 6) SSB consumption (price lasticity), 7) consumption of substitute products (cross-price elasticity) Results from remaining 24 articles were narrative synthesized for BMI, diet quality, product change and unintended consequences.		ity and the results stay the same. Reduced the heterogenityet, however a heterogenity still remained The authors have tried to account for the high heterogenity by using 3 level random effects model	children and adults are lacking Multiple outcomes could not be included in the metaanalysis because of low number of studies Theheterogeneity for studies particularyle on SSB prices and sales was very high reflecting a variation in study design, quality and data sources	of general low quality (77 %) for SSB consumption, 82 % for consumption of substitutes). The majority of studies about price and sales were rated as high quality. The BMI and diet studies were medium quality.

Reference & Type	Studies (N, design, country)	Policy type (exposure)	Year of implementation/Duration of policy	Outcome	Aim and Analyses	Total no. cases	Strengths	Limits	Quality (AMSTER tool)
	California (4), Cook County, Illinois (3), Seattle, Washington (3), Catalonia, Spain (3), San Fransicco, California (1), Boulder, Colorado (1), Sheffield, UK (1), UK restaurant Chain (1)								
Itria et al. 2021 [2] SLR	N = 18 Study design: interrupted time series (controlled and uncontrolled), price	SSB taxes: excise taxes, import tariffs, sales taxes or any other tax applied	NA	Main outcome: change in overweight and obesity prevalence or change in body weight or BMI mean. Other outcomes:	Aim: to evaluate the impact of sugar-sweetened beverage taxes on overweight and obesity prevalence in countries of different income classifications Analyzes: synthesis of the results on the effect of SSB taxes on the outcomes reported as difference,	All population, adults 16 years or older, children and adolescents, youth and adults, children,	Compare different type of income countries The application of the quality checklist to include	Lack of relevant data from the selected studies to asses the quality, lack of information of which other health policies were carried out in the countries	Critically low (Amster) Internally quality: used a critical appraisal tool established

Reference & Type	Studies (N, design, country)	Policy type (exposure)	Year of implementation/Duration of policy	Outcome	Aim and Analyses	Total no. cases	Strengths	Limits	Quality (AMSTER tool)
	elasticity and modelling of SSB tax, comparison between pre and post tax, association of the firts penny per ounce SSB excise tax with price, sales, consumption and intake, state level ssb taxes and cross sectional sssb conumtpopm			consumption, sales/purchases and dietary intake, price change	percentage change and tax elasticity (meaning the percentage change in consumption for a 1% change in tax)	18-64 years. Sample size NA	studies that specifically look at SSB taxes Addressing the outcome on health parameters	No inclusion of studies from low-income countries The effects on obesity prevalence were mainly from modeling studies (12 of 18) and studies conducted among adults thereby no real effect is seen in most of the studies and not among children and adolescence A high heterogenty in the included studies such as estimates for SSB consumption, study design and difficulties for controlling for income, population, and other country specific characteristics.	according to prior published reviews of food and beverage pricing studies. Only articles that achieved a score of 4 or higher (out of 0-7) were included in the review.

Reference & Type	Studies (N, design, country)	Policy type (exposure)	Year of implementation/Duration of policy	Outcome	Aim and Analyses	Total no. cases	Strengths	Limits	Quality (AMSTER tool)
	Countries: USA (7), Barbados (1), UK (1), Ireland (1), Chile 1), Australia (1), Mexico (2), South Africa 1), India (1) 75 % of the studies were from high income countries and 2 from upper middle income and 1 from middle income								

Reference & Type	Studies (N, design, country)	Policy type (exposure)	Year of implementation/Duration of policy	Outcome	Aim and Analyses	Total no. cases	Strengths	Limits	Quality (AMSTER tool)
Lhachimi et al. 2020 [3] SLR	N=2 Both studies design were an interrupted time series design (observational) and netiher had a control group from another geographic area. Countries: Denmark (2)	Tax of fat content in foods. Taxation at any level were eligible for inclusion but only the Danish tax on saturated fat were exmined as exposure	NA but studies were done in 2011 and 2012	Primary outcomes: total fat consumption, consumtption of saturated fat, energy intake through fat, energy trough saturated fat, total energy intake and incidence/prevalence of overweight or obesity.	Aim: to asses the effects of taxation of the fat content in food on consumption of total fat and saturated fat, energy intake, overweight, obesity and other adverse health outcomes in the general population Results were summarized narratively	Both children and adults were eligible for inclusion. In one study 2.000 households were included and the other included sales from a specific Danish supermarket chain with 1.293 stores.	Both the assessment of risk of bias and certainty of the evidence was done by two review authors independently = a strong method assertation	Only very few studies included (n=2) so the evidence is limited on this specific restriction/aim	Risk of bias was assessed by using the Cochrane's risk of bias tool and the EPOC Groups guidance: the risk of bias was deemed as inclear for both studies The certainty of the evidence was assessed by using GRADE : low quality/very uncertain evidence

Reference & Type	Studies (N, design, country)	Policy type (exposure)	Year of implementation/Duration of policy	Outcome	Aim and Analyses	Total no. cases	Strengths	Limits	Quality (AMSTER tool)
									Moderate (Amster)
Pfinder et al. [4] 2020 SLR	N=1 Design: interrupted time series (observational) Country: Hungary (1)	Tax: the Hungarian public health product tax: taxation of sugar-sweetened beverages and of foods high in salt or caffeine	September 2011 Study baseline from January 2008-august 2011	Consumption of sugar-added foods	Aim: To asses the effects of taxation of unprocessed sugar or sugar-added foods in the general population on the consumption of unprocessed sugar or sugar-added foods, the prevalence and incidence of overweight and obesity, and the prevalence and incidence of other diet-related outcomes	40.210 households	Good and strong methods section with both risk of bias assesment, quality assesment and discussion of potential heterogenity (not relevant when n=1)	Only one study included No meta analysis could be performed because of one study included	The study was assessed by the authors as a low risk of bias and using GRADE the evidence was deemed very uncertain /very low because of the limited amount of evidence Moderate (Amster)
Olm et al. 2019 [5] SLR	N=21 (both studies about	Taxation of unhealthy food and beverages:	NA	Healthcare costs focused n	Aim: To assess nutritional interventions for their impact on healthcare costs to community-dwelling	Population with type 2 diabetes	Narrow inclusion criteria	Missing studies that are controlled and measure the direct economic	Moderate (Amster)

Reference & Type	Studies (N, design, country)	Policy type (exposure)	Year of implementation/Duration of policy	Outcome	Aim and Analyses	Total no. cases	Strengths	Limits	Quality (AMSTER tool)
	food habit interventions and taxation were included). 10 studies concerned taxation. Study design: Alle studies were modelling studies UK (1), USA (5), South Africa (1), Australia (2), Mexico (1),	taxation of SSBs (n=8), taxation of unhealthy food in general (n=1), eliminating the tax subsidy for advertising unhealthy food to youth (n=1). Taxation dimensions included a tax of 1 penny per ounce of SSBs (n=4), 10 % tax rate on junk food and SSB (n=2), 20 % excise tax on SSB (n=3).		obesity or T2DM or both Outcomes: effect of intervention on obesity/diabetes Change in healthcare costs Outcomes are: T2DM/obesity cases, QALY's, consumption, costs/costs saved in £, $	individuals regarding T2DM or obevisty or both specifically using CHEERS (Consolidated Health Economic Evaluation Reporting standards) criteria to assess the economic components in the evidence Comparison to current practice.	mellitus or obesity. No. of total cases NA But target population were: all ages (3), Children and adolescents (1), children 2-19 y (1), Adults 15 and over (1), Adults 20 and over (1), Adults 35-94 y (1), Adults aged 20 or older (1), Adults 25-64 y (1), General populatio	A quality assessment of individual studies	impacts, mostly external sources and economic modeling/risk estimates are included Risk of bias is moderate since all modeling studies are based on assumptions between intervention and effects and rarely based on RCT's. Furthermore a great variation and heterogenous economic results because of different populations, variation in interventions and time horizon, different study designs, different types of economic evaluations.	Internally quality was measured by using 24-point checklist of the Cheers statement. A range from 10,5 items fulfilled to 23 with an average score of 19,7 (among all 21 studies). High quality of the modelling studies.

Reference & Type	Studies (N, design, country)	Policy type (exposure)	Year of implementation/Duration of policy	Outcome	Aim and Analyses	Total no. cases	Strengths	Limits	Quality (AMSTER tool)
						n (n=3), adult population (n=5), children (n=2)			
Teng et al. 2019 [6] SLR & MA	N=18 and 15 were included in the meta-analyses

Study design: only observational / real life studies were so included studies were cross-sectionals or interrupted time series and before and after studies. | SSB tax in jurisdictions in cities and on national level: Comprised ad Volerem taxes and volumetric taxes.

Studies were evaluations from 10 jurisdictions | 2003, 2014, 2012, 2016, 2011, 2015, 2017, various dates for implementations | Consumption outcomes: sales, purchasing and intake (reported by volume, energy or frequency) | Aim: To systematic review real-world sugar-sweetened beverage (SSB) tax evaluations and examine the overall impact on beverage, purchases and dietary intake by meta-analysis

Meta-analyses were done separately for each consumption outcomes adjusted for the size of the tax: the summary measure was a risk ratio or rate ratio (RR) scaled for a 10 % sized tax.

Comparisons between pre-post tax (n=11) or taxed vs. untaxed jurisdicstions (n=6) | N ranges among 416-57164 | This MA adds more real world studies and results overlap with Afshin et al. who uses experiemental studies and escobar that uses simulation studies.

Included studies were general high quality for observational studies | A substantial heterogeneity among the studies but not within jurisdictions.

The subgroup analyses were limited by the outcomes reported in the included studies.

More evidence is needed from low- and medium income countries and from studies reporting n the effect of SSB taxes on total untaxed beverages and subcateogires such as water. | Risk of bias was assessed by using GRADE and CASP at a score of low, medium or high to each consumption outcome: 8 heigh quality, six medium quality and 8 low quality outcomes

High quality (Amster) |

Reference & Type	Studies (N, design, country)	Policy type (exposure)	Year of implementation/Duration of policy	Outcome	Aim and Analyses	Total no. cases	Strengths	Limits	Quality (AMSTER tool)
	Countries: Chile (2), US (4), Catalonia spain (1), France (2), Finland (1) Hungary (1), Mexico (5), Berkeley US (2), Philidelphia (1)						and the risk of bias is assessed.		
Redondo et al. 2018 [7] SLR	N=17 Study designs: naturalistic experiements (n=5) such as interrupted time-series and observati	SSB tax at state, city or county level or SSB taxes at virtuel or experimental conditions. The real life taxes evaluated were SSB excise tax in Berkeley,	Januar 2014 in Mexico, march 2015 in march 2015, 1991 in Maine, january 2003 Ohiio	Consumption, purchase, and sales of SSB's	Aim: To synthesize the existing evidence related to the impact of taxes on the consumption, purchase, or sales of SSB's	N=26 supermaR KETINS, 205.112 PURCHSE S, ADULTS 873, 1806 ADULS	Low risk of bias of the natural studies	The results from virtual or experimental studies are difficult to expalpolate from selected populations to general populations

Results from the naturalistic studies might also be an effect of other circumstances | The evidence were assessed according to the TREND statemen ts. The risk of bias were assessed as low for the natural |

Reference & Type	Studies (N, design, country)	Policy type (exposure)	Year of implementation/Duration of policy	Outcome	Aim and Analyses	Total no. cases	Strengths	Limits	Quality (AMSTER tool)
	onal study using sales data while the rest had a study design using virtual or experiemental conditions (n=12) such as RCTS, non RCTS, laboratory experiments, clinical trails, , interrupted time-study sries Countries from the naturalist	a production tax of SSBs in Mexico and a production tax in Berkeley and a tax of 5,5 on snacks and soft drinks in Maine and a 5 % tax on refreshments in Ohio						such s economic crisis, greater nformatio, effect of season on SSB purchase No access to all information meaning that there might could be conflict of interest in the publication of study results.	experiemtns with a total yes of 33-48 Moderate (Amster)

Reference & Type	Studies (N, design, country)	Policy type (exposure)	Year of implementation/Duration of policy	Outcome	Aim and Analyses	Total no. cases	Strengths	Limits	Quality (AMSTER tool)
	ic experiments: US (3) and Mexico (2)								
Wright et al. 2017 [8] SLR	N=91 peer reviewed studies and 11 grey lit studies Study design: all on empirical data: modelling (54), evaluative (16), experiments (10) public opinion survey (9) and qualitative approaches (11), mixed	Health taxes : the majority of the studies focused on taxes on food or beverage products – the fiscal measure could both be a tax and a subsidy: Examples of included health taxes include those on certain unhealthy foods (for example processed foods, or foods high	NA but the publications are from between 2004 to 2016.	Consumption of targeted products and related harms	Aim: systematic review the evidence on health taxes and generate insights into how taxes can 1) reduce consumption of targeted products and related harms and 2) generate revenues for health objectives and distribute the tax burden across income groups in an efficient and equitable manner and 3) be made politically sustainable Narrative thematic synthesis of the results in answering five questions	NA	Gather the broad amount of litterature on health taxes	No risk of bias assessment or quality assesment but considerations of ias intrinsic to selected data source (especially for modelling studies); selection bias; validity of reported outcomes; and selective outcome reporting will be taken into account No sub-group analyses ➔ Lack of methodological quality because of the big number of included	No internally risk of bias or quality assesment were made (NA) Critically low (Amster)

Reference & Type	Studies (N, design, country)	Policy type (exposure)	Year of implementation/Duration of policy	Outcome	Aim and Analyses	Total no. cases	Strengths	Limits	Quality (AMSTER tool)
	method (2), mixed modelling with evaluative (1) and mixed quantitative/qualitative (1). Countire: mainly high income countries and a smaller number of middle-income: 51 (51), Europe (34): countries : US (<51), UK (9), South Africa, Pacific Islands, Norway, Netherla	in sugar or fat) and non-alcoholic beverages (for example 'sugar-sweetened beverages but also ad valorem taxes (proportional to the price)						studies. And no meta analysis made.	

Reference & Type	Studies (N, design, country)	Policy type (exposure)	Year of implementation/Duration of policy	Outcome	Aim and Analyses	Total no. cases	Strengths	Limits	Quality (AMSTER tool)
	nds, Mexico, Irael, Ireland, India, Hungary, Greece, France, Finland, Europe,, Denmark, Canada, Brazil, AUS								
Afshin et al. 2017 [9] SLR & MA	N= 30 23 interventional (RCT and 16 non-rct) and 7 prospective Countries: US (29), other countries such as South Africa, France, New	Price increase (tax)(n=15) and price decrease (subsidy in form of discount at the point of purchase, coupon or cash rebate) (n=22) on healthy and unhealthy foods	NA	Change in consumption of foods and beverages: data on sales/purchases. secondary outcome were body weight and BMI	Aim: to quantify the prospective effect of changes in food prices on dietary consumption Meta analyses on price increase and decrease on healthful and unhealthful items and effects according to food groups e.g. fruits and vegetables Each study was standardized to a 10 % price change	Populations were both adults (n=27), children (3) adult and children (7)	Meta analyses done and both quality assesment and analysis of publication bias was done	The majority of the included studies are interventions and thereby not real life studies so results might be different in real world	Quality assesment were made based on a 5 criteria rating. 21 studies got 2-3 points and 16 studies got 4-5 points Critically low (Amster)

Reference & Type	Studies (N, design, country)	Policy type (exposure)	Year of implementation/Duration of policy	Outcome	Aim and Analyses	Total no. cases	Strengths	Limits	Quality (AMSTER tool)
	Zealand, Netherlands (8)								
Nakhimovsky et al. 2016 [10] SLR	N=9 Study designs: all were observational or modelling studies: Quasi-experimental, non experimental and modeling studies Countries: Brazil (1), Ecuador (1), India (1), Mexico (5), Peru (1) South Africa (1).	Taxes or prices of SSBs	NA But studies were done 1989, 1997, 2001, 2006, 2011-2012 and 2014-2015	Price elasticity, SSB consumption and overweight/obesity	Aim: A systematic review of the evidence from middle-income countries assessing post-tax price increases (objective 1), changes in demand for SSBs and other products, overall and by socio-economic groups (objective 2) and effects on overweight and obesity prevalence (objective 3) Authors standardizes estimates for change in the consumption of SSB products in kilojoules per person per day given a 10 % change in SSB prices	From 25805 to 205112 household observations, 46 cities, women between 19 to 49 n=19,658, surveys among 10,919-20,349, and 25532 respondents	Assess the quality of studies	No risk of bias assessment Does also include simulation studies and only two evaluate an actual tax	Study quality was determmined by authors based on study design and using the quality checklist. The studies ranged between having five X and two X (the more the better). X (Amster)
Backholer et al. 2016 [11] SLR	N=11	SSB taxes (n=3) , price elasticity	NA	SSB purchased, energy	Aim: to clarify the differential impacts of SSB taxes on beverage purchases and	NA	The strengths include	The major limitations is related to the	The quality of the

Reference & Type	Studies (N, design, country)	Policy type (exposure)	Year of implementation/Duration of policy	Outcome	Aim and Analyses	Total no. cases	Strengths	Limits	Quality (AMSTER tool)
	Study designs: principal studies (3), price elasticity estimation (1), modelling studies (7) Countries: US (7), UK (1), Ireland (1), Aus (1), New Zealand (1)	estimation of SSB demand (n=1) and hypothetical SSB taxes combining pricing elasticity estimates with SEP-specific beverage consumption energy intake or body weight (n=7) Taxes in the individual studies that are examined: State-level taxes in grocery stores (n=2), the rest of the studies are:	But real life studies are done with data from 1997-2006, 1990-2004	intake, total energy intake, body weight, BM), obesity prevalence,	consumption, weight outcomes and the amount paid in SSB according to socioeconomic position in high income countries Income were used in 10 studies as indicator os SEP, one used parental education.		the inclusion of both academic and grey literature and extraction of data by two authoers	limited variability in the study types identified. Only three evaluated real life SSB taxes and all of these studies were limited to small tax rates (average of 4 %). The rest of the studies are modelling studies and reliant on assumptions which might not be the trught in real life.	studies were assessed using a checklist from two reviews of food and pricing studies (p. 3072) – studies are rated out of 7 and 1 point for each quality measure. Six of 11 included a score of 4 or more (out of seven) for quality appraisal and rest got 3 or less.

Reference & Type	Studies (N, design, country)	Policy type (exposure)	Year of implementation/Duration of policy	Outcome	Aim and Analyses	Total no. cases	Strengths	Limits	Quality (AMSTER tool)
		20 and 40 % sales tax, 20 % excise tax, 0•5 cents per ounce*excise tax, 20 % sales tax, 10 % excie tax, 20 cents per litre excise tax and 20 % sales tax and 0•5 cents per ounce excise tax							Critically low (Amster)
Niebylski et al. 2015[12] SLR	N=78 both studies and SR Study designs: cost-effectiveness studies, modelleling studies	Tax on unhealthy foods/beverages or subsidy effects on healthy foods	NA	Nutrition related health indicators incl. blood pressure, BMI, blood lipids or glucose, healthy food purchases (fruits and vegetables) by consumers and	Aim: to evaluate the evidence base to assess the effect of healthy food/beverage subsidies and unhealthy food/beverage taxation.	NA	The SLR encompasses a wide range of litterature included and can be used as a moderate strong evidence	A lot of the studies included are experimental/modelling studies and there is a risk that the real life circumstances wont be the same – so the results will be different. Furthermore, the restriction of 10 years could mean that some relevant	All studies quality were rated using GRADE: in general the evidence was rated as moderately strong. The cost-

Reference & Type	Studies (N, design, country)	Policy type (exposure)	Year of implementation/Duration of policy	Outcome	Aim and Analyses	Total no. cases	Strengths	Limits	Quality (AMSTER tool)
	(simulation, sensisitvity, regression), emperical studies (observational, natural experiements), experiemental studies (localized, controlled), and miscellaneous articles (meaning having 2 varied capacitites e.g. mixed studies and grey lit)			increased consumption of healthier foods and reduced consumption of unhealthy foods to include SSBs.				studies have not been included and the lack of studies evaluating the effects on health outcomes over long term is also missing.	effectiveness studies are rated as moderate quality, the modelling studies are rated as low to moderate quality, the empirical studies are rated at low to moderate quality, , the experimental studies are rated as low to moderate and the quality of the miscellaneous have not

Reference & Type	Studies (N, design, country)	Policy type (exposure)	Year of implementation/Duration of policy	Outcome	Aim and Analyses	Total no. cases	Strengths	Limits	Quality (AMSTER tool)
	Countries: Western Europe, Canada, US, Australia, New Zealand								been asses. Critically low (Amster)
Freudenberg et al. 2015 [13] SLR	N=94 Whereas 36 studies report on taxes on unhealthy foods and 51 on food subsidies Study design for these studies are observational, experimental, quasi/natural experiement,	Food subsidies and taxes on unhealthy foods (labeling and creation in food stores is also reported, but not relevant here)	NA But publication dates are between 2000-2011	Purchase, consumption, body weight or BMI	Aim: to summarize the literature on recent efforts in US to change food-related policies to prevent obesity and diabetes among adults. Descriptive statistics about the results and no meta-analysis: the studies were divided into four different main categories (food and nutrition information, food availability and accessibility, limiting the availability of unhealthy foods and legal mechanisms)	NA	Gives a good insight on which policies used in US and which are most effective. Uses studies that are observational meaning results are closer to real life – but also experiemental and modelling are included.	Effect sizes are not looked at consistently since no meta-analysis is made. Furthermore, it is not reported how the different subsidies and taxes differ and are unfolded exactly. Another limitation is that relevant studies might have been missed if they only were included in gre lit.	Studies quality ate rated from a scale form 0-10 using GRADE. The mean score for food subsidies is 7,5 (mediuam m quality) and 7,1 for food taxes (medium quality) Critically low (Amster)

Reference & Type	Studies (N, design, country)	Policy type (exposure)	Year of implementation/Duration of policy	Outcome	Aim and Analyses	Total no. cases	Strengths	Limits	Quality (AMSTER tool)
	model estimate and 1 meta analysis.						A strength is that both adecemic and grey lit are included		
Alagiyawanna et al. 2015 [14] SLR	N=18 Study design – all observational: natural experiments, interrupted time series, cross sectional, longitudinal, controlled before and after, uncontrolled before and after,	Implemented fiscal policies at local and national level: taxes on specific food products such as an increase in the cost of a soda drink and vending machine products (n=9) and subsidies such as price discounts and vouchers for healthy foods.	NA But study periods ranged from 6 months-23 years Studies were done from 1961-2011	Anthropometric measurements e.g. body mass index, waist circumference, height for age, nutrient intakes and health and health outcomes related to diet e.g. mortality, morbidity, hospital attendance etc.	Aim: to study the behavioral and health outcomes of implemented food and beverage fiscal interventions in form of taxes and subsidies in countries of different income classes	Either not specified or then rangin from n=709-902-10.071 (families)22.132-153673 – 351319 and 4864673. Interventions sample sizes were ranged from 100-168	Review were carried out in accordance with the protocols recommended by the Cochrane. It is also broader than previous SLR.	Limitations were that the taxes studies were often at a low level. Furthermore, much evidence came from cross-sectional studies which do not allow an inference o causality. Furthermore studies differed regarding setting, design, outcome measures, sources, methods which makes it hard to compare the effectiveness of FI on diet and health outcomes. Furthermore, the review is limited to	Quality is rated using the EPHPP tool. Nine studies were evaluate weak, seven as moderate and two were evaluate as strong. All from uppermiddle income and lower middle income were graded as weak.

Reference & Type	Studies (N, design, country)	Policy type (exposure)	Year of implementation/Duration of policy	Outcome	Aim and Analyses	Total no. cases	Strengths	Limits	Quality (AMSTER tool)
	cross sectional comparison Countries: 13 from high-income countries, 4 from middle-income countries, one from lower-middel countries and none from lower-income countries. Ireland (1), USA (11), Australia (1), Brazil (2), China (1), South							English publications and a tool designed to asses the quality of the studies implemented at population level a tool designed for individually focused studies were used.	Moderate (Amster)

Reference & Type	Studies (N, design, country)	Policy type (exposure)	Year of implementation/Duration of policy	Outcome	Aim and Analyses	Total no. cases	Strengths	Limits	Quality (AMSTER tool)
	Africa (1) Egypt (1)								
Thow et al. 2014 [15] SLR	N=43 reports representing 38 studies. 32 peer reviewed lit and 8 grey lit

Study designs: RCT's, modeling studies using husehold expenditure survey, dietaru survey, longitudinal data, state-level obesity and purchase /expenditure data | Food taxes and subsidies targeted to influence the price of a specific food product or nutrient. Four types were assessed: SSBs taxes, fat- and calorie-based taxes, nutrient profiling based taxes and healthy food subsidies | NA

But studies were completed from 1985-2007 | Consumption | Aim: to systematic review and assess the quality of the studies for the evidence published between jan 2009 and mar 2012 for the effect of food taxes and subsidies on consumption | N ranges between42 to 48470

Children and adults | Ranging the quality of the studies. | The SLR is limited to English language and lack of studies from LI and MI countries. The variety of targets of taxation add uncertainty to the conclusions (heterogeneity).

Not assessing ROB. | The quality is rated based on the Cochrane system on a checklist of 1-5. The majority had 3 out of 5.

Critically low (Amster) |

Reference & Type	Studies (N, design, country)	Policy type (exposure)	Year of implementation/Duration of policy	Outcome	Aim and Analyses	Total no. cases	Strengths	Limits	Quality (AMSTER tool)
	Countries: New Zealand, USA; France, Brazil, Norway, Finland, Sweden, UK, The netherlands								
Escobar et al. 2013 [16] MA	N=9 Study designs: Observational studies: cross sectional or longitudnal studies Countires: US (6), Mexico (1), Brazil (1), France (1)	SSB taxes on soda, sweet drinks, soft drinks, non-alcoholic beverages, corbonated SSBs, all SSBs, vending machine soda, caloric sweetened beverages	NA But studies are conducted in 1997-2006	Consumption, obesity, overweight and BMI.	Aim: To evaluate the literature on SSB taxes or price increases and their potential impact on consumption levels, obesity, overweight and body mass index (BMI). The possibility of switching to alternative drinks is also considered. Meta-analyses were made for: Own-price elasticity (used to estimate the impact of taxes on specific foods, så a negative means that the demand decreases if the price increases) and cross price elasticity (Measures the change in the quantity demandned of one good in response to a change in the	Children and adults Population ranged between n=416-48.479	Asseses obesity but not in a MA however but does a MA for price elastic and cross price elasrticity	Does not asses the quality of the studies Lack of studies from MI and HI countries	NA but ROB was assesed Moderate (Amster)

23

Reference & Type	Studies (N, design, country)	Policy type (exposure)	Year of implementation/Duration of policy	Outcome	Aim and Analyses	Total no. cases	Strengths	Limits	Quality (AMSTER tool)
					price of another good. It can be either positive or negative) but not possible for BMI				
Maniadakis et al. 2013 [17] SLR	N= 55

Study designs: demand studies (n=22), longitudinal studies (n=11), cross-sectional studies (n=11), modelling studies (n=6), experiemental studies (n=4) and cohort studies (n=1)

Countries: USA (40), UK (2), | Taxes on nonalcoholic beverages and high-in-fat foods. 30 studies estimated price elasticity, 18 focused on effects of certain taxation (health taxes were considered as excise or sales tax -) and 8 considered both elements.

28 of the studies focused on SSbs only and the | NA
But studies were done from year 1974-2010 | Consumption of products, caloric intake and weight outcomes such as weight or body mass index. | Aim: to assess the possible effects of taxation policies by identifying and analyzing all studies which investigate the impact of price increases on consumption, caloric intake or weight outcomes

Results were narratively synthesized | Household observations ranged from 2.000-100.000

Market observations: 53 markets

Some were scanner data

Individual data among 5090-7.291 children, 5115—8730-11.900-20.745 – 153673 | Describes the uncertainty of the evidence well and the individual results divided to study type | Heterogene data and study types – so comparisons are difficult to make and thereby the certaintiy of the evidence is limited

No quality and ROB is established for the included studies

Study sample were not representative in all included studies | NA

Critically low (Amster) |

Reference & Type	Studies (N, design, country)	Policy type (exposure)	Year of implementation/Duration of policy	Outcome	Aim and Analyses	Total no. cases	Strengths	Limits	Quality (AMSTER tool)
	Norway, Italy (2), Denmark, Germany, France, the Netherlands, Mexico (2), Brazil, Taiwan, Singapore and Australia.	rest (n=36) focused on either HFSSFs alone or HFSSFs in conjuction with SSBs.				adolescents/students,102 undergraduates (18-22) and 306 - 7331- 8.322 – 2.709.422 adults			
Powell et al. 2013 [18] SLR	N= 21 examined effect of prices on consumption and 20 examined effect on body weight outcomes

Study designs: all empirical studies: | Price elasticity Price and taxes (state level) on soft drinks, carbonate soda and national food stamp program | NA

Studies were conducted from 1985-2007 | Demand for(sales/consumptio/purchase) SSB, fast food and fruits and vegetables Body weight outcomes (BMI, obesity, weight, overweight) | Aim: To systematic review the recent US studies on the price elasticity of demand for sugar-sweetened beverages, fast food and fruits and vegetables as well as the direct associations of prices/taxes with body weight outcomes

An overall mean estimate was made for elasticity of demand for SSB, fast food, fruits and vegetables – they were weighted by its relative consumption share of SSBs based on caloric intake from 24-hour dietary recall data among individuals 2+ years | Sample sizes were either national sample of retailers, adults (n=5115-7331), households, children (n= 1679-4896-7300-20968-22132), children and adults | Gathers all the available evidence from US and only uses empirical data | Limited amount of evidence and no meta analyses done – only looking at mean estimates

No ROB and quality assessmet | NA

Critically low (Amster) |

Reference & Type	Studies (N, design, country)	Policy type (exposure)	Year of implementation/Duration of policy	Outcome	Aim and Analyses	Total no. cases	Strengths	Limits	Quality (AMSTER tool)
	cross-sectional, longitudunal, Almost ideal demand system, demand system Country: US (all)					(n=7331-11088-2709422), adolescents (n=11900)			
Dangour et al. 2013 [19] SLR	N=4, 1 reporting on undernutrition and 3 reporting on nutrition chronic related disease Study designs: two post evaluations and two ex ante	National food price related agricultural policies : two studies focused on policies that subsidices the price of agricultural outputs while the other two focused on public food distribution policies.	NA	Nutrition outcomes: prevalence of undernutrition and overnutrition (obesity, NCD's)	Aim: to systematically review the available evidence on whether national or international agricultural policies that directly affect the price of food incluence the prevalence rates of undernutrition or nutrition-related chronic discease in children and adults Narrative summary of the results	Children and adults	A broad search criteria and verity of databases and health and agricultural sectors were included	Very limited evidence, only 3 reporting on NCD's The SLR does not consider other pathways of incluencew between agicultural and health outcomes Very heterogene studies regarding policy evaluated, country, outcomes etc.	Quality was assessed but rating NA Low quality (Amster)

Reference & Type	Studies (N, design, country)	Policy type (exposure)	Year of implementation/Duration of policy	Outcome	Aim and Analyses	Total no. cases	Strengths	Limits	Quality (AMSTER tool)
	simulations Countries: India (1, undernut), Egypt (1), the Netherlands (1) and USA (1)	In USA and Netherland study the potential impacts of removal of farm subsidies (output price policies) were modelled and the impact of a long-running public distritbution system system policy in Egypt.							
Thow et al. 2010 [20] SLR	N=24, 13 peer-reviewed and 11 online Study designs: empirical (11),	Tax and subsidies: excise tax, soft drink taxes, snack taxes, food taxation based on nutrient content	NA	Food consumption body weight, diease	Aim: to assess the effect of food taxes and subsidies on diet, body weight and health trough a systematic review Narrative analyses of the studies were divided into 1) the outcome assessed, 2) whether studies were modelled or empirical and 3)	NA	Managed to include real world studies	A great heterogeneity among the study types No meta-analyses No ROB assessment	Quality was assessed by X and was generally deemed low but individual scores are NA,

Reference & Type	Studies (N, design, country)	Policy type (exposure)	Year of implementation/Duration of policy	Outcome	Aim and Analyses	Total no. cases	Strengths	Limits	Quality (AMSTER tool)
	modelinng (16) Countries: almost all studies were conducted in HI countries: Denmark (2), Scotland (1), US (12), UK (3), Egypt (1), Norway (1), Sweden (1), France (1), Scotland	mainly fat, fruit and vegetable subsidies and taxes on a variety of unhealthy foods.			whether studies were peer-reviewed or not				only notes. Critically low (Amster)

SLR: systematic literature review; MA: meta-analysis; NA: not available; NAp: not applicable.

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Table 2 – Overview and characteristics of the included articles in marketing restriction policies section

Referenc e & Type		Studies (N, design, country)	Policy type (exposure)	Year of implementa tion	Outcome	Aim and Analyses	Total no. cases	Strengt hs	Limits	Qualit y (AMST ER Tool)
CAPOC umbrella review	Boylan d et al. 2022 [1] SLR	N = 44 observational studies. All had cross-sectional designs and one study natural experiment design. 43 from high income countries: US (15), Canada (10), UK (5), Australia (5), EU (3), Chile (2), Spain (1), Korea (1), Singapore (1). 1 from middle-income country: Mexico (1)	Policies to restrict food and non-alcoholic beverage marketing (0-19 years) Policy types were mandatory (restriction, law, protection act, regulation, protection act, full implemented, partial implemented, n=16) and voluntary (advertising initiative, EU pledge, self-regulation, n=28) Evaluation of 14 policy types (two subnational policies and one regional policy) and seven policies that were voluntary meassdures.	1980 (5), 2006 (7), 2007 (11), 2007-2009 (4), 2008 (5), 2009 (6), 2010 (1), 2011 (2), 2015 (1), 2016 (2)	Medium (TV, packaging, websites) on the following outcomes: Exposure (n=37), power (n=18), unhealthy food purchasing (n=5), dietary intake (n=1), Unintended consequences (n=3), product change (n=2).	Aim: *To review the effectiveness of policies restricting marketing of foods and/or non-alcoholic beverages to children.* 1) Before and after implementati on (n=21), 2) Differences in outcomes between jurisdictions with and without restrictions/d ifferent restrictions/d ifferent target groups (n=4) 3) Companies who signed vs. did not sign voluntary measures (n=14)	Most Studies did not involve human participan ts (n=37). Samples were television recordings, advertisin g, data related to brands. 7 studies included humans which ranged from 156 individuals to 6.000 household s.	Updates the existing literature on both mandatory and voluntary. No studies funded by the food industry	Lack of studies from low- and middle-income countries, longer-term outcomes, detail on policies (design, implementa tion, enforceme nt), assessment across multiple forms of marketing, statistical analysis and heterogenei ty in study designs and effect measures. No meta-analyses because of	Moderat e (Amster) GRADE was applied by the authors to estimat e the certaint y of the evidenc e.

Referenc e & Type	Studies (N, design, country)	Policy type (exposure)	Year of implementa tion	Outcome	Aim and Analyses	Total no. cases	Strengt hs	Limits	Qualit y (AMST ER Tool)
					4) A combination of 1 & 3 (n=4) 5) A combination of 2 & 3 (n=1) Any policy vs. no policy (n=39). Mandatory policy vs. no policy (n=10) and voluntary measures vs. no voluntary measure (n=29) Mandatory policy (legally enforceable e.g. statutory approach, regulation, legislation) vs. voluntary measures (non-mandatory e.g. self-regulatory measures, pledges, codes) (n=4) Mandatory policy (full implementation) vs. mandatory policy (partial implementation) (n=1) Where possible sub-group analyses were made for target age			the diverse range of effect measures used in the studies. The certainty of the evidence was low for our of the six outcomes and one reason for this is the use of GRADE as assessment, because RCT are prioritized higher than observation al studies and because of the inconsisten cy in effects. So methodolo	

Reference & Type	Studies (N, design, country)	Policy type (exposure)	Year of implementation	Outcome	Aim and Analyses	Total no. cases	Strengths	Limits	Quality (AMSTER Tool)
					group, marketing medium, aaproach to determining foods restricted from marketing and marketing technique.			gical differences in outcome measures gives a big heterogeneity band therefore lower certainty e.g. study design.	
Chung et al. 2021 [2] SLR	N = 36 observational studies + an inclusion of grey literature describing nine policies US (11), Australia (10), New Zealand (6), UK (2), Canada (1), Sweden (1), Chile (1), Ghana (1), Jamaica (1), Indonesia (1), the Philippines and Mongolia (1)	Government policies restricting unhealthy food and beverage marketing in outdoor spaces	NAp	Prevalence of unhealthy food advertising in outdoor spaces/publicly owned assets (n=28), associations between outdoor advertising **and** consumption of unhealthy food (n=2) **and** school food environment (n=1) **and** neighborhood level obesity	Aim: *To describe:* Potential health and economic impacts of implementing government-led policies restricting unhealthy food advertising in outdoor spaces/public assets	NA	It includes both systematic searching of acedemic and grey litterature guided by a protocol.	The study-protocol was not pre-registered. The study is limited to outdoor advertising. Many different focus points for the review	Critically low (Amster) NA

Referenc e & Type	Studies (N, design, country)	Policy type (exposure)	Year of implementa tion	Outcome	Aim and Analyses	Total no. cases	Strengt hs	Limits	Qualit y (AMST ER Tool)
				rates (n=2), policy options for regulating unhealthy food marketing in outdoor environments (n=2), public opinions towards marketing regulation (n=2), evaluation of Chile's law on food labeling and advertising (n=19\n\nHealth and economic impacts (no studies reported on this however) vores					
Pereira et al. 2021 [3] SLR	N = 52, but only 3 covers marketing restrictions: rct (1), grey litterature (2)	Mass-media based intervention: TV ban/ restrictions of food commercials to kids – both bans, restrictions and a law. However, the study only	September 1996-April 1997	Changes in measures of height, weight, triceps skinfold	Aim: To review the existing literature on dietary interventions for the prevention of childhood obesity and their effectiveness.	192 students in third and fourth grade		Not more than one study in the review is a scientific study. A	Critically low (Amster)\n\nNA

Reference & Type	Studies (N, design, country)	Policy type (exposure)	Year of implementation	Outcome	Aim and Analyses	Total no. cases	Strengths	Limits	Quality (AMSTER Tool)
	Sweden, Norway, Denmark, Austria, Greece (1), Portugal (1), San Jose California (1)	assess a trail of an policy. Children in 1 elementary school received an 18-lesson, 6-month classroom curriculum to reduce television, videotape, and video game use.		thickness, waist and hip circumferences, and cardiorespiratory fitness; self-reported media use, physical activity, and dietary behaviors; and parental report of child and family behaviors. The primary outcome measure was body mass index, calculated as weight in kilograms divided by the square of height in meters.	Analyses in regard to marketing restriction were to assess the effects of reducing television, videotape, and video game use on changes in adiposity, physical activity and dietary intake.			RCT study which does not assess the effect of a real implemented policy. The lack of studies that our relevant to our inclusion criteria	
Pérez-Ferrer et al. 2019 SLR [4]	84 studies met inclusion criteria, whereas 16 focused around marketing.	Policies that targeted the food environment and studies that investerage associations between food environment and dietary behavoiur/overweight/obesit	Nap	Number of adds, prom character (cartoon figures/celebrities), health	Aim: *To review the literature that 1) describes the food environment and policies targeting the food environment and*	Nap

But number of add/products ranged | Investegates the food environment more broadly | Might be to broad. Does not contain evaluations of policies but show | Critically low (Amster)

NA |

Reference & Type	Studies (N, design, country)	Policy type (exposure)	Year of implementation	Outcome	Aim and Analyses	Total no. cases	Strengths	Limits	Quality (AMSTER Tool)
	Except for one study, all were descriptive. Seven countries: Brazil (n=5), Mexico (n=3), Chile (n=1), Honduras (n=1), Guatemala (n=4), Uruguay(n=1), El Salvador(n=1)	y/obesity related chronic diseases. The marketing studies focused on: Monitortring of food and beverage advertisements (n=9), food package design (n=4), evaluations on advertisements on billboards and shops (n=3). Meaning no studies were regarding policy evaluations.		claims (statement about relationship between food and health), offers (e.g. two-for one, extra product for same price), appeal (product design, use of color, and fonts)	*2) analytic studies that investigate associations between the food environment and dietary behaviours, overweight/obesity and obesity-related diseases.* Descriptives – number of adds, promotion elements identified, system for defining healthy/unhealthy in the study (Food based, Nutrient profiling)	between 83-9.178	and covers a lot of topics. Points out the lack of policy evaluations in in regard to marketing	the extend of advertisements and the descriptives. Does not discuss the heterogenity and risk of bias.	
McKinnon et al. 2016 SLR [5]	27 studies met the inclusion criteria of studies that described cost-benefit or cost-effectiveness studies of obesity-related policy/environmental interventions that support and encourage individual-level nutrition and physical	Type of social marketing and media interventions: community campaign to reduce sedentary time and increase walking (local intervention) (n=1), restrictions on food and beverage television advertising to children (national intervention) (n=1), Social marketing campaign to promote physical activity to teens (state intervention)	No year of mplementation is reported. However, time horizon for the cost-effectivesness ranges between <1 year, 20 years and lifetime of participants.	Cost-effectiveness	Aim: *To review the cost-benefit or cost-effectiveness studies of obesity-related policy/environmental interventions.* Cost-effectiveness analysis: assess relative costs and effects of two or more different options. Often expressed in terms of quality or disability adjusted life-years or healthy years	NA	Economic assessment studies can be helpful expesically in a political context to help politicians make descisions.	It can be difficult to asses costs and benefits over a long time, because a policy action can result in direct effects such as on behaviour which might have	Critically low (Amster) NA

Reference & Type	Studies (N, design, country)	Policy type (exposure)	Year of implementation	Outcome	Aim and Analyses	Total no. cases	Strengths	Limits	Quality (AMSTER Tool)
	activity behavoiur. 3 of the 27 evaluated social marketing and media interventions. The study design were quasi-experimental designs using natural experiments (policy or environmental change outside the direct control of researches) (n=1) and secondary data analysis to determine their economic assesments (n=2) here one of the studies used a simulation model				equavalents in attempt to account for gains in quality of life.			an effect over a long time horizon e.g. reduced risk of chronic disease. Often the direct effects are only observed. So some results are chosen on assmtions. Limits described in the review is: 1) the review might not have located all relevant studies, 2) the located studies might be the result of publication	

Reference & Type	Studies (N, design, country)	Policy type (exposure)	Year of implementation	Outcome	Aim and Analyses	Total no. cases	Strengths	Limits	Quality (AMSTER Tool)
	technique in their economic assessment. Country: EU (n=1), Australia (n=1), US (n=1)							bias against null findings, 3) the costs of childhood obesity and its impact on morbidity and mortality is deficult to know the precise cost and benefits of interventions. A lot of heterogenity in the studies design. Few studies included, lack of risk of bias assessment.	
Chambers et al. 2015 SLR [6]	N=47 – 19 on statutory regulation 25 for self-	Advertising bands and restrictions on TV, internet, radio, magazines and	NA	Volume of advertising, advertising exposure,	Aim: *To review evidence on 1) the effectiveness of statutory and self-*	In the experiemental designs	Many of the included studies	Main limitation: the complexity	Internally quality: are

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Reference & Type	Studies (N, design, country)	Policy type (exposure)	Year of implementation	Outcome	Aim and Analyses	Total no. cases	Strengths	Limits	Quality (AMSTER Tool)
	regulation (n=44) Study design: observational : monitoring data of food advertising, cross-sectional and nine used experiemental or quasiexperiementai designs Statutory studies: UK (4), Quebec (3), Canada (2), US (4), Brazil, China, England, India, Mexico, Russia and South Africa (1), Australia (4) Self-regulation studies: Australia (4), US (13), Germany (1), Canada (4), EU (3),	newspaper – statutory and self-regulation Statutory regulations (often directed to children under 12 or 13 in Quebec, Sweden and Norway) and in US foods HFFS are prohibited during television programming. Regulations are concentrated in high income countries. Self-regulations: the food industry, EU pledge etc. Within these companies themselves can define which products they consider healthier and many only refer to TV advertising		advertising parents by nutritional content, cost-effectiveness, eating behaviour, health outcomes and antecedents of eating behavior	*regulatory actions to reduce the volume, exposure or wider impact of advertising for foods high in fat, sugar and salt (HFSS) to children and 2) the role of educational measures.* Analyses: before/after measures, experimental or quasi experimental or comaprison	sample sizes ranged from n=35 to 9.177	exmined data covering a full year Bring together the ecisting lit and complements the Galbraith review. The review supports the divergence in the results No publications were exclude because of language and thereby broadering the number	of concluding something from very heterogene studies and little information on significant effects. Studies mainly focused on tv and little evidence were for non-broadcast advertising. Outcome measures vaqried in approach, quality and results – so a lack of consistency in the evaluations.	reporter by study design Critically low (Amster)

Reference & Type	Studies (N, design, country)	Policy type (exposure)	Year of implementation	Outcome	Aim and Analyses	Total no. cases	Strengths	Limits	Quality (AMSTER Tool)
								Some of the studies did not manage to report information about statistical techniques and only reported descriptivie statistics – so difficult to assess whether the results are statistically significant changes	
Galbraith-Emami et al. 2013 SLR [7]	21 peer-reviewed studies and 28 reports (grey lit). Study design: observational: commercial monitoring data, authors survey.	Statutory and voluntary codes to restrict the marketing to children. Regulations are described in table 1 and are e.g. EU pledge self-regulation, IFBA-self-regulation, CFBAi self-regulation, AFGC, Danish Food Forum self-regulation, UNESDA Pledge	1978, 2005, 2007, 2008, 2009, 2010	Levels of exposure of children to the advertising of less healthy foods. Outcome measures were: The numbers, proportions,	Aim: *To review the data available on levels of exposure of children to the advertising of less healthy foods since the introduction of the statutory and voluntary codes.* 1) Changes before and after the	NA But media sample period/extend for the studies were describes between: mostly tv analyses	Gathers both peer-reviewed and grey litterature. Nuanced considerations of risk of bias and why and how the heterogen	Includes reports funded by the industry and have very heterogenous results and methods and measurements.	Moderate (Amster) NA

Reference & Type	Studies (N, design, country)	Policy type (exposure)	Year of implementation	Outcome	Aim and Analyses	Total no. cases	Strengths	Limits	Quality (AMSTER Tool)
	For the first analysis 10 countries or regions were covered by 8 studies and for the second analysis 21 countries or regions were covered by 13 studies. Countries covered by the first 8 studies UK (n=1), Germany (n=1), South Korea (n=2), US (n=2), Australia (n=1). Countries covered for the second analysis by the 13 studies: UK (n=2), Canada (n=4), Chile (n=1), Australia (n=2), US (n=2), Spain (n=1), Romania (n=1)			or frequencies of promotional marketing messages to which children are likely to be exposed or direct measures and type of advertisements.	introduction of government regulation or self-regulatory pledges (n=8 studies, 6 reports – here two industry sponsered) 2) Absolut levels of exposure in the period after the introduction of the self-regulatory in countries/region where no earlier data is available for comparison (n=12 studies and 5 reports)	e.g. repeated two days in a row, four days period, between 7 am and 10 pm, tv national, local channels and cable tv, over 350 hoours over 3 weeks 9 am to 10 pm. one study website content for manufactures.	ous study designs and motivations affect the results.		

SLR: systematic literature review; NA: not available; NAp: not applicable.

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Table 3 – Overview and characteristics of the included articles in labelling policies section

Reference & Type	Studies (N, design, country)	Policy type (exposure)	Year of implementation/Duration of policy	Outcome	Aim and Analyses	Total no. cases	Strengths	Limits	Quality (AMSTER tool)
Atanasova et al. 2022 SLR[1]	N=58, 9 covered labeling/the effect of information Design:quasi-experimental studies (n=4 difference-in-differences (DID), n=1 interrupted time series (ITS) and RCTs (n=4) Countries: USA (n=7), UK (n=1), Canada (n=1)	Built food environments: in this case calorie labeling (n=7), FOP traffic light, numeric, warning signs (n=1), tailored front of pack labeling (n=1)	NA Two to 14 months	Dietary intake and obesity (BMI)	Aim: to systematically review the impact of different elements of the food environment on dietary intake and obesity. Findings were narratively summarized	73 % of the total papers were on adults and 27 % of the total on children Sample sizes in the 9 studies ranged from 56 to 7699	Most of included studies were of high quality (low ROB) The authors only included studies that use casual inference methodologic alies which makes it possible to critically appraise the studies ROB and method Different type of interventions included	No research protocol Only few (2) studies that were cross-sectional were included.	Risk of bias was low among all studies but two that were high risk of bias Low quality (Amster)
Pereira et al. 2021 SLR[2]	N = 52, but only 4 covers labeling: one systematic review and grey	Food labeling	NA	Dietary intake	Aim: To review the existing literature on dietary interventions for the prevention of	Adults		Not more than one study in the review is a scientific study and no detailed description about this SLR.	Critically low (Amster) NA

Reference & Type	Studies (N, design, country)	Policy type (exposure)	Year of implementation/Duration of policy	Outcome	Aim and Analyses	Total no. cases	Strengths	Limits	Quality (AMSTER tool)
	litterature (n=3) Countries: Grey lit: Europe (n=2), Australia/New Zealand (n=1) Countries NA for systematic literature review				childhood obesity and their effectiveness.			The lack of studies that are relevant to our inclusion criteria. Very few methodological details and details about studies results. Grey lit reports is also included in our own collection.	
An et al. 2021 SLR & MA[3]	N= 23, 8 included in MA Study design: RCT (n=13), Non-randomized experiements (n=9), computer simulation study (n=1) countries: US (n=11), Canada (n=3), Australia	SSB warning labels. Labels were classified into 6 categories: 1)symbol with nutrient profile (SNP), 2) symbol with health effect (SHE), 3) text of nutrient profile (TNP), 4) text of health effect (THE), 5) graphic	NA	SSB choices, purchase intentions, perceived effectiveness, purchase, perceived healthfulness of SSBs, and overweight/obesity risk.	Aim: To systematically synthesize the scientific evidence regarding the impact of sugar-sweetened beverage warning labels on consumer behaviours and intentions Comparisons between	Children and adults (n=4), adults (n=13), children (n=4), 2 studies did not report age of participants. Sample size varied from 148 to 32.452	Meta-analyses made across different type of SSB labelings	The study types are broad in designs: both RCTs, non-randomized experiments and computer simulation and a small sample of age groups and it is unclear how many examine real world implemented labeling initiatives or if	Study quality was assessed based on 9 criteria and all ranged among scores from 4 to 8 Low quality (Amster)

Reference & Type	Studies (N, design, country)	Policy type (exposure)	Year of implementation/Duration of policy	Outcome	Aim and Analyses	Total no. cases	Strengths	Limits	Quality (AMSTER tool)
	(n=2), New Zealand (n=2), Brazil (n=1), UK (n=1), Uruguay (n=1), Germany (n=1), the Netherlands (n=1).	with health effect (GHE), 6) graphic with nutrient profile.			warning label and no-warning label and comparison between different warning labels Meta-analyses was made to estimate the effect of SSB warning labels on consumers purchase intentions or choices: purchase intention refer to the degree of willingness to buy an SSB product measured on a 7-point Likert scale (e.g. 1-7 denoting least likely to most likely to			some are hypothetical. No sociodemographic data and the majority of results on purchase intention or choice might not be the same as purchasing behaviour in naturalistic envinroment, so effects on consumption are lacking.	

Reference & Type	Studies (N, design, country)	Policy type (exposure)	Year of implementation/Duration of policy	Outcome	Aim and Analyses	Total no. cases	Strengths	Limits	Quality (AMSTER tool)
					buy) on SHE, THE, GHE and GNP				
Von Philipsborn et al. 2020 & 2019 SLR[4]	N=58 studies, and 8 studies about labelling Study design: Interrupted-time series studies (n=5), controlled before after study (n=3) Country: US, Australia, Canada,	Traffic light-labeling, nutritional rating shelf-labels, menu-board calorie labeling, emoticon labelling at hospitals, chains, stores and school cafeterias	NA but follow up for studies ranges between 4 months to 12 months.	SSB sales, beverage calories per transaction, sugar-sweetened milk-selection	Aim: To asses the effects of environmental interventions (exl. Taxation) on the consumption of sugar-sweetened beverages and sugar-sweetened milk, diet-related anthropometric measures and health outcomes and any reported unintended consequences or adverse outcomes	186 students, rest is sales data	This SLR is valuable because it only includes real world-population studies and adjust for quality, ROB and heteregoenity in the interpretation of the results.	Do not succeed to adjust for other relevant factors themselves such as attitude, awareness, lication, occation etc. which also could have an important influence and thereby reduce the effect of a single population level intervention. No studies about warning labels were found/including.	Certainty of evidence is rated with GRADE and for studies concerning traffic-light-labeling, the certaintity of the evidence is Moderate, low for nutritional rating score shelf-labels and emoticon labelling and very low for menu-

Reference & Type	Studies (N, design, country)	Policy type (exposure)	Year of implementation/Duration of policy	Outcome	Aim and Analyses	Total no. cases	Strengths	Limits	Quality (AMSTER tool)
									board labelling. Moderate (Amster)
Shangguan et al. 2019 SLR & MA [5]	N=60 studies from 59 articles Design: randomized (n=16), non randomized (n=44) interventions Countries: US, the Netherlands, Canada, Norway, Australia, Japan, Sweden, Belgium, Switzerland, South Korea.	Food labeling: characterizes as 1) package labelling (all types implemented by government, industry or associations) and 2) menu or other point of purchase labeling (both voluntary and mandatory aapprochases). No studies about ingredient information were included.	NA	Consumer:dietary consumption of labeled foods/begeverages, sales/purchases Industry: changes in formulations or availabilities of a product Diet-related health measures: adiposity (weight, BMI), metabolic risk factors, diabetes	Aim: to systematic review and meta-analysis the quantitative effects of labeling across multiple approaches, to provide effects estimates, uncertainties and heteregenoeities included stratified analyses and to asses responsenses on both consumers and industry Meta-analyses (laboratory studies were	Adults and children but adults in most studies Sample sizes NA	Quality and ROB assessment, a broad range of studies, outcomes like intended ourchases were excluded	However, such as big amount of data that it is difficult to see which studies are evalutating real policies or if some are experiments. But many of the non randomized interventions were natural experiments increasing generalizability. Interventions and setting swere extremely heterogenous	The quality of each study was assessed based on five criteria (study design, assesment of exposure, assesment of outcome, control for confounding, and evidence of selction bias) ranging from 1-5 in quality. A total of 60 % of studies had high quality

Reference & Type	Studies (N, design, country)	Policy type (exposure)	Year of implementation/Duration of policy	Outcome	Aim and Analyses	Total no. cases	Strengths	Limits	Quality (AMSTER tool)
					included if foods were ordered and consumed, but intended, knowledge, attitudes were excluded).				score (3 or higher) High quality (Amster)
Crockett et al. 2018 SLR & MA[6]	N=28 but only 11 were conducted in real-world settings Design: RCT (n=17), Q-RCT (n=5), ITS (n=6) Countries: mainly US (21 out of 28)	Labelling on menus or menu boards, or nutritional labelling placed on, or adjacent to, a range of food and drinks. The most frequently was energy (i.e. calorie) information.	NA	Purchasing of food and drinks Purchases from vending machines (n=1 cluster RCT), grocery stores (n=1 ITS), or restaurants, cafeterias or coffee shops (n=3 RCT, n=1 cluster RCT, and n=5 ITS).	Aim: To asses the impact of nutritional labelling for food and non-alcoholic drinks on purchasing and consumption of healthier items. Our second objective was to explore possible moderators of nutritional labelling on purchasing and consumption.	Adults and children	A good assessment of both quality, ROB etc. Good that results are reported based on study setting	Only inclusion of very few real-world evaluation s of implemented labeling policies	Quality was assessed via GRADE and for studies on vending machines and grocery stores, they were deemed very low quality and for energy labelling in restaurant s, they were deemed low. Only two studies

Reference & Type	Studies (N, design, country)	Policy type (exposure)	Year of implementation/Duration of policy	Outcome	Aim and Analyses	Total no. cases	Strengths	Limits	Quality (AMSTER tool)
									were of low ROB. Low (Amster)
Sarink et al. 2016 SLR [7]	N=18 representing 14 studies. Study design: Natural experiements (n=11 studies, 2 qualitative), experiements (n=4) Countries: USA, NY (n=6), Philidelphia (n=1), King County (n=2)	Menu energy labelling. The introduction of mandatory menu labelling in US states	NA	Effect on low SEP population, purchase	Aim: to summarize the evidence on the effectiveness of menu energy labelling by socioeconomic position (SEP) SEP was wither measured as education, household income, neighbourhood income based zip code	39-8.489 repondents >100.000 transactions	ROB was assessed and heterogenoty was considered in interpretation A comprehensive review that includes grey lit also	Many studies did not report effect of menu energy labelling over all of for low SEP population but this could be explained by the sample sizes and groups collected Variability in SEP groups could affect the results	Quality of studies was assessed by a checklist from EPHPP and MERGE None reached the highest quality but six out of 12 natural experiments scored 8 or more (out of 10). Low (Amster)
Sacco et al. 2016 SLR[8]	N=11 Study design: real world	Menu labelling in real world settings: menu-	NA But before and after implementation, 2 motnhs	actual food purchase(calories purchased per transaction using restaurant or	Aim: To asses whether menu labelling influences	Study group among all studies: Parents on behalf of Children and	Includes real world studies and report results based	There is a lack of studies on this topic and a lack of real world studies	Quality was assessed by EPHPP tool: the

Reference & Type	Studies (N, design, country)	Policy type (exposure)	Year of implementation/Duration of policy	Outcome	Aim and Analyses	Total no. cases	Strengths	Limits	Quality (AMSTER tool)
	settings (n=6, pre and post, cross-sectional, control, RCT) and artificial settings (n=5, RCT's, within subject experiemen ts) Countries: NA, but at least two in US states	labelling legislation New Yoirk and Seattle/King Country (n=2), mutlitple nutrition labeling formats tested in restaurant of private club (n=1), menu labelling in school cafeterias (n=3)	testing interval at restaurant	school or sales or receipt data) or hypothetical food selections. Other outcomes were: Total content of fat in purchased/consu med food, awareness of nutrition information, self-reported use of labels when purchasing food and menu-labelling preferences	the amount of calories ordered by children and adolescents (or parents on behalf of youth) Comparison before and after and to control without legislation	adolescents (n=5), adolescents (n=5), children (n=2) parents	on study design	with good quality Results from artificial settings are likely to overestimate the impact.	studies conducte d in real world setting were all rate weak except one rated moderate (elbel et al. 2011) Low (Amster)
Littlewo od et al. 2016 SLR & MA[9]	N=15 Study design: Experiment al (n=4), real world (n=7, between site, between city, cross-sectional, differences in	Menu labelling : the prominent display of energy values appearing on menus (or food tags, retail shelf displays and other promotional ateriation).	NA	Selected, ordered and consumed	Aim: To consider the most recent evidence which assesses the effect of menu labelling regarding changes in energy consumed, ordered or selected in	Adults in all real world setting studies but one that examines children (1-13 years). Sample size in real world studies ranges from 138-6125.	A comprehensiv e and precie review from the time period 2012-2014 Divides results from MA based on different study settings	But the limited scope can be a bias and potentially only include studies with positive results. A methodologica l limiatation is related to the included studies such as incomplete ML, medium or	Study quality was assesed by 7 punkt model with points given and the studies were in total rated good (n=3), fair

Reference & Type	Studies (N, design, country)	Policy type (exposure)	Year of implementation/Duration of policy	Outcome	Aim and Analyses	Total no. cases	Strengths	Limits	Quality (AMSTER tool)
	differences, pre-post cross-sectional, between group cross sectional, between group experiment, between group longitudinal experiment), survey (n=5) Countries: USA (n=10), Canada (n=3), Australia (n=2)	Type of labels: energy labels, no labels (comparison), single TL, fat labels, healthy symbol labels, nutrition bargain price score.			both real-world and experimental settings. MA with 12 of 15 studies			small sample sizes, lack of case-control match and sifnificnat differences between grups not reported or adjusted. Only three studies had good quality. Lack of real world studies measuring energy ordered.	(n=9), weak(n=3). Low (Amster)
Cecchini et al. 2015 SLR & MA[10]	N=9 Design: experiemental setting (n=5, controoled setting, two in real world setting), online	Food labelling systems: traffic light schemes, Guideline Daily Amount and other food labelling schemes	NA	Selection of products and calorie intake Food intake, purchase or choice (n=3), food choice intentions (n=5)	Aim: To assess the effectiveness of food labelling i increasing the selection of healthier products and in reducing calorie intake. Furthermore	Median 703 participants, only 3 studies included more than 1.000 participants	Previous studies have examined if consumer understand labels, while this study gathers the evidence on the quantitatyve effect	The quality of the studies included in MA consists of relatively small sample groups and can not account for potential confounders etc. and different	NA Criticallt low(Amster)

Referenc e & Type	Studies (N, design, country)	Policy type (exposure)	Year of implementation/Dur ation of policy	Outcome	Aim and Analyses	Total no. cases	Strengths	Limits	Quality (AMSTE R tool)
	randomized traisl (n=4) USA (n=2), Australia (n=2), UK (n=2), France (n=1), Germany (n=1), Canada (n=1)				a comparison is made between the relative effectiveness of traffic light schemes, guideline daily amount and other food labeling scheeemes. MA analyses made on homogenous outcomes: calorie intake (n=4), purchase of healthier options (n=4 +2)		The pooled results from meta analysis can be used to compare to other types of labeling e.,g. menu labeling and other policy initiative.	protocols and outcomes in the included studies The quality and ROB is not assessed	
Nikolaou et al. 2015 SLR & MA[11]	N=7, 6 included in MA Study designs: cross-sectional, Natural experiemtn, quasi-	Calorie labeling: NYC legislation (n=3), Washinton legislation (n=2),	Washintong legislation enacted on 1. Januar 2009	Calories purchased	Aim: to assess the effect of calorie-labelling on calories purchased Meta analysis on six studies on calorielabellin g effect on	NA	ROB assessed	Very few studies included and old studies included No quality assessment besides ROB Very short method	Cochrane risk of bias assesment tool was used: allm studies with low quality was excluded. Two had low ROB

Reference & Type	Studies (N, design, country)	Policy type (exposure)	Year of implementation/Duration of policy	Outcome	Aim and Analyses	Total no. cases	Strengths	Limits	Quality (AMSTER tool)
	experimental Country: all made in US states				calorie purchase			section so a lack of what is done and thereby low rating	and thus high quality while five had some risk of bias. Critically low(Amster)
Mayne et al. 2015 SLR[12]	N=37 (18 on nutrition/diet, 17 on PA and 3 on BMI), but N=8 on labelling Study design: Natural and quasi-experiemtnal studies: one-time cross sectional with comparison (n=1), repeated cross-sectional (n=6),	A broad range of policy and built environmental prevention efforts, but regarding labelling: nutritional labeling in restaurants (n=7) and nutritional labeling in supermarkets (n=1)	NA	Obesity-related outcomes: calories, saturated fat, sodium, sugar content, carbohydrates - purchases, percentage of purchases classified as healthy, types of foods purchased and frequency of fast food consumption	Aim: To examine the use of natural or quasi experiments to evaluate the efficacy of policy and built environment changes on obesity-related outcomes.	NA But study population was either adults (n=16), children/adolescents (n=8) or combination of age groups (n=10).	A broad inclusion of real world evaluaitons of prevention policies which makes the validity of the results as best as possible. Has a good discussion about the consequences of the study designs/quality	A majority of the studies did not employ propability-based sampling. Also 14 studies in total did not adjust for cofounders in the comparison between intervention and control group.	Study design was evaluated from 3 (strongest), 2 – intermediate and 1 weakest design: 1 (n=3), 2 (n=4), 3 (n=1) Critically low (Amster)

Reference & Type	Studies (N, design, country)	Policy type (exposure)	Year of implementation/Duration of policy	Outcome	Aim and Analyses	Total no. cases	Strengths	Limits	Quality (AMSTER tool)
	within longitudinal (n=1) Countries: All labelling from cities in US								
Swartz et al. 2011 SLR[13]	N=7, 5 examined natural experiments on calorie menu label in real world setting Study design: experimental or quasi-eperimental (labratory) Country: US	Calorie menu labelling: evaluations after the implementation of calorie labeling legislation in NYC at chain restrauants (n=3), King County at chain restaurants and drive-trough (n=1),, and one dinning hall in Ohio state university (n=1).	2008 in NYC: all chain restaurants with 15 or more locations should list calorie information on items on the menu 2010 a national menu labelling law for all restaurants with 20 or more locations	Calorie purchase or consumption	Aim: To use current literature to answer the question of whether calorie labelling on menus at restaurants and cafeterias has an effect on consumer purchasing and eating behaviour. Comparison between calorie labeled menu and no calorie menu	Children and adolescenys (n=349), adults (1.156 to 7.309), and stores	Include the existing real-wolrd evaluation and assess the quality of the evidence and comment on this regarding the reporting of the results	The limitations on the current evidence is that it is difficult to test for confounders in observational studies. So that could effect the few reported effects Consumption were not assessed in the observational studies. The two RCT is difficult to generalize to real world	Quality of the included real world studies: good (n=1), fair (n=4). Low quality (Amster)

SLR: systematic literature review; MA: meta-analysis; NA: not available; NAp: not applicable.

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Table 4 – Overview and characteristics of the included articles in school health policies section

Reference & Type	Studies (N, design, country)	Policy type (exposure)	Year of implementation/Duration of policy	Outcome	Aim and Analyses	Total no. cases	Strengths	Limits	Quality (AMSTER tool)
CAPOC umbrella review	Collado-Soler et al. 2023 [1] SLR	N= 19 but only 1 study examines a policy. Rest were interventions Study design: quasi-natural experiment Country: Norway	The relevant study (n=1) examined the effectiveness of a program based on free fruit and vegetable FFV) school policies	One piece of fruit for 4 years (follow-up during 2010, 2012, 2015 and 2017)	Body weight and BMI	Aim: to investigate the effectiveness of nutrition intervention programs in children aged 3-12 years around the world.	11215 students 8-13 years	Used PRISMA as protocol	Only one study is relevant to our inclusion criteria, and the rest are interventions. Furthermore, the authors themselves report on heterogeneity among the included studies in total. Because of their inclusion criteria/exclusion some global studies are not included. Furtmore, the included studies' quality is not assessed	No internally rating Critically low (Amster)
	Guarino et al. 2023 [2]	N=10, 2 were relevant	Different things were	Simulation from 2015	Cost-effectiveness	Aim: to deal with the cost-	Nap	The simulation	Studies included	Internally studies

Reference & Type	Studies (N, design, country)	Policy type (exposure)	Year of implementation/Duration of policy	Outcome	Aim and Analyses	Total no. cases	Strengths	Limits	Quality (AMSTER tool)
SLR	Study design: simulation studies (n=2) Country: USA (n=2)	calculated both community and school programs, but for school health policies relevant were : Early care and education policy change (ECE); 4) Active physical education (Active PE). (Gortmaker 2015a), and Early care and education policy change (ECE); 4) Active physical education (Active PE). (Gortmakrer 2015b)		regarding health outcome on BMI unit change and healthcare costs, DALYs and QALYs	effectiveness analysis (CEA) of primary prevention programs on childhood overweight/obesity, in order to benefit from cost-effectiveness interventions		studies might be some of the best data we will have to see the full effects	were heterogenic regarding study design, target population, health, and economic outcomes. Only some relevant regarding which program they examined but also study design Missing data on real life effects and only simulation data	quality was rated using Drummond's checklist. Gortmaker 2015a scored 14 out of 21 and Gortmaker 2015b scored 15 out of 21. (considered low-medium quality) Critically low (Amster)
Pereira et al. 2021 [3] SLR	N = 52, but only 1 school policies. Rest on school are interventions.	The SNPI was developed and delivered by The Food Trust, a community-based	2008	Overweight and BMI	Aim: To review the existing literature on dietary interventions for the prevention of	10 schools and 1349 students in grades 4 to 6	A multicomponent intervention	Not more than one study in the review is a scientific study examining a	NA internally Critically low (Amster)

Reference & Type	Studies (N, design, country)	Policy type (exposure)	Year of implementation/Duration of policy	Outcome	Aim and Analyses	Total no. cases	Strengths	Limits	Quality (AMSTER tool)
	Design: comparisons between Cluster study Philadelphia (1)	organization, and was funded by the US Department of Agriculture Food Stamp Nutrition Education Program. Committees were established to make recommendations on the CDC guidelines and to work with the Food Services Division, which operates food services in all Philadelphia public schools, to remove all sodas, sweetened drinks, and snacks that did not meet the standards set by the committee			childhood obesity and their effectiveness. Analyses in regard to this study was that: 50% of students eligible for free or reduced-price meals. Schools were matched on school size and type of food service and randomly assigned to intervention or control. Students were assessed at baseline and again after 2 years.			policy. Rest are interventions. Furthermore, a small sample size in the included study	

Reference & Type	Studies (N, design, country)	Policy type (exposure)	Year of implementation/Duration of policy	Outcome	Aim and Analyses	Total no. cases	Strengths	Limits	Quality (AMSTER tool)
		(see below in nutrition policy) from the vending machines and the cafeteria line. All of the schools were under the direction of the district's Food Service Division, which agreed to make the necessary changes in the intervention schools, while making no changes to the control schools. The SNPI included the following components: (1) school self-assessment; (2) nutrition education; (3) nutrition policy; (4) social marketing; and (5) parent outreach.							

Reference & Type	Studies (N, design, country)	Policy type (exposure)	Year of implementation/Duration of policy	Outcome	Aim and Analyses	Total no. cases	Strengths	Limits	Quality (AMSTER tool)
Taghizadeh et al. 2020 [4] SLR & MA	N= 64, and n= 38 included in MA. 47 estimates for (BMI) and 45 (BMIz) but different settings depending on the policy – so only some relevant to school health – see next coloumn. Study design: RCT (n=33), non-randomized controlled trials (n=7) Country: 35 % of program were carried out in IS, 31 % in Australia, 1 China, 1 Brazil, 3 New Zealand, 2 Spain, 1 UK, 1 Fiji, 1 Tonga, 1 France,	Setting for the policy are: School only (n=16), community and school (n=10), school and home (n=1), community, school and home (n=2) and community, school, home and primary care clinic (n=5) The majority were policies focused on combining diet and PA interventions (n=33) and 5 consisted of only PA. No on only diet	NA But 14 programs had follow-up periods after the end of the intervention which ranged from 6 weeks to 3 years	BMI and BMIz	Aim: this meta-analysis summarize the results of controlled trials that evaluated the effect of obesity prevention policies in children and adolescents Analyses were made for BMI and BMIz-score	Total in 64 studies (n=200255) and in MA total n=178017 ranging from 86 to 35157	It is a comprehensive assessment of obesity prevention policies with an emphasis on different settings, age ranges etc. The role of intervention period is also investegated. But meta-analysis, quality rating and awareness of ROB.	A bit unclear exactly what the policies separately contain besides their settings but it can be seen in supplementary but results are more reported in general.	Quality rated internally with the Effective Public Health Practive Project Quality Assesment Tool for Quantitative studies: 15 rated as weak, 10 moderate and 13 strong High quality (Amster)

Reference & Type	Studies (N, design, country)	Policy type (exposure)	Year of implementation/Duration of policy	Outcome	Aim and Analyses	Total no. cases	Strengths	Limits	Quality (AMSTER tool)
Dabravolskaj et al. 2020 [5] SLR & MA	N= 83 in SLR and 80 for MA Study design: Both qualitative interviews with 45 Canadian stakeholders and the studies included were: RCT was employed in 56 studies with schools being the unit of randomization in 50 studies, quasi-experimental studies, natural ecperiments and longitudinal data for the rest. Countries: US (17), Australia (10), Canada (8), Denmark (7), Spain (7), UK (6), Norway (6), New Zealand (6), Germany	School-based interventions: see result section for more detailed description of identified interventions by Canadian stakeholders. CGS approach (n=18), modifications of school nutrition policies (n=1), universal school food program (n=2), provision of healthy foods in schools (n=4), modifications of the existing PE curriculum (n=18), promotion of PA outside of PE classes (n=8), changing food/drinks sold and/or	Nap But intervention duration ranged from three months to 7 years.	Physical activity (PA) (reporter in 28), fruit and vegetable intake (reported in 18) and body weight (reporter in 70)	Aim: to examine the effectiveness of school-based intervention types perceived by Canadian stakeholders in health and education as feasible, acceptable and sustainable in terms of improving physical activity (PA), fruit and vegetable intake and body weight.	Sample size varied from 82 to 1,065,562 school aged children (4-18 years)	Combines Canadian stakeholders identificiation of necessary itnerventions and investegate the effectiveness – so might be different priorities in other national contexts. However, made a MA, rated the quality, assessed ROB, Publicaiton bias	While stakeholders identified universal school food programs and modifications of school nutrition policies as top priority interventions, very little data was found Furthermore, a small number of schools were often in the cluster RCTs which could lead to overestimation of intervention effect. A bit unclear when there is a distinction between policies and intervention	Studies were internally rated using the Downs and Black checklist. See table 2 for results for every study. Moderate (Amster)

Reference & Type	Studies (N, design, country)	Policy type (exposure)	Year of implementation/Duration of policy	Outcome	Aim and Analyses	Total no. cases	Strengths	Limits	Quality (AMSTER tool)
	(4), Ireland (2), Italy (2), Switzerland (2), France (2), Belgium (1), Sweden (1), South Korea (1), Israel (1)	served in schools (n=3), and multicomponent interventions (n=29)						s included within the different types of interventions	
Bramante et al. 2019 [6] SLR	N=33 where 24 took place in school setting Study design: Natural experiments (n=33) Countries: US (29), Canada (2), Australia (2)	Population level policies and programs. Among the 29 US studies, 35 % evaluated local policies, 31 % state/regional policies, 24 % federal-level policies and 10 % non-governmental policies. Feederal level policies included the child nutrition and special supplemental nutrition program for women, infants and children reauthorization act; state or	Policies implemented in 2000 to 2017	Childhood BMI outcomes as primary outcome (BMI, BMIzand also food/beverage intake, physical activity	Aim: to evaluate the effectiveness of population level policies and programs from natural experiments for childhood obesity prevention	Across differed school grades: elementary, middle and high school	Evaluated the ROB of each study and is spot on regarding study type and focus.	The authors themselves describe that there is a lack of clear description of what was actually implemented in the policies and programs. Studies often did not describe changes but just as 'healthy changes'. Plus the majority kf studies had a high ROB.	Risk of Bias was rated with the Effective Public Health Practice Project tool : high for most studies (76 %, 25/33) and rest 7 medium and 1 low ROB. In the sensititvity analysis, Most (63 %) of the 8 studies with low/medium ROB took place

Reference & Type	Studies (N, design, country)	Policy type (exposure)	Year of implementation/Duration of policy	Outcome	Aim and Analyses	Total no. cases	Strengths	Limits	Quality (AMSTER tool)
		regional policies included competitive food laws and school district policies, and local policies included efforts to promote PA trough ecercise classes, sidewalsk or playgrounds Among the school studies, n=14 focused on the food/beverage environment, n=6 focused on PA environment and n=4 foused on multiple environments							in school settings Moderate (Amster)
Micha et al. 2018 [7] SLR & MA	N=91 intervention	School food environment policies: direct	Na	Dietary habits, adiposity, metabolic risk factors	Aim: to systematically review and quantify the	School aged children.	To the authors knowledge the first	Heterogene contexts for schools and educaitonal	Quality score rated on a scale from

Reference & Type	Studies (N, design, country)	Policy type (exposure)	Year of implementation/Duration of policy	Outcome	Aim and Analyses	Total no. cases	Strengths	Limits	Quality (AMSTER tool)
	Study design: randomized (n=39) or quasi-exteripemental /non-randomized (n=52) Countries: US (55), UK (11), the Netherlands (7), Norway (6), Canada (3), South Korea (2), and others (each n=1).	provision of healthful foods/beverages (n=40), competitive food/beverage standards (n=29), school mean standards (n=39) (some interventions assessed multiple policies). Policies are both at national level (law, policy), local (program, policy), statewide (plocy), citywide (policy)	Longest follow up in randomized was 47 months And 60 months for qusi-exterpeimental studies		impact of school food environment policies on dietary habits, adiposity, and metabolic risk in children	Primary schools (47), secondary (27), preschool (1), mixed schools (1), one study did not specifcy	study to quantify the effects of school food environment policies on child habitual dietary intake. Evaluates the existing policies and describe the level of each policy Asses quality and ROB	systems across nationals could potentialle contribute to unmeasured heterogenity, intensity or success of implementatio could modify results but are difficult to quantity Most studies from high income western countires	1-5 and can be seen in table 1 for each study. 0-3 = low, 4-5 higher High (Amster)
Bleich et al. 2018 [8] SLR	N= 56 but only one study is a policy study and therefor relevant Study design: Natural experiment	Provision of water jets in NYC schools which was a part of New York's FITNESSGRAM initiative	NA but intervention length and follow-up duration was 5 years	BMI, BMIz-score, BMI percentale, overweight/obesity prevalence etx.	Aim: To identify effective interventions to prevent excess weight gain in young people	N=1065562 kindergarten to school grade	Study quality and ROB is assessed.	Very little evidence relevant to our umbrella-review so estimates and effects	Study quality of Schartz et al. 2016 was rated good internally using the Downs

Reference & Type	Studies (N, design, country)	Policy type (exposure)	Year of implementation/Duration of policy	Outcome	Aim and Analyses	Total no. cases	Strengths	Limits	Quality (AMSTER tool)
	Country: US (1)							are very limited Variablity in studies included Study setting was quantified but nit as much the characteristics of the intervention such as the specific elements	and Black checklist. Moderate (Amster)
Singh et al. 2017 [9] SLR	N=27 but 20 are focused on dietary or PA policies, 7 on tobacco/alcohol Study design: 15 interventional studies (8 RCT, 7 quasi-experimental studies), 11 observational studies (10 cross-sectional, 1 case-control),	School polices – divided on outcome targets (see further description in result section) – but is policies nutrition policies, comprehensive legislation to combat obesity, removal of unhealthy beverages	NA but study is done between 1999-2013	NCD risk factors: diet, PA. Tobacco, antropoemtry, alcohol use	Aim: This study reviewed the literature on the impact of school policies on major NCD factors	Population in the studies ranged from 6-17 years Sample size ranges 48 to 80428	Included new outcome compared to previous SLR's : such as anthropometric measures, alcohol use and biomarkers. Rated quality and assessed ROB.	The majority of the included studies have weak or moderate quality. Diffoicult to differentiate between the specific policy types since results are reported on healthoutcome.	Internally studies quality was rated using the Effective Public Health Practice project quality assesment tool. 18 categorized as weak, 6 as moderate

Reference & Type	Studies (N, design, country)	Policy type (exposure)	Year of implementation/Duration of policy	Outcome	Aim and Analyses	Total no. cases	Strengths	Limits	Quality (AMSTER tool)
	1 natural experiment Countries:USA (15), Australia (4), UK(2), Canada (2), Spain 1), Greece (1), USA & Australia (1), India (1).	and junk food and more availability of healthier products						Could not make meta-analysis because heterogenity y	and 3 as strong. Moderate (Amster).
Mansfield et al. 2017 [10] SLR	N=31 Study design: one-time observation studies (no comparison group) (n=x), longitudinal observation studies (before/after and pre/post without control group) (n=x), and intervention studies (with control) (n=x) Country: US (all)	National school lunch program (administrated by Food and Nutrition Service of the US department of Agriculture). The lunch meal standards under the implementation of School wellness policies, the Healthy Hunger Free Kids Act: all federal regulation that	Fall 2006 to December 2009: school wellness policy 2012 HHFKA	Plate waist, dietary intake, food selection, and/or purchsing	Aim: to assess whether policy changes impacted food-consumption behaviours of students during periods when (1) school wellness policies were implemented (2006-2007); (2) the Healthy, Hunger-Free Kids Act was passed (2010-2012), and (3) the Healthy Hunger Free Kids Act was implemented (2012-present).	US School aged students between 2006 and 2016	Concrete evaluations of policies implemented in US focusing on school lunch program ROB assessment	The evaluations f HHFKA policy changes are only made shortly after the implementation 3-4 years, so results on food consumption related behaviour is limited also in the extent that this is an early review after implementation	Cohrane's Collaboration tools for assessing risk of bias in RCTs was used when appropraite: 20 rated as low, 11 medium, 0 high Moderate (Amster)

Reference & Type	Studies (N, design, country)	Policy type (exposure)	Year of implementation/Duration of policy	Outcome	Aim and Analyses	Total no. cases	Strengths	Limits	Quality (AMSTER tool)
		mandates the US national School Lunch Program nutrition standards align with the Dietary Guidelines for Americans						Limitations of individualstudies: small sample sizes, convenience sampling, short intervention periods, lack of RCTs, differences in ffood culturae and lication of ntervention sites. Potential bias in the early studies – because a potential of HHFKA policy changes to reduce childhood obesity.	
Olstad et al. 2017 [11] SLR	N=20 (18 studies) and 8 school studies Countries: Of the 18 studies USA (14), the	Only policies that targeted disadvantaged children and adults – so universal studies are not included.	Na Duration was from 1 to 2 years	Anthropometric, dietary, and physical activity outcomes relevant to obesity prevention/treatment among	Aim: to synthesize the evidence from controlled studies pertaining to the impact of policies on	Both children and adults. Sample size for organizational policies ranged from 186-7565	Manages to include the highest quality of evidence of effectiveness for disadvantag	As the authors describe themselves, it is difficult with the organizational studies to	ROB is assesses via Cochrane Public Health Review Group.

Reference & Type	Studies (N, design, country)	Policy type (exposure)	Year of implementation/Duration of policy	Outcome	Aim and Analyses	Total no. cases	Strengths	Limits	Quality (AMSTER tool)
	Netherlands (2), UK (1), New Zealand (1)

Study design: Cluster RCT (7), quasiexpoerimental pre-post longitudinal (7), quasi experimental controlled prepost cross-sectional (3), regression discontinuity (1) | The school studies (10 papers, 8 studies) examined organizational policies within the context of seven distinct multi-component interventions in disadvantaged schools. All were long-term and comprehensive initiatives that engaged families, school districts, and/or communities in their development and/or implementation.

Policies are defined as also covering non-governmental | | both children and adults | anthropometric, dietary, and physical activity outcomes amongst socioeconomically disadvantaged children and adults

Policies were classified as organizational (e.g. those adopted and implemented by organisations) or governmental (i.e. named policies enacted by government) | particioants and government policies ranged from 242-35606 participants. | ed children, including school policies

Assess ROB. | figure out exactly what causes the positive effect since they are multicomponent but also lack descriptions of their content. | In the 8 organizational policies 6 are rated as strong, 1 moderate and one weak. In the government policies 5 strong, 3 moderate and 2 weak.

Moderate (Amster) |

Reference & Type	Studies (N, design, country)	Policy type (exposure)	Year of implementation/Duration of policy	Outcome	Aim and Analyses	Total no. cases	Strengths	Limits	Quality (AMSTER tool)
		initiatives so: laws, regulation, programs, wecommenda tions (voluntary or mandatory) but also e.g. school nutrition policies.							
McKinnon et al. 2016 [12] SLR	N= 27 studies but only 9 evaluated school environment interventions. Study design:.RCT (4), Quasi-experimental (2), quasi-experimental simulation (1) secondaray data analysis – simulation (2) Countries: NA	School environmenta l policies at both local (n=5) and national level (n=3) and both (n=1). The local cover physical and nutrition intervention (5) National cover active transportatio n (walking) to school (n=1), physical	NA But time horizon for included studies ranges between 1 year and to lifetime of participants	Cost-benefit, cost-effectiveness	Aim: *To review the cost-benefit or cost-effectiveness studies of obesity-related policy/environ mental interventions.* Cost-effectiveness analysis: assess relative costs and effects of two or more different options. Often expressed in terms of quality or disability	NA	Economic assessment studies can be helpful expesically in a political context to help politicians make descisions.	Very brief description of what the policies exactly contain. It can be difficult to asses costs and benefits over a long time, because a policy action can result in direct effects such as on behaviour which might have an	NA internally Critically low (Amster)

Reference & Type	Studies (N, design, country)	Policy type (exposure)	Year of implementation/Duration of policy	Outcome	Aim and Analyses	Total no. cases	Strengths	Limits	Quality (AMSTER tool)
		activity after school program (n=1), two interventions to promote FV consumption (1) Local/national cover community based physical activity and nutrition intervention			adjusted life-years or healthy years equavalents in attempt to account for gains in quality of life.			effect over a long time horizon e.g. reduced risk of chronic disease. Often the direct effects are only observed. So some results are chosen on assmtions. Limits described in the review is: 1) the review might not have located all relevant studies, 2) the located studies might be the result of publication bias against null findings, 3) the costs of childhood obesity and its impact on morbidity	

Reference & Type	Studies (N, design, country)	Policy type (exposure)	Year of implementation/Duration of policy	Outcome	Aim and Analyses	Total no. cases	Strengths	Limits	Quality (AMSTER tool)
								and mortality is deficult to know the precise cost and benefits of interventions. A lot of heterogenity in the studies design. Few studies included, lack of risk of bias assessment.	
Meyer et al. 2016 [13] SLR	N=30 (representing 26 studies) and 18 had school settings Stydy design: RCT (3), rest non-rct Country: Canada (3), US (23), American Indian Tribes/First	Policy and environmental strategies : strategies/content among the school setting studies are: adopt worksite policies or practices, increase PA opportunities at school	NA	School interventions resulted in changes on: students (n=14), change in the use of facilitites for the community (n=3), changes that effected employers (n=1)	Aim: To synthesize the evidence on the implementation, relevance, and effectiveness of physical activity-related policy and environmental strategies for obesity prevention in	Sample size ranges from 114 to 6000 but samples are also schools and employees at schools	Identifies strategies	Lack a summary and overall description of effects from each policy, so information can only be found in appendix and the reporting of the results	Internally Cochrane is used for RCT and GRADE for observational studies to assess ROB: RCT studies. Ratings can be seen at table 3

Reference & Type	Studies (N, design, country)	Policy type (exposure)	Year of implementation/Duration of policy	Outcome	Aim and Analyses	Total no. cases	Strengths	Limits	Quality (AMSTER tool)
	national of Canada (4) → All rural areas	outside of PE, increase amount of and access to PA equiptment, increase PA opportutinies outside og PE, provide access to public buidings after hours, promote PA ressources, and COCOMO strategies nr 12-18 see table 1			rural communities.			are very limited.	Low (Amster)
Calancie et al. 2015 [14] SLR	N=33 and 13 were in school settings, and 16 reported data on effectiveness – here 7 was in school settings. Study design: pretest-posttest no comparison (6), cross-sectional (1)	Nutrition-related policies and environmental strategies: increased availability of fruit and vegetables in school carfeterias (n=1), increased availability of healthy vs. unhealthy	NA	Nutrition-related behaviour	Aim: to synthesize availeble evidence on the adaption, impelementation and effectiveness of nutrition-related policy and environmental obesity-prevention strategies in rural settings.	Sample size ranges from 600 students 80,428 students. 1 school-496 schools and statewide policy	Identifies strategies	Lack a summary and overall description of effects from each policy, so information can only be found in appendix and the reporting of the results are very limited.	No internally ROB assessment or quality assessment. Critically low (Amster)

Reference & Type	Studies (N, design, country)	Policy type (exposure)	Year of implementation/Duration of policy	Outcome	Aim and Analyses	Total no. cases	Strengths	Limits	Quality (AMSTER tool)
	Country: all from rural communities in US (n=25) or Canada (n=4)	foods and beverages available in schools (n=1), increased number of schools with nutrition-related policies (n=2); increased number of schools with nutrition related policies and increased availability aof healthy foods (n=1); schools consistently complied with existing policy limiting calories from fat and saturated fat in school meals (n=1), a policy banning high fat and high sugar snack foods; initiated a school						No internally ROB assessment or quality assessment	

Reference & Type	Studies (N, design, country)	Policy type (exposure)	Year of implementation/Duration of policy	Outcome	Aim and Analyses	Total no. cases	Strengths	Limits	Quality (AMSTER tool)
		breakfast program (n=1)							
Driessen et al. 2014 [15] SLR	N=18 but only 13 covered policies, rest were interventions Study design: natural experiments (11), RCT, simulation studies Country: US (14), UK (4)	School obesity prevention inititiatives focusing on the school food environment: the majority of studies (14) reported changes to food or beverage availability in canteens or other food provision/sales areas such as snack bars. New fruit only tuchshop was introduced (n=1), analysis of state policy (n1).	NA but pre and post periods ranges from 1997-2009	BMI (2), purchasing / eating behaviour (14), weight and behaviour (2)	Aim: to review the evidence for the effect of isolated food environments interventions on both eating behaviour and/or body weight.	3 schools to 80 schools to nationally covered Sample sizes ranged from 444 student to 90730	Reported on the different setting of studies and policies. Distinguish between policies and interventions. Asses ROB.	Could be more clear in which are policies and which are interventions and exact content and implementation time of each policy	Two studies were rated as strong quality, 5 moderate and 11 as weak Low quality (Amster)
Chriqui et al. 2014 [16] SLR	N=24 Study design: cross sectional (20), longitudinal (3), combination (1)	CF&B policies: policies governing the sale of foods and beverages sold outside of the school	Texas 2002 and 2004 All studies published between 2006-2009 with 22 of 24 published between 2009-2012	body mass index (BMI), weight and probability of overweight/(obesity (n=4), consumption (n=10) and	Aim: To examine the potential influence that the federal rule (the US department of Agricultures	X 7 policy influence in elementary, middle and high school, 7 inn high	Good description of policy content Discuss aspects and account for	Heterogenity in studies design and policy focus Lack of ROB assessment	NA internally rating Low (Amster)

Reference & Type	Studies (N, design, country)	Policy type (exposure)	Year of implementation/Duration of policy	Outcome	Aim and Analyses	Total no. cases	Strengths	Limits	Quality (AMSTER tool)
	Country: US (all)	meal programs: State laws (n=14), district policies (n=8), both (n=2). Types of policies: Food and beverage policies (n=18), beverage policy only (n=4), food policies only (n=2)	16 studies examine prepolicy/postpolicy changes, 8 examined postpolicy changes	availability of CF&Bs (n=13); 3 studies examined more than one outcome	final rule governing the sale of foods and beverages sold outside of the school meal programs (competitative foods and beverages [CF&Bs]) may have based on peer-reviewed published studies examining the relationship between state laws and/or school district policies and student body mass index (BMI) and weight outcomes, consumption and availability of CF&Bs	school, 6 inmiddle school and 2 on elemmentary school, 1 at both middle and high school, 1 at both elementary and middle school	ROB and heterogneity when discussing and presenting results	or Quality assesment	
Williams et al. 2013 [17] SLR & MA	N=21 Study design: RCT (2), controlled before and after (3),	Either policies on diet only (n=10) and physical activity only (n=5), or both	NA	Weight status: BMI (BMI standard deviation score, percentiles), overweigh/obesityx	Aim: to evaluate the effects of policies related to diet and physical activity in	Children in the age of 4-11 years participating in full time education	Report the results divided on PA and diet or combined	Only outcomes eamined on weight and therefor a lack of significant	Standard tools were used to assess quality and ratings

Reference & Type	Studies (N, design, country)	Policy type (exposure)	Year of implementation/Duration of policy	Outcome	Aim and Analyses	Total no. cases	Strengths	Limits	Quality (AMSTER tool)
	cohort studies (11), cross-sectional (5) Countries: USA (16), Australia (1), Canada (1), Italy (1), Mexico (1), the UK (1)	diet and PA policies (n=6) Diet policies were: school nutrition policy initiative, location of school breakfast program consumption, national school lunch program and/or school breakfast program, nutrition guidelines PA policies were: physical activity in the curriculum, walking school bus scheme, professionally led PE, increased PE duration of 1 hour per week, meeting the			schools, either alone, or as a part of an intervention programme on the weight status of children aged 4 to 11 years MA where policies that sought to affect diet, those that sought to affect PA and those who sought to affect both were separated to their three separate MA. However, analysis within the cluster diet on the US National school Lunch and School Breakfast programs were analyzed seperately	Ranging from 106-130353	political focus Good descriptions on policy content	beneficial effects but effects on changed diet or PA behaviour could be interesting Lack of summary on ROB ratings only an overwiew on the different points	can be seen for each study in table 3 Low (Amster

Reference & Type	Studies (N, design, country)	Policy type (exposure)	Year of implementation/Duration of policy	Outcome	Aim and Analyses	Total no. cases	Strengths	Limits	Quality (AMSTER tool)
		national association for sport and physiuca education guidelines Combined policies: be active eat well, utahs gold medal schools, healthy living Cambridge kids, viarety of diet and PA related policies, nutrition policy and Annapolis valley health promoting schools project,							
Bleich et al. 2013 [18] SLR	N= 9, but only 1 cover policies conducted in school and community setting Study design: quasi-	A statewide strategy in Delawere (n=1), Nemours, a leading child health care provider, launched a statewide	2006	BMI or BMIz-score, dietary intake and PA	Aim: to systematically review community-based childhood obesity prevention programs in US and high-	Pediatric population Sample sizes 4595children in the age of 0-17	ROB and quality assesment	Only one study relevant to our inclusion criteria makes it difficult to conclude anythins and	Studies ROB were assessed using the Downs and Black insrument. Strenght of

Reference & Type	Studies (N, design, country)	Policy type (exposure)	Year of implementation/Duration of policy	Outcome	Aim and Analyses	Total no. cases	Strengths	Limits	Quality (AMSTER tool)
	experimental designs (n=1) Country: Delaware, USA (1)	program to improve child health			income countries Included studies are reported after setting: so community only or comutnity with other setting (e.g. home, school, primary care, child care)			evidence is insufficient Furthermore there I a lot of heterogenity y Might be affected by publication bias	evidence was graded using the grading schme recommended in the MEthods Guide for Conducting comparative effectiveness reviewer and for the study is was concluded that evidence was insufficient hence n=1 Moderate (Amster)
Cauwenbe rghe et al. 2010 [19] SLR	N=42, 29 in children and 13 in adolescents. 27 articles (22 studies) included a	School nutrition policy (n=27) Either environmenta	NA	Dietary behaviour and anthropometric s	Aim: To summarize the existing European published and 'grey' literature	6-18 years in school setting Study population	Has summarized different intervention components	However difficult to distinguish between whether it is an	Quality was assessed internalin using the Effective

Reference & Type	Studies (N, design, country)	Policy type (exposure)	Year of implementation/Duration of policy	Outcome	Aim and Analyses	Total no. cases	Strengths	Limits	Quality (AMSTER tool)
	school nutrition policy, rest interventions Study design: non-rct (11), prospective cohort (5), cluster RCT (3), before and after (2) Country: Norway (6), Denmark (2), UK (11), The Netherlands and Spain (1), the Netherlands (2), Sweden (1)	I interventions (n=6 for children studies, 2 for adolescent studies), or multicomponent interventions (n=9 for children, 5 for adolescent studies)			on the effectiveness of school-based interventions to promote a healthy diet in children (6-12 y) ad adolescents (13-18 y).	ranges from 294-6076 studies in children, and 54 to 4020 in studies on adolescents	Assessed the quality of the evidence	intervention or a real school policy and then on what level Lack of in depth description of what policies include	Public Health Practice Project Quality assesment. And the evidence was also graded from a set of parameters p. 783. Out of 27, 15 as weak, 5 as moderate, 2 as strong Low (Amster)
Jaime et al. 2008 [20] SLR	N=27 papers reporting on 18 studies Study design: non-RCT (2), follow-up (13), RCT (7) Countries. US and Europe	School food and nutrition policies: Nutrition guidelines (n=9),regulation of food and beverage availability policy (n=2), price intervention (n=8)	NA	student's dietary intake, and decreasing overweight and obesity	Aim: to review the effectiveness of school food and nutrition policies world wide in improving the school food environment, student's dietary intake, and decreasing	2-56 schools / 135-2840 children/students	Spot on regarding policy focus and explaining the individual content in policies and studies	Lack of ROB and quality assesment and results are only descriptive since no meta-analysis was made due to high heterogenity	NA internally Critically low (Amster)M

Reference & Type	Studies (N, design, country)	Policy type (exposure)	Year of implementation/Duration of policy	Outcome	Aim and Analyses	Total no. cases	Strengths	Limits	Quality (AMSTER tool)
					overweight and obesity Results were analyzed narratively into three categories of policies: nutrition guidelines, regulation of food and beverage availability and price intervention				
De Sa et al. 2008 [21] SLR	N=30 studies, however 6 articles (5 studies) only studies were policies meanwhile rest were interventions Study design: RCT (n=3), non-rct (n=2) Country: England (n=1), USA (1), UK (1), Norway (2)	School fruit and vegetable policy: national school fruit scheme, Kids Choice school lunch program, UK school fruit and vegetable scheme, Norwegian school fruit programme and fruit and vegetables make the marks	Na for some and 2004 for the national fruit scheme in England	F&V intake, knowledge, attitude, preference, weight,	Aim: To review the effectiveness of interventions to promote fruit and/or vegetable consumption in children in schools, to inform the European Commision policy development process (2007 proposal on school fruit and vegetable	Participants ranging from less than <100 to more than 1.000	Explicitly express the content of the policy	Does not clearly distinguish between interventions and policies in reporting of results Do not assess ROB	Study quality was assessed using tool used but ratings are NA in article Critically low (Amster)

Reference & Type	Studies (N, design, country)	Policy type (exposure)	Year of implementation/Duration of policy	Outcome	Aim and Analyses	Total no. cases	Strengths	Limits	Quality (AMSTER tool)
					programmes as part of agricultural reforms).				

SLR: systematic literature review; MA: meta-analysis; NA: not available; NAp: not applicable.

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Table 5 – Overview and characteristics of the included articles in availability, accessibility, and affordability prevention section

	Reference & Type	Studies (N, design, country)	Policy type (exposure)	Year of implementation/Duration of policy	Outcome	Aim and Analyses	Total no. cases	Strengths	Limits	Quality (AMSTER tool)
CAPOC umbrella review	Semba et al. 2022 [1] SLR	N=20 Study design: cross-sectional (11), longitudinal (9) Country: Most in Latin America and the Caribbean: Brazil, Mexico, Peru, South Africa, Japan, Canada, US	Cash transfers programs (CT): a direct regular and predictable non-contributory payment of money to eligible individuals. Can either be unconditional (no specific obligations needs to be fulfilled) (n=6) and conditional (conditions are it should be used for health care, education e.g.) (n=14)	NA	Risk of overweight and obesity	Aim: to characterize the relationship between CT programs and the risk of overweight and obesity in children	Child studies (n=11), adult studies (n=8), both (n=1) Ranged from 319-217,002	Has good and detailed descriptions of the included policies Assess the quality and reflect on the heterogeneity	Does not report on the risk of bias and whether they have a protocol / plan for the methods before conducting the review. Little information on methodology	NOS assessment. Of the cross-sectional studies 5 reached 2-3 stars, 4 reached 4-5 starts and 2 reached 6-7 starts. Of the cohort, 1 reached 2 stars, 2 reached 4-5 stars, four reached 6-7 stars, 2 reached 8 starts. Mean score wads 4.75 stars. Low quality (Amster)
	Tran et al. 2021 [2] SLR	N=8 studies	Health promoting	Nap	Cost-effectiveness	Aim: to review 1) the cost-	Children and adults	An extensive search	The Cheers checklist is	Cheers checklist:

Reference & Type	Studies (N, design, country)	Policy type (exposure)	Year of implementation/Duration of policy	Outcome	Aim and Analyses	Total no. cases	Strengths	Limits	Quality (AMSTER tool)
	representing 30 retail-based interventins, but 5 relevant Study design: modelleing studies (8) Country: Australia (5), USA (2), England (1)	food-relatil based interventions			effectiveness of health-promoting food retail interventions and 2) key assumptions adopted in these evaluations	Sample size NA	strategy and include all food retail settings	used to evaluate the reporting of economic evaluations rather than the methodological quality Lack of assessment of quality and ROB	Compline in reporting the 24 items ranged from 65 % to 96 % Critically low (Amster)
Carins et al. 2021 [3] SLR	N=36 articles/reports covering 16 schemes, but only the studies covering enabling (n=6 schemes) and engineering (n=2 schemes) are relevant. First	Food service inititatives (e.g. reformulation, labelling, new/rebalanced availability of healthier foods, restriction of advertising, use of pricing, providing smaller portion sizes) in three approaches:	NA	Consumer health	Aim: to analyse food service schemes that aimed to improve consumer health.	Both owners, buissiness, brands. Subjects ranging from 16-899	Rigorous search process	Small evidence base and quality of evaluations conducation. Generally low quality for the evaluations. No ROB assessment or discussion of heterogenity	NA Critically low (Amster)

Reference & Type	Studies (N, design, country)	Policy type (exposure)	Year of implementation/Duration of policy	Outcome	Aim and Analyses	Total no. cases	Strengths	Limits	Quality (AMSTER tool)
	subject is covered in other umbrella-review. So 14 studies were relevant. Study design: Case-study (9), qualitative (4), quasi-experimental pre-post (1) Country: US (5), Canada (4), UK (3), Continental Europe (2), Australia (2)	informing (n=8, relaying on an informed consumer to make a healthy choice – labeling/advertising inititative), enabling (n=6, healthier catering commitment, choose health LA, healthy beverage executive order, responmsibility deal), engineering (n=2, healthier olis initiative, national salt reduction initiative).						No effects were measured on food choice and dietary intake for enabling and engineering schemes	
Von Phillpsborn et al. 2020/2019 [4] SLR	N=58, 15 relevant for this	Envirnmental interventions (excluding SSB taxes):	Na	SSB sales, beverage calories per transaction,	Aim: To asses the effects of environmental interventions	Supermarkets and children, adolescents and adults.	This SLR is valuable because it only includes	Do not succeed to adjust for other	Certainty of evidence is rated with GRADE

Reference & Type	Studies (N, design, country)	Policy type (exposure)	Year of implementation/Duration of policy	Outcome	Aim and Analyses	Total no. cases	Strengths	Limits	Quality (AMSTER tool)
	umbrella topic

1 study about in-store promotion of healthier beverages, 3 studies about food benefit program, 1 study about healthier default beverages on kids menus, 1 study about urban planning, 1 study about restrictions to number of stores selling SSB, 3 studies about price discounts, 1 | labelling, price, in store promotion, food benefit programs, restriction, multi-component campaings, improving availability of low-calorie beverages in home | | sugar-sweetened milk-selection | (exl. Taxation) on the consumption of sugar-sweetened beverages and sugar-sweetened milk, diet-related anthropometric measures and health outcomes and any reported unintended consequences or adverse outcomes | Total sample size 1,180,096

Sample size in included studies ranging from 2,274 to 61,126 subjects | real world-population studies and adjust for quality, ROB and heteregoenity in the interpretation of the results. | relevant factors themselves such as attitude, awareness, lication, occation etc. which also could have an important influence and thereby reduce the effect of a single population level intervention.

No studies about warning labels were found/including. | and for studies concerning in-store promotion of healthier beverages in supermarkets and food benefits programs with incencitives for purchasing fuirt and vegetable and restriction on SSB purchases the certainty of the evidence is Moderate, low for healthier default beverages in kids menu, very low for |

Reference & Type	Studies (N, design, country)	Policy type (exposure)	Year of implementation/Duration of policy	Outcome	Aim and Analyses	Total no. cases	Strengths	Limits	Quality (AMSTER tool)
	study about food discounts, 3 studies about industry self regulation, 1 study about price discounts about Study designs: RCT (9), ITS (4), CBA (3) Countires: Australia, Uk, New Zealand, US								urban planning restriction and restrictiont o the number of stores selling SSB. Incosistent and negative effects for the rest. Moderate (Amster)
Hudak et al. 2019 [5] SLR	N=23 Study deisgn: observatio nal data Country: US	Supplemental Nutrition Assistance program (SNAP)	NA	Child weight status	Aim: to review the relationship between SNAP participation and child weight	Children 2-18 years old Sample size ranging from: 167-26104	All studies relevant and assessment of ROB, self-selection etc. when interpreting the results	Comment on the ROB, heterogenity and quality of included studies but does not rate it themself	NA Low quality (Amster)
White et al. 2018 [6] SLR	N= 27 (7 was grey lit). 5 was	Public health initiatives related to	NA	Cost-effectiveness/ cost-	Aim: To support commissioning by collating	NA	Include a broad range of public	Only very few/x	NA

Reference & Type	Studies (N, design, country)	Policy type (exposure)	Year of implementation/Duration of policy	Outcome	Aim and Analyses	Total no. cases	Strengths	Limits	Quality (AMSTER tool)
	related to overweight and obesity and 12 to physical activity. Obs: only 4 studies on PA were relevant to this topic Study design: economic evaluations Country: UK (all)	overweight/obesity or PA		utility/cost-benefit	published data on economic evaluations and modelling of local authority commissioned public health preventative interventions in the UK.		health inititatives.	studies relevant. A great heterogenity between the included evaluations and interventions because the searches were done seperately	Critically low (Amster) Obs. It seems very difficult to use AMSTER for economic evaluations reviews and very sparse information in review and one in supplemental about method
Olstad et al. 2017 [7] SLR	N=20 (18 studies) and 10 studies were government policies, rest organizational school policies. 7 governmental studies were	Only policies that targeted disadvantaged children and adults – so universal studies are not included. Government policies concerned policies providing information/	Na Duration was from 4 months to 7 years incl. follow-up	Anthropometric, dietary, and physical activity outcomes relevant to obesity prevention/treatment among both children and adults	Aim: to synthesize the evidence from controlled studies pertaining to the impact of policies on anthropometric, dietary, and physical activity outcomes amongst socioeconomically disadvanted	Both children and adults. Sample size for ranges between 242-35,606 participants.	Manages to include the highest quality of evidence of effectiveness for disadvantaged children, Assess ROB.	As the authors describe themselves, it is difficult with the organizational studies to figure out exactly what causes the positive effect since they are multicompon	ROB is assessed via Cochrane Public Health Review Group. 2 rated as weak, 3 as moderate and 3 as strong

Reference & Type	Studies (N, design, country)	Policy type (exposure)	Year of implementation/Duration of policy	Outcome	Aim and Analyses	Total no. cases	Strengths	Limits	Quality (AMSTER tool)
	relevant for this topic Countries: USA (7) Study design: Cluster RCT (1), quasi expoerimental (6)	education, fruit and vegetable subsidies, changes to built environments			children and adults Policies were classified as organizational (e.g. those adopted and implemented by organisations) or governmental (i.e. named policies enacted by government)			ent but also lack descriptions of their content.	Moderate (Amster)
Sisnowski et al. 2017 [8] SLR	N=36 peer-reviewed articles inc. grey lit reports. 11 studies relevant for this topic Study design: repeated cross-sectional (8), descriptive study (3) Country: US (6): NYC,	Statutory provisions aimed at reducing the consumption of energy dense foods and beverages. Six different types of interventions were covered. studies relevant for this topic covered changes to food	NA Implementation ranged between 2-5 years	Consumption of energy dense foods and beverages, nutrient composition, purchase,	Aim: to examine the effect of real-world policies targeting different aspects of the food environment that shape individual and collective nutrition A narrative synthesis	22 properties-142 vendors/green carts/ Range from 192 to 2.287 respondents/farmers etc.	A broad seach and quality assessment. ROB and heterogenity is assessed and commented on during the review and in the quality appraisal	Only a small number of studies from outside OECD countries were included. Study designs are not favourable when assessing the effect of policies, only observational studies	Appriaisal tools for pre-post and observational studies were used to assess quality. 2 studies judged poor, 5 studies judged fair/medium, 3 studies judged good. 1 study

Reference & Type	Studies (N, design, country)	Policy type (exposure)	Year of implementation/Duration of policy	Outcome	Aim and Analyses	Total no. cases	Strengths	Limits	Quality (AMSTER tool)
	LA and Boston	infrastructure (n=5), and government food standards (n=1). Other topics were calorie posting, taxation, subsidies, nutrition labeling.							quality not rated Moderate (Amster)
Panter et al. 2017 [9] SLR	N=33, 7 were whole of community. Rest not relevnant for this topic. Only 4 were programmes/policies, rest were community interventions Study design: pre post without control (1),	Setting based health promotion interventions on obesity	NA Follow-up from 3 to 8 years.	BMI, changes in ditary habits, health behaviour, PA indicators,	Aim: To present a qualitative synthesis of setting-based health promotion interventions on obesity, from Nordic countries and the Netherlands.	Adult +20 Sample size ranging from 2,500- 272,215	First systematic review focusing on setting-based interventions on obesity prevention in Nordic countries and the Netherlands	The authors point that there are very low reporting of attributability and SES in included studies, and unclear discription of results and some messing tests, and reasons for choosing a region, municipality etc.	Quality was rated an 5 studies was rated as quality category A, and two rated as category B Moderate (Amster)

Reference & Type	Studies (N, design, country)	Policy type (exposure)	Year of implementation/Duration of policy	Outcome	Aim and Analyses	Total no. cases	Strengths	Limits	Quality (AMSTER tool)
	quasi-exterimental (3). Country:The Netherlands (1), Sweden (2), Norway (1)							Unclear whether it is interventions or policies	
McKinnon et al. 2016 [10] SLR	N= 27 studies but only 8 focused on the community and built environment, 7 on nutrition related changes (one on labelling), so 14 relevant in total Study design: Quasi-experimental (10), secondary	Community and built environment policies (n=8), with PA focus (8) such as physical activity equipment in parks, access to fitness centers, bicycling network, increased sidewalk, open streets, bicycle trail development Nutrition related policy/education (7) all	NA But time horizon for included studies ranges between 1 year and to lifelong time	Cost-benefit, cost-effectiveness	Aim: *To review the cost-benefit or cost-effectiveness studies of obesity-related policy/environmental interventions.* Cost-effectiveness analysis: assess relative costs and effects of two or more different options. Often expressed in terms of quality or disability adjusted life-years or healthy	NA	Economic assessment studies can be helpful especially in a political context to help politicians make descisions.	Very brief description of what the policies exactly contain. It can be difficult to asses costs and benefits over a long time, because a policy action can result in direct effects such as on behaviour which might have an effect over a long time	NA internally Critically low (Amster)

Reference & Type	Studies (N, design, country)	Policy type (exposure)	Year of implementation/Duration of policy	Outcome	Aim and Analyses	Total no. cases	Strengths	Limits	Quality (AMSTER tool)
	data analysis (4) Countries: NA	with diet focus. Policies such as changes in SNAP program, expanded nutrition and food education program, At local level (8), state (5), national (1)			years equavalents in attempt to account for gains in quality of life.			horizon e.g. reduced risk of chronic disease. Often the direct effects are only observed. So some results are chosen on assmtions. Limits described in the review is: 1) the review might not have located all relevant studies, 2) the located studies might be the result of publication bias against null findings, 3) the costs of childhood obesity and its impact on morbidity and mortality	

Reference & Type	Studies (N, design, country)	Policy type (exposure)	Year of implementation/Duration of policy	Outcome	Aim and Analyses	Total no. cases	Strengths	Limits	Quality (AMSTER tool)
								is deficult to know the precise cost and benefits of interventions. A lot of heterogenity in the studies design. Few studies included, lack of risk of bias assessment.	
Mayne et al. 2015 [11] SLR	N=37 (18 on nutrition/diet, 17 on PA and 3 on BMI), but N=22 relevant within this topic Study design: Natural and quasi-experiemtnal studies: longitudinal	A broad range of policy and built environmental prevention efforts, but regarding availability policies on food stamp benefits, built environment changes, changes in park playground,	NA	Obesity-related outcomes: calories, saturated fat, sodium, sugar content, carbohydrates -purchases, percentage of purchases classified as healthy, types of foods purchased and frequency of fast food consumption	Aim: To examine the use of natural or quasi experiments to evaluate the efficacy of policy and built environment changes on obesity-related outcomes.	Children and adults Sample size ranged from 51-67,841	A broad inclusion of real world evaluaitons of prevention policies which makes the validity of the results as best as possible. Has a good discussion about the	A majority of the studies did not employ probability-based sampling. Also 14 studies in total did not adjust for cofounders in the comparison between intervention	Study design was evaluated from 3 (strongest), 2 – intermediate and 1 weakest design: 1 (n=3), 2 (n=13), 3 (n=6) Critically low (Amster)

Reference & Type	Studies (N, design, country)	Policy type (exposure)	Year of implementation/Duration of policy	Outcome	Aim and Analyses	Total no. cases	Strengths	Limits	Quality (AMSTER tool)
	(9), cross-sectional (14) Countries: US (16), Chile (1), Australia (2), Canada (1), UK (2), New Zealand (1),	trails, bicycle programs, bans of trans-fat, low-income food vouchers					consequences of the study designs/quality	and control group.	
Calancie et al. 2015 [12] SLR	N=33 articles (29 studies) and 6 were relevant for this topic. However, only two studies reported on relevant outcomes and had descriptive data provided, pre-post test non-randomized comparison (1)	Increase accessability and availability of healthier food and beverage choices in public service venues. Provide incentivesto food retailers to locate in and/or offer healthier food and beverage choices in underserved areas.	NA	Nutrition-related behaviour	Aim: to synthesize availeble evidence on the adaption, impelementation and effectiveness of nutrition-related policy and environmental obesity-prevention strategies in rural settings.	All New York State FMNP participants (1), 4 communities 133-246 members (1)	Identifies strategies	Lack a summary and overall description of effects from each policy, so information can only be found in appendix and the reporting of the results are very limited. No internally ROB assessment or quality assessment	No internally ROB assessment or quality assessment Critically low (Amster)

Reference & Type	Studies (N, design, country)	Policy type (exposure)	Year of implementation/Duration of policy	Outcome	Aim and Analyses	Total no. cases	Strengths	Limits	Quality (AMSTER tool)
	Study design: time-series comparison (1), cross-sectional (1) Countries: NY (1), Arizona (1), North Caroline (1), Canada (2), Arizona, Utah and Mexico (1)								
Adam et al. 2016 [13] SLR	N=42, but only 11 were relevant (rest were covered by labelling or interventions) Study design: pre-post (5), cohort (1), quasi-experimental (2),	Policies at retail grocery stores and supermarkets: WIC program, Healthy foods benefit; Healthy Bodegas; Colorado Healthy people 2010 obesity preventi9on initiative,	NA	Sale/purchase of healthy foods	Aim: to shed light on the effectiveness of food store interventions indended to promote the consumption of healthy foods and the methodological quality of the studies reporting them.	Overall sample size among all studies (n=42) ranges from 37 supermarket costumers to more than 200,000 beneficiares	ROB and methodological quality is assessed	ROB is rated as high or medium for all relevant studies. However, this is probably due to the study design. Not quite clear when studies are interventions or policies/program	Quality of the studies incl. ROB (in line with Cohrane and Prisma guidelines) was assessed using 16-item quality assessment tool, and x studies rated low, 3 medium, 7 high

Reference & Type	Studies (N, design, country)	Policy type (exposure)	Year of implementation/Duration of policy	Outcome	Aim and Analyses	Total no. cases	Strengths	Limits	Quality (AMSTER tool)
	Asssess Reach (1), process evaluative (1) Country: USA (9), South Africa (1)	Baltimore Healthy stores							Moderate (Amster)
Niebylski et al. 2014 [14] SLR	N= 34, 5 are grey lit. 9 are relevant when grey lit and school studies are exclude. Study design: NA on individual level but study designs that were included were randomized controlled	Healthy food procurement policies: in school (n=19), worksites (n=6), and other setting: Hospitals, Care homes, correctional Facilities, government institutions, and miscellaneous settings (n=6)	NA for all but information about few policies states that they are implemented between 2002-2010	Food purchases, food consumption, and behaviors towards healthy foods	Aim: The objective of this systematic review was to evaluate the evidence base assessing the impact of healthy food procurement policies.	Children, adolescents, and adults Schools ranged from 2-136 Worksites ranged from 5-28 Facilities within the other studies ranged from: 2-48 Sample size was NA for most studies	A broad collection of healthy foods procurement and all included studies were policies	No rating and comment on quality, ROB or heterogenity os the studies and thereby difficult to assess the certainty of the evidence	NA Critically low (Amster)

Reference & Type	Studies (N, design, country)	Policy type (exposure)	Year of implementation/Duration of policy	Outcome	Aim and Analyses	Total no. cases	Strengths	Limits	Quality (AMSTER tool)
	trials, prospective and retrospective non randomized. 11 are relevant since school (n=19) is covered by the other topic. Country: England (3), USA (20), Canada (3), Scotland (1), Denmark (1), Ireland (1), UK (1)								
Yang et al. 2010 [15] SLR	N=25, only 2 relevant when grey lit exclude. Study design: RCT (1), Cluster RCT (1), controlled	Policies/programs that aim to promote cycling School level (1), City/town level (n=3), community (n=20)	NA but follow up ranged between 2 -3 years	Physical activity and anthropometric outcomes	Aim: to determine what interventions are effective in promoting cycling, the size of the effects of interventions, and evidence of any associated	Study population were city residents (1), adult residents (1) Sample size ranged	Assess the study validity and ROB A broad search on 13 databases	Not so clear whether the studies are interventions and/or policies. Missing a bit of data on intervention content	Asssessed the validity by using a 11 criteria. Rating is NA Low quality (Amster)

Reference & Type	Studies (N, design, country)	Policy type (exposure)	Year of implementation/Duration of policy	Outcome	Aim and Analyses	Total no. cases	Strengths	Limits	Quality (AMSTER tool)
	reprat coss sectional (1), ontrolled cohort (1) Countries: Denmark (1), Australia (1),				benefits on overall physical activity or anthripometric outcomes	between 909-1000			

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Table 6 – Overview and characteristics of the included articles in early childhood prevention section

Reference & Type	Studies (N, design, country)	Policy type (exposure)	Year of implementation/Duration of policy	Outcome	Aim and Analyses	Total no. cases	Strengths	Limits	Quality (AMSTER tool)
Rossiter et al. 2021 SLR[1]	N=49 papers and 38 studies BUT only 3 studies are relevant to our inclusion criteria Design: cross-sectional study (n=1) and longitudinal administerative data (n=2) Country: USA, Los Angeles (n=3)	WIC supplemental food packages available as vouchers for low-income families (n=3): cover vouchers available monthly from pregnancy until age 4 while the family is eligible under income test. The intervention content is that there is a change in motnyl WIC supplemental food packages: more F&V and whole grains, less juice and whole milk. For fully FF infants: 403 fl oz. formula per month up to 4 mo, 442 fl oz. pm for 4-5.0 mo	Children who participated before 2009 where the new package was implemented vs. and after 2009	Obesity risk and weight measures such as mean zWFH (z-score weight for age: refers to s score of weight for height/lenght	Aim: to examine interventions delivered before 2 years that aim to ameliorate excess weight gain among infants at high risk of overweight or obesity, due to sociodemographic characteristics, parental weight or health status, infant feeding or health behaviours. Comparisons between samples in 2003-2016	Sample size ranged from 8,117 and 530,72 aged 0-5	Good description of each study included. Assessed risk of bias by using MMAT criteria and reported the results in regard to selection bias etc.	Only include very few studies covering evaluations of policies implemented. Majority of included studies are intervention studies. A broad scope also means that the included studies in general were heterogenous and therefor the authors were unable to assess the selection of studies (publication bias).	Moderate (Amster)

Reference & Type	Studies (N, design, country)	Policy type (exposure)	Year of implementation/Duration of policy	Outcome	Aim and Analyses	Total no. cases	Strengths	Limits	Quality (AMSTER tool)
		and 312 fl oz. pm for 6-11.9 mo Policy started during pregnancy and continued after birth							
Martin et al. 2016 SLR [2]	N=0	WHO infant feeding recommendations	Since 2001 WHO has recommended that infants are breastfed exclusively to the age of 6 months and that appropriate complementary feeding should be introduced at 6 months with continued breastfeeding to 2 years	Risk of later overweight/obesity (BMI, BMI z-score etc.) or risk factors for cardiometabolic disease (blood pressure: group means and mean difference in systolic and diastolic blood pressure, fasting blood glucose levels.	Aim: To review the evidence on whether adherence to *all elements* of the WHO infant feeding recommendations (comparison group those exclusively breastfed to 6 months, introduced to appropriate complementary feeding from 6 months with continued breastfeeding to at least 24 months; exposure group characterized by non-adherence to any of the three	NA	Show the lack of evaluations within this area even though a lot of countries are following these recommendations there is a lack of evidence covering this.	Does not find any studies that can be included	High (Amster)

Reference & Type	Studies (N, design, country)	Policy type (exposure)	Year of implementation/Duration of policy	Outcome	Aim and Analyses	Total no. cases	Strengths	Limits	Quality (AMSTER tool)
					recommendations) is associated with reduced risk of later obesity or cardiometabolic disease.				

SLR: systematic literature review; MA: meta-analysis; NA: not available; NAp: not applicable.

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