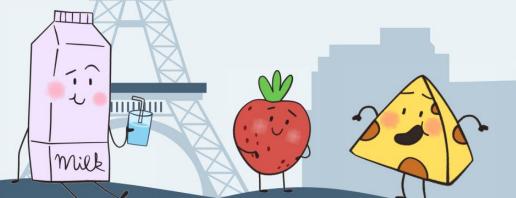


Social inequalities, health and nutrition among European children

Dr Tim Lobstein, Consultant

18.09.2023







HEALTH INEQUITY



 Health inequality – differences in health between people for any reason (e.g. genetic differences, biology, neighbourhood).

Health inequality includes...

• Health inequity – differences in health that are avoidable and unfair: linked to social determinants – e.g. socio-economic status, education, access to healthcare.

Health inequity needs policy interventions





- 1. Health inequity is easily seen in childhood obesity in Europe:
 - National wealth (GDP)
 - National wealth inequity (GINI)
 - Local and household inequity (SES etc)
- 2. Also <u>nutrition inequity</u> in children in Europe

HEALTH INEQUITY

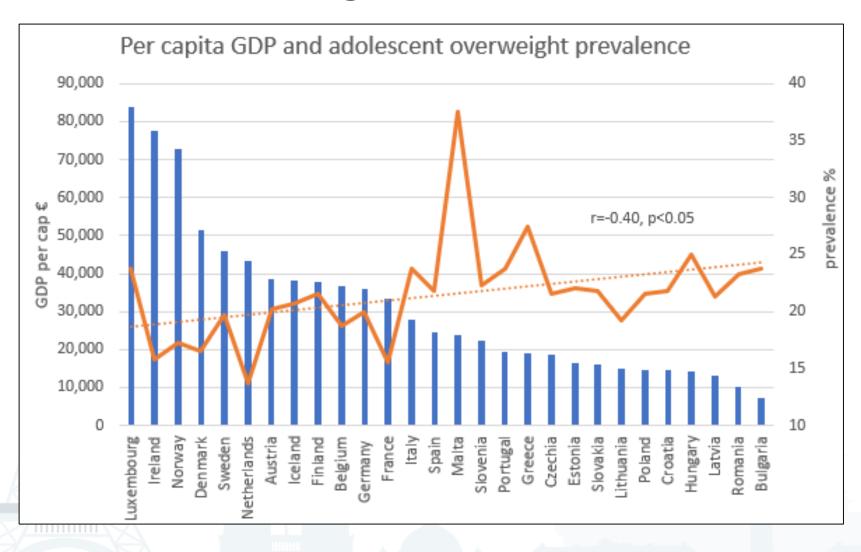


Today:

- 1. Health inequity is easily seen in childhood obesity in Europe:
 - National wealth (GDP)
 - National wealth inequity (GINI)
 - Local and household inequity (SES etc)
- 2. Also <u>nutrition inequity</u> in children in Europe
- 3. How can policies reduce health inequity?
- 4. Best-ReMap risk assessment tools

Child overweight and national wealth

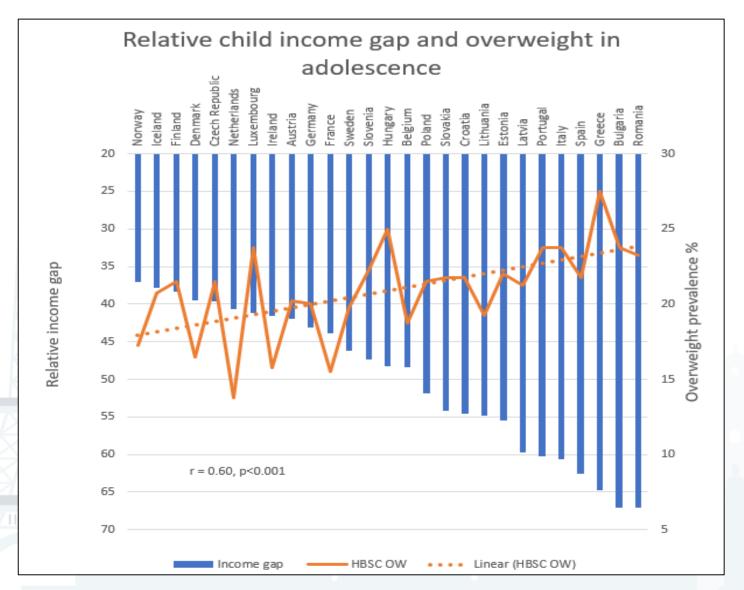




Eurostat https://ec.europa.eu/eurostat/databrowser/view/sdg_08_10/default/table?lang=en
WHO 2020 https://www.who.int/europe/initiatives/health-behaviour-in-school-aged-children-(hbsc)-study

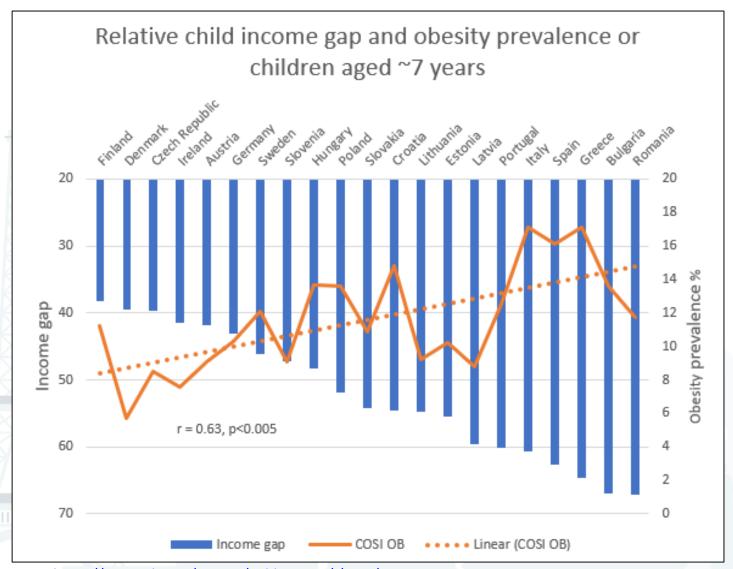
Child overweight and national wealth inequity





Child obesity and national wealth *inequity*

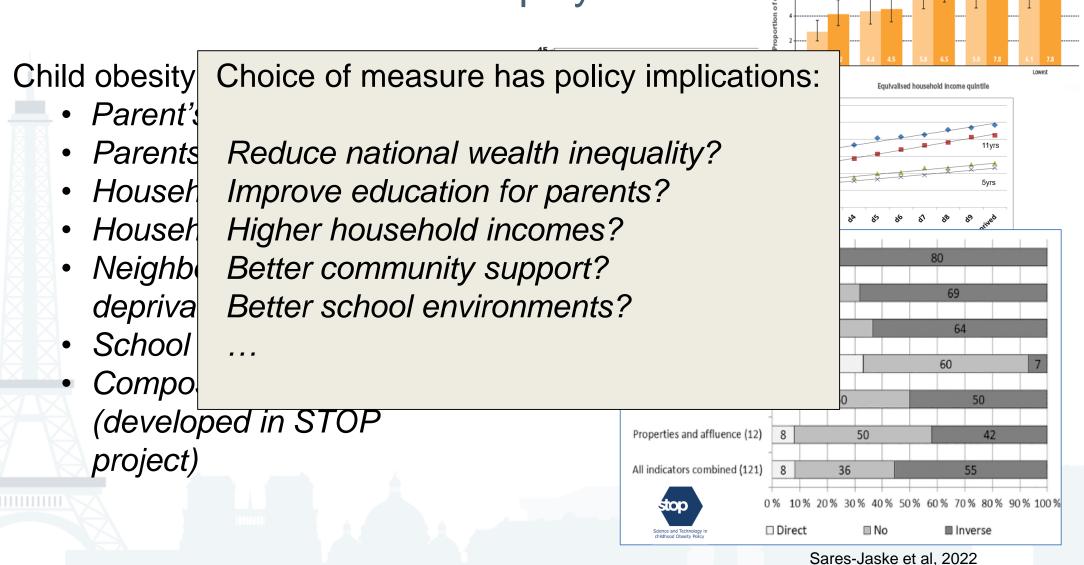




WHO 2022 https://www.who.int/europe/publications/i/item/WHO-EURO-2022-6594-46360-67071

UNICEF 2016 https://www.unicef-irc.org/publications/pdf/RC13_eng.pdf

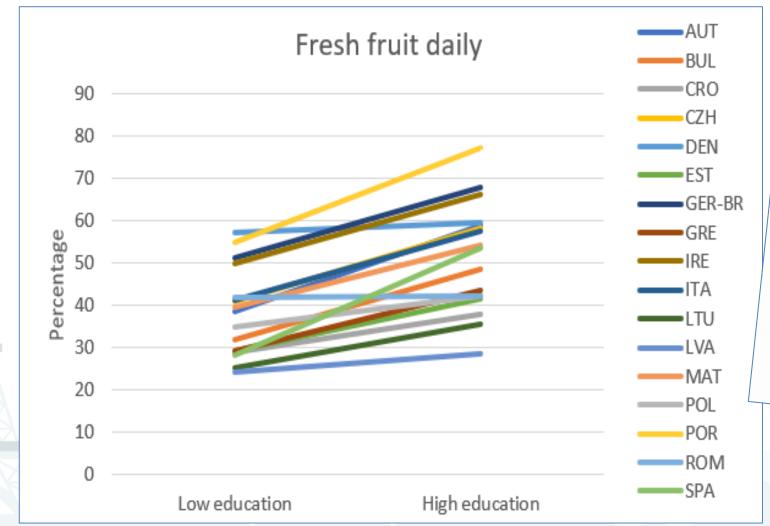
Household social inequity

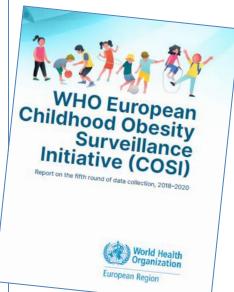


Boys Girls



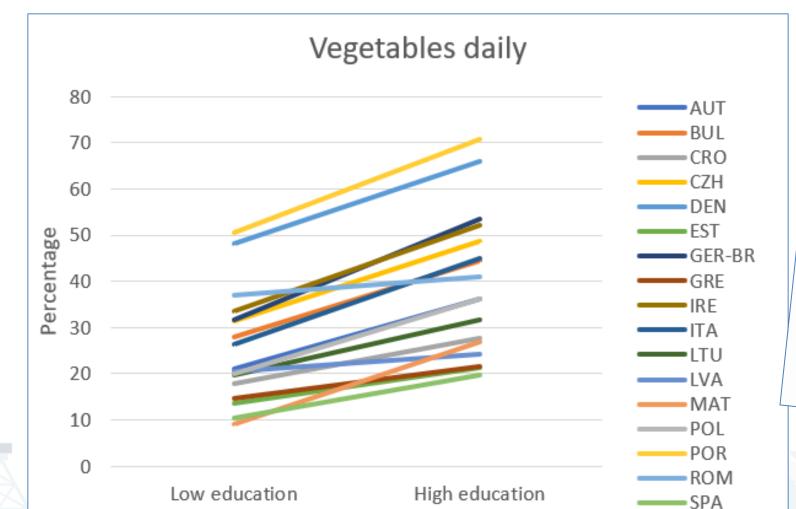








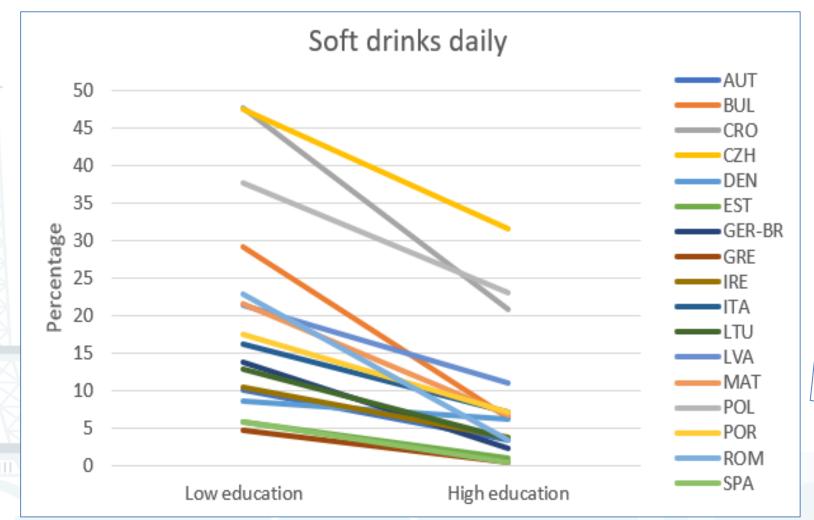


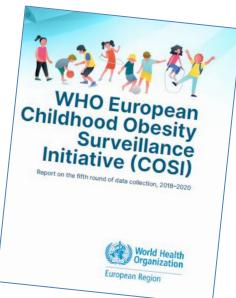






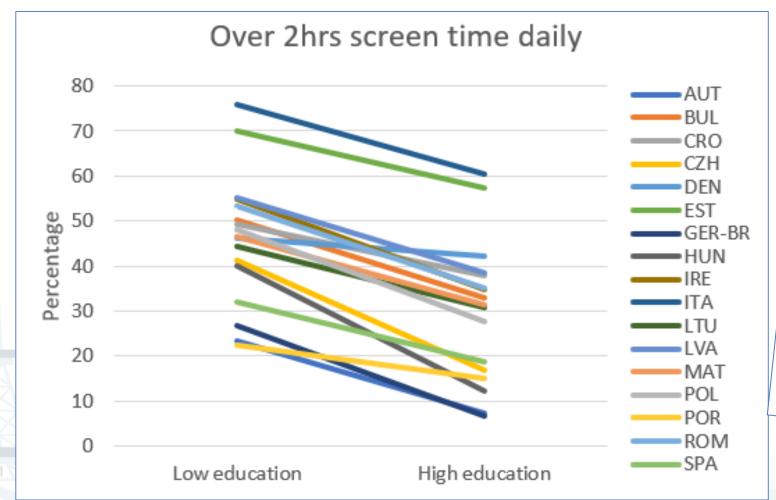


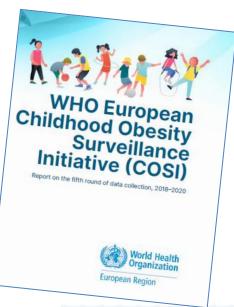






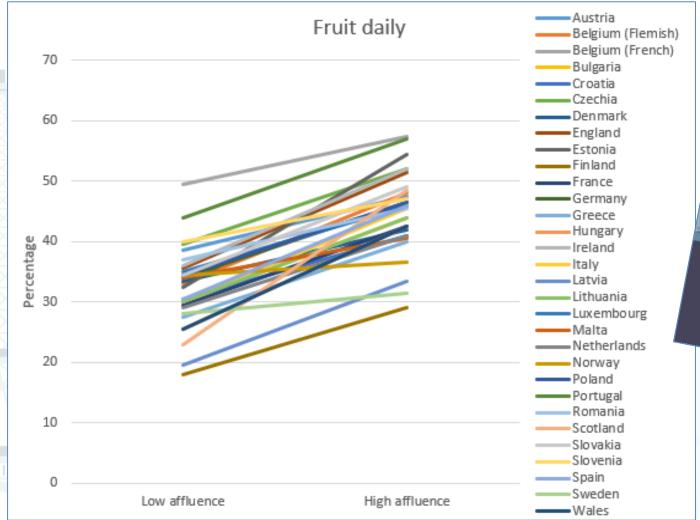






NUTRITION INEQUITY

Household affluence Adolescents aged 11-15 years old

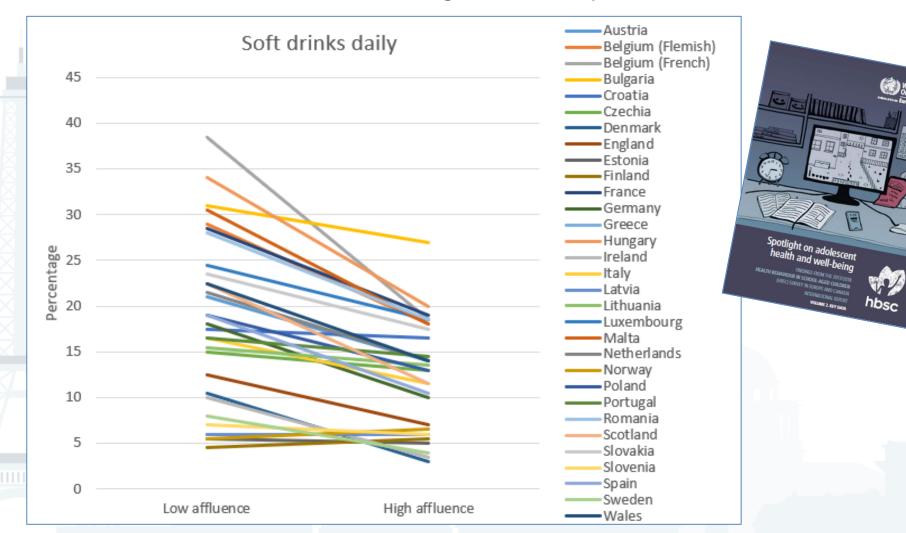






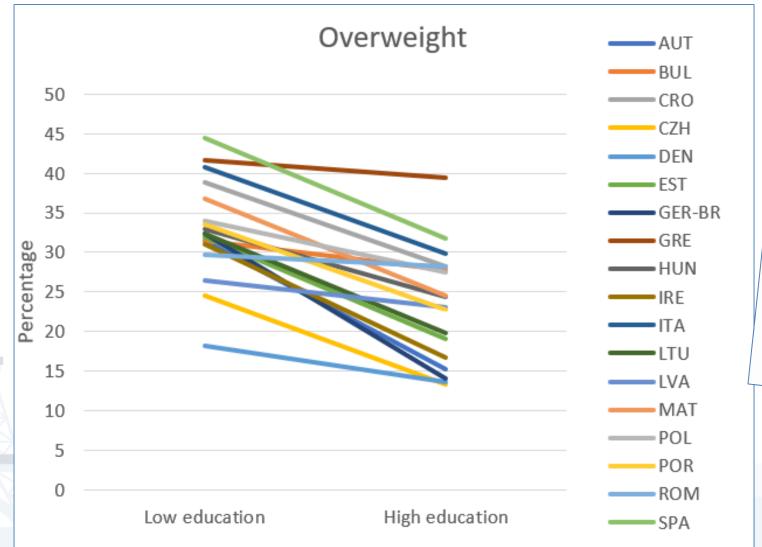
Household affluence Adolescents aged 11-15 years old

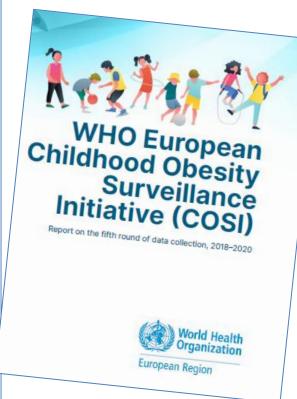








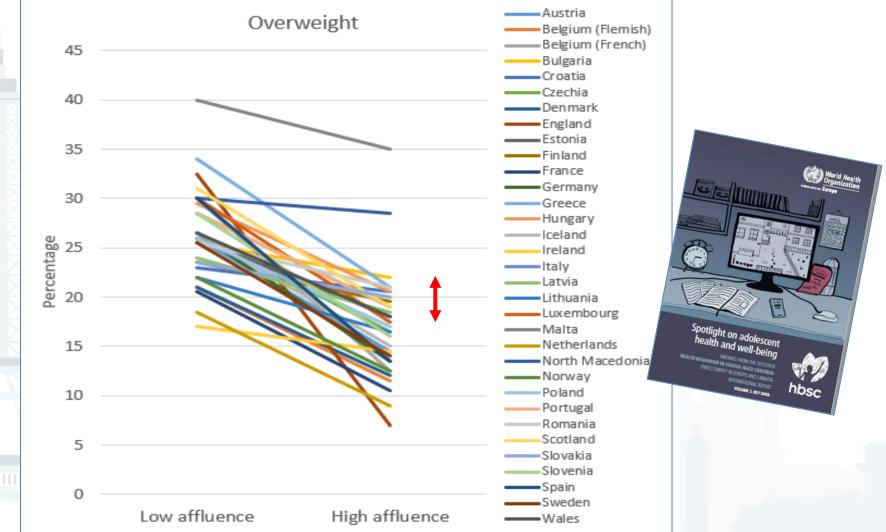




NUTRITION INEQUITY

Household affluence Adolescents aged 11-15 years old



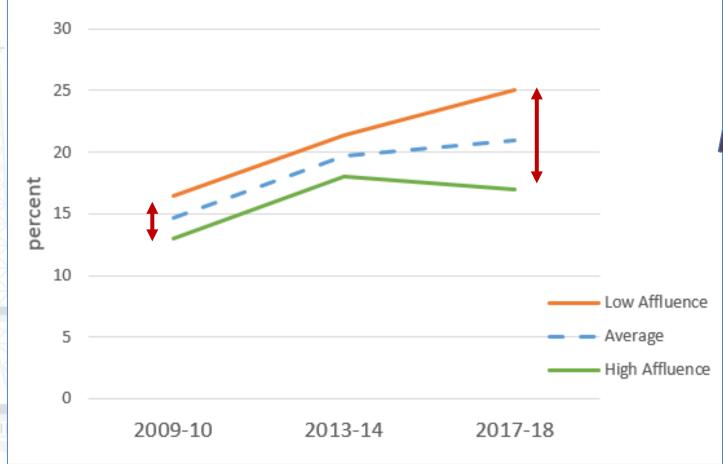


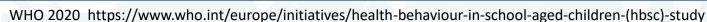
NUTRITION INEQUITY

Household affluence Adolescents aged 11-15 years old



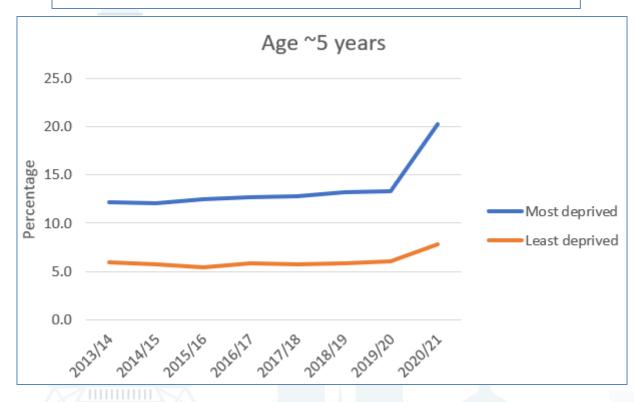
Adolescent overweight 2009-2018





England - neighbourhood deprivation

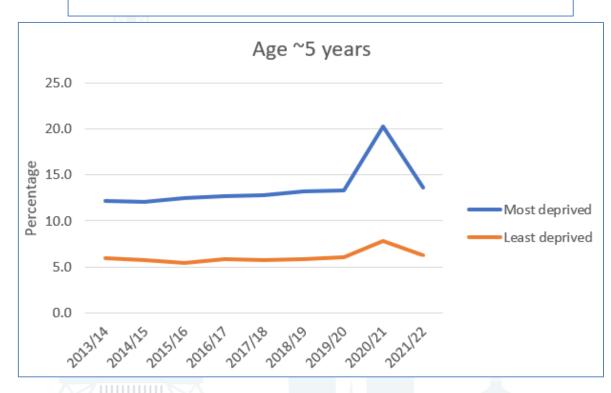
Covid lockdown – obesity prevalence gap widens

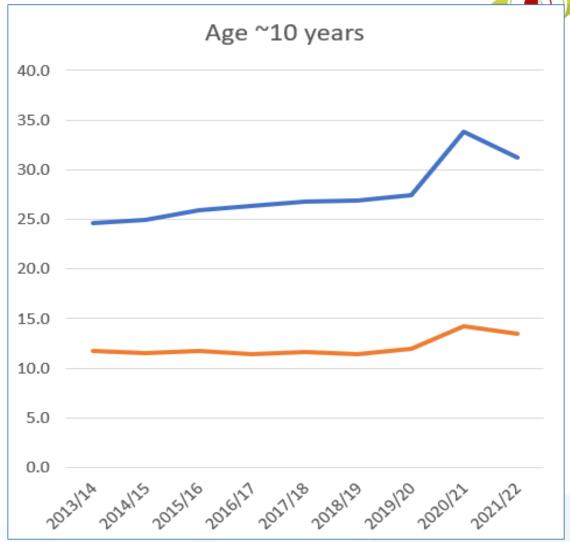




England neighbourhood deprivation

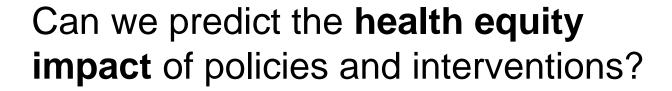
Obesity gap narrows again!







Best-Re-Map question:



- Will a policy increase or decrease the gap in obesity risk, between more affluent and less affluent children?
- What criteria can we use?
- What evidence is available?

Can we construct a 'checklist' tool for policy-making?



WHO Handbook

Handbook [™]Guideline Development

2nd edition



Causes of inequities, e.g:

- ✓ Differences in **exposure** to causes of illhealth (e.g. obesogenic environments)
- ✓ Differences in **vulnerability** (psychological and social resilience)
- ✓ Differences in **access** to health-supporting resources (knowledge, skills, money)

HEALTH INEQUITY

World Health Organization Europe

Review of social determinants and the health divide in the WHO European Region: final report



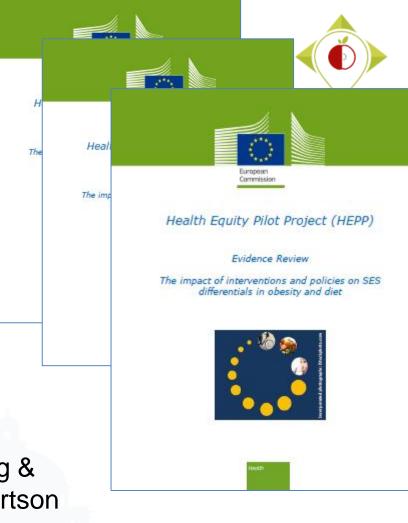
Marmot review of social determinants of

health

Health Equity
Pilot Project
series of case
studies

Obesity and inequities

Guidance for addressing inequities in overweight and obesity



Loring &
Robertson
guidance
on
addressing
obesity
inequity

Best-ReMap risk assessment approach



Which policies increase or decrease the gradient of health inequity?

Underlying exposure
Reach of intervention
Form of intervention
Take-up of intervention
Response to intervention
Resilience of response
Challenges to intervention

Best-ReMap risk assessment model





Health equity impact Literature review and risk assessment model for the Best-ReMap policy areas:

- Food marketing restrictions
- Food reformulation
- Food procurement standards

https://bestremap.eu/wp-content/uploads/2023/05/Health-equity-impact-literature-review_TLobstein_v3.pdf



Best-ReMap RISK ASSESSMENT CHECK-LIST

- 1. <u>Underlying inequities in exposure to risk</u> (pre-existing health inequity, unequal susceptibility to risk, unequal exposure to risk).
- 2. Reach and type of an intervention: universal and proportionate (unequal reach across and penetration into all subgroups, localisation, upstream/downstream, unequal reach of and access to supportive measures).
- 3. <u>Response to an intervention</u> (agency-led or structure-led behaviour change, requirements for skills and resources, transfer from school to home, home-level acceptability and priority).
- 4. Response sustainability (community compatibility, regulatory support, presence of threats).



Case study: Restricting TV advertising for junk food



Exposure to advertising *Greatest for lower SES*Reach of intervention (if regulation)

Implementation (except cross-border)

Structural, upstream

Community acceptance. Sustained (if regulation)

Reduction in exposure applies to all, and is greatest among higher risk groups = proportionate, universal, sustainable



Case study: Public procurement for healthier meals



Exposure to poor catering. Greatest for lower SES	
Reach of intervention: All public sector?	?
Take-up of intervention: Regulation and standards	$\sqrt{}$
Structural, upstream.	$\sqrt{}$
Community accepted. Sustained (regulation)	

Long-term effect likely to benefit all, especially lower income groups

= proportionate, universal, sustainable



Case study: Product reformulation



Exposure: Consumption greater for lower SES?

Reach: Consumers of target products

Implementation: Universal if by regulation

Sustained: by regulation

Long-term effect likely to benefit all, especially lower income groups

= proportionate, universal, sustainable

Health equity impact of policies for the public procurement of healthful foods and beverages

Summary of evidence, using the Best-ReMap framework

In brief: the prevailing evidence suggests that public procurement can reduce health inequiped but price barriers could widen health inequities unless compensating support is provided. Individual agency in food consumption may lead to a weakening of the effect (e.g. if schoolchildren choose to purchase food off the premises).

The effects of the negative elements highlighted in red can be minimised if there are require to ensure the procured foods are offered at the same price or a lower price than competitive sources, possibly reinforced by agreed mandatory standards for the food provided.

Source of inequity	Assessment criteria	Evidence concerning the equity impact of polic
		procure healthy foods and beverages.
Pre-occurring risk	Underlying health or diet differences	Evidence of greatest need among lower SES grou
	Vulnerability or susceptibility	Price sensitivity and resistance to change may be
		in low SES groups.
	General exposure to potential	Exposure to poor food procurement may show a
	hazard	economic gradient
	Targeted exposure to potential	Lack of evidence of deliberate targeting of socio-
	hazard	economic subgroups.
Reach and type of	Reach across	Limited evidence of reach across all groups: likely
Intervention	subgroups/gradient	universal and proportionate.
	Degree of penetration within	Limited evidence that improved food standards re
	sub-groups	all subgroups.
	Localised (micro) or widespread (macro)	Both: localised practices and national standards
	Is it upstream or downstream?	Primarily upstream with potential to improve hea equity
	Reach of supportive messaging	No evidence of differential reach of messaging
	Access to supportive services	Potential differential access to supportive service
Response to	Agency- or structure-led	Structure-led with some limited agency
intervention	behaviour change	
	Resource requirements	Costs may act as a disincentive
	Skills, literacy and numeracy requirements	No skills, literacy or numeracy required
	School-to-home transfer of behaviour changes	Mixed evidence of school-home relations
	Household-level acceptability of	Depends on cost and attractiveness, and parental
	intervention	involvement in adopting new standards
	Household-level perceived	No evidence on whether food procurement is
	priority	differentially prioritised
Sustainability of	Compatibility with community	No clear evidence of differential compatibility
response	and cultural environment	,
	Voluntary vs regulatory	Improved standards likely to be mandatory
	Barriers/threats to policy	Price and attractiveness may affect sustainability
	maintenance	

Dark green = good evidence in favour of interventions improving health equity;

Pale green = moderate evidence in favour of interventions improving health equity

Amber = some evidence, but unclear or contradictory;

Pale red = Mod Grey = lack of e



Health equity impact of policies for the reformulation of foods and beverages

Summary of evidence, using the Best-ReMap framework

In brief: the evidence suggests that reformulation would likely reduce health inequities. However, reformulant policies that create price barriers or require numeracy or literacy skills can widen health inequities, and there may resistance if reformulated foods have a different and unfamiliar taste profile

The effects of the negative elements highlighted in red can be minimised if there are requirements to offer reformulated foods at the same price or a lower price than their non-reformulated equivalents, if the products are widely distributed and that the choice of reformulated foods is not hampered by requirements to read and interpre labelling details. Negative commercial interests may be moderated by ensuring high standards to reformulated for potentially through mandated standards

Source of inequity	Assessment criteria	Evidence concerning the equity impact of reforumiating foods and beverages.
Pre-occurring risk	Underlying health or diet	Evidence of greatest need among lower SES
	differences	groups
	Vulnerability or susceptibility	Price sensitivity may disadvantage lower-income
		households.
	General exposure to potential	Exposure is proportional to purchase across all
	hazard	groups
	Targeted exposure to potential hazard	Targeted promotion may increase low SES exposure
Reach and type of	Reach across	Mandatory reformulation likely to be universal an
intervention	subgroups/gradient	proportionate.
IIISEIVEILIOII	Degree of penetration within	No evidence found.
	sub-groups	IVO evidence lound.
	Localised (micro) or widespread	Macro, affecting all consumers of the specific
	(macro)	products
	Is it upstream or downstream?	Upstream: likely to improve health equity
	Reach of supportive messaging	Possibly greater reach in higher income groups
	Access to supportive services	No evidence found
Response to	Agency- or structure-led	Mandatory reformulation is a structure-led
Intervention	behaviour change	intervention
	Resource requirements	Resource requirements if there are price differentials
	Skills, literacy and numeracy	Choice may require literacy or numeracy
	requirements	
	School-to-home transfer of behaviour changes	No school-to-home transfer required
	Household-level acceptability of intervention	Some resistance to reformulated products
	Household-level perceived priority	No evidence of differential perceived priority
Sustainability of	Compatibility with community	No evidence of community incompatibility.
response	and cultural environment	
	Voluntary vs regulatory	Mandatory reformulation maximises health equity improvement
	Barriers/threats to policy	Commercial interests may undermine equity
	maintenance	benefits of reformulation

Health equity impact of policies to reduce children's exposure to food and beverages marketing

Summary of evidence, using the Best-ReMap framework

In brief: the prevailing evidence is that an intervention to reduce children's exposure to the promotional marketing of less healthful foods and beverages would reduce health inequities rather than widen them.

The red coloured cell indicates moderate evidence that the policy may lead to responses from interested parties that undermine the effectiveness the policy and maintain or widen health inequities.

Source of inequity	Assessment criteria	Evidence concerning the equity impact of restrictions on children's exposure to the marketing of less healthy foods and beverages.
Pre-occurring risk	Underlying health or diet	Evidence of greatest need among lower SES
	differences	children.
	Vulnerability or susceptibility	Some evidence of greater vulnerability in lower- SES children.
	General exposure to potential hazard	Evidence of greater exposure in lower SES groups
	Targeted exposure to potential hazard	Evidence of targeting of lower-income or minority groups.
Reach and type of Intervention	Reach across subgroups/gradient	Reach in proportion to exposure: universal and proportionate
	Degree of penetration within sub-groups	No evidence found
	Localised (micro) or widespread (macro)	At both levels interventions would improve health equity
	Is it upstream or downstream?	Upstream: likely to improve health equity
	Reach of supportive messaging	No evidence found.
	Access to supportive services	No evidence found.
Response to intervention	Agency- or structure-led behaviour change	Structure-led: likely to improve health equity.
	Resource requirements	No resource requirements for individuals.
	Skills, literacy and numeracy requirements	No personal skills, literacy or numeracy required.
	School-to-home transfer of behaviour changes	No school-to-home transfer required.
	Household-level acceptability of intervention	No evidence of differential acceptability.
	Household-level perceived priority	No evidence of differential perceived priority.
Sustainability of	Compatibility with community	No evidence of community incompatibility.
response	and cultural environment	,,
	Voluntary vs regulatory	Regulatory implementation likely improves health equity
	Barriers/threats to policy maintenance	Commercial resistance could widen health inequity.

https://bestremap.eu/wp-content/uploads/2023/05/Reformulation-sheet.pdf https://bestremap.eu/wp-content/uploads/2023/05/Marketing-sheet.pdf https://bestremap.eu/wp-content/uploads/2023/05/Procurement-sheet.pdf good evidence in favour of interventions improving health equity;
 moderate evidence in favour of interventions improving health equity;
 foderate evidence against intervention improving health equity; and
 of evidence.





Thank you for your attention!

Dr Tim Lobstein <u>t.lobstein@gmail.com</u>

Joint Action on implementation of validated best practices in nutrition (Reformulation, Marketing and Public Procurement)





