Skolemat og sosial ulikhet

Elling Bere
Seniorforsker
Avdeling for helse og ulikhet
Senter for evaluering av folkehelsetiltak

Matglede for barn og unge i Trøndelag. Modell for innføring av skolemat. Stjørdal 27/3/19.

JARED DIAMOND

GUNS GERMS & STEEL

20TH ANNIVERSARY EDITION

With a new afterword by the author

A short history of everybody for the last 13,000 years

Over One Million Copies Sold

Hva er sosial ulikhet?

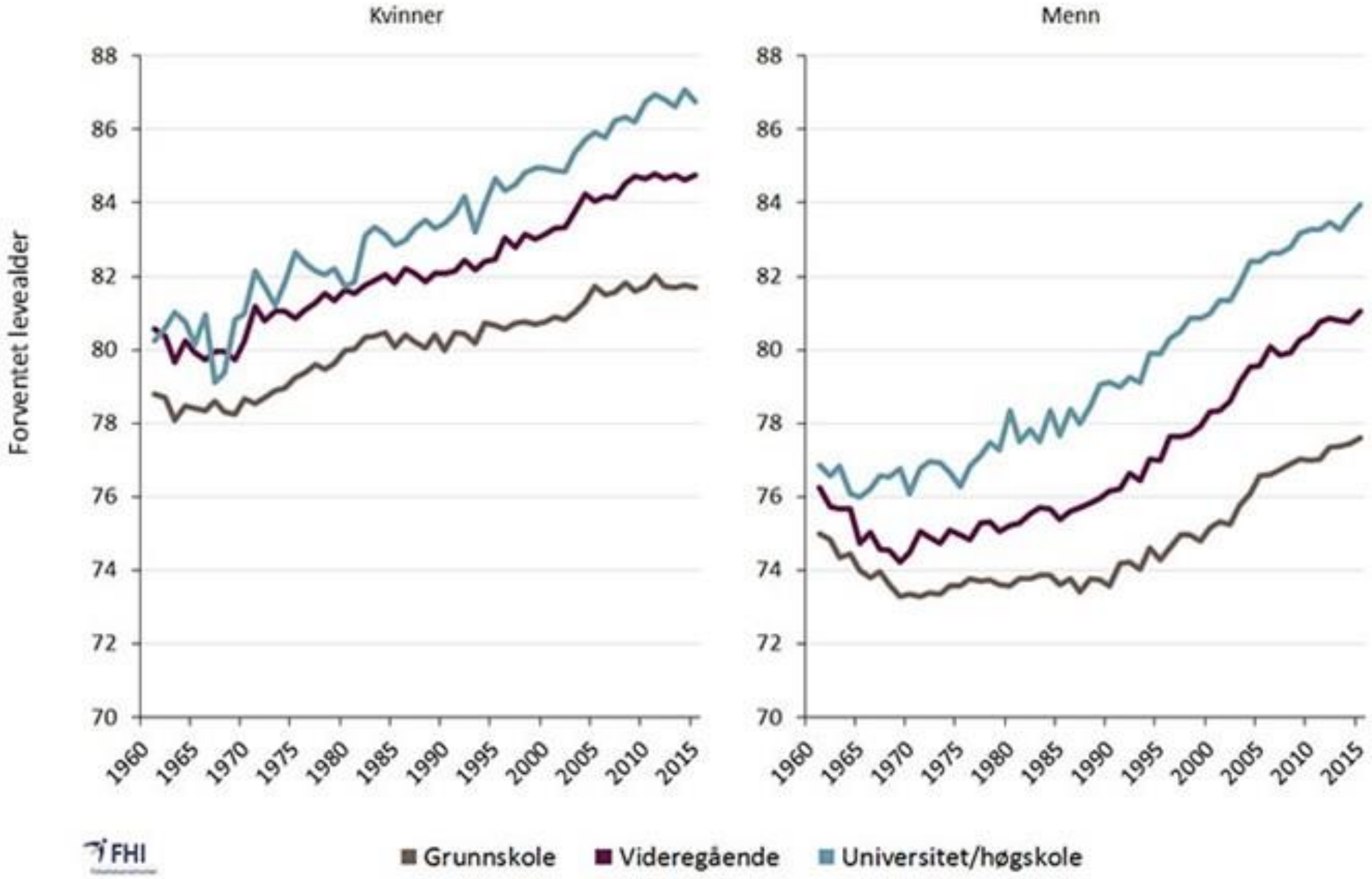
- **Social inequality** occurs when resources in a given society are distributed unevenly, typically through norms of allocation, that engender specific patterns along lines of socially defined categories of persons. WIKIPEDIA

Sosial ulikhet i helse - Helsedirektoratet

- Systematiske forskjeller i helsetilstand som følger sosiale og økonomiske kategorier
  - Yrke
  - Utdanning
  - Inntekt
- Disse helseforskjellene er sosialt skapt og mulig å gjøre noe med.

Forventet levealder ved 35 år

Folkehelserapporten 2018



Sosial- og helsedirektoratets handlingsplan
mot sosiale ulikheter i helse

Gradientutfordringen

Sosial- og helsedirektoratet
IS-1229

Ulikhet i sykdom

Tabell 5.5 Prosentandelen 75-76-åringer som rapporterer om sykdom etter utdanningslengde. n= antall svar.

Utdanning totalt år	7-9 år	10-12 år	13-16 år	17+ år
Menn				
Hjerteinfarkt n=2667	17,4	16,1	15,0	12,8
Diabetes, n=2662	11,1	7,9	8,9	4,5
Mindre god generell helse, n=2638	43,1	37,0	26,6	23,0
Kronisk bronkitt, n=2633	8,0	7,0	9,5	4,5
Kroniske smerteplager, n=2586	3,9	2,9	3,5	1,8
Psykiske plager som man har søkt hjelp om, n=2610	11,1	9,5	8,9	7,3
Kvinner				
Hjerteinfarkt n=3240	6,8	7,2	4,7	4,4
Diabetes, n=3265	8,6	5,8	3,5	2,9
Mindre god generell helse, n=3260	52,5	40,2	34	27,9
Kronisk bronkitt, n=3234	6,7	4,9	7,3	3,0
Kroniske smerteplager, n=3161	11,0	10,5	7,6	9,0
Psykiske plager som man har søkt hjelp om, n=3203	13,3	10,3	11,2	13,9

Kilde: Næss m.fl. 2007a:35.

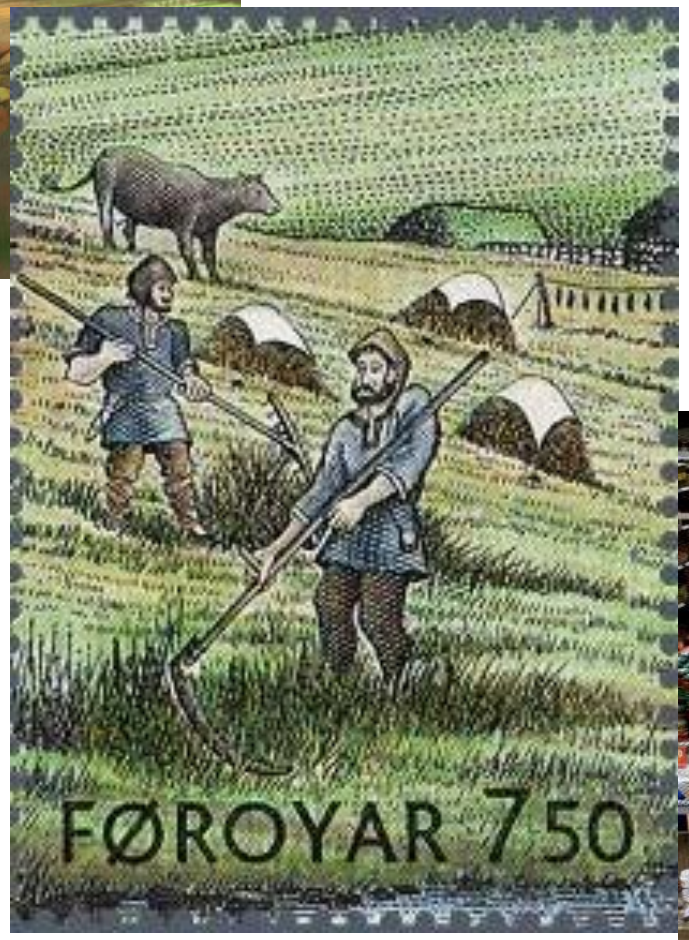
Hva er problemet med sosial ulikhet i helse?

- Sosiale helseforskjeller er urettferdige og representerer et tap for både enkeltmennesker, familier og samfunnet. Befolkningens totale helsepotensiale utnyttes ikke fullt ut.

Folkehelserapporten, FHI, 2018

- Urettferdig!
- Økte samfunnskostnader

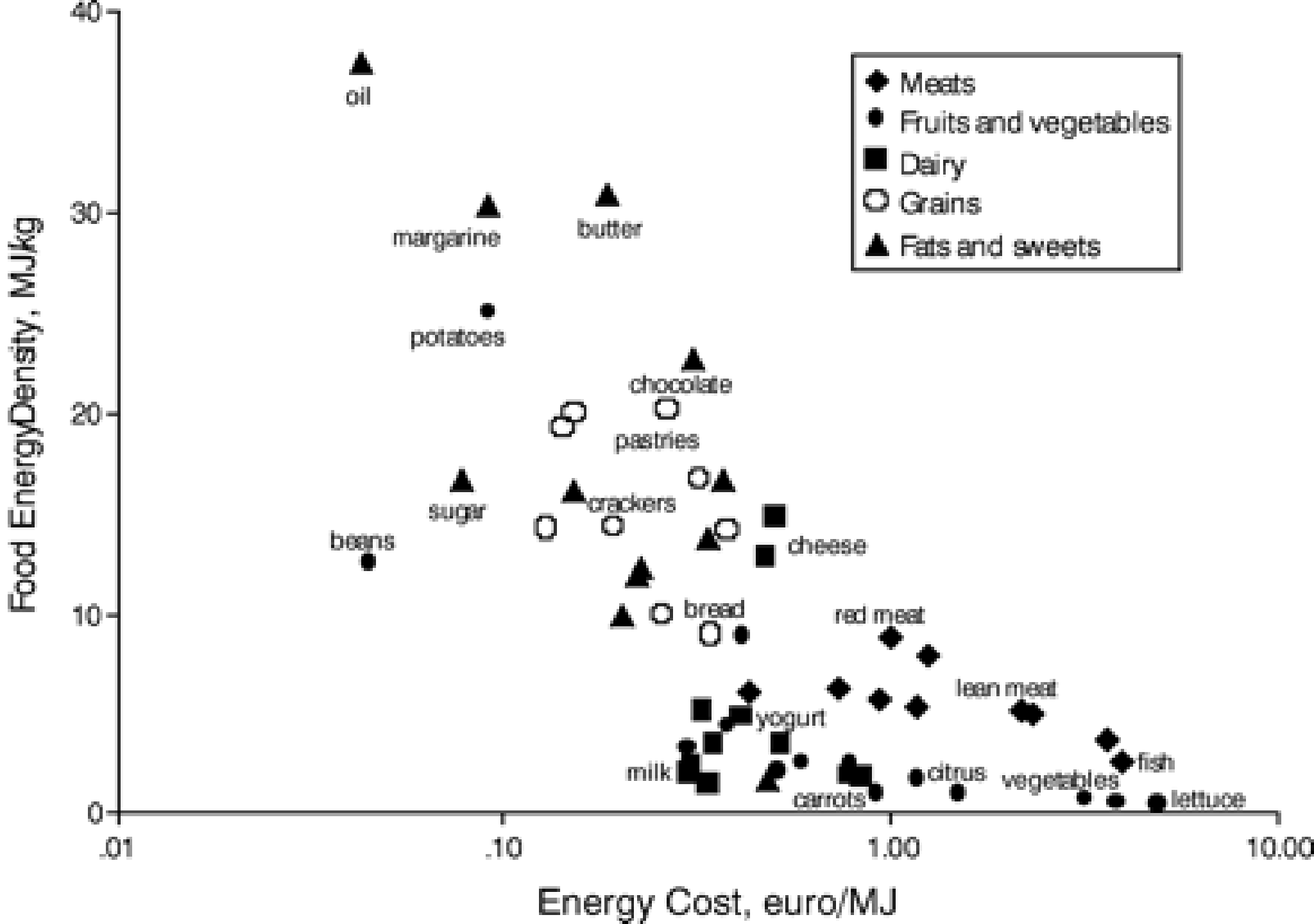
History of food procurement



Og resultatet er…

VI TRENGER KOSTRÅD!

SUNN
MAT
ER
DYR



Ulikhet i kosthold - brus

- Bolt et al 2018

Table 2
Observed mean frequency for consumption of sugar-sweetened beverages and artificially sweetened beverages (times/week) at all time points

Year	2001	2005	2016	In total
	Mean	Mean	Mean	Mean
Sugar-sweetened beverages	2.8	2.4	1.2	2.1
Parental education 2001				
High	2.5	2.1	0.9	1.8
Low	2.9	2.7	1.3	2.3
p-value	0.090	**0.005**	**0.011**	**< 0.001**
Educational intentions 2005				
High	2.4	2.1	1.0	1.8
Low	3.1	2.9	1.5	2.5
p-value	**0.009**	**0.001**	**0.010**	**< 0.001**
Education 2016				
High	2.6	2.2	0.9	1.9
Low	3.2	3.0	1.9	2.7
p-value	**0.009**	**0.005**	**< 0.001**	**< 0.001**
Household income 2001				
High	2.6	2.3	1.0	1.9
Low	2.9	2.4	1.2	2.2
p-value	0.276	0.978	0.183	0.243
Income 2016				
High	2.8	2.4	1.0	2.1
Low	2.8	2.5	1.5	2.3
p-value	0.772	0.926	**0.012**	0.135

Materiell vs kulturell kapital

- Fismen, 2012
- HEVAS 2005/06: 11-17 år,
- Material capital:
  - The Family Affluence Scale (number of cars, holidays, PC and bedrooms)
- Cultural capital:
  - Number of books in the household

Table 2

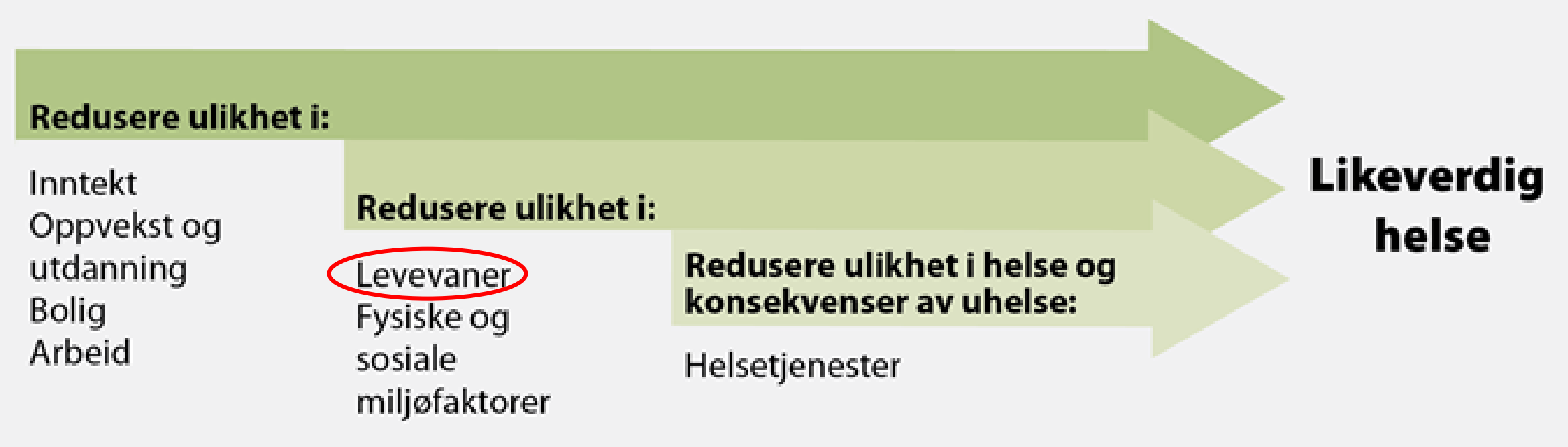
The likelihood of material capital (FAS) and cultural capital (number of books) associated with daily consumption of fruit, vegetables, sweets and soft drinks

Food items	Fruit (n=6058)		Vegetables (n=6051)		Sweets (n=6049)		Soft drinks (n=6052)	
	OR	95% CI	OR	95% CI	OR	95% CI	OR	95% CI
Material capital (FAS)	1.52	(1.25–1.82)	1.39	(1.12–1.69)	1.14	(.83–1.54)	1.12	(.85–1.47)
Cultural capital (number of books)	1.85	(1.52–2.22)	2.38	(1.92–2.94)	.45	(.33–.61)	.26	(.17–.34)

OR Odds Ratio.

CI Confidence Interval.

Hvordan endre sosial ulikhet i helse?



Folkehelserapporten, FHI, 2018

Short report

What types of interventions generate inequalities? Evidence from systematic reviews

Theo Lorenc,[1] Mark Petticrew,[1] Vivian Welch,[2] Peter Tugwell[2]

► An additional appendix is published online only. To view this file please visit the journal online (http://dx.doi.org/10.1136/jech-2012-201257).

[1]Department of Social & Environmental Health Research, London School of Hygiene & Tropical Medicine, London, UK
[2]Centre for Global Health, University of Ottawa, Ottawa, Canada

ABSTRACT

Background Some effective public health interventions may increase inequalities by disproportionately benefiting less disadvantaged groups ('intervention-generated inequalities' or IGIs). There is a need to understand which types of interventions are likely to produce IGIs, and which can reduce inequalities.

Methods We conducted a rapid overview of systematic reviews to identify evidence on IGIs by socioeconomic status. We included any review of non-healthcare interventions in high-income countries presenting data on

reduce or increase inequalities.[5–7] However, few studies have sought to bring together what is known about IGIs across the whole field of public health interventions. The aim of this paper is to provide an overview of evidence from systematic reviews in order to provide preliminary indications as to which types of interventions are more likely to produce IGIs, and which have the potential to reduce inequalities.

McGill et al. BMC Public Health (2015) 15:457
DOI 10.1186/s12889-015-1781-7

BMC Public Health

RESEARCH ARTICLE Open Access

Are interventions to promote healthy eating equally effective for all? Systematic review of socioeconomic inequalities in impact

Rory McGill[1*], Elspeth Anwar[1], Lois Orton[1], Helen Bromley[1], Ffion Lloyd-Williams[1], Martin O'Flaherty[1], David Taylor-Robinson[1], Maria Guzman-Castillo[1], Duncan Gillespie[1], Patricia Moreira[1], Kirk Allen[1], Lirije Hyseni[1], Nicola Calder[1], Mark Petticrew[2], Martin White[3,4], Margaret Whitehead[1] and Simon Capewell[1]

Abstract

Background: Interventions to promote healthy eating make a potentially powerful contribution to the primary prevention of non communicable diseases. It is not known whether healthy eating interventions are equally effective among all sections of the population, nor whether they narrow or widen the health gap between rich and poor.
We undertook a systematic review of interventions to promote healthy eating to identify whether impacts differ by socioeconomic position (SEP).

Methods: We searched five bibliographic databases using a pre-piloted search strategy. Retrieved articles were screened independently by two reviewers. Healthier diets were defined as the reduced intake of salt, sugar, trans-fats, saturated fat, total fat, or total calories, or increased consumption of fruit, vegetables and wholegrain. Studies were only included if quantitative results were presented by a measure of SEP.
Extracted data were categorised with a modified version of the *"4Ps"* marketing mix, expanded to *6 "Ps"*: "Price, Place, Product, Prescriptive, Promotion, and Person".

Results: Our search identified 31,887 articles. Following screening, 36 studies were included: 18 "Price" interventions, 6 "Place" interventions, 1 "Product" intervention, zero "Prescriptive" interventions, 4 "Promotion" interventions, and 18 "Person" interventions.
"Price" interventions were most effective in groups with lower SEP, and may therefore appear likely to reduce inequalities. All interventions that combined taxes and subsidies consistently decreased inequalities. Conversely, interventions categorised as "Person" had a greater impact with increasing SEP, and may therefore appear likely to reduce inequalities. All four dietary counselling interventions appear likely to widen inequalities.
We did not find any "Prescriptive" interventions and only one "Product" intervention that presented differential results and had no impact by SEP. More "Place" interventions were identified and none of these interventions were judged as likely to widen inequalities.

Conclusions: Interventions categorised by a "6 Ps" framework show differential effects on healthy eating outcomes by SEP. "Upstream" interventions categorised as "Price" appeared to decrease inequalities, and "downstream" "Person" interventions, especially dietary counselling seemed to increase inequalities.
However the vast majority of studies identified did not explore differential effects by SEP. Interventions aimed at improving population health should be routinely evaluated for differential socioeconomic impact.

Keywords: Noncommunicable diseases, Socioeconomic inequalities, Healthy eating, Intervention

* Correspondence: rmcgill@liv.ac.uk
[1]Department of Public Health and Policy, University of Liverpool, Liverpool,

obesity reviews doi: 10.1111/obr.12161

Obesity Prevention

The effect of obesity prevention interventions according to socioeconomic position: a systematic review

A. Beauchamp[1,2,3], K. Backholer[1,2], D. Magliano[1,2] and A. Peeters[1,2]

[1]Baker IDI Heart and Diabetes Institute,

Summary

Moore et al. BMC Public Health (2015) 15:907
DOI 10.1186/s12889-015-2244-x

BMC Public Health

RESEARCH ARTICLE Open Access

Socioeconomic gradients in the effects of universal school-based health behaviour interventions: a systematic review of intervention studies

Graham F. Moore[1*], Hannah J. Littlecott[1], Ruth Turley[1], Elizabeth Waters[2] and Simon Murphy[1]

Abstract

Background: Socioeconomic inequalities in health behaviour emerge in early life before tracking into adulthood. Many interventions to improve childhood health behaviours are delivered via schools, often targeting poorer areas. However, targeted approaches may fail to address inequalities within more affluent schools. Little is known about types of universal school-based interventions which make inequalities better or worse.

Methods: Seven databases were searched using a range of natural language phrases, to identify trials and quasi-experimental evaluations of universal school-based interventions focused on smoking, alcohol, diet and/or physical activity, published from 2008–14. Articles which examined differential effects by socioeconomic status ($N = 20$) were synthesised using harvest plot methodology. Content analysis of 98 intervention studies examined potential reasons for attention or inattention to effects on inequality.

Results: Searches identified approximately 12,000 hits. Ninety-eight evaluations were identified, including 90 completed studies, of which 20 reported effects on SES inequality. There were substantial geographical biases in reporting of inequality, with only 1 of 23 completed North American studies testing differential effects, compared to 15 out of 52 completed European studies. Studies reported a range of positive, neutral or negative SES gradients in effects. All studies with a negative gradient in effect (i.e. which widened inequality) included educational components alone or in combination with environmental change or family involvement. All studies with positive gradients in effects included environmental change components, alone or combined with education. Effects of multi-level interventions on inequality were inconsistent. Content analyses indicated that in approximately 1 in 4 studies SES inequalities were discussed in defining the problem or rationale for intervention. Other potential barriers to testing effect on inequality included assumptions that universal delivery guaranteed universal effect, or that interventions would work better for poorer groups because they had most to gain.

Conclusions: Universal school-based interventions may narrow, widen or have no effect on inequality. There is a significant need for more routine testing of the effects of such interventions on inequality to enable firmer conclusions regarding types of interventions which affect inequality.

PROSPERO registration number: CRD42014014548

* Correspondence: MooreG@cardiff.ac.uk

Alle konkluderer mer eller mindre med

- Oppstrømsintervensjoner kan redusere ulikhet
  - Strukturelle tiltak
    - Et sunnere miljø
    - Omgår RESSURSENE som kreves for «frivillig» atferdsendring
      - tid, penger, kompetanse

- Nedstrømsintervensjoner kan øke ulikhet
  - Tiltak for å endre individenes avgjørelser
    - Avhengig av RESSURSER
      - tid, penger, kompetanse


40,-
58,-
52,-
DAGENS SUPPER

Mulige tiltak for å redusere bollespising

Oppstrøms

- Forbud/påbud
- Penger
- Avgifter, subsidier, incentiver
- Lokale endringer i miljø
- Skolemat
- Plassering av automater
- Lokalitet (feks kiosker/fast food)
- Produktmodifisering
- Restriksjoner på reklame/markedsføring
- Mediakampanjer
- Matlagingskurs
- Nutrition education
- Informasjon
- Veiledning

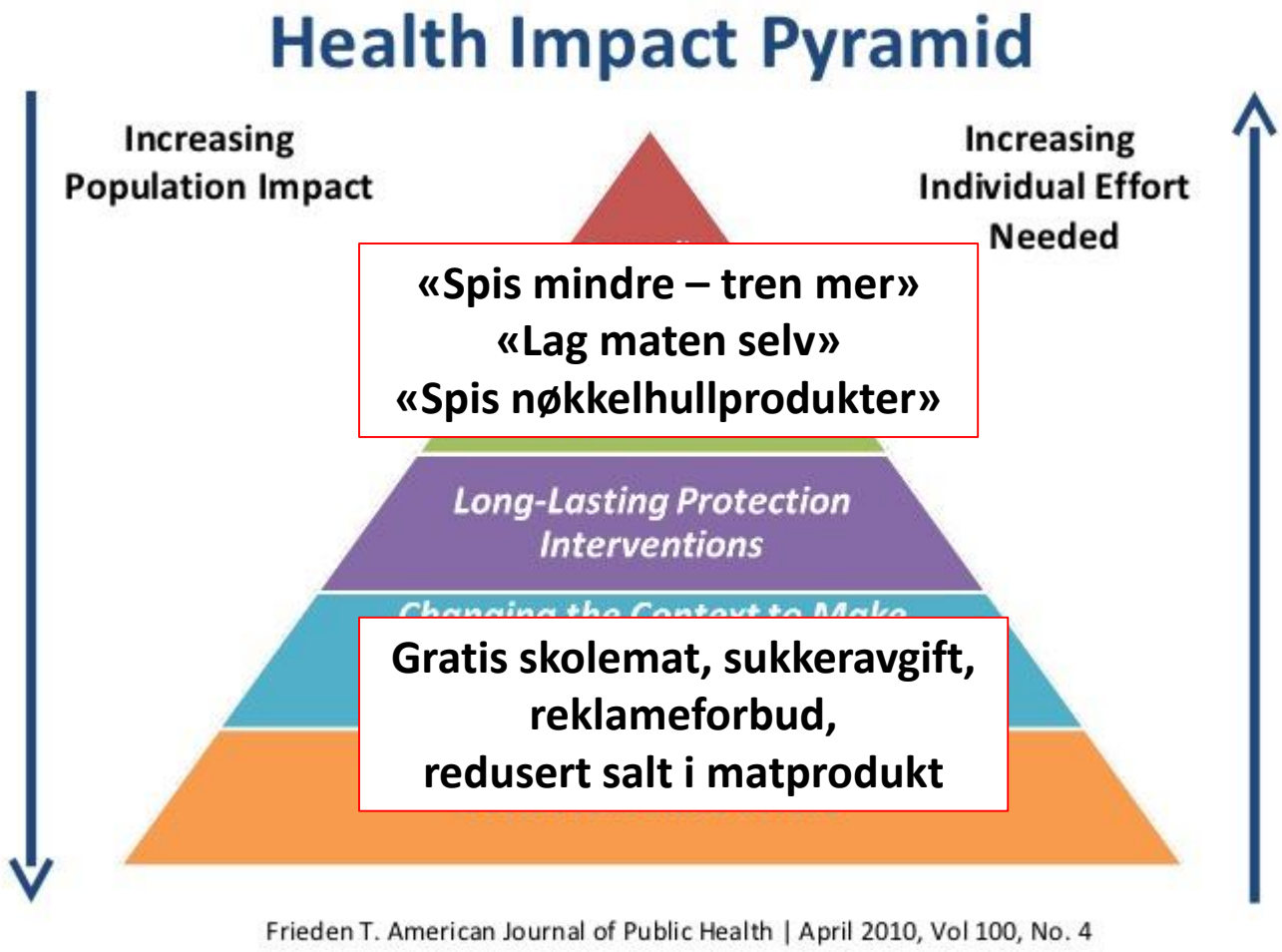
Nedstrøms

- Fjerne bollene fra kantina
- Dyrere boller
- Annen plassering – f.eks. bakerst i kaffebaren – eller kanskje helst i kantina for de ansatte
- Boller med grovt mel
- Ikke 3 for 2
- na
- Lag bollene selv!
- Inneholder raske KH
- Ikke sunt å spise boller
- Ikke spis for mange boller, fordi…

Frieden, AJPH, 2010

Nedstrøms

Oppstrøms



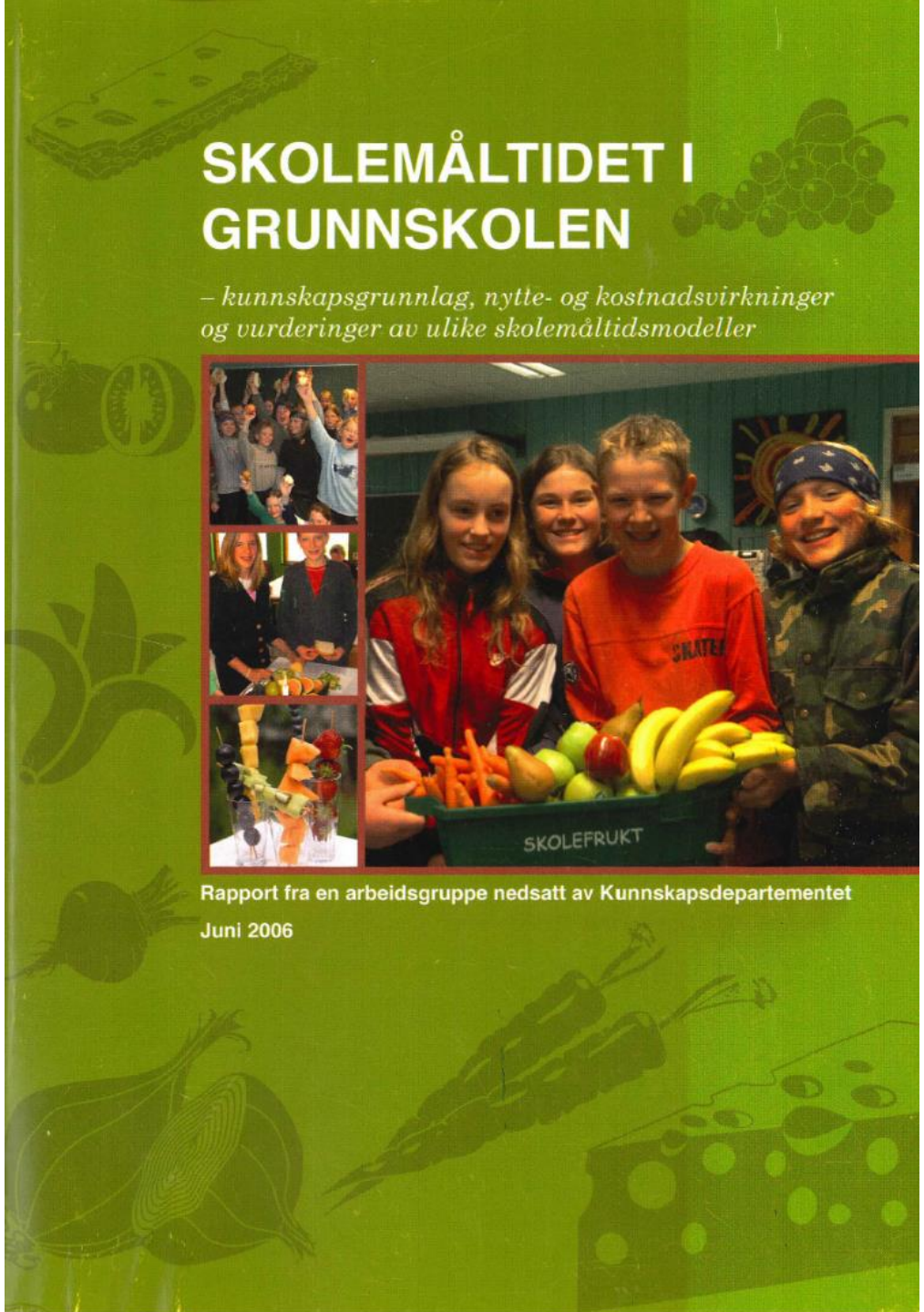
OSLOFROKOSTEN fra 1930

- Melk
- Kavring/knekkebrød/kneip
- Margarin og mysost
- ½ eple eller appelsin eller 100 g kålrot eller gulrot
- Tran

2005 stortingsvalg

2006 rapporten

- *Arbeidsgruppen anbefaler at tilbud om gratis melk og frukt eller grønnsak (modell 1) innføres for hele grunnskolen. Videre bør det vurderes å utvide dette tilbudet til et komplett brødmåltid, som et minimum for ungdomstrinnet, alternativt for hele grunnskolen.*



Gratis skolefrukt 2007-14

FV at school 4 or 5 days/week

	2001 percentage	(95%CI)	2008 percentage	(95%CI)	Change 01-08 percentage points
Free fruit 08					
Boys	20 %	(7, 33)	81 %	(68, 94)	61
Girls	38 %	(24, 51)	88 %	(75, 100)	50
Low parental edu	28 %	(15, 40)	79 %	(66, 92)	52
High parental edu	30 %	(16, 44)	90 %	(77, 102)	60
Subscription 08					
Boys	23 %	(14, 31)	57 %	(48, 65)	34
Girls	32 %	(23, 40)	68 %	(60, 77)	37
Low parental edu	25 %	(16, 33)	59 %	(50, 68)	35
High parental edu	29 %	(21, 38)	66 %	(57, 74)	36
No program 08					
Boys	25 %	(17, 34)	35 %	(25, 44)	9
Girls	45 %	(37, 53)	47 %	(39, 56)	3
Low parental edu	35 %	(27, 42)	34 %	(25, 43)	0
High parental edu	36 %	(27, 44)	48 %	(39, 57)	12

Bere et al, BJN 2012

Unhealthy snacks (times/week)

TABLE 2

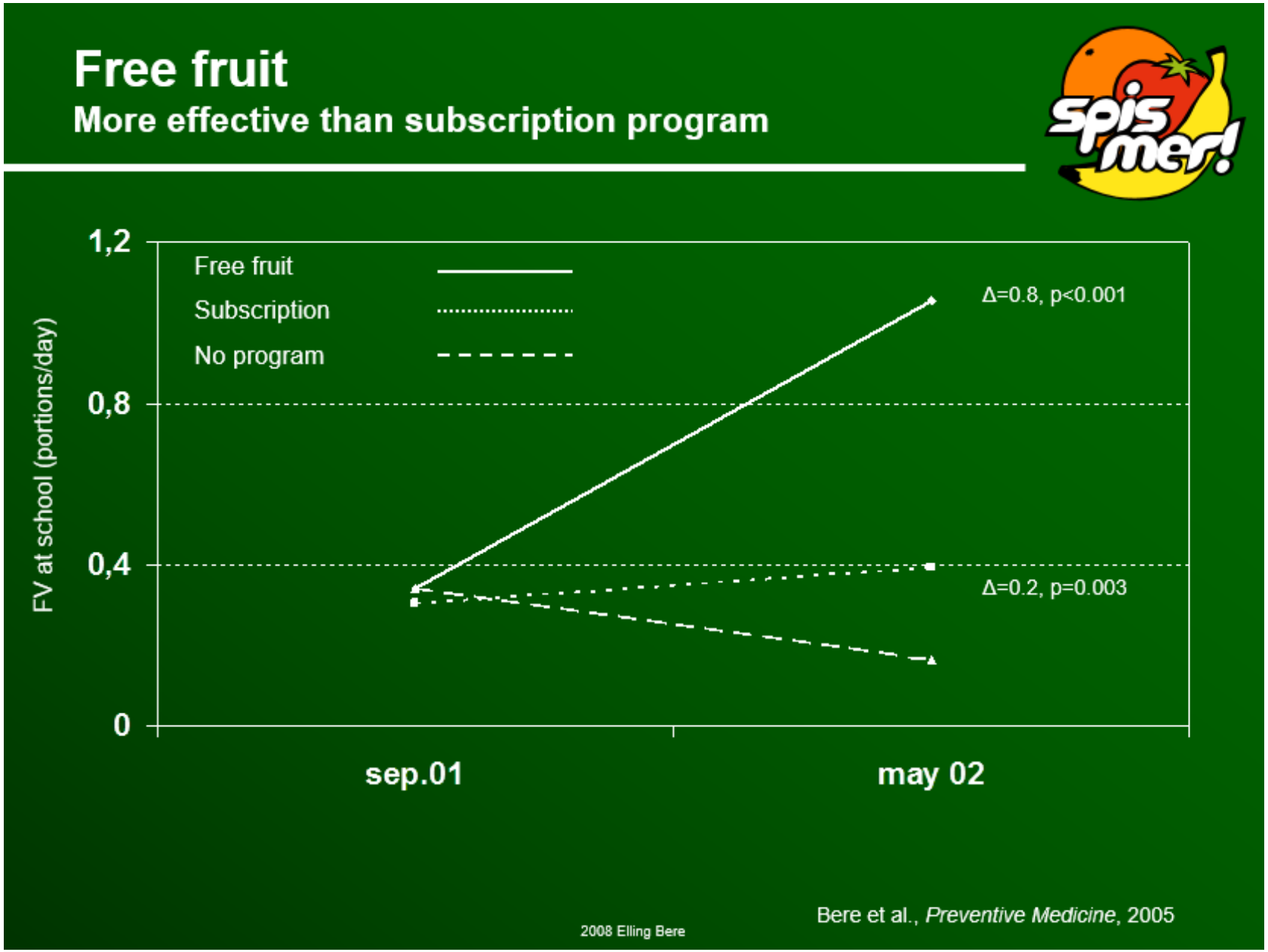
Change in consumption of unhealthy snacks from 2001 to 2008 in relation to the different school fruit programs for the total sample and stratified by parental educational level: the Fruits and Vegetables Make the Marks Project[1]

	2001		2008			
	Intake	95% CI	Intake	95% CI	Change from 2001 to 2008	*P* for time × group interaction
	times/wk		*times/wk*		*times/wk*	
All	6.6	6.3, 6.9	4.4	4.1, 4.7	−2.2	0.009
Free fruit, 2008	6.6	5.9, 7.2	3.8	3.1, 4.4	−2.8	
Subscription, 2008	6.9	6.4, 7.3	4.6	4.1, 5.0	−2.3	
No program, 2008	6.4	6.0, 6.8	4.9	4.4, 5.3	−1.5	
Higher education	5.9	5.3, 6.3	4.1	3.7, 4.5	−1.8	0.32
Free fruit, 2008	5.4	4.6, 6.2	3.5	2.8, 4.2	−1.8	
Subscription, 2008	6.3	5.8, 6.8	4.3	3.7, 4.6	−2.1	
No program, 2008	6.0	5.5, 6.5	4.6	4.0, 5.1	−1.4	
No higher education	7.3	7.0, 7.7	4.7	4.3, 5.1	−2.6	0.004
Free fruit, 2008	7.8	6.9, 8.6	4.0	3.0, 5.0	−3.8	
Subscription, 2008	7.4	6.8, 8.0	4.9	4.2, 5.6	−2.5	
No program, 2008	6.7	6.2, 7.3	5.1	4.5, 5.8	−1.6	

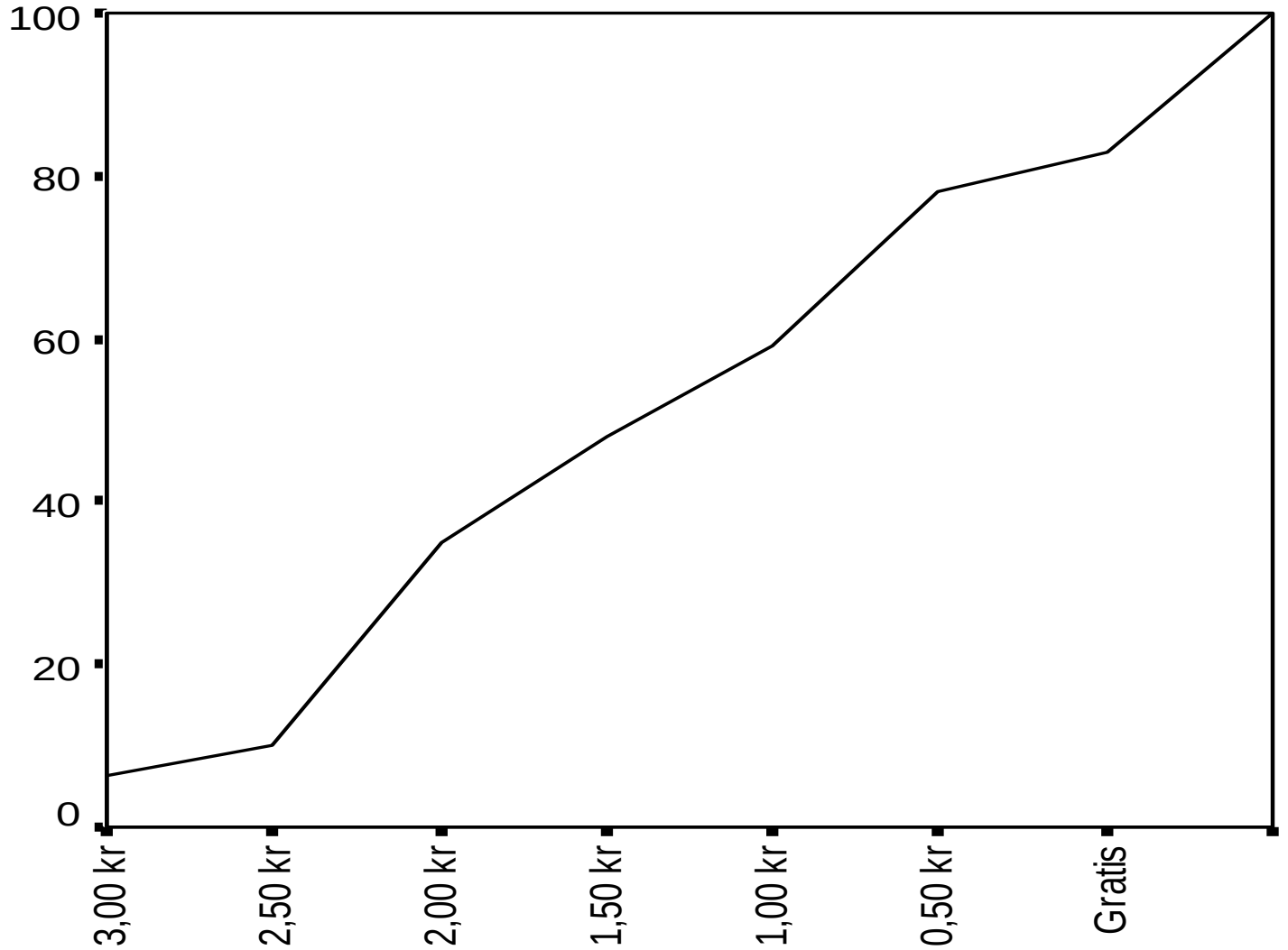
[1] Multilevel linear mixed models adjusted for all variables presented in the table and school as a random effect.

Øverby et al, AJCN 2012

Gratis vs abonnement



Norwegian School Fruit Programme Hypothetical subscription% vs. price



Helsebringende atferd i alle sosiale grupper

Dårlige helsevaner er hyppigere i grupper med lav sosial status

Forskjeller i helseatferd har sin rot i unødvendige og urettferdige forskjeller i sosiale, økonomisk og miljømessige levekår. I dag er det ikke-smittsomme sykdommer som skaper mest uhelse i høyinntektsland som Norge, og risikofaktorene for disse sykdomsgruppene er i stor grad knyttet til ugunstig atferd slik som røyking, usunt kosthold, fysisk inaktivitet, bruk av alkohol og andre rusmidler.

Målet vil være å redusere de sosiale ulikhetene i helseatferd, og da særlig forskjellene i røyking, usunt kosthold, fysisk inaktivitet og skadelig alkoholbruk.

Anbefalte tiltak

- Forsterkning av tobakks- og alkoholpolitikken med tiltak innen pris og tilgjengelighet
- Forsterkning av tiltak som bidrar til røykeslutt
- Gratis sunt måltid til alle barn i alle skoler i hele landet hver dag
- Sunn skatteveksling for frukt og grønt versus sukker, salt og fett