Effects of interpretive nutrition labels on consumer food purchases: the Starlight randomised controlled trial

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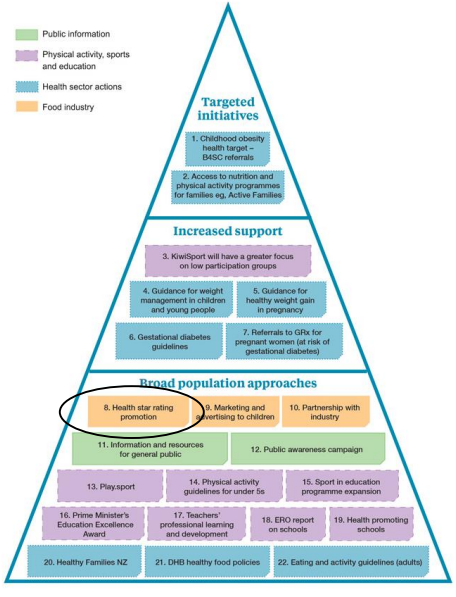
Interpretive FOP nutrition labels are a common policy recommendation

	Target population	Strength of evidence*	DALYs saved	Gross costs† (A$ million)	Net cost per DALY saved‡ (A$ million)
Unhealthy food and beverage tax (10%)§[77]	Adults	4	559 000	18·00	Cost-saving
Front-of-pack traffic light nutrition labelling§[77]	Adults	5	45 100	81·00	Cost-saving
Reduction of advertising of junk food and beverages to children¶	Children (0–14 years)	2	37 000	0·13	Cost-saving

The childhood obesity plan



REPORT OF THE COMMISSION ON

ENDING CHILDHOOD OBESITY

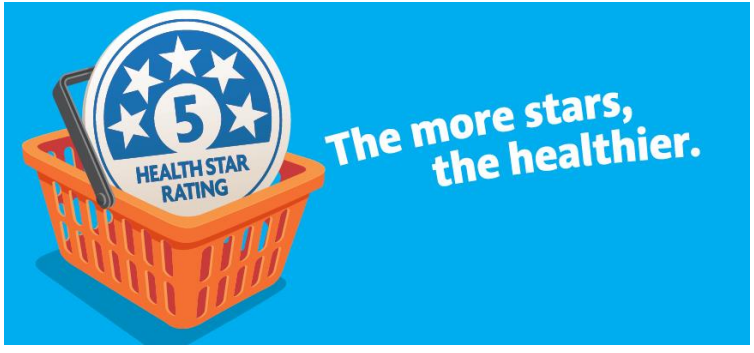
1.6 Implement a standardized global nutrient labelling system.

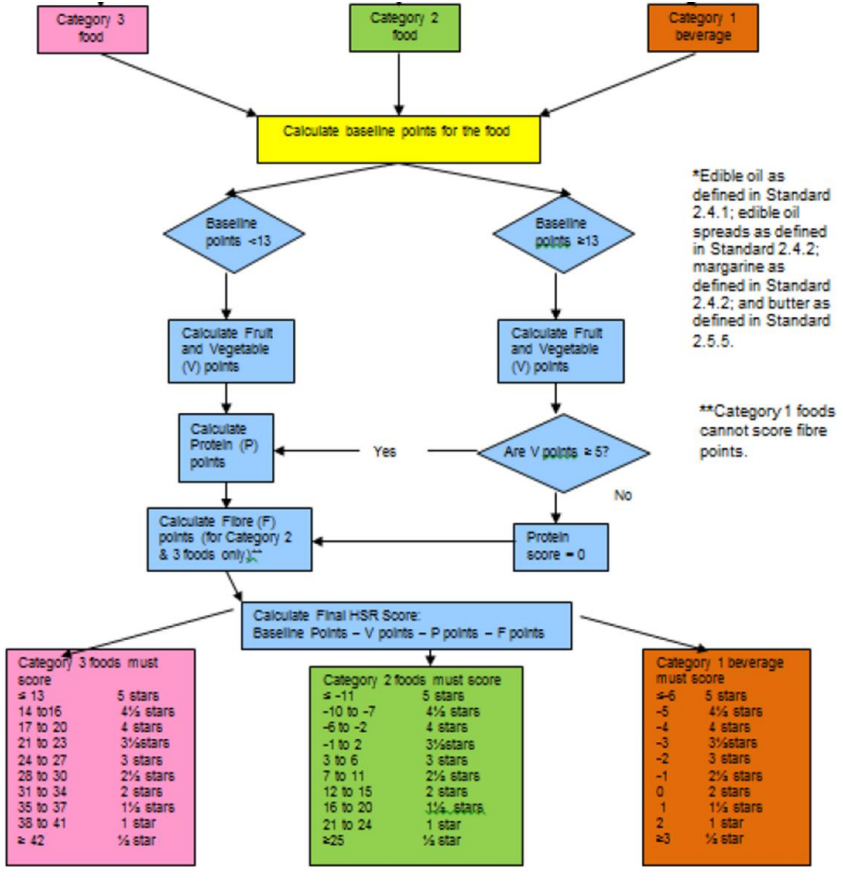
1.7 Implement interpretive front-of-pack labelling, supported by public education of both adults and children for nutrition literacy.

Traffic Light Labels (TLL)

All measures per 100g	LOW a healthier choice	MEDIUM most of the time	HIGH eat occasionally
Sugars	5g or less	5.1g - 15g	More than 15g
Fat	3g or less	3.1g - 20g	More than 20g
Saturates	1.5g or less	1.6g - 5g	More than 5g
Salt	0.3g or less	0.31g - 1.5g	More than 1.5g

Health Star Rating (HSR) label





Starlight RCT

What effects do interpretive nutrition labels have on the healthiness (FSANZ nutrient profiling scoring criterion – NPSC) of consumer food purchases?

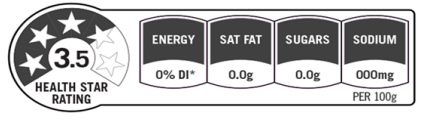
Research funded by HRC. Symposium co-sponsored by Healthier Lives National Science Challenge

Study design

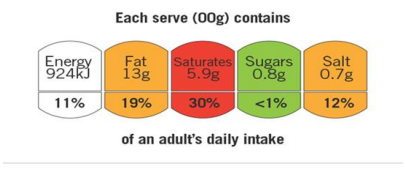
Registration and 1-week run-in

Randomisation

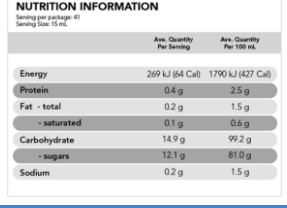
HSR



TLL

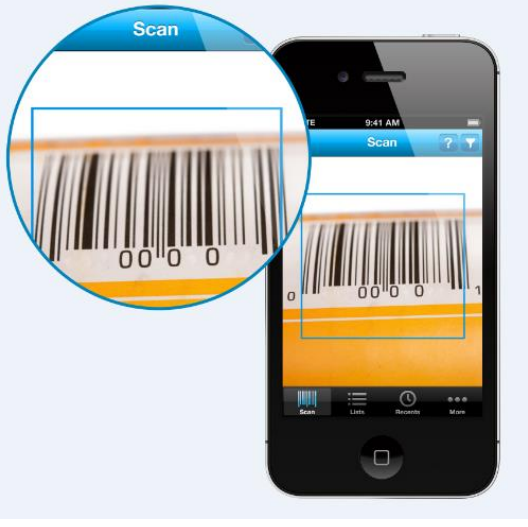


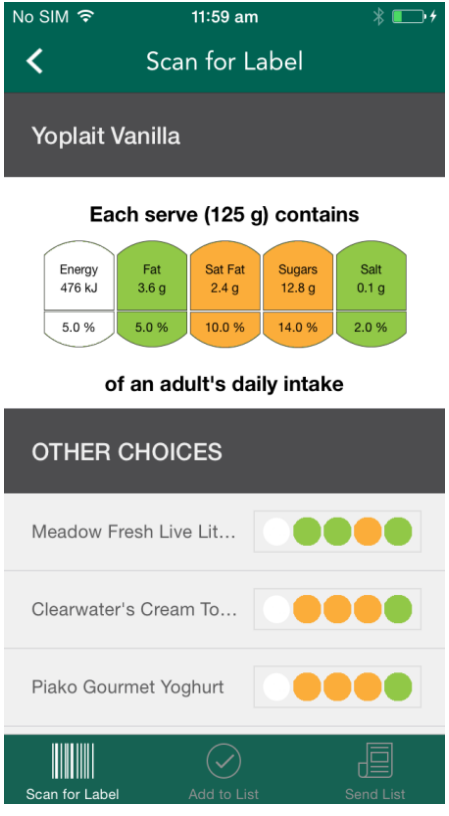
NIP



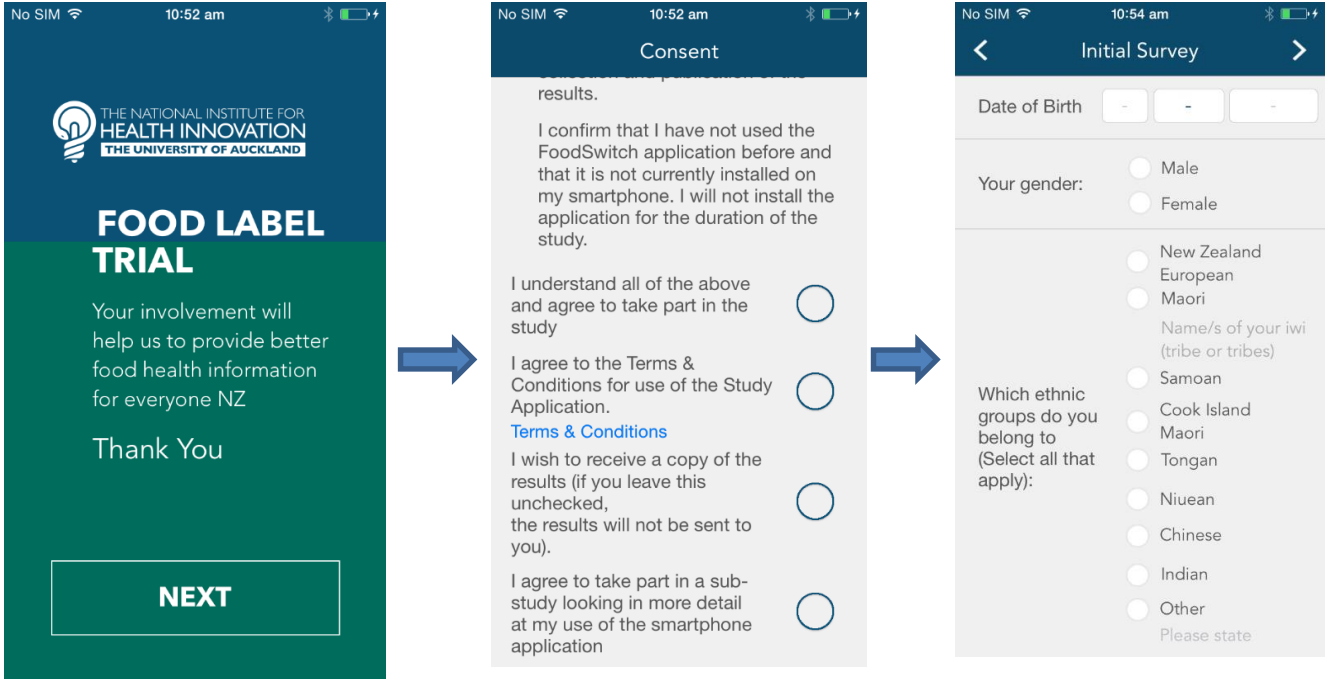
1-month follow-up of all packaged food purchases

Intervention delivery



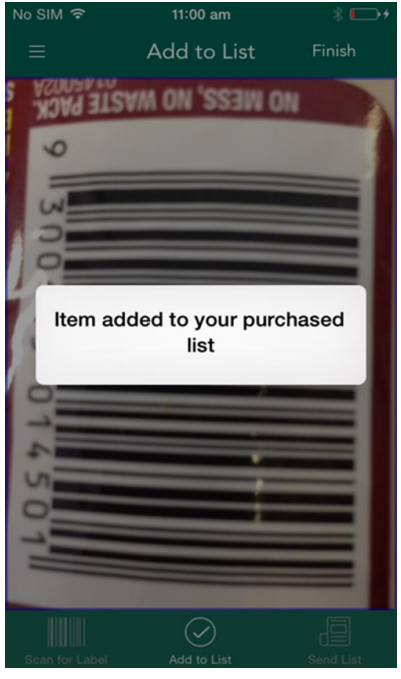


Consent & baseline data collection



Volkova et al, *JMIR mHealth uHealth* 2016

Food purchasing data collection



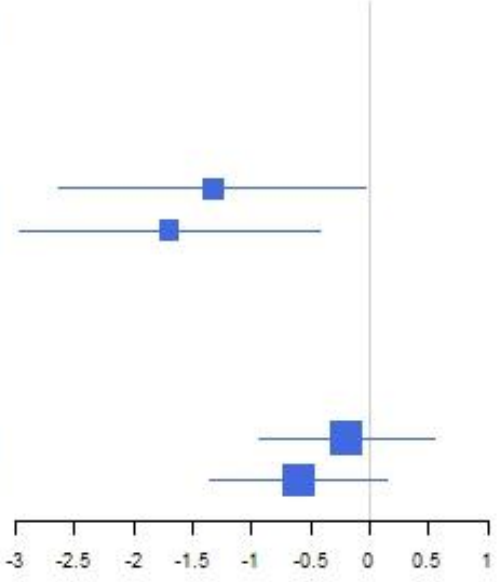
Postage Included

Starlight study team
National Institute for Health Innovation
University of Auckland

Volkova et al, *JMIR mHealth uHealth* 2016

Healthiness of food purchases

	Difference	Lower 95%CI	Upper 95%CI
Frequent label users (n=423)			
TLL v NIP	-1.33	-2.63	-0.04
HSR v NIP	-1.70	-2.97	-0.43
All participants (N=1,357)			
TLL v NIP	-0.20	-0.94	0.54
HSR v NIP	-0.60	-1.35	0.15



Ni Mhurchu et al, *Am J Clin Nutr* 2017

Self-reported label usefulness *(TLL and HSR compared to NIP)*

- Participants randomised to HSR and TLL significantly more likely to report that they found the assigned labels ***useful***; ***easy*** to understand; ***bought different foods*** as a result of viewing the labels; and their nutrition ***knowledge*** improved as a result of using the labels in the app (all p-values <0.001)

- No difference between TLL and HSR groups (all p-values >0.05)

Strengths and weaknesses

Strengths

- Randomised, blinded, controlled, large, real-world setting

Weaknesses

- Limited use of intervention, use of app as surrogate for on-pack labelling, incomplete reporting of purchases

Take home messages

- At the relatively low level of use observed in this RCT, interpretive front-of-pack nutrition labels had no significant effect on population food purchases
- However shoppers find interpretive labels more useful and easier to understand than non-interpretive labels (NIP)
- Amongst a small subgroup of frequent label users, interpretive labels may assist in making healthier food choices

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