

Promoting healthier food choices among children: an innovative strategy combining school and home gardens



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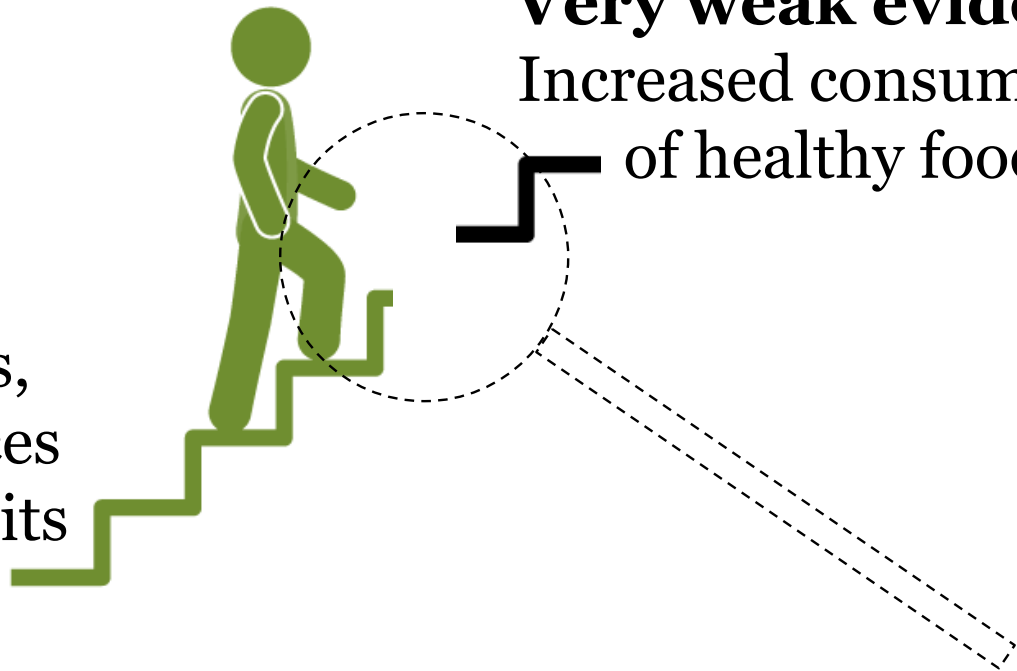
Tilman Brück

Do school garden interventions
contribute to healthier eating among
children in low-income countries?



Ratna Rajva SS, Sindhupalchok Dis

Strong evidence:
Improved awareness,
knowledge, preferences
for vegetables and fruits

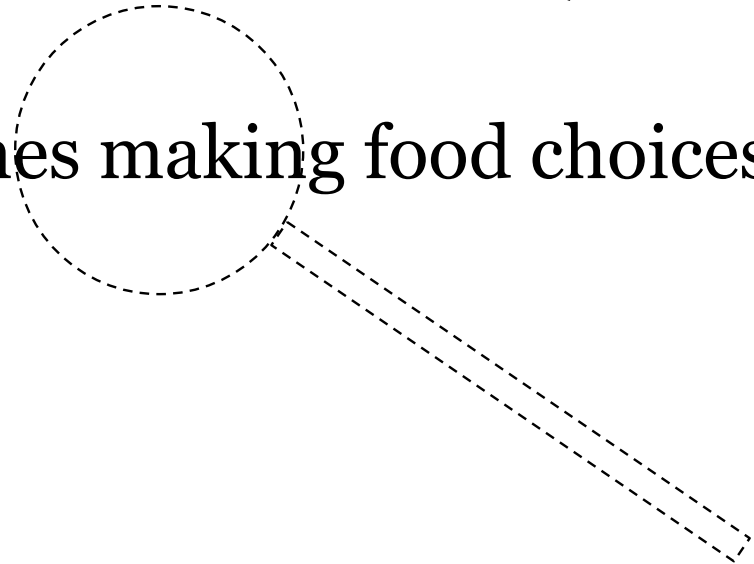


Very weak evidence:
Increased consumption
of healthy foods

The missing
link

Healthier food items are unavailable

Children are not the ones making food choices



Hypothesis

So, would school gardens affect children's food choices if vegetables were more available and parents had greater incentives to serve them?

Implementation



- Tested the idea as a pilot in Nepal
- Sindhupalchok District
- Established school gardens in 15 schools
- Provided home garden training to 450 parents
- Implemented in the 2018-2019 school year

School Vegetable Garden for Nutrition Education

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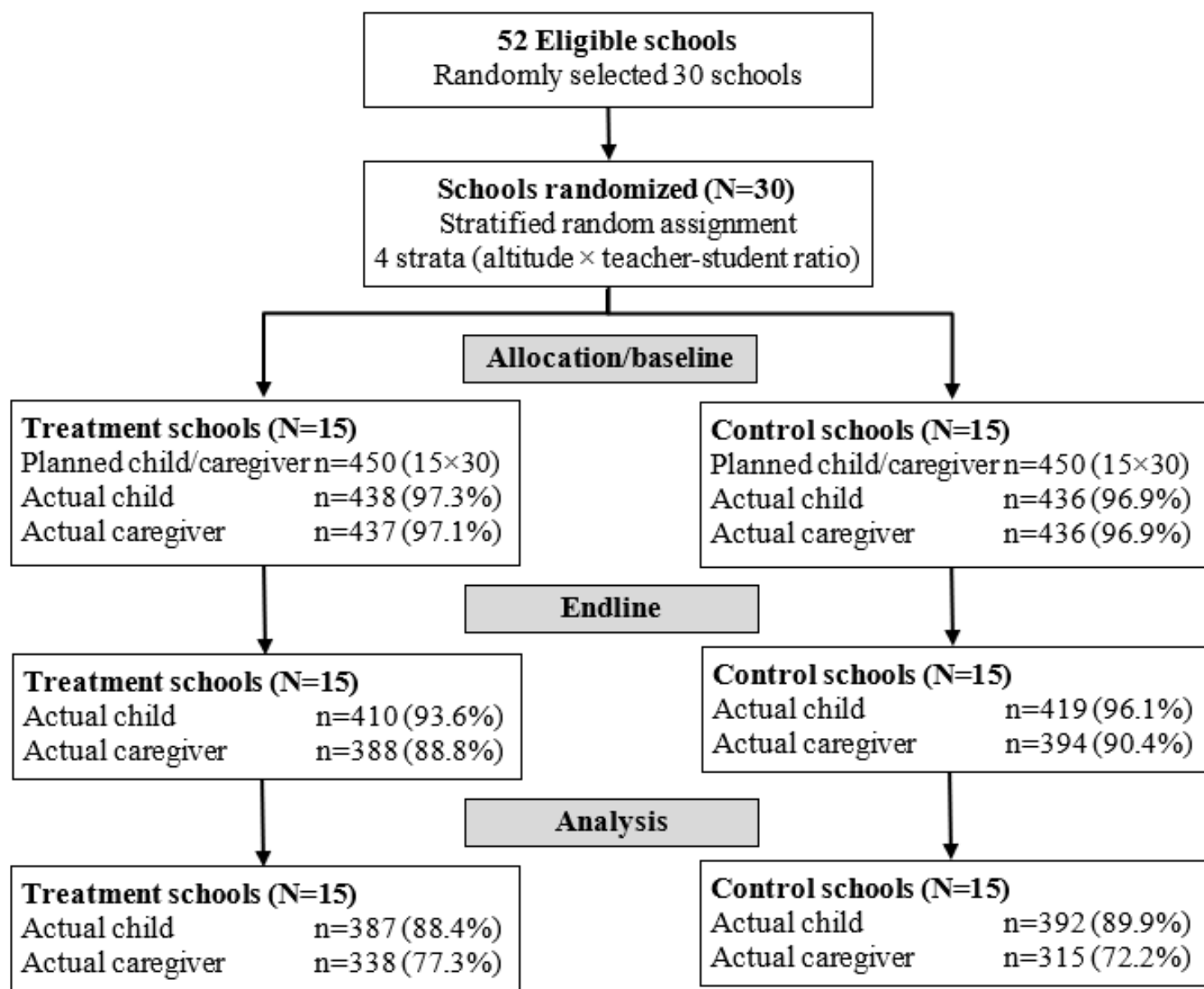


Figure 1 Consort flow diagram for the study

Measurement



- Food and nutritional knowledge
- Food preferences
- Monthly food choices

Data were collected from children and parents at the start of the school year in June 2018 and one year later

Findings



- **Food and nutritional knowledge:** +26.4% over mean baseline levels for parents ($p < 0.01$), but the effect for children was not significant.
- **Liking for vegetables** increased by 6.3% ($p < 0.01$) for children and 10.2% ($p < 0.10$) for their parents.

Effects on food choice



Proportion of meals eaten that included at least one vegetable

Period	Control (mean)	Treatment (mean)	Impact (ATE)	p-value	% change
Baseline (June)*	0.32	0.29			
Jul-Sep (Q1)*	0.26	0.24	0.01	0.620	4.0%
Oct-Dec (Q2)	0.26	0.27	0.04	0.084	15.1%
Jan-Mar (Q3)	0.25	0.29	0.07	0.017	25.9%
Apr-Jun (Q4)	0.22	0.25	0.06	0.088	25.5%

* Before start of the intervention

Conclusion



- **Importance of comprehensive intervention designs**—as opposed to school gardens as a standalone intervention—that aim to promote healthier food choices not just at the individual level, but at a household or community level.
- Hence, school gardens in low-income countries must not only try to influence children's food preferences and food behavior, but also **make healthy food more available in children's homes** and also **nudge parents toward healthier food choices.**



Drivers of Food Choice

Competitive Grants Program



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