CHOICES Criteria for Selecting Strategies to Model

A strategy must have strong evidence for impact on health

1. We prioritize effect estimates that are from strong designs providing the opportunity for strong causal inference, such as **randomized controlled trials, quasi, or natural experiments** and in some cases, change-in-change longitudinal studies.

1a. We prefer studies that measure these outcomes both **before the intervention starts as well as after** (rather than just after). Because weight change takes time, we prefer studies that use BMI as the outcome to **last at least six months** (e.g. from before and after).

1b. We prefer the presence of **a group in a study that does not receive the intervention** (control group) that can be used as a benchmark to compare to those receiving the intervention.

2. We look for effects of strategies on change in:

- Body mass index (BMI) (or BMI z-score) and if not available:
- Dietary intake and/or
- Physical activity
- Screentime

3. We prefer studies that use **objectively measured outcomes** (like measured weight and height, plate waste, and accelerometers) instead of subjective (like self-reported or parent-reported).

Randomized controlled trial (RCT): A study design in which people are assigned to receive either an intervention or an alternative condition by a random process.[1]

Change-in-change longitudinal study: A study design that does not involve manipulations by the investigator but may involve comparisons of exposed and non-exposed individuals.[2] Changes or differences in the exposure are studied in relation to changes or differences in outcomes.[3]

Quasi-experiment: A study design in which people are not assigned to conditions by a random process.[1]

Natural experiment: A type of quasi-experimental study design in which the intervention or event cannot be manipulated; a naturally occurring event is contrasted with a comparison condition.[1]

1. Shadish WR, Cook TD, Campbell DT. *Experimental and quasi-experimental designs for generalized causal inference*. Boston (MA): Houghton Mifflin; 2002.
2. The Community Guide. Glossary. http://www.thecommunityguide.org/about/glossary.html
3. The Cochrane Collaboration. Glossary. http://www.cochrane.org/glossary

A strategy must have:

- Defined activities
- Potential to be implemented using a process or system
- Applicability within a real-world setting