# Conceptual Model to assess the Resilience Capacity of School Meal Programs: A Systematic Review and Thematic analysis

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### Background
- Unprecedented school closures during the COVID-19 pandemic brought into question the resilience capacity of school meal programs.
- Resilience capacity is defined as the capacity to endure shocks and stressors including absorptive capacity (persistence), adaptive capacity (incremental adjustment), and transformative capacity (change).
- Resilience Capacity Model assesses the resilience capacity of a system based on the corresponding components of that system.
- Resilience capacity has been explored in school nutrition setting but a Resilience Capacity Model addressing school meal provision is lacking.

### Objectives
The primary objective of this review is to qualitatively explore a conceptual model to assess the resilience capacity in the context of school nutrition. Other aims are (1) to understand how the school-based meal programs and interventions contribute to the resilience capacity of school meal programs, and (2) to explore possibilities to build the resilience capacity of the school meal programs.

### Methods
**Study Design, Settings, Participants**  
- Assisted by PRISMA, a systematic evaluation of peer-reviewed full-text articles published between 2005-2020 was performed.
- **Measurable Outcome/Analysis**  
  - Qualitative and quantitative studies explored the effect of school meal programs or in-school interventions on child food security that accounts for resilience capacity of school meal programs.
  - Thematic analysis was used to identify factors associated with strategies for building resilience capacity.

### Results
- Of 406 articles identified via online search, 32 full-text articles met inclusion criteria.
- The strategies to build resilience include food availability, food accessibility, food quality, education, training, and support from parents, teachers, and administration.
- The Resilience Capacity Model can be used to assess whether the strategies adopted during unprecedented circumstances lead to a resilience or a vulnerability pathway.

### Discussion
- **Absorptive capacity** is the capacity of the school meal programs to meet the food provision demands of all children during unexpected times like a pandemic.
- **Adaptive capacity** is the incremental adjustment made in the implementation of school meal programs to accommodate the urgent need to provide school meals to those in need.
- **Transformative capacity** has the potential to build resilience capacity and build strategies to improve food distribution, provide grab-and-go meals, and volunteer donations and food drives through food banks in addition to the federal child nutrition waivers.

### Conclusion
RCM can be used to assess program operations and better inform of support needed to enable resilience pathways. The conceptual RCM proposed in this review can be used to assess and analyze the resilience capacity of the current school meal programs and can also guide the formation of future nutrition programs. To assess the applicability of the model, extensive formative research is suggested to identify the indicators for all the three dimensions of resilience capacity viz. absorptive, adaptive, and transformative capacity of school meal programs. In the current form, the indicators include the entire food flow process from menu decision to food distribution and secondary factors such as parent/teacher support.

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**References**