Supplementary Data

Supplementary Appendix A. Database Search Strategies

The following includes the search strategies performed in Ovid MEDLINE, PubMed, and Web of Science on October 2, 2015. The searches were re-run on January 5, 2017 with a modified time variable to capture articles published between search dates. Search terms are arranged by topics, in bold. Within each topic, the search terms are connected by OR. The topics are then combined with AND; therefore, each article must contain at least one search term from each topic. There are also search limitations, which are expressed slightly differently in each database.

1) Ovid MEDLINE. A MeSH (Medical Subject Heading) term is followed by "/". "Adj2" means that the two words must be located near each other—they can be in either order. "Exp" means that the MeSH term will be exploded (*i.e.*, includes all subject headings in the term's indexed hierarchical structure). "MT" means methods and "OG" means organization & administration.

Obesity

exp Adiposity/ or exp Adipose Tissue/ body mass index/ body weight changes/ or weight gain/ Waist Circumference/ body constitution/ or body fat distribution/ or body size/ or skinfold thickness/ or waist-hip ratio/ weight gain/ or weight loss/ or overweight/ (adipos* or body fat) (bmi or "body mass index") (obes* or overweight) over eat* overeat* (skinfold* adj2 thick*) (waist adj2 (hip or circumference)) (body adj2 (fat or composition or weight or measure* or constitution)) exp obesity/ or exp pediatric obesity/ or exp overweight/ infant weight to length (weight adj2 (loss* or reduc* or lower* or control* or prevent* or gain* or over or health* or change*)) 1 or 2 or 3 or 4 or 5 or 6 or 7 or 8 or 9 or 10 or 11 or 12 or 13 or 14 or 15 or 16 or 17

Community-based

Community-Based Participatory Research/ Cooperative Behavior/ Consumer Participation/ exp Community Health Services/ Community Health Planning/ Community-Institutional Relations/ Healthy People Programs/ exp Health Planning Organizations/ participatory evaluation empowerment evaluation task force (action adj2 (research or science)) (community based participatory research or CBPR) collaborat* (committee adj2 (steering or working or advisory or action)) (group adj2 (steering or working or advisory or action)) stakeholder* (community adj2 (advisory or coalition or network* or involvement or academic partnership* or engagement or based or environment)) 19 or 20 or 21 or 22 or 23 or 24 or 25 or 26 or 27 or 28 or 29 or 30 or 31 or 32 or 33 or 34 or 35 or 36

Prevention

primary prevention/ or secondary prevention/ prevent* pc health promotion/ or healthy people programs/ exp Preventive Health Services/mt, og 38 or 39 or 40 or 41 or 42

Study Type

Longitudinal Studies/ randomized controlled trial/ exp Controlled Clinical Trial/ Random Allocation/ Double-Blind Method/ single-blind method/ intervention studies/ evaluation studies/ Comparative Study/ exp Cross-Over Studies/ (stud* adj2 (intervention or evaluation or comparative or cross-over)) (method adj2 (double-blind or single-blind)) quasi experimental pre post group randomized controlled trial cluster randomized controlled trial Program Evaluation/ Prospective Studies/ (community based adj2 intervention) non randomized control* trial longitudinal 44 or 45 or 46 or 47 or 48 or 49 or 50 or 51 or 52 or 53 or 54 or 55 or 56 or 57 or 58 or 59 or 60 or 61 or 62 or 63 or 64 18 and 37 and 43 and 65

Limits

limit 66 to (english language and male and female and humans and ("all infant (birth to 23 months)" or "preschool child (2 to 5 years)" or "child (6 to 12 years)") and last 25 years)

<u>2)</u> PubMed. The purpose of searching PubMed in addition to Ovid MEDLINE was to find articles that have not yet been indexed with MeSH (Medical Subject Heading) terms. Because these articles have not been indexed, they will not appear in Ovid. This search was limited to those articles that are not available in Ovid. Also because of this, the search cannot rely on indexed terms and instead uses more general search terms. This search was intentionally broader. "Text word" means that everything other than the body of the article was searched; "tiab" means that the title and abstract are searched only.

Obesity

obes* [tiab] OR anthropomet* [Text Word] OR adipos* [Text Word] OR bmi [Text Word] OR "body mass index" [Text Word] OR "body composition" [Text Word] OR "body constitution" [Text Word] OR "body fat" [Text Word] OR "body measure" [Text Word] OR "body weight" [Text Word] OR "over weight" [Text Word] OR overweight [Text Word] OR "skinfold thickness" [Text Word] OR "waist hip" [Text Word] OR "weight control" [Text Word] OR "weight gain" [Text Word] OR "weight loss" [Text Word] OR "weight lowering" [Text Word] OR "weight reduction" [Text Word] OR "weight weight] [Text Word] OR "weight reduction" [Text Word] OR "weight weight] [Text Word] OR "weight reduction" [Text Word] OR "weight weight] [Text Word] OR "weight reduction" [Text Word] OR "weight] [Text Word] OR "weight] [Text Word] OR "weight] [Text Word] OR "weight reduction" [Text Word] OR "weight] [Text Word] [Text Word] OR "weight] [Text Word] [Text Word]

Community-based

AND coalition*[Text Word] OR collabor* [tiab] OR communit* [tiab] OR council* [tiab] OR partner*[Text Word] OR "community engagement" [Text Word] OR CBPR [Text Word] OR committee* [tiab] OR "steering committee" [tiab] b]OR stakeholder* [tiab]

Limits AND child* [tiab]OR pediatric* [tiab]OR preschool* [Text Word] OR pre-school* [Text Word] OR toddler* [Text Word] OR infant* [tiab] NOT medline[sb]) AND english[Language] AND 1990:2015[dp]

3) Web of Science. Web of Science does not use indexed search terms, so this search is not as precise as Ovid MEDLINE. "Near2" means that the words are located near each other, similar to "adj2" in other databases. "Topic" indicates that the database should search the title, abstract, etc. for the keyword.

Obesity

TOPIC: obes* OR anthropomet* OR adipos* OR bmi OR "body mass index" OR "body composition" OR "body constitution" OR "body fat" OR "body measure" OR "body weight" OR "over weight" OR overweight OR "skinfold thickness" OR "waist hip" OR "waist-hip OR "weight control" OR "weight gain" OR "weight loss" OR weight lowering" OR "weight reduction"

Community-based

AND TOPIC: community NEAR/2 (advisory OR coalition OR network* OR involvement OR "academic partnership*" OR engagement)) OR CBPR OR "community based participatory research" OR "community based" OR "communitybased" OR (group NEAR/2 (steering OR working OR advisory OR action)) OR collaborat* OR stakeholder*

Prevention

AND TOPIC: prevent*

Limits

AND TOPIC: child* OR pediatric* OR "preschool*" OR "pre-school"* OR toddler* OR infant* NOT TOPIC: cross-sectional OR qualitative Timespan: 1990-2015 Search language = English Document type=article, clinical trial

Supplementary Appendix B. Online Survey Instrument Notes: CBPR Conceptual Model domains^{21–23} are indicated in **bold gray text** and were not part of the administered instrument. Brackets [] indicate where study-specific information was inserted, *e.g.*, the coalition's name.

1. History & Context. What was the reason for having the [coalition] involved in [study name]? Select all that apply:

- The [coalition] already existed in the community and was interested in partnering
- The [coalition] was mobilized to support the research project
- The research grant or funding source required the involvement of a committee
- To help design and plan the research project
- To help implement component(s) of the research project
- To help evaluate the research project
- Other (*please describe*):

2. History & Context. What was your role within the [coalition]? Select all that apply:

- \circ Chair or leader
- Meeting facilitator
- Member
- Observer
- Other (*please describe*):

3. Coalition Partnership Dynamics. Approximately how many people served on the [coalition]? Select one:

- \odot Less than 5 members
- \odot 5 10 members
- \bigcirc 11 15 members
- \circ 16 20 members
- More than 20 members

- 4. Coalition Partnership Dynamics. Which groups of people or sectors were represented on the [coalition]? *Select all that apply:*
 - Academia/researchers
 - Parents
 - Childcare providers
 - Teachers
 - School administration
 - School nurses
 - School foodservice
 - O Government-funded nutrition programs
 - Recreation department
 - Local public health department
 - Local government representatives
 - State government representatives
 - Medical providers
 - Mental health providers
 - Restaurants
 - Media
 - Community-based organizations
 - Other (*please describe*): ____
- 5. Coalition Partnership Dynamics. Which of the following characterize the composition of the [coalition]? *Select all that apply:*
 - \odot Member demographics represented the target population
 - O Members represented different sectors or settings involved in the research project
 - \odot Members had different leadership roles within their primary organization
 - Other (*please describe*):
 - \circ None of the above

6. Coalition Partnership Dynamics. Did [coalition] membership change throughout the research project?

- Yes
- \circ No
- I'm not sure
- 7. Coalition Partnership Dynamics. IF 'YES' TO #6: How did membership change throughout the research project?
 - Members were added
 - Members left
 - Other (*please describe*): _____

8. Coalition Partnership Dynamics. How frequently did [coalition] members meet as a whole group? Select one:

- At least twice per month (two times within the same month)
- \bigcirc About once per month
- Every other month
- A few times per year
- Meeting frequency varied
- I'm not sure
- 9. Coalition Partnership Dynamics. How would you characterize average attendance at [coalition] meetings? Select one:
 - \bigcirc Nearly all members attended each meeting \bigcirc About $\frac{3}{2}$ of members attended each meeting
 - \circ About $\frac{3}{4}$ of members attended each meeting
 - \circ About $\frac{1}{2}$ of members attended each meeting \circ About $\frac{1}{4}$ of members attended each meeting
 - \bigcirc About $/_4$ of memoers attended each meeting
 - \circ Very few members attended each meeting
 - \circ I'm not sure
- 10. Coalition Partnership Dynamics. Did [coalition] members sign any formal agreements to solidify the research partnership (*e.g.*, sub-contracts or memorandums of understanding)?
 - \circ Yes
 - O No
 - I'm not sure

- 11. Coalition Partnership Dynamics. Were [coalition] members or their organizations given any incentives for their involvement in [study name] (*e.g.*, stipends or gift cards)?
 - Yes
 - \circ No
 - I'm not sure
- 12. Coalition Partnership Dynamics. On a scale of 1 10, please rate the [coalition's] level of *engagement* with efforts related to childhood obesity prevention at the beginning and end of the intervention:

Beginning engagement	End engagement
[Scale – 10]	[Scale – 10]

13. Coalition Partnership Dynamics. On a scale of 1 - 10, please rate the [coalition's] *knowledge* of efforts related to childhood obesity prevention at the beginning and end of the intervention:

Beginning knowledge	End knowledge
[Scale 1 – 10]	[Scale – 10]

- 14. Coalition Partnership Dynamics. Were any sub-committees formed from the larger group?
 - Yes
 - \circ No
 - \circ I'm not sure
- 15. Coalition Partnership Dynamics. *IF 'YES' TO #14*: What was the purpose of the sub-committee(s)? *Please describe below:* ______

Intervention & Research Processes. Aside from attending [coalition] meetings, we are interested in learning about other ways that [coalition] members were involved with the research project. Were the following activities a *major function*, *minor function, intended as a function but not carried out*, or *not intended as a function* for [coalition] members?

	Major function	Minor function	Intended as a function but not carried out	Not intended as a function	l'm not sure
16. Networked with community stakeholders					
17. Conducted strategic planning					
18. Made decisions about priority needs and problems					
19. Made decisions to allocate project resources					
20. Implemented research programs or activities					
21. Advocated for local public policy objectives					
22. Provided funding for components of the intervention					
23. Raised funds to sustain intervention component(s)					
24. Monitored data collection					
25. Reported and disseminated research findings					
26. Other (please describe):					

27. Impact & Sustainability Outcomes. What do you think were the [coalition's] main achievements? Select all that apply:

- They leveraged future funding to sustain the intervention
- $\, \odot \,$ They increased the capacity of the local organizations involved
- $\odot~$ They increased the capacity for their town/city
- They influenced social change related to childhood obesity in their town/city
- \odot They became a sustainable group that continued their efforts
- Other (*please describe*): _

- 28. Impact & Sustainability Outcomes. Overall, how important was the [coalition] to [study name]'s success?
 - Extremely important
 - Important
 - Neutral
 - Not important
 - Completely irrelevant

Supplementary Appendix C. Follow-up Phone Interview Guide

Notes: CBPR Conceptual Model domains²¹⁻²³ are indicated in **bold gray text** and were not part of the administered instrument. Brackets [] indicate where study-specific information (*e.g.*, the coalition's name) and survey data were inserted.

- 1. History & Context. From the survey, you responded that the reason(s) for having the [coalition] involved in [study name] was/were [reason(s)]. We wanted to hear a little bit more about this. Can you tell us about the history of the [coalition]?
 - a. How was it formed?
 - b. Who convened the group?
 - c. [Add interviewer notes from survey response to Q1]
- 2. Coalition Partnership Dynamics. From the survey, you said that your role within the [coalition] was/were [role(s)]. Can you tell us more about how the [coalition] was led and facilitated?
 - a. Who played a leadership role at meetings?
 - b. [Add interviewer notes from survey response to Q2]
- 3. Coalition Partnership Dynamics; Intervention & Research Processes. It seems like there was representation from [groups/sectors]. Can you describe the partnerships and interactions among [coalition] members?
 - a. What were the group dynamics like?
 - b. What were the facilitators to good partnerships? What were the barriers?
 - c. Was the [coalition] work supported by other community efforts?
 - d. Can you describe an experience or story about the [coalition] that highlights how it worked?
 - e. [Add interviewer notes from survey responses to Q3–13]
- 4. Impact & Sustainability Outcomes. From the survey, you said that [main achievement(s)] was/were the [coalition's] main achievement(s). Can you tell me more about that and how the [coalition] impacted this achievement?
 - a. How do you think the [coalition's] role in the research project impacted the [success/null findings] of the intervention?
 - b. [Add interviewer notes from survey response to Q14-16]