

Nutrition Assistance Program Report Series
Office of Research and Analysis

Supplemental Nutrition Assistance Program

***SNAP Education and Evaluation
Case Study Report:***

***Chickasaw Nation Nutrition Services'
Eagle Adventure Program***

Volume II: Appendices



United States
Department of
Agriculture

Food and
Nutrition
Service

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Assistance Program
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SNAP Education and Evaluation Case Study Report:

Chickasaw Nation Nutrition Services' Eagle Adventure Program

Volume II: Appendices

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**A.1: Program Information Abstraction Form for Demonstration
Project Application to FNS and 2010 SNAP-Ed Plans**

Program Information Abstraction Form for

CNNS Eagle Adventure Demonstration project Application to FNS and 2010 SNAP-Ed Plans

<p>IA:</p> <p>State:</p> <p>Program name:</p> <p>Data abstractor:</p> <p>Date of abstraction:</p> <p>Resources used:</p>	
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TOPIC AREA 1: Formative Research and Intervention Design

1-1. Target audience(s)

1-2. Reach or intended size of intervention

1-3. Description of nutrition education intervention.

A. Describe the key education methods that are being used in the nutrition education intervention, including how this may vary for different target audiences (e.g. children versus their caregivers).

B. Describe each nutrition education lesson in detail using the following format. [Please copy and paste as many copies of this table as you need to capture all nutrition education messages and number them accordingly].

Lesson #1

Short title:	
Detailed description of education message(s):	
Specific objectives:	▪
Intended impact/change	
Materials supporting lesson	▪

Lesson #2

Short title:	
Detailed description of education message:	▪
Specific objectives:	▪
Intended impact/change	
Materials	▪

supporting lesson	
-------------------	--

Lesson #3

Short title:	
Detailed description of education message:	▪
Specific objectives:	▪
Intended impact/change	
Materials supporting lesson	▪

Lesson #4

Short title:	
Detailed description of education message:	▪
Specific objectives:	▪
Intended impact/change	
Materials supporting lesson	▪

C. List and describe other key components of the nutrition education intervention that supports or reinforces its objectives (e.g. the family activity nights in NV).

1-4. Anticipated dose and intensity of each nutrition education intervention method

___ A. Direct education

Dose (# of contacts with each participant)	
Intensity (# of contacts X length of contact)	

___ B. Indirect education

Dose (# of contacts with each participant)	
Intensity (# of contacts X length of contact)	

___ C. Social marketing

Dose (# of contacts with each participant)	
Intensity (# of contacts X length of contact)	

___ D. Other

Dose (# of contacts with each participant)	
Intensity (# of contacts X length of contact)	

1-5. Nutrition education materials (Title, source, how to locate source)

___ A. Materials developed by FNS

If modified FNS materials, how and why?

___ B. Materials developed by other State SNAP-Ed programs

If modified these existing materials, how and why?

___ C. Materials developed by other public nutrition educations programs

If modified these existing materials, how and why?

___ D. Materials developed by private agencies

If modified these existing materials, how and why?

___ E. Materials developed by project

Justification for development?

___ F. Other

1-6. Theoretical underpinnings for nutrition education

1-7. Evidence that suggest the intervention will be successful (i.e., pilot project results, previously tested instruments, etc.)

1-8. Key players in the design of the intervention

- a. Who were the key players from the implementing agency?
- b. Were there any partnerships with other public or private organizations that were key to the design and implementation plan of the intervention?
- c. If so, how were these partnerships formed?
- d. Other key players?

TOPIC AREA 2: Operational Steps Involved in Intervention Implementation

2-1. Management and oversight structure

- a. Who are the program administrators and coordinators?
- b. Who is responsible for quality control and monitoring the nutrition education delivery?

2-2. Qualifications of nutrition educator trainer(s)

- a. Level of education
- b. On-the-job training
- c. Years of experience

2-3. Qualifications of nutrition education provider(s)

- a. Level of education
- b. Specialized training
- c. Years of experience delivering nutrition education

2-4. Plans for training of nutrition education providers (*Describe frequency and duration of training, training agenda and method, etc.*)

2-5. Recruitment of intervention sites/participants

- a. How were *individual* intervention sites selected to participate in the intervention (specifically for this FNS evaluation component)?
- b. How will individual classrooms be selected to participate in the intervention?
- c. How will the adult participants be recruited to participate in the intervention?

2-6. Efforts planned to retain participants in order to receive the desired maximum dose of the intervention

A.2: Discussion Guide for Program Managers [Pre-Implementation]

Discussion Guide for Implementing Agency Program Administrator

[PRE-IMPLEMENTATION]

State:

Respondent / Title /

Organization:

Address:

Phone:

Fax:

Email:

Interviewer:

Date of Interview:

Time of Interview:

OMB No. 0584-0554

Expiration date: 1/31/2013

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Thank you for taking the time for this interview. As you know, the U.S. Department of Agriculture's Food and Nutrition Service has contracted with Altarum Institute and RTI International to conduct a study of the Eagle Adventure nutrition education program and three other SNAP-Ed programs across the country. Altarum is a health and nutrition policy research and consulting institute and our work focuses on helping improve the health and nutrition status of children, families, and adults. We are the primary contractor on this effort and are responsible for managing the study overall as well as collecting and describing information related to the process evaluation. Again, RTI's primary responsibility is to collect and analyze the information related to the impact of the nutrition education program on behavior change. Together we will also evaluate the evaluation you have designed and plan to conduct with regards to the Eagle Adventure program.

Again, the purpose of the study is to evaluate several SNAP (Supplemental Nutrition Education Program)-Education models around the country and to provide recommendations for how these interventions could be improved to better serve the children and families in your community. We also will be evaluating how the intervention might be replicated in other communities.

Although there are only a select number of programs participating in this evaluation, we will do our best to aggregate data wherever possible in order to avoid information being tied back to a particular respondent. Nothing said today will be attached to you, and nothing that you say will affect your job or be shared with your employers.

In preparation for our discussions today, and to familiarize ourselves with your program, we have reviewed the following materials:

- Application to FNS
- Notes from telephone discussions between you and FNS and/or RTI/Altarum
- Email exchanges related to your program
- Curriculum documentation that you shared with us
- Etc.

We have gathered most of the detail we need to accurately describe your program (as planned), including information on the objectives, modes of delivery, nutrition messages, dose and reach, target audience, and so on. In the coming weeks we will write a summary of your program that will be used in reports submitted to FNS. Prior to including that summary in any reports, we will ask you to review the information to ensure that we have portrayed it accurately.

Since we have already collected this background information through data abstraction, there may be a few small gaps in our understanding of your program that we wish to clarify today, but for the most part our discussion will primarily be focused on the planning process you used to get to the point you are today (several weeks prior to implementing) and your expectations for the intervention. This part of the discussion will probably take about 20-30 minutes. Afterwards, we'd like to discuss a few "housekeeping" things, i.e. our next site visit, planning focus group discussions, collecting and sharing quantitative data on dose and reach, our plans to collect information on other nutrition education taking place in both the intervention and control schools. We hope to conclude this interview and discussion in a total of about 60 minutes.

Before I begin, do you have any questions?

Planning and design phase

I'd like to start by clarifying that the topic of this discussion is primarily about the nutrition education program or "intervention." We will be meeting with Stephany later this morning to talk in more detail about the process involved in the design and implementation of the evaluation of Eagle Adventure.

Why don't we start by having you describe the process used to develop your curriculum, including the specific roles and responsibilities each of you have had in this planning phase?

For my own understanding, could you briefly describe how the Eagle Adventure program fits in with the Get Fresh! program and explain how, why and when the partnership between CNNS and OKU began?

Who were the key players in the planning and design phase and what were their respective roles and responsibilities?

1. What challenges, if any, have you faced during the design and planning phases of this nutrition education program?
 - a) What factors do you feel have contributed most to a successful design and planning phase (prompts: using education materials that were already developed, good communication between contributors, knowledgeable staff, establishment of strong partnerships, etc.)?
 - b) What lessons have you learned during this key phase of program development? What would you do differently? What would you do the same?
2. Could you briefly describe the process for developing the Eagle Play- key partners, level of efforts establishment of relationship, successes/challenges working with these partners, etc.?

Okay, now I would like to shift our focus to the upcoming implementation of your SNAP-Ed project.

3. Now that you are ready to transition from the planning and design phase of your project to the implementation phase, what challenges, if any, are you anticipating?
4. Do you feel that the environment in which the intervention will take place will be able to support the intended change in behavior, knowledge, and/or attitudes?
 - a) For example, do you have any sense of the teacher's buy-in and/or enthusiasm about the intervention and what impact this might have on the children?
 - b) Does the school/child care center offer the children healthy foods options and are healthy foods otherwise available? *Do you plan to collect menus from the schools? If not, would you be willing to do this?*
 - c) What, if any, other nutrition education messages and programs are the children in the intervention sites being exposed to (that you are aware of)?
5. Did the program have any difficulty recruiting adequate staff for the nutrition education delivery?
[IF YES]
 - a) What were the recruitment challenges/problems?
6. Please describe any quality control and monitoring efforts that will take place during implementation? *Who will be responsible for quality control and monitoring activities?*

That ends my formal interview questions. Do you have any comments or recommendations that you would like to add before we move on to some "housekeeping" items.

A.3: Discussion Guide for Program Managers [Post-Implementation]

Discussion Guide for Implementing Agency Program Administrator

[POST-IMPLEMENTATION]

State:

Respondent / Title /

Organization:

Address:

Phone:

Fax:

Email:

Interviewer:

Date of Interview:

Time of Interview:

OMB No. 0584-0554

Expiration date: 01-31-2013

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Thank you for taking the time for this interview. Our discussion today will focus on how the implementation of the program differed from your expectations. We also will discuss lessons learned and ask for your feedback on how the program might be improved. The last time we met I provided some background on the purpose of our evaluation of the Eagle Adventure program. Would anyone like me to review the specific goals of the evaluation? I expect that this discussion will take about 45 minutes. I appreciate you taking the time to speak with me today.

Before I begin, do you have any questions?

Formative research and program design

I'd like to briefly discuss how, if at all, the implementation of your nutrition education intervention differed from what was originally planned. There are several aspects of implementation that I would like to cover.

1. **Nutrition education messages.** Were any of the key nutrition education messages or objectives of the Eagle Adventure program modified at any point during implementation?

[IF YES]

- a) How and why were they modified?

2. **Target audience.** Did the target audience differ from what was originally planned?

[IF YES]

- a) How and why did they differ

3. **Method of delivery.** Were the methods of delivery (i.e., direct education, indirect education) modified during implementation for any reason?

[IF YES]

- a) How and why were they changed?

4. **Dose.** Did the dose of nutrition education vary from what was originally planned (i.e., the number of lessons, the length of each lesson, etc.)?

[IF YES]

- a) How and why did this vary from what was planned?

5. **Reach.** Were you able to implement the intervention at the originally proposed number of sites and do you feel that you reached the intended number of participants? Were there any factors that affected your ability to achieve the full, intended reach?

6. **Nutrition education activities.** Were the nutrition education activities modified at any point during implementation?

[IF YES]

- a) How were the materials modified and why?

7. **Timeline.** To what extent were the original (based on the schedule you provided to us at our last visit) implementation timelines met?

- a) What are the reasons for and implications of any departures from the original timelines?

Operational steps involved in program implementation

8. Did you find the level of staff, both in terms of qualifications and total number of staff (and types of staff), adequate for optimally delivering your nutrition education intervention?
9. What changes, if any, were made to planned key staff involvement and what were the reasons for any such changes?
10. Were any quality control and monitoring processes employed to maximize the fidelity/quality of the intervention delivery?
11. Thinking in terms of replicability of the Eagle Adventure program, was specific qualifications, qualities, and/or behaviors are most important to effectively deliver the lessons?
12. Do you think the nutrition educator training was sufficient?
 - a) What worked well?
 - b) What could have been improved?
13. In your opinion, how well was the program able to track participation?
14. Did the schools in which you implemented the program remain engaged throughout the intervention?
15. Do you feel these partnerships were successful?
 - [IF YES]
 - a) What would you say contributed to their success?
 - [IF NO]
 - b) Why not?

Resources devoted to intervention

16. Were the actual time commitments for key staff different than planned?
 - [IF YES]
 - a) Why did they differ?

17. How closely did the actual program cost components reflect the budgeted costs?
 - a) If there was a difference between budgeted and actual, what factors might have contributed to this?
18. Were the necessary type and quantity of materials, technology, etc. available to carry out the implementation as planned? If not, what else was needed?

Lessons learned for improvement and replicability

Next I'd like to talk about lessons learned during implementation of the study.

19. Overall, what factors were key to the success of this nutrition education program?
20. What factors hindered or limited the success of this nutrition education program?
21. Looking back over the past 2 months, what lessons have you learned? What would be most valuable for another State or implementing agency to know if they were considering using this model?
22. In your opinion, are there any aspects of this SNAP-Ed program that would make it difficult to implement on a larger scale?
23. How did the FNS requirements for this demonstration project influence the design of your intervention project in ways that you had not anticipated when you applied to become a demonstration project?

That ends my formal interview questions. Do you have any comments or recommendations that you would like to add?

Thank you very much for your time and input on this very important project.

A.4: Discussion Guide for Trainers [Post-Implementation]

Discussion Guide for Trainers of On-Site Nutrition Educators

[POST-IMPLEMENTATION]

State:	_____	Interviewer:	_____
Respondent:	_____	Date of Interview:	_____
Title:	_____	Study ID No:	_____
Organization:	_____		
Address:	_____		

Phone:	_____		
Fax:	_____		
Email:	_____		

OMB No. 0584-0554

Expiration date: 01/31/2013

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The purpose of the study is to evaluate several SNAP-Education models around the country and to provide recommendations for how these interventions could be improved to better serve the children and families in your community. We also will be evaluating how the intervention might be **replicated** in other communities. I think that our focus on replicability is really important to keep in mind when thinking about the questions we ask during this discussion, as there are some aspects of your programs' structure that are unique.

Again, everything you say will be kept private. Your name will not appear anywhere in the report. Nothing said today will be attached to your name at any point. Today I have just a few questions about training provided to the nutrition educator(s) and your assessment of the intervention—whether it was effective, and what changes might be made. I expect that our discussion will take no more than 30 minutes. I appreciate you taking the time to speak with me today.

Before I begin, do you have any questions?

Training Background:

First I would like to follow up with you on the training that you provided.

1. First I would like to follow up with you on the training of the direct educators.
 - a) Was the format of the training successful? Why/why not? What would you change?
 - b) What other aspects of the training do you think worked well? What didn't work well? What would you change?
2. Was any ongoing training or assistance provided to the educators as they implemented the program?
 - a) Do you feel that it was helpful? Why or why not?
 - b) What would you change about the way you provided ongoing training or technical assistance to the intervention educators?
3. Was any performance monitoring of the educators conducted as they implemented the program.
 - a) Who performed that monitoring?
 - b) What methods were used (e.g., review of logs, site visits, etc.)?
 - c) What feedback was provided to the instructors, and when?
 - d) Do you think this feedback was helpful to the instructors?
 - e) In the future, would you somehow incorporate what you learned from this monitoring into the initial training?
 - f) What could make the performance monitoring of the educators more effective or useful?

Formative research and Intervention Design:

Next I would like to ask about the success of certain aspects of the intervention.

4. Do you think that the direct classroom education for the children was effective for this target audience?
 - a) If not, why?
 - b) What format might have been more effective?
5. Do you think that the nutrition education materials designed for use in the classroom with children were effective?
 - a) Why or why not?
 - b) What might be more effective?

6. Do you think the take home nutrition education materials targeted for the parents were effective?
 - a) Why or why not?
 - b) What might make them more effective?

7. Were the channels of communication effective?
 - a) Why or why not?
 - b) What might be more effective?

Lessons Learned for Improvement and Replicability:

Next I'd like to discuss some lessons learned with you.

8. When we interviewed you prior to the project's start-up, you discussed some challenges you could foresee for effectively implementing it as planned. You mentioned things like time constraints (e.g. limited time to implement the program and work within the school schedules) as well as one of your educators' upcoming surgery as challenges or potential challenges. Did these any of these challenges materialize and if so how did they change the implementation from what was planned?

9. Are there other ways the project implementation varied from what you had planned? [PROBE FOR EACH DEVIATION, ASK THE FOLLOWING:
 - a) What was the reason or cause for this change?
 - b) How was this change positive for the program and its potential impact on the target audience?
 - c) How was this change negative for the program and its potential impact on the target audience?

10. What particular aspects of the program do you think worked well?

11. What particular aspects of the program do you think did not work well?

12. Do you have any recommendations or suggestions for ways that the program could be revised and improved?

13. Do you have any other suggestions for how (schools or child care centers) in the target communities can encourage preschool children to eat more fruits and vegetables at home and encourage their parents to serve more fruits and vegetables?

That ends my formal interview questions. Do you have any comments or recommendations that you would like to add? Thank you very much for your time and input on this very important project.

A.5: Discussion Guide for Direct Educators [Pre-Implementation]

Discussion Guide for On-Site Nutrition Educators

[PRE-IMPLEMENTATION]

State: _____ Interviewer: _____
Respondent: _____ Date of Interview: _____
Title: _____ Study ID No: _____
Organization: _____
Address: _____

Phone: _____
Fax: _____
Email: _____

OMB No. 0584-0554

Expiration date: 01/31/2013

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Thank you for taking the time for this interview. The U.S. Department of Agriculture's Food and Nutrition Service has contracted with Altarum Institute to conduct a study of the [NAME OF INTERVENTION] that is offering information to children and their families about healthy foods to eat and the importance of being active. Altarum is a health and nutrition policy research and consulting institute and our work focuses on helping to improve the health and nutrition status of children, families, and adults. The purpose of the study is to evaluate several SNAP-Education models around the country and to provide recommendations for how these interventions could be improved to better serve the children and families in your community. We also will be evaluating how the intervention might be replicated in other communities.

We will be using first names only today. Everything you say will be kept private. After we conduct several of these interviews, we will write a report for the U.S. Department of Agriculture's Food and

Nutrition Service. Your name will not appear anywhere in the report. Nothing said today will be attached to your name at any point. Nothing that you say will affect your job or be shared with your employers.

Today we will specifically be discussing your background and other qualifications as an educator for this education program, the planning process that has already begun with the intervention sites, and your expectations for the reach and design of the program. Once you have completed teaching one complete session of [NAME OF INTERVENTION], we will follow up with you for one more interview to find out how things may have changed from what you planned to do and to obtain your experiences and views on what worked well or not and why, and what you might change to improve the program.

I expect that our discussion today will take about 30 minutes. Before I begin, do you have any questions?

Educator's Job Title, Qualifications and Capabilities

First I would like to ask you a few questions about your position and your background for this type of work.

1. What is your job title in this role as educator for the Eagle Adventure nutrition education program?
2. Do you also provide nutrition education or community education for any other programs?

[IF YES]

- a) Please tell me a little bit about your other related work?

[ASK THIS ONE QUESTION BELOW ONLY FOR EDUCATORS IN NY INTERVENTION]

3. On how many occasions or for what amount of time have you practiced delivering the Eagle Adventure curriculum either through the pilot phase or through training exercises?
4. Prior to this role as an educator for Eagle Adventure have you had any other job or volunteer experience in nutrition or health education for children and families?

[IF YES]

- a) Please describe these job or volunteer experiences?
- b) How many total years of experience in nutrition or health education for children and families did you have before you came to be an educator in the Eagle Adventure program?

5. What is the highest level of education you have completed to date?
 - a) [For those who have college or graduate school degrees] What subject was your major or degree in?

6. Outside of any formal education, have you had any specialized training or certification either in nutrition education or health education?

[IF YES]

- a) Could you please describe this training for me?

7. What else from your life experience do you think makes you capable of being an effective educator for this the Eagle Adventure program?

8. What are some of the challenges that you or others like you might face in being an effective educator for this intervention?

Recruitment and Implementation Plans

Next I would like to discuss what is being planned to recruit sites and participants for the intervention and how many sites, classes and students you plan to be working with.

9. Can you describe the process you used to recruit schools and what your role was in terms of recruitment?

- a) Was anyone else involved with recruitment?
b) Do you think this is an effective way to select the sites? Why or why not?

10. At how many of the 5 schools will you be teaching the Eagle Adventure classes?

11. How many classrooms or groups of children will you be working with at each of these sites?

- a) How many children do you expect will be involved in each class?

[ASK NEXT 3 QUESTIONS ONLY FOR NY and NV INTERVENTIONS ONLY]

12. *How involved have you been/will you be in the development and delivery of the Eagle Play?*

13. You and [Jill Fox or Andina Wiley] are the two nutrition educators for the Eagle Adventure program at this time.

[IF YES]

- a) What will her role be?
b) Do you have any sense of her buy-in and/or enthusiasm about the intervention and what impact this might have on the children?

14. What physical resources will you need at the sites to implement the intervention? (e.g. space, a/v equipment, computers)?

Scheduling

Thank you for sharing the detailed schedule form you have developed for each school. Is the schedule you provided still accurate?

15. Is the schedule you provided several weeks ago still accurate? If not, what has changed? And why? Can you share an updated version of the schedule with us?

Perceived Facilitators and Challenges to Intervention Success

16. Based on what you know about the curriculum, materials and other aspects of the Eagle Adventure program, what aspects of the do you think will be most effective with the target audiences you are trying to reach?
17. Before we close, I would like to ask you whether you foresee any challenges in implementing the intervention as designed or planned?
[IF YES]
 - a) What are those potential challenges and how might they be overcome?

That ends my formal interview questions. Do you have any comments or recommendations that you would like to add?

Thank you very much for your time and input on this important project. My colleagues and I at Altarum will get be getting back in touch with you to schedule a follow-up interview after you finish teaching Eagle Adventure. I am looking forward to talking with you then.

A.6: Discussion Guide for Direct Educators [Post-Implementation]

Discussion Guide for On-Site Nutrition Educators

[POST-IMPLEMENTATION]

State: _____ Interviewer: _____
Respondent: _____ Date of Interview: _____
Title: _____ Study ID No: _____
Organization: _____
Address: _____

Phone: _____
Fax: _____
Email: _____

OMB No. 0584-0554

Expiration date: 1/31/2013

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Thank you for taking the time for this interview. As I told you during our first meeting, the U.S. Department of Agriculture's Food and Nutrition Service has contracted with our Altarum Institute to conduct a study of the Eagle Adventure that is offering information to children and their families about healthy foods to eat and the importance of being active. Altarum is a health and nutrition policy research and consulting institute and our work focuses on helping to improve the health and nutrition status of children, families, and adults.

The purpose of the study is to describe how several SNAP-Education program models are being carried out across the country and evaluate their impact on nutrition behaviors. The study will also highlight recommendations for how to replicate and improve these SNAP-Education models—based on what we observe and learn from the program planners, from the people who are implementing these interventions—like yourselves—and from the intervention participants.

We will be using first names only today. Everything you say will be kept private. After we conduct several of these interviews, we will write a report for the U.S. Department of Agriculture's Food and Nutrition Service. Your name will not appear anywhere in the report. Nothing said today will be attached to your name at any point. Nothing that you say will affect your job or be shared with your employers.

Today we will talk first about the training and assistance you were provided, then about differences between what your planned implementation versus what actually happened. After we cover that information, I want to spend most of our today hearing what you think worked well and your suggestions for any revisions or improvements to [NAME OF INTERVENTION].

I expect that our discussion will take about 30 minutes today. Before I begin, do you have any questions?

Experience and Satisfaction with Training

Let's start with your views on the training you received from (NAME OF ADMINISTERING AGENCY) before you began implementing the Eagle Adventure.

1. We understand that the training model used for staff providing the Eagle Adventure nutrition education program in the classroom setting was multi-faceted. It was a facilitated process that included peer to peer training activities as well as independent study. Could you please describe, in your own words, all aspects of the training you received on the Eagle Adventure curriculum prior to implementing the program?
2. Did you receive any ongoing training or assistance—in a structured or unstructured format—after your initial training for Eagle Adventure?

[IF YES]

- a. What was the format?
- b. What was the content?
- c. How much of this assistance did you receive?
- d. What was helpful about this follow-up training or assistance?
- e. What other follow-up training or assistance could have helped your or other educators like you teach the nutrition education curriculum to this target population more effectively?

[IF NO]

- f. What kind of follow-up training or technical assistance do you think could have helped you more effectively teach the [curriculum]?
3. What aspects of the training did you find most useful?
4. What additional information, tools, skills, or other training do you think should be provided in the initial training to help you or other educators like yourself be more effective in delivering Eagle Adventure, if any?
5. Are there any other changes you would suggest to improve the content or format or other aspects of the educator training for Eagle Adventure?

Reach, Dosage and Intensity of Intervention- Actual Compared to Planned

6. How did the number of sites, groups, classes and activities you implemented with the children differ, if at all, from what you had planned?
7. How did the amount of time you spent in direct education with the children differ, if at all, from what you had planned?

Differences between Actual and Planned Implementation

8. In addition to any changes in the number, size and length of your educational activities you mentioned earlier, were there other differences in how you implemented the Eagle Adventure compared to what you and the program planners had intended?

[IF YES]

- a) In what ways was it implemented differently from what was planned?
- b) Why did these changes from the original plan occur?
- c) In what ways were the changes positive?
- d) In what ways were the changes negative?

Lessons Learned for Improvement and Replicability

9. What do you think worked well about the direct education, in-classroom education format of for children and why do you think it worked well?
10. What could be improved about the direct education, in-classroom education format of Eagle Adventure for children and why would you suggest this change?

11. What do you think worked well about the nutrition education materials and lesson activities designed for the children and why do you think it worked well?
12. What could be improved about the nutrition education materials and lesson activities designed for the children and why would you suggest this change?
13. [IF NOT ALREADY MENTIONED] Do you think that the nutrition educational materials and lessons and other aspects of the Eagle Adventure are tailored to be culturally-appropriate to the racial and ethnic groups that are in the target audience?
[IF YES]
 - a) What features of the materials and lessons make them culturally-appropriate?[IF NO]
 - b) What do you think specifically could be changed or tailored in the materials and/or lessons or class form to make them more culturally appropriate for the racial and ethnic groups that are in the target audience for Eagle Adventure?
14. In addition to what we have already talked about already, are there any other specific aspects of the Eagle Adventure that you think worked well?
15. Are there other particular aspects of the program do you think did not work well?
16. Do you have any other suggestions for ways that Eagle Adventure could be improved to be more effective in improving the nutrition behaviors of its target audiences?

That ends my formal interview questions. Do you have any comments or recommendations that you would like to add?

Thank you very much for your time and input on this important project.

A.7: Discussion Guide for Principals [Pre-Implementation]

Discussion Guide for School Principals or Childcare Center Directors

[PRE-IMPLEMENTATION]

State:

Respondent / Title /

Organization:

Address:

Phone:

Fax:

Email:

Interviewer:

Date of Interview:

Time of Interview:

OMB No. 0584-0554

Expiration date: 1/31/2013

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Thank you for taking the time to participate in this interview. The U.S. Department of Agriculture's Food and Nutrition Service has contracted with Altarum Institute to conduct a study of the Eagle Adventure program that is offering information to children and their families about healthy foods to eat and the importance of being active. Altarum is a health and nutrition policy research and consulting institute and our work focuses on helping to improve the health and nutrition status of children, families, and adults.

This study will provide information on how the Eagle Adventure program works from the perspective of the people who planned the program, the program teachers, you and your staff and some of the parents whose children participated. We also will use what you tell us today to provide recommendations for how Eagle Adventure program can be improved to better work with organizations like yours and the children and families you serve.

Any answers you provide for this study will be kept private and your name will not be identified with any answers you provide. The estimated amount of time required to complete this interview is 30 minutes. I want to thank you for taking the time today to speak with me.

Before I begin, do you have any questions?

Initial Engagement and Response to the Program

1. How did you find out about the Eagle Adventure program?
2. Why did your child care center/school decide to participate in the Eagle Adventure program at this time?
3. What do you see as the most important messages and goals of the Eagle Adventure program for the children and families it is trying to reach?
4. How would you say that the messages and goals of Eagle Adventure program will fit into other aspects of the curriculum you have for the children in the targeted classrooms?
5. Do you currently have any other nutrition education programs in your school? If so, what programs are they and what are the messages? What grades and classrooms in those grades are the programs being taught?

This issue is really important to us. Our plan is collect this information from each of the schools participating in the Eagle Adventure program and then to ensure we have collected the information consistently, we will compile all the nutrition education programs being conducted at any of the schools and send you a quick form to complete. It will list all of the programs and ask you to indicate if this program is in your school, etc. What would be the best means of sending you that form and getting your response? Mail/email?

6. What are your initial impressions of the educator who will be teaching the Eagle Adventure program to the children (and their parents) at your center/school?

Implementation Plans

7. How many classrooms and children are planned to be involved in Eagle Adventure program at your center/school over the next couple of months?
8. How will the Eagle Adventure program take home materials be distributed to the parents of the children in these classrooms?

9. What mechanisms are in place to find out if the parents saw or used the materials?

Implementation Challenges and Solutions

10. What do you see as the logistical challenges that your teachers or you as the principal may face in fitting Eagle Adventure program into the daily schedule and activities that are already going on at the center/school for the children?

11. In addition to the in-classroom logistical issues we discussed early, do you anticipate any other challenges or issues that in implementing the Eagle Adventure program as planned?

12. If any unanticipated challenges arise during the next couple of months while the intervention is going on, how do you think they can be addressed?

That ends my formal interview questions. Do you have any comments or recommendations that you would like to add?

Thank you very much for your time and input on this very important project. As I mentioned earlier, we will follow up with you after the intervention has been implemented to hear your experience and recommendations.

A.8: Discussion Guide for Principals [Post-Implementation]

Discussion Guide for School Principals

[POST-IMPLEMENTATION]

State:

Respondent / Title /

Organization:

Address:

Phone:

Fax:

Email:

Interviewer:

Date of Interview:

Time of Interview:

OMB No. 0584-0554

Expiration date: 01/31/2103

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Thank you for taking the time for this interview. As I explained during our first meeting, the U.S. Department of Agriculture's Food and Nutrition Service has contracted with Altarum to conduct a study of the Eagle Adventure nutrition education program that is offering information to children and their families about healthy foods to eat and importance of being active.

This study will provide information on how the Eagle Adventure nutrition education program works from the perspective of the people who planned the program, the program teachers, you and your staff and some of the parents whose children participated. We also will use what you tell us today to provide recommendations for how the Eagle Adventure nutrition education program can be improved to better work within schools like yours and with the children and families you serve.

Again, everything you say will be kept private. After we conduct several of these interviews, we will write a report for the U.S. Department of Agriculture's Food and Nutrition Service. Your name will not appear anywhere in the report. Nothing said today will be attached to your name at any point.

Today I have just a few questions about how the Eagle Adventure nutrition education program was carried out at your school, and your views on whether it was effective and how it could be improved.

The estimated amount of time required to complete this interview is 30 minutes. I want to thank you for taking the time today to speak with me.

Before I begin, do you have any questions?

1. Tell me about your involvement in overseeing the implementation of Eagle Adventure?

REQUIRED PROBES:

- a) Have you observed any of the in-classroom activities for the children?
 - b) *[For Chickasaw Nation only]* Were you able to observe the Eagle Adventure play that was presented to the participating children in your school?
 - c) Have you been able to read any of the Eagle Adventure materials that were sent home with children to their parents?
2. Now that the intervention is over, tell me your views about the educator who led the classes?
 3. What would you say are the most useful aspects of the Eagle Adventure program overall for the age groups of children it is targeting?
 4. How do you think the various strategies that were used by Chickasaw Nation Nutrition Services through the Eagle Adventure program to encourage parent involvement (e.g. take home materials, activities targeted to parents and caregivers? If you are not familiar with the strategies used, please feel free to skip this question.
 - a) What worked well? Why?
 - b) What could be changed or improved to increase parent or other caregiver engagement in the program's nutrition education components?
 5. What challenges or issues did you face in implementing this program at your school?
 - a) How did you address these?
 - b) Did you need to communicate with the Eagle Adventure program staff to address any of these issues? If so what did you need to communicate to them about and how were those issues addressed?
 6. What could be done to make the Eagle Adventure program more appealing to schools like yours?

7. Do you have any other suggestions for ways that this educational program could be improved?
8. The Eagle Adventure aside, do you have any suggestions for other ways that schools like yours can encourage children to eat more fruits and vegetables at home and encourage their parents to serve more fruits and vegetables?
9. My final and very straightforward question for you today is: would you want the Eagle Adventure to come to your school next year?
 - [IF YES]
 - a) Why would you want this program back at your school again?
 - [IF NO]
 - c) Why not?

That ends my formal interview questions. Do you have any comments or recommendations that you would like to add?

A.9: Discussion Guide for Parents/Caregivers

GROUP Discussion Guide for Parents/Caregivers

[POST-IMPLEMENTATION ONLY]

State:

Date of Discussion:

Location:

Facilitator:

Note-taker:

Number of participants:

Start time:

End time:

OMB No. 0584-0554

Expiration date: 1/31/2013

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Welcome! My name is Val Long I am here with my co-worker Stacy Gleason. Thank you for taking the time for this group discussion. The U.S. Department of Agriculture's Food and Nutrition Service has contracted with Altarum Institute to conduct a study of the Eagle Adventure program that is offering information to children and their families about healthy foods to eat and the importance of being active. Altarum is a health and nutrition policy research consulting institute and our work focuses on helping improve the health and nutrition status of children, families, and adults.

This study will provide information on how the program in which your children participates works from the perspective of: the people who planned the program, the teachers, you and your child. The purpose of today's group is to hear from you—about you and your child's experiences and satisfaction with this program that recently took place at your child's school. We also will use what you tell us today to provide recommendations for how Eagle Adventure can be improved to better serve the children and families in your community and those in other communities like yours.

We will be using first names only today. Everything you say will be kept private. After we conduct several of these group discussions, we will write a report for the U.S. Department of Agriculture's Food and Nutrition Service. Your name will not appear anywhere in the report. Nothing said today will be attached to your name at any point. Nothing that you say will affect the services you receive through any of the programs we talk about today.

Before we begin, I would like to review a few details about our discussion:

- First, your participation in today's discussion is voluntary. You are free to leave at any time.
- There are no right or wrong answers. Remember that we don't work for the government, the school or with the educators, so please feel free to say whatever you think.
- Also, it is okay to have ideas or opinions that are different from each other. We want to hear everyone's point of view.

It would be helpful to have only one person talking at a time. We are tape recording this session so that we don't miss anything important. If two people talk at once it will be very difficult for us to capture all of your good comments, so we may remind you of this during the discussion.

- We would like everyone to participate. But, you each don't have to answer every question. You don't have to raise your hand either. If, however, some of you are shy or we really want to know what you think about a particular question, we may ask you what you think.
- We have a lot to talk about today. So, don't be surprised if at some point we interrupt the discussion and move to another topic. But, don't let us cut you off. If there is something important you want to say, let us know and you can add your thoughts before we change subjects.
- Finally, we just want to emphasize what we said earlier: we will be using first names only. Everything you say is private. What you say today will not be attached to your name at any point. Nothing that you say will affect the child care you receive at this site or any other services you receive from this or any other program.

The group will last no more than 2 hours. You will not get out any later than _____. We will not be taking a formal break, but if you need to leave for a restroom break, the bathrooms are _____. And feel free to get snacks.

For this session, I will read a question and then listen to your responses. I also may ask follow up questions to get some more detail.

Let's get started! I can't wait to hear what you think of the Eagle Adventure program.

Do you have any questions before we begin?

Introductions/Icebreaker

Let's go around the room for this one: Please introduce yourself, tell us how long you have been in the community, and name one fun activity (doesn't have to be an Eagle Adventure activity) you like doing with your child (children). [MODERATOR NOTE: it is helpful to go in order of how the group is sitting. This will allow the transcriptionist to label responses by person. Also for note taking you can then label person1, person2, person 3 etc- to be able to write comments]

Exposure and Accessibility of SNAP-Ed Intervention for Parents/Caregivers

Please raise your hand if you know that your child has been participating in a program at their school where they learn about healthy foods and being active. [ASK FOLLOWING QUESTIONS FOR THOSE WHO RAISE HAND]

1. What did your children tell you about what they did in these classes or sessions?

PROBES: Food they tried? Activities they did? Games they played? What they learned?

2. Did you see any take home materials on food and physical activity recently provided for you by the Eagle Adventure program? [MODERATOR SHOULD PROMPT RESPONSE BY SHOWING SOME SAMPLE TAKE-HOME MATERIALS USED IN THE INTERVENTION]
3. What were the most helpful aspects of these take home materials?

Satisfaction/Likes and Dislikes with Intervention

4. Tell me about the parts of the program overall—including the classes for your children and the various take home materials that you liked the best and why you liked these parts?
5. Now, I would like to know what parts of the program you liked least and why?
6. What parts of the program do you think your child liked the best and why?
7. What parts of the program did your child like the least and why?

Perceptions of Goals and Relevancy of Intervention

We are interested in hearing more about what you thought about the purpose of the classes, whether they helped you and provided useful information to you.

8. What do you think the Eagle Adventure program was trying to teach you and your child?

9. How useful was the information the program offered for parents like you with young children?
10. How well did the program suggestions and information fit with the ways that you live culturally?
11. Tell me how well you think the program suggestions and information fit with the challenges faced by people who do not have a lot of money?

Intervention Impacts

These next few questions are about how you think Eagle Adventure classes and materials may have helped you learn new information or other ways it may have changed things for you or your children.

12. What are the most important things your child learned from this program?
13. What are the most important things you learned from this program?
14. Now I would like to ask you a question that you probably need more time to think about: What are the most significant change or changes that have taken place in your household because of this program?

I am passing out pieces of paper again if you want to write down your response.

[AFTER ABOUT 2 MINUTES TAKE ANSWERS VIA ROUND ROBIN QUESTIONING]

OPTIONAL PROBES AS NEEDED:

- Changes in food parents serve to their children?
- Changes in the food children select?
- Changes in physical activity at home?

Factors Affecting Fruit and Vegetable Availability at Home and Ways of Addressing these Barriers

Now I would like to take a few moments to ask you about the difficulties that parents who live in your neighborhood might face in trying to buy, store, and prepare fruits and vegetables for your child or children.

15. Is there anything that makes it difficult to for you or other parents like you to buy and keep fruits and vegetables at home? (e.g., cost, access, and storage)
 - a. For those of you that said “yes”, what makes it difficult?
16. Is there anything that makes it difficult for you or other parents of young children like you to prepare and serve fruits and vegetables to your children?

17. Did the information or take home materials provided to you by Eagle Adventure help you to address any of these difficulties or barriers?

a) For those of you that said “yes”, how was the information or materials helpful?

18. For those who said “no”, what could have been done to make the information or take home materials more helpful for parents?

Child’s Experience

19. What kind of things did your child tell you about the Eagle Adventure program?

20. Do you think your child liked the Eagle Adventure program?

[IF YES]

a) Why?

[IF NO]

b) Why not?

Recommendations

c) Would you recommend this program to friends?

[IF YES]

a) Why?

[IF NO]

b) Why not?

c) If you could change anything about the classes or take home materials or other aspects of the Eagle Adventure program – what would it be?

d) Is there anything we haven’t asked that you would like to tell us about your experience with and opinions of the Eagle Adventure program?

e) Before we close, I would like you to help us by giving us your ideas for other ways that schools could encourage children to eat more fruits and vegetables and encourage their parents to serve fruits and vegetables more often.

Thank you very much for participating in this discussion group today. We have learned a lot from your experiences and recommendations.

A.10: Program Resource and Expense Tracking Form

**Project Resource and Expense Tracking Form for
Implementation of the Eagle Adventure Program**

This data collection form will be used to summarize information about ACTUAL resources used for and expenses related to the implementation of your SNAP-Ed intervention.

Implementation

In the following tables, please provide the requested information as it relates to the implementation of your project. Please do not include resources or expenses related to your planning and design or evaluation.

1.1 Summarize staff costs (human capital) for the implementation of your SNAP-Ed project

a) At the administrative, coordination, oversight level, trainer level

Title of position	Brief description of responsibilities	FTEs	Average salary for this position	Salary range for this position

b) At the nutrition educator level (per intervention site), IF APPLICABLE

Title of position	Brief description of responsibilities	FTEs	Average salary for this position	Salary range for this position

c) IT/Technical Staff, IF APPLICABLE

Title of position	Brief description of responsibilities	FTEs	Average salary for this position	Salary range for this position

d) Other

Title of position	Brief description of responsibilities	FTEs	Average salary for this position	Salary range for this position

1.2 Describe the ACTUAL costs other than staff costs (physical capital) required to implement project

- a) Space
- b) Audio/visual
- c) Computer/software
- d) Other

1.3 Please provide the following information for ACTUAL expenditures related to the implementation of your SNAP-Ed intervention only (NOT FOR EVALUATION)

Expenses	(a) Non-Federal Public Funds		(b) Non-Federal, Non-cash	(c) Total Non-Federal Funds (a+b)	(d) Federal Funds	Total Funds (c+d)
	Cash	In-kind Donations				
1. Salary/benefits						
2. Contracts/grants agreements						
3. Non-capital equipment/ supplies						
4. Materials						
5. Travel						
6. Administrative						
7. Building/space						
8. Maintenance						
9. Equipment and other capital expenditures						
10. TOTAL Direct Costs						
11. Indirect costs						
12. TOTAL Costs						

A.11: SNAP-Ed 1 Nutrition Education Observation Form

SNAP-Ed 1 Nutrition Education Observation Form

The purpose of this observation tool is to describe the intervention as it is being implemented and inform the process evaluation of this project. This observation is not intended to evaluate the teaching abilities of the instructor.

Name of observer:

Date of class observed:

Name of intervention:

Name of instructor:

Name and type of site:

PART A: GENERAL PLAN BACKGROUND (to be filled out prior to class)

Name of lesson to be taught:

Lesson topic(s):

Intended Lesson Objective(s):

Target audience(s):

Children

Yes No

Parents/Guardians

Yes No

Grade/Age range of children in class:

PART B: CLASS OBSERVATION

1. Length of Class

Class Start Time:

Class End Time:

2. Reach

Number of participants:

How many of the participants were exposed to the complete class (e.g. most relevant for NY parent classes where some may arrive or leave late):

3. Description of the Setting

- Physical Location
 - In the children's regular classroom
 - Indoors, in a general purpose room in the building (describe briefly)
 - Indoors, in an informal area of the building not structured for group classes (describe briefly-- e.g. in the hallway, in the front waiting area, etc.)
 - In an outdoor area
- Adequacy of space
 - Space is very ample for the number of participants and activities planned
 - Space is sufficient, but somewhat limited for the number of participants and activities planned
 - Space is insufficient for the number of participants and activities planned
- Any other facilitators or barriers related to classroom setting:
 - Facilitators to teaching the lesson, carrying out planned activities and engaging participants:
 - Barriers to teaching the lesson, carrying out planned activities and engaging participants:
- Other observations about adequacy of space or class environment/setting:

4. Teaching Methods

- Teaching Techniques Used: *Check the teaching techniques used in teaching the lesson.*
- Lecture/verbal presentation
 - Educator engages the children in discussions
 - Story reading
 - Food preparation demonstration
 - Food tasting
 - Movement activity
 - Student performance (e.g. dance)
 - Small group discussions or activities (likely only relevant with large parent classes)
 - Other
- Types of Teaching aids used: *Check the types of teaching aids used in the lesson.*
- Food models
 - Posters
 - Music
 - DVD or Video
 - Handouts
 - Foods for demonstration purposes and tasting
 - Other

- Materials Distributed: *Check the materials that were distributed during the lesson.*
 - Recipes
 - Nutrition education newsletters
 - Handouts:
 - Other:

5. Student Engagement in the Lesson

Describe the level of engagement of students in the lesson as presented. For example: did it appear the students were engaged in the lesson; was the lesson age appropriate; was the literacy level appropriate for this grade level; was it culturally appropriate; did it appear that this was new information for the students.

PART C. LESSON WAS TAUGHT AS PLANNED IN PROJECT

Overall, did the instructor follow the curriculum for this lesson as developed? If not, how was it different and what are the apparent reasons for this deviation?

Observer Comments/Notes:

PART D. ENVIRONMENTAL REINFORCEMENTS/INFLUENCES

(relevant to classes for children -not necessary to complete for the parent classes)

1. Teacher Involvement

What role (s) did the school/childcare teacher(s) play during the intervention class?

- Was not in the classroom during the lesson
- Silent observer who did not participate or support the educator during the lesson ,
- Assisted the nutrition educator in handing out materials
- Assisted the nutrition educator in activities beyond handing out materials
- Additional or other roles: What other role, if any, does the classroom teacher play in supporting the intervention messages?

2. Availability of Fruits and Vegetables At the intervention sites

Request and review the current weekly or cycle menu to see the extent and variation in fruits and vegetables offered at the school/center for meals and snacks. Below, provide a general description of the number of the fruits and vegetables on menu each day and the variety of fruits and vegetables offered on menu. Attach a copy of the menu.

3. Supportive or Conflicting Indirect Nutrition Messages Visible at the Intervention Site

Note any posters, displays, bulletin boards at the intervention site that relate to nutrition and physical activity.

Description of nutrition messaging at intervention site:

PART E. LESSONS LEARNED FOR IMPROVEMENT AND REPLICABILITY

These are four questions for observers to ask educator after the lesson:

1. Did you deviate from the written lesson plan for today? Yes No
(If yes)
 - a. What did you do differently?
 - b. Why did you decide to make this change (or changes) today?
2. What do you think works best today about this lesson and why?
3. What if anything made it challenging to teach the lesson as you had planned today?
4. What recommendations would you have for improving this lesson if you or others are teaching it another time?

Additional Observer Comments/Notes:

Appendix B
Process Evaluation Data and Supplemental
Information

List of Contents

- B.1: Project Resource and Expense Tracking Form *Eagle Adventure* (Implementation and Evaluation Costs)
- B.2: *Eagle Adventure* Program Evaluation Parent Follow-up Survey Descriptive Tasks for Process Questions
- B.3: Characteristics of *Eagle Adventure* Focus Group Participants

**B.1: Project Resource and Expense Tracking Form *Eagle Adventure*
(Implementation and Evaluation Costs)**

Project Resources and Expenses Tracking Form

Eagle Adventure

(Planning and Design, Implementation, and Evaluation Costs)

This data collection form will be used to summarize information about ACTUAL resources used for and expenses related to your SNAP-Ed intervention. In Section 1 we are requesting information that is specific to the planning and design of your project. In Section 2 we are requesting cost related data specific to the implementation of your project. In Section 3 we are requesting information that is specific only to the evaluation (Demonstration Project-led assessment) component of your intervention.

SECTION 1. Planning and design

In the following tables, please provide the requested information as it relates to the planning and design of your project. Please do not include resources or expenses related to the implementation or evaluation of your project.

1.1 Summarize staff costs (human capital) for the planning and design of your SNAP-Ed intervention . FTEs are calculated using 2080 hours and benefits are 33%.

a) At the administrative, coordination, oversight, trainer level

Title of position	Brief description of responsibilities	FTEs	Average salary for this position	Salary range for this position
Outcomes Coordinator	Guiding the Model project development and selection of education goals	.5 (1040 hours)	\$63.13/hr	n/a
Program Manager	Assist in design/development and planning	.06 (124 hrs)	\$34.26/hr	n/a
Program Coordinator	Coordinator and Development of Curriculum	.6 (1248 hours)	\$18.90/hr	n/a
Administrative Assistant	Securing all needed materials	.25 (520 hrs)	\$15.21/hr	\$11.01 - \$19.10

b) At the nutrition educator level (per intervention site), IF APPLICABLE

Title of position	Brief description of responsibilities	FTEs	Average salary for this position	Salary range for this position
Educators	Development & Review of project materials and integration of PASS Objectives & Accelerated Reading	1 (2080 hours)	\$18.68/hr	\$15.53 - \$21.17

c) IT/Technical Staff, IF APPLICABLE

Title of position	Brief description of responsibilities	FTEs	Average salary for this position	Salary range for this position
Performing Arts Staff	Adapting books to play, blocking, costume design, music and CD development	.1 (208 hours)	\$14.50/hr	\$12.21 - \$17.22
Graphics Design Specialist	Design of Materials	.03 (56 hours)	\$40.00	n/a

d) Other

Title of position	Brief description of responsibilities	FTEs	Average salary for this position	Salary range for this position
4-H members & volunteers	Development of play, song, etc.	50 hours	\$8.00/hr	n/a

1.2 Please provide the following information for ACTUAL expenditures related to the planning and design of your SNAP-Ed intervention only (NOT FOR IMPLEMENTATION OR EVALUATION)

Expenses	(a) Non-Federal Public Funds		(b) Non-Federal, Non-cash	(c) Total Non-Federal Funds (a+b)	(d) Federal Funds	Total Funds (c+d)
	Cash	In-kind Donations				
1. Salary/benefits	\$63,863.14	\$400.00		\$64,263.14	\$192,789.41	\$257,052.55
2. Contracts/grants agreements					n/a	
3. Non-capital equipment/supplies	\$801.50			\$801.50	\$108.75	\$910.25
4. Materials					n/a	
5. Travel					\$2,295.76	\$2,295.76
6. Administrative					n/a	
7. Building/space					n/a	
8. Maintenance					n/a	

9. Equipment and other capital expenditures					n/a	
10. TOTAL Direct Costs	\$64,664.64	\$400.00		\$65,064.64	\$195,193.92	\$260,258.56
11. Indirect costs (20.24%)	\$13,088.12	\$80.96		\$13,169.08	\$39,507.25	\$52,676.33
12. TOTAL Costs	\$77,752.76	\$480.96		\$78,233.72	\$234,701.17	\$312,934.89

SECTION 2. Implementation

In the following tables, please provide the requested information as it relates to the implementation of your project. Please do not include resources or expenses related to your planning and design or evaluation.

2.1. Summarize staff costs (human capital) for the implementation of your SNAP-Ed project

e) At the administrative, coordination, oversight level, trainer level

Title of position	Brief description of responsibilities	FTEs	Average salary for this position	Salary range for this position
Program Manager	Program oversight	.02 40 hours	\$34.26/hr	n/a

f) At the nutrition educator level (per intervention site), IF APPLICABLE

Title of position	Brief description of responsibilities	FTEs	Average salary for this position	Salary range for this position
Educators	Provide direct education	.27 (566 hours)	\$18.86	\$ 15.53-\$21.17

g) IT/Technical Staff, IF APPLICABLE

Title of position	Brief description of responsibilities	FTEs	Average salary for this position	Salary range for this position
Performing Arts staff	Run audio and Direct & perform in play	.023 48 hours	\$14.50/hr	\$12.21 - \$17.22

h) Other

Title of position	Brief description of responsibilities	FTEs	Average salary for this position	Salary range for this position
4-H and other volunteers	Perform play and assist with other education preparation duties	.053 (112 hours)	\$8.00/hour	n/a

2.2. Describe the ACTUAL costs other than staff costs (physical capital) required to implement project

Educational material printing and production; office supplies; teacher; student reinforcements; props and audio visual equipment for play

2.3. Please provide the following information for ACTUAL expenditures related to the implementation of your SNAP-Ed intervention only (NOT FOR EVALUATION)

Expenses	(a) Non-Federal Public Funds		(b) Non-Federal, Non-cash	(c) Total Non-Federal Funds (a+b)	(d) Federal Funds	Total Funds (c+d)
	Cash	In-kind Donations				
1. Salary/benefits	\$4,752.58	Volunteers \$896.00		\$5,648.58	\$16,945.74	\$22,594.32
2. Contracts/grants agreements					n/a	
3. Non-capital equipment/supplies	\$8,022.34			\$8,022.34	\$22,120.40	\$30,142.74
4. Materials					n/a	
5. Travel					\$1,946.61	\$1,946.41
6. Administrative					n/a	
7. Building/space					n/a	
8. Maintenance					n/a	
9. Equipment and other capital expenditures					n/a	
10. TOTAL Direct Costs	\$12,774.92	\$896.00		\$13,670.92	\$41,012.75	\$54,683.67
11. Indirect costs (20.24%)	\$2,585.64	\$181.35		\$2,766.99	\$8,300.98	\$11,067.97
12. TOTAL Costs	\$15,360.56	\$1,077.35		\$16,437.91	\$49,313.73	\$65,751.64

SECTION 3. Evaluation

In the following tables, please provide the requested information as it relates to the evaluation of your SNAP-Ed project.

3.1. Summarize actual staff costs (human capital) used for your evaluation

i) At the administrative, coordination, oversight level

Title of position	Brief description of responsibilities	FTEs	Average salary for this position	Salary range for this position
Outcomes Coordinator	Development, training and completion of data calculations	.2 416 hours	\$63.13/hr	n/a
Program Manager	Review and assist on a program level	.012 25 hours	\$34.26/hr	n/a
Evaluation Coordinator	Assist in development, training, data input and calculations	.06 124 hours	\$20.18/hr	n/a

j) At the evaluator level, IF APPLICABLE

Title of position	Brief description of responsibilities	FTEs	Average salary for this position	Salary range for this position
Educators/evaluators	Prepared for and administered evaluation	.17 361 hours	\$18.68/hr	\$15.53-\$21.17

k) IT/Technical Staff, IF APPLICABLE

Title of position	Brief description of responsibilities	FTEs	Average salary for this position	Salary range for this position

l) Other

Title of position	Brief description of responsibilities	FTEs	Average salary for this position	Salary range for this position

3.2. Describe the ACTUAL physical capital required to *evaluate* this project

Printing; labels; computer; folders, office supplies; student reinforcements

3.3. Please provide the following information for ACTUAL expenditures related to the evaluation of your SNAP-Ed intervention only (NOT FOR IMPLEMENTATION)

Expenses	(a) Non-Federal Public Funds		(b) Non-Federal, Non-cash	(c) Total Non-Federal Funds (a+b)	(d) Federal Funds	Total Funds (c+d)
	Cash	In-kind Donations				
1. Salary/benefits	\$16,137.28			\$16,137.28	\$48,411.84	\$64,549.12
2. Contracts/grants agreements					n/a	
3. Non-capital equipment/supplies	\$4,719.39			\$4,719.39	\$11,508.25	\$16,227.64
4. Materials					n/a	
5. Travel					\$2,649.93	\$2,649.93
6. Administrative					n/a	
7. Building/space					n/a	
8. Maintenance					n/a	
9. Equipment and other capital expenditures					n/a	
10. TOTAL Direct Costs	\$20,856.67			\$20,856.67	\$62,570.02	\$83,426.69
11. Indirect costs (20.24%)	\$4,221.39			\$4,221.39	\$12,664.17	\$16,885.56
12. TOTAL Costs	\$25,078.06			\$25,078.06	\$75,234.19	\$100,312.25

SECTION 4. Total Budget Costs

In the following table, please provide the requested information as it relates to the TOTAL cost of your SNAP-Ed project.

4.1. Provide the total proposed budget for the SNAP-Ed project (Sum of 1.2, 2.3 and 3.3)

Expenses	(a) Non-Federal Public Funds		(b) Non-Federal, Non-cash	(c) Total Non-Federal Funds (a+b)	(d) Federal Funds	Total Funds (c+d)
	Cash	In-kind Donations				
1. Salary/benefits	\$84,753.00	Volunteers \$1,296		\$86,049.00	\$258,146.99	\$344,195.99
2. Contracts/grants agreements					n/a	
3. Non-capital equipment/supplies	\$13,543.23			\$13,543.23	\$33,737.40	\$47,280.63
4. Materials					n/a	
5. Travel					\$6,892.30	\$6,892.30
6. Administrative					n/a	
7. Building/space					n/a	
8. Maintenance					n/a	
9. Equipment and other capital expenditures					n/a	
10. TOTAL Direct Costs	\$98,296.23	\$1,296.00		\$99,592.23	\$298,776.69	\$398,368.92
11. Indirect costs	\$19,895.16	\$262.31		\$20,157.47	\$60,472.39	\$80,629.86
12. TOTAL Costs	\$118,191.39	\$1,585.31		\$119,749.70	\$359,249.09	\$478,998.78

**B.2: *Eagle Adventure* Program Evaluation Parent Follow-up Survey
Descriptive Tables for Process Questions**

**Eagle Adventure Program Evaluation
Parent Follow-up Survey**

Descriptive Tables for Process Questions

Table B-1. Use of Take-Home Materials from the Eagle Adventure Program

	n	%
Number of Eagle Books read to child ^a (mean = 2.90)		
None	18	5.23
One	38	11.05
Two	60	17.44
Three	62	18.02
Four	158	45.93
Did not receive books	6	1.74
Don't know/refusal	2	0.58
Number of recipes used to make a snack or meal for child ^b (mean = 1.90)		
None	86	25.00
1 to 2	142	41.28
3 to 4	77	22.38
5 to 6	11	3.20
7 to 8	10	2.91
Did not receive recipes	13	3.78
Don't know/refusal	5	1.45
Child helped make snacks or meals using the recipes		
Yes, all or most of the recipes	66	19.19
Yes, some of the recipes	147	42.73
No	112	32.56
Did not receive recipes	13	3.78
Don't know/refusal	6	1.74
Number of Nestwork worksheets completed and returned to teacher ^c (mean = 2.51)		
None	51	14.83
One	39	11.34
Two	63	18.31
Three	41	11.92
Four	133	38.66
Did not receive worksheets	9	2.62
Don't know/refusal	8	2.32
Number of respondents	344	

^a Four picture books, called "The Eagle Books," were sent home with participating students. These books help children understand why it is important to eat healthy and get exercise.

^b Recipes for healthy meals and snacks were sent home with participating students within the week of the lesson.

^c Four worksheets, called "Nestwork," were sent home with participating students. These worksheets encourage children to eat healthy foods and get exercise and were sent home within the week of the lesson.

Source: Parent Follow-up Survey, data collected May–July 2010.

Table B-2. Parent Satisfaction with Eagle Adventure Program Materials

	n	%
Parents' level of understanding of the Eagle Adventure program materials sent home with child ^a		
Very easy	212	61.63
Easy	99	28.78
Somewhat easy	15	4.36
Not very easy	0	0.00
Not at all easy	0	0.00
Did not read or use the materials and activities	14	4.07
Don't know/refusal	4	1.16
Perceived usefulness of the Eagle Adventure program materials in helping child eat healthier foods ^a		
Very useful	95	27.70
Useful	138	40.23
Somewhat useful	71	20.70
Not very useful	14	4.08
Not at all useful	2	0.58
Did not read or use the materials and activities	18	5.25
Don't know/refusal	5	1.46
Number of respondents	344	

^a Eagle Adventure program materials included The Eagle Books, recipes, worksheets, and other materials and activities.

Source: Parent Follow-up Survey, data collected May–July 2010.

B.3: Characteristics of *Eagle Adventure* Focus Group Participants

Characteristics of Eagle Adventure Focus Group Participants (N=23)

Select Characteristics	n	%
Relationship to Child		
Mother/Step-Mother	23	100.0
Father/Step-Father	0	0.0
Other	0	0.0
School Grade of Child*		
First grade	11	42.3
Second grade	8	30.8
Third Grade	7	26.9
Responsible for most of their households' food shopping		
Yes	22	95.7
No	1	4.3
Responsible for most of their households' food preparation		
Yes	21	91.3
No	2	8.7
Highest Education Level Attained		
8 th grade or less	0	0.0
Some high school but did not graduate	0	0.0
High school grad or GED	3	13.0
Some college or 2-year degree	10	43.5
Four year college grad or more	10	43.5
Ethnicity		
Hispanic or Latino	0	0.0
Not Hispanic or Latino	23	100.0
Race		
White	10	43.5
Black/African American	1	4.3
Asian	0	0.0
Native Hawaiian/Pacific Islander	1	4.3
American Indian/Alaska Native	11	47.8
Other (Hispanic or Latino)	0	0.0
Did not answer	0	0.0
Age		
20-29 years old	2	8.7
30-39 years old	16	69.6
40-49 years old	4	17.4
50-59 years old	1	4.3

* For this question, parents responded with the school grade of each of their children so the total N = 26

Appendix C
Parent Survey Instruments

List of Contents

C.1: Baseline Survey, Intervention and Comparison Groups*

C.2: Follow-up Survey, Intervention Group

C.3: Follow-up Survey, Comparison Group

C.1: Baseline Survey, Intervention and Comparison Groups*

*Cups of fruits and vegetables graphics courtesy of Dr. Marilyn Townsend and Kathryn Sylva, University of California, Davis.

OMB No. 0584-0554

Expiration date: 1/31/2013

See OMB statement on inside cover

What Does Your Child Eat?



¿Qué come su niño?

Thank you for taking part in this important study!

Please fill out and return the survey in the enclosed envelope within the next week.
If you have any questions about the *What Does Your Child Eat?* study, please send an e-mail to USDA@sna.rti.org or call toll-free at 1-866-800-9176.

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Public reporting burden for this collection of information is estimated to average 15 minutes per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information.

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Send comments regarding this burden estimate or any other aspect of this collection of information, including suggestions for reducing this burden, to: U.S. Department of Agriculture, Food and Nutrition Services, Office of Research and Analysis, Room 1014, Alexandria, VA 22302 ATTN: PRA (0584-0554). Do not return the completed form to this address.

If you have questions regarding your rights as a research participant, you may contact RTI's Office of Research Protection toll-free at 866-214-2043.

This survey asks about what your child eats. This study is being sponsored by the U.S. Department of Agriculture's Food & Nutrition Service and conducted by RTI International, a non-profit research organization. The survey will take about 15 minutes to complete. You will receive \$10 for completing this survey and \$15 for completing a second survey that we will mail you in about 2 months.

All of your answers to the survey will be kept private. We will not share your answers with anyone. You may skip any questions you do not want to answer. If you have any questions, please call Matthew Bensen at RTI International at 1-866-800-9176.

Questions on Whether Certain Foods Are Available at Home

1. Were any of the following foods available in your home during the past week? Include fresh, frozen, canned, and dried foods. *(Circle yes or no for each food.)*

a. Bananas	Yes	No
b. Apples	Yes	No
c. Grapes	Yes	No
d. Peaches	Yes	No
e. Oranges	Yes	No
f. Carrots	Yes	No
g. Celery	Yes	No
h. Raisins	Yes	No
i. Potato chips, nacho chips, or corn chips	Yes	No
j. Regular soft drinks or sodas	Yes	No
k. Diet or low calorie soft drinks or sodas	Yes	No

Questions on the Fruits and Vegetables Your Child Eats

For the next questions think about what your child ate during the past week, or the past 7 days. Do not include school or day care time.

2. How many days during the past week did your child eat more than one kind of fruit each day? Do not include fruit juice. *(Circle one.)*

1. None
2. 1 to 2 days
3. 3 to 4 days
4. 5 to 6 days
5. Every day

3. During the past week, how many cups of fruit did your child eat each day? Do not include fruit juice. (Circle one.)

1. None
2. 1/2 cup
3. 1 cup
4. 1 1/2 cups
5. 2 cups
6. 2 1/2 cups
7. 3 cups or more



None



1 cup



2 cups



3 cups

4. How many days during the past week did your child eat more than one kind of vegetable each day? Do not include vegetable juice. (Circle one.)

1. None
2. 1 to 2 days
3. 3 to 4 days
4. 5 to 6 days
5. Every day

5. During the past week, how many cups of vegetables did your child eat each day? Do not include vegetable juice. (Circle one.)

1. None
2. 1/2 cup
3. 1 cup
4. 1 1/2 cups
5. 2 cups
6. 2 1/2 cups
7. 3 cups or more



None



1 cup



2 cups



3 cups

6. During the past week, did your child eat any meals or snacks that were provided by his or her school or day care? (Circle all that apply.)

1. Yes, breakfast
2. Yes, lunch
3. Yes, snacks
4. No, did not eat breakfast, lunch, or snacks provided by school or day care

7. Is your child willing to try a new kind of fruit? (Circle one.)

1. No
2. Maybe
3. Yes

8. How many days during the past week did you give your child fruit as a snack? (*Circle one.*)

1. None
2. 1 to 2 days
3. 3 to 4 days
4. 5 to 6 days
5. Every day

9. How many days during the past week did your child ask or help himself or herself to fruit as a snack? (*Circle one.*)

1. None
2. 1 to 2 days
3. 3 to 4 days
4. 5 to 6 days
5. Every day

10. How many days during the past week did you give your child fruit at dinner? (*Circle one.*)

1. None
2. 1 to 2 days
3. 3 to 4 days
4. 5 to 6 days
5. Every day

11. Is your child willing to try a new kind of vegetable? (*Circle one.*)

1. No
2. Maybe
3. Yes

12. How many days during the past week did you give your child a vegetable as a snack? (*Circle one.*)

1. None
2. 1 to 2 days
3. 3 to 4 days
4. 5 to 6 days
5. Every day

13. How many days during the past week did your child ask or help himself or herself to vegetables as a snack? *(Circle one.)*

1. None
2. 1 to 2 days
3. 3 to 4 days
4. 5 to 6 days
5. Every day

14. How many days during the past week did you give your child a vegetable at dinner? *(Circle one.)*

1. None
2. 1 to 2 days
3. 3 to 4 days
4. 5 to 6 days
5. Every day

Questions on Your Child's Eating Habits

15. How many days during the past week did your child help you make a snack or cook a meal? For example, did your child wash fruits or vegetables or crack an egg? *(Circle one.)*

1. None
2. 1 to 2 days
3. 3 to 4 days
4. 5 to 6 days
5. Every day

16. How much do you agree or disagree with the following statement? "If my child eats healthy, he or she will be healthier when he or she gets older." *(Circle one.)*

1. Strongly agree
2. Agree
3. Disagree
4. Strongly disagree

17. How much do you agree or disagree with the following statement? "I am a good role model for my child by eating healthy foods." (*Circle one.*)

1. Strongly agree
2. Agree
3. Disagree
4. Strongly disagree

18. How strongly do you agree or disagree with the following statement? "I can help my child eat a diet that is healthy." (*Circle one.*)

1. Strongly agree
2. Agree
3. Disagree
4. Strongly disagree

Questions about You and Your Household

19. During the past year, how often did you run out of food before the end of the month? (*Circle one.*)

1. Did not run out of food
2. Seldom
3. Sometimes
4. Most of the time
5. Almost always

20. How many people under 18 years of age live in your household?

21. Including yourself, how many people 18 years of age or older live in your household?

22. Which of the following categories best describes your age? (*Circle one.*)

1. 18 to 24
2. 25 to 34
3. 35 to 44
4. 45 to 54
5. 55 to 64
6. 65 to 74
7. Over 74

23. What is your gender? *(Circle one.)*

1. Male
2. Female

24. Are you Hispanic or Latino? *(Circle one.)*

1. Yes
2. No

25. What is your race? *(Circle all that apply.)*

1. American Indian or Alaska Native
2. Asian
3. Black or African American
4. Native Hawaiian or other Pacific Islander
5. White

***Thank you for completing our survey.
Please return the survey in the enclosed envelope.
If you have misplaced the envelope, call 1-866-800-9176
for a replacement or mail the survey to
RTI INTERNATIONAL
ATTN: Data Capture (0211890.001.008.002)
PO Box 12194
Research Triangle Park, NC 27709-9779***

C.2: Follow-up Survey, Intervention Group

OMB No. 0584-0554

Expiration date: 1/31/2013

See OMB statement on inside cover

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1. Were any of the following foods available in your home during the past week? Include fresh, frozen, canned, and dried foods. *(Circle yes or no for each food.)*

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b. Apples	Yes	No
c. Grapes	Yes	No
d. Peaches	Yes	No
e. Oranges	Yes	No
f. Carrots	Yes	No
g. Celery	Yes	No
h. Raisins	Yes	No
i. Potato chips, nacho chips, or corn chips	Yes	No
j. Regular soft drinks or sodas	Yes	No
k. Diet or low calorie soft drinks or sodas	Yes	No

Questions on the Fruits and Vegetables Your Child Eats

For the next questions think about what your child ate during the past week, or the past 7 days. Do not include school or day care time.

2. How many days during the past week did your child eat more than one kind of fruit each day? Do not include fruit juice. *(Circle one.)*

1. None
2. 1 to 2 days
3. 3 to 4 days
4. 5 to 6 days
5. Every day

3. During the past week, how many cups of fruit did your child eat each day? Do not include fruit juice. (*Circle one.*)

- 1. None
- 2. 1/2 cup
- 3. 1 cup
- 4. 1 1/2 cups
- 5. 2 cups
- 6. 2 1/2 cups
- 7. 3 cups or more



None



1 cup



2 cups



3 cups

4. How many days during the past week did your child eat more than one kind of vegetable each day? Do not include vegetable juice. (*Circle one.*)

- 1. None
- 2. 1 to 2 days
- 3. 3 to 4 days
- 4. 5 to 6 days
- 5. Every day

5. During the past week, how many cups of vegetables did your child eat each day? Do not include vegetable juice. (*Circle one.*)

- 1. None
- 2. 1/2 cup
- 3. 1 cup
- 4. 1 1/2 cups
- 5. 2 cups
- 6. 2 1/2 cups
- 7. 3 cups or more



None



1 cup



2 cups



3 cups

6. During the past week, did your child eat any meals or snacks that were provided by his or her school or day care? (*Circle all that apply.*)

- 1. Yes, breakfast
- 2. Yes, lunch
- 3. Yes, snacks
- 4. No, did not eat breakfast, lunch, or snacks provided by school or day care

7. Is your child willing to try a new kind of fruit? (*Circle one.*)

- 1. No
- 2. Maybe
- 3. Yes

8. How many days during the past week did you give your child fruit as a snack? (*Circle one.*)

1. None
2. 1 to 2 days
3. 3 to 4 days
4. 5 to 6 days
5. Every day

9. How many days during the past week did your child ask or help himself or herself to fruit as a snack? (*Circle one.*)

1. None
2. 1 to 2 days
3. 3 to 4 days
4. 5 to 6 days
5. Every day

10. How many days during the past week did you give your child fruit at dinner? (*Circle one.*)

1. None
2. 1 to 2 days
3. 3 to 4 days
4. 5 to 6 days
5. Every day

11. Is your child willing to try a new kind of vegetable? (*Circle one.*)

1. No
2. Maybe
3. Yes

12. How many days during the past week did you give your child a vegetable as a snack? (*Circle one.*)

1. None
2. 1 to 2 days
3. 3 to 4 days
4. 5 to 6 days
5. Every day

13. How many days during the past week did your child ask or help himself or herself to vegetables as a snack? *(Circle one.)*

1. None
2. 1 to 2 days
3. 3 to 4 days
4. 5 to 6 days
5. Every day

14. How many days during the past week did you give your child a vegetable at dinner? *(Circle one.)*

1. None
2. 1 to 2 days
3. 3 to 4 days
4. 5 to 6 days
5. Every day

Questions on Your Child's Eating Habits

15. How many days during the past week did your child help you make a snack or cook a meal? For example, did your child wash fruits or vegetables or crack an egg? *(Circle one.)*

1. None
2. 1 to 2 days
3. 3 to 4 days
4. 5 to 6 days
5. Every day

16. How much do you agree or disagree with the following statement? "If my child eats healthy, he or she will be healthier when he or she gets older." *(Circle one.)*

1. Strongly agree
2. Agree
3. Disagree
4. Strongly disagree

17. How much do you agree or disagree with the following statement? "I am a good role model for my child by eating healthy foods." (*Circle one.*)

1. Strongly agree
2. Agree
3. Disagree
4. Strongly disagree

18. How strongly do you agree or disagree with the following statement? "I can help my child eat a diet that is healthy." (*Circle one.*)

1. Strongly agree
2. Agree
3. Disagree
4. Strongly disagree

Questions on Nutrition Education Materials Your Child Got at School

19. Your child got four picture books called, "The Eagle Books." These books help children understand why it is important to eat healthy and get exercise. How many Eagle books did you or someone else in your household read to your child? (*Circle one.*)

1. None
2. One
3. Two
4. Three
5. Four
6. Did not get books

20. Your child's teacher sent home recipes for healthy meals and snacks. How many recipes did you or someone else in your household use to make a snack or meal for your child? (*Circle one.*)

1. None
2. 1 to 2
3. 3 to 4
4. 5 to 6
5. 7 to 8
6. Did not get recipes

21. Did your child help you or someone else in your household make snacks or meals using the recipes? (*Circle one.*)

1. Yes, all or most of them
2. Yes, some of them
3. No
4. Did not get recipes

22. Your child got four worksheets called "Nestwork" on eating healthy and getting exercise. How many of these worksheets or "Nestworks" did you or someone else in your household help your child complete and return to your child's teacher? (*Circle one.*)

1. None
2. One
3. Two
4. Three
5. Four
6. Did not get worksheets

23. How easy was it to understand the Eagle books, recipes, worksheets, and other materials and activities sent home with your child? (*Circle one.*)

1. Very easy
2. Easy
3. Somewhat easy
4. Not very easy
5. Not at all easy
6. Did not read or use these materials and activities

24. How useful were the Eagle books, recipes, worksheets, and other materials and activities in helping you to get your child to eat healthier? (*Circle one.*)

1. Very useful
2. Useful
3. Somewhat useful
4. Not very useful
5. Not at all useful
6. Did not read or use these materials and activities

25. Please share any comments about the Eagle books, recipes, worksheets, and other materials and activities.

***Thank you for completing our survey.
Please return the survey in the enclosed envelope.
If you have misplaced the envelope, call 1-866-800-9176
for a replacement or mail the survey to
RTI INTERNATIONAL
ATTN: Data Capture (0211890.001.008.002)
PO Box 12194
Research Triangle Park, NC 27709-9779***

C.3: Follow-up Survey, Comparison Group

OMB No. 0584-0554

Expiration date: 1/31/2013

See OMB statement on inside cover

What Does Your Child Eat?



¿Qué come su niño?

Thank you for taking part in this important study!

Please fill out and return the survey in the enclosed envelope within the next week.
If you have any questions about the *What Does Your Child Eat?* study, please send an e-mail to USDA@sna.rti.org or call toll-free at 1-866-800-9176.

Put Label Here

OK – Post C

Public reporting burden for this collection of information is estimated to average 15 minutes per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information.

An agency may not conduct or sponsor, and a person is not required to respond to, a collection of information unless it displays a currently valid OMB control number.

Send comments regarding this burden estimate or any other aspect of this collection of information, including suggestions for reducing this burden, to: U.S. Department of Agriculture, Food and Nutrition Services, Office of Research and Analysis, Room 1014, Alexandria, VA 22302 ATTN: PRA (0584-0554). Do not return the completed form to this address.

If you have questions regarding your rights as a research participant, you may contact RTI's Office of Research Protection toll-free at 866-214-2043.

This survey asks about what your child eats. You may recall that we asked some of the same questions in the last survey. This study is being sponsored by the U.S. Department of Agriculture's Food & Nutrition Service and conducted by RTI International, a non-profit research organization. The survey will take about 15 minutes to complete. You will receive \$15 for completing this survey.

All of your answers to the survey will be kept private. We will not share your answers with anyone. You may skip any questions you do not want to answer. If you have any questions, please call Matthew Bensen at RTI International at 1-866-800-9176.

Questions on Whether Certain Foods Are Available at Home

1. Were any of the following foods available in your home during the past week? Include fresh, frozen, canned, and dried foods. *(Circle yes or no for each food.)*

a. Bananas	Yes	No
b. Apples	Yes	No
c. Grapes	Yes	No
d. Peaches	Yes	No
e. Oranges	Yes	No
f. Carrots	Yes	No
g. Celery	Yes	No
h. Raisins	Yes	No
i. Potato chips, nacho chips, or corn chips	Yes	No
j. Regular soft drinks or sodas	Yes	No
k. Diet or low calorie soft drinks or sodas	Yes	No

Questions on the Fruits and Vegetables Your Child Eats

For the next questions think about what your child ate during the past week, or the past 7 days. Do not include school or day care time.

2. How many days during the past week did your child eat more than one kind of fruit each day? Do not include fruit juice. *(Circle one.)*
 1. None
 2. 1 to 2 days
 3. 3 to 4 days
 4. 5 to 6 days
 5. Every day

3. During the past week, how many cups of fruit did your child eat each day? Do not include fruit juice. (*Circle one.*)

- 1. None
- 2. 1/2 cup
- 3. 1 cup
- 4. 1 1/2 cups
- 5. 2 cups
- 6. 2 1/2 cups
- 7. 3 cups or more



None



1 cup



2 cups



3 cups

4. How many days during the past week did your child eat more than one kind of vegetable each day? Do not include vegetable juice. (*Circle one.*)

- 1. None
- 2. 1 to 2 days
- 3. 3 to 4 days
- 4. 5 to 6 days
- 5. Every day

5. During the past week, how many cups of vegetables did your child eat each day? Do not include vegetable juice. (*Circle one.*)

- 1. None
- 2. 1/2 cup
- 3. 1 cup
- 4. 1 1/2 cups
- 5. 2 cups
- 6. 2 1/2 cups
- 7. 3 cups or more



None



1 cup



2 cups



3 cups

6. During the past week, did your child eat any meals or snacks that were provided by his or her school or day care? (*Circle all that apply.*)

- 1. Yes, breakfast
- 2. Yes, lunch
- 3. Yes, snacks
- 4. No, did not eat breakfast, lunch, or snacks provided by school or day care

7. Is your child willing to try a new kind of fruit? (*Circle one.*)

- 1. No
- 2. Maybe
- 3. Yes

8. How many days during the past week did you give your child fruit as a snack? (*Circle one.*)

1. None
2. 1 to 2 days
3. 3 to 4 days
4. 5 to 6 days
5. Every day

9. How many days during the past week did your child ask or help himself or herself to fruit as a snack? (*Circle one.*)

1. None
2. 1 to 2 days
3. 3 to 4 days
4. 5 to 6 days
5. Every day

10. How many days during the past week did you give your child fruit at dinner? (*Circle one.*)

1. None
2. 1 to 2 days
3. 3 to 4 days
4. 5 to 6 days
5. Every day

11. Is your child willing to try a new kind of vegetable? (*Circle one.*)

1. No
2. Maybe
3. Yes

12. How many days during the past week did you give your child a vegetable as a snack? (*Circle one.*)

1. None
2. 1 to 2 days
3. 3 to 4 days
4. 5 to 6 days
5. Every day

13. How many days during the past week did your child ask or help himself or herself to vegetables as a snack? *(Circle one.)*

1. None
2. 1 to 2 days
3. 3 to 4 days
4. 5 to 6 days
5. Every day

14. How many days during the past week did you give your child a vegetable at dinner? *(Circle one.)*

1. None
2. 1 to 2 days
3. 3 to 4 days
4. 5 to 6 days
5. Every day

Questions on Your Child's Eating Habits

15. How many days during the past week did your child help you make a snack or cook a meal? For example, did your child wash fruits or vegetables or crack an egg? *(Circle one.)*

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2. Agree
3. Disagree
4. Strongly disagree

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3. Disagree
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18. How strongly do you agree or disagree with the following statement? "I can help my child eat a diet that is healthy." (*Circle one.*)

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***Thank you for completing our survey.
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Research Triangle Park, NC 27709-9779***

Appendix D
Parent Survey Supplemental Materials

List of Contents

D.1: Initial Letter

D.2: Information Sheet

D.3: Contact Card

D.4: Brochure

D.1: Initial Letter

February 2010

Dear Parent or Caregiver,

I am writing to ask you to take part in a research study about what elementary school children eat. This study is being sponsored by the U.S. Department of Agriculture's Food & Nutrition Service and carried out by RTI International, a non-profit research organization.

If you decide to take part in this study, you will be asked to complete two surveys that ask about your child's eating habits. We will mail the first survey to you after you return the completed Contact Card. We will mail the second survey to you about 2 months later. Each survey will take you about 15 minutes to fill out. **As a thank you, we will mail you \$10 cash for filling out the first survey and \$15 cash for filling out the second survey.** We hope you will agree to participate in this important research study. Your survey answers will help improve nutrition education programs for elementary school children in your community.

If you want to take part in the *What Does Your Child Eat?* study, please complete and return the Contact Card to your child's teacher in the envelope provided, so we can send you the surveys. If you do not want to participate, please check the "No" box and return the Contact Card in the enclosed envelope to your child's teacher. These envelopes will be forward to RTI for processing. Every child who returns the envelope will receive a surprise gift and your child's school will receive a cash donation for helping us with the study.

The enclosed brochure provides additional information on the study. If you have any questions about the *What Does Your Child Eat?* study, please e-mail me at USDA@sna.rti.org or call me toll-free at 1-866-800-9176.

Sincerely,



Matthew F. Bensen
RTI International

D.2: Information Sheet

Information Sheet

Introduction

You are being asked to take part in a research study, which is being sponsored by the U.S. Department of Agriculture's Food & Nutrition Service (USDA, FNS) and carried out by RTI International, a non-profit research organization. Before you decide whether to take part in this study, you need to read this sheet to understand what the study is about and what you will be asked to do. This sheet also tells you who can be in the study, the risks and benefits of the study, how we will protect your information, and who you can call if you have questions.

Purpose

The purpose of this survey is to learn what elementary school children eat, as part of a study to improve nutrition education programs for elementary school children. You are one of about 1,400 parents and caregivers who will be asked to participate in this study.

Procedures

If you decide to take part in this study, you will be asked to complete two surveys that ask about your child's eating habits. In order for us to send you the surveys, you need to provide us with your contact information.

Study Duration

We will mail the first survey to you after you return the completed Contact Card. We will mail the second survey to you about 2 months later. Each survey will take you about 15 minutes to fill out.

Possible Risks or Discomforts

There are minimal psychological, social, or legal risks to taking part in this study. There is also a minimal risk of loss of privacy. Please be assured that all of your answers to the survey will be kept private except as required by law, and every effort will be made to protect your contact information. We will not share your contact information or your survey answers with anyone outside the study team.

Benefits

There are no direct benefits to you from participating in this study. Your survey answers will help us improve nutrition education programs for elementary school children in your community and across the country.

Payment for Participation

As a thank you, we will mail you \$10 cash for filling out the first survey and \$15 cash for filling out the second survey, for a total of \$25.

Privacy

Many precautions have been taken to protect your contact information. Your name will be replaced with an identification number. Other personal information like your address will be stored separately from your survey answers. If the results of this study are presented at scientific meetings or published in scientific journals, no information will be included that could identify you or your answers personally.

The Institutional Review Board (IRB) at RTI International and the IRB for Chickasaw Nation has reviewed this research. An IRB is a group of people who are responsible for making sure the rights of participants in research are protected. The IRB may review the records of your participation in this research to assure that proper procedures were followed.

Future Contacts

If you decide to take part in this study, we will mail the first survey to you after you return the completed Contact Card. We will mail the second survey to you about 2 months later. We may also call you and ask you to take part in a group discussion for an additional payment.

Your Rights

Your decision to take part in this research study is completely up to you. You can choose not to answer any survey questions, and you can stop participating at any time. If you decide to participate and later change your mind, you will not be contacted again or asked for further information.

Your Questions

If you have any questions about the study, you may call Matthew Bensen at 1-866-800-9176. If you have any questions about your rights as a study participant, you may call RTI's Office of Research Protection at 1-866-214-2043

D.3: Contact Card

D.4: Brochure

Do I have to participate?

No. You do not have to take part in this study or answer any questions you do not want to answer. Your decision on whether to participate will not affect any social service(s) you may be getting.

¿Tengo que participar?

No. Usted no tiene que participar en este estudio o contestar ninguna pregunta que no quiera contestar. Su decisión de participar o no, no afectará ningún servicio social que pueda estar recibiendo.

Why was I selected?

Specific child care centers or elementary schools were selected for the study. Parents and caregivers in the selected sites and classrooms are being asked to participate.

¿Por qué fui seleccionado(a)?

Se seleccionaron centros de cuidado infantil o escuelas elementales específicos para el estudio. Se les está pidiendo que participen a los padres y a las personas encargadas del cuidado de niños de los centros y escuelas seleccionadas.

How can I get more information?

For more information, call 1-866-800-9176 (toll-free) and leave a message or send an e-mail to USDA@sna.rti.org. Someone from the project staff will contact you.

RTI International is an independent, non-profit research organization in North Carolina, dedicated to conducting research that improves the human condition. For more information, see www.rti.org.

Additional information about the Food & Nutrition Service of the U.S. Department of Agriculture is available at www.fns.usda.gov/fns.

¿Cómo puedo obtener más información?

Para mayor información, llame al número gratuito 1-866-800-9176 y deje un mensaje o envíe un mensaje por correo electrónico a USDA@sna.rti.org. Un miembro del personal del proyecto se comunicará con usted.

RTI International es una organización independiente sin fines de lucro que realiza estudios sobre la salud y está ubicada en Carolina del Norte. Se dedica a realizar estudios que mejoran la condición humana. Para mayor información, vea el sitio de Internet www.rti.org.

Información adicional sobre el Servicio de Alimentos y Nutrición del Departamento de Agricultura de los Estados Unidos está disponible en el sitio de Internet www.fns.usda.gov/fns.



RTI International is a trade name of Research Triangle Institute.

RTI International es el nombre comercial registrado de Research Triangle Institute.

What Does Your Child Eat?



¿Qué come su niño?

Questions & Answers about the *What Does Your Child Eat Study*

Preguntas y Respuestas sobre el estudio ¿Qué come su niño?

Conducted by RTI International and sponsored by the Food & Nutrition Service of the U.S. Department of Agriculture

Realizado por RTI International y pagado por el Servicio de Alimentos y Nutrición del Departamento de Agricultura de los Estados Unidos





What is the purpose of this study?

RTI International is conducting a study for the Food & Nutrition Service of the U.S. Department of Agriculture. This study will help researchers and policymakers understand more about what young children eat and help improve nutrition education programs for children in your community.

¿Cuál es el propósito de este estudio?

RTI International está realizando un estudio para el Servicio de Alimentos y Nutrición del Departamento de Agricultura de los Estados Unidos. Este estudio ayudará a las personas encargadas de realizar estudios y a los legisladores a entender mejor lo que los niños pequeños comen y a ayudar a mejorar los programas educacionales de nutrición para niños en su comunidad.

What is involved and how long will it take?

To participate, complete and return the Contact Card to your child's teacher in the envelope provided. You will receive the

first survey in the mail in 7 to 10 days. The survey takes about 15 minutes to complete. In about 2 months we will contact you one more time by mail to ask you to complete a second survey. This will also take about 15 minutes. You may refuse to answer any question on the surveys, and you may stop participating in the study at any time.

¿Qué hay que hacer para participar en este estudio y cuánto tiempo tomará?

Para participar, complete y devuelva el Formulario de datos personales al/a la maestro(a) de su niño(a) en el sobre que le proporcionamos. Usted recibirá la primera encuesta por correo entre 7 y 10 días. La encuesta toma entre 15 minutos en completarse. En unos 2 meses, nos comunicaremos con usted una vez más por correo para pedirle que complete una segunda entrevista. Esta encuesta también tomará entre 15 minutos en completarse. Usted puede dejar de contestar cualquier pregunta de las encuestas que no desee contestar y puede dejar de participar en el estudio en cualquier momento.

Will I be paid?

Yes. You will be mailed \$10 cash after completing the first survey. You will receive an additional \$15 cash for completing the second survey sent to you about 2 months later.

¿Recibiré algún pago?

Sí. Usted recibirá \$10 dólares en efectivo por completar la primera entrevista. Usted recibirá \$15 dólares adicionales en efectivo por completar la segunda encuesta que se le enviará 2 meses después.

What about my privacy?

The information you provide will be kept confidential except as required by law. We will create an identification (ID) number and use it instead of your name to identify your information, which will prevent anyone from finding out your answers. Only the project staff will see the information we have collected from study participants. We will combine your information with information from all of the other participants to create summary reports.

¿Y qué pasa con mi privacidad?

La información que usted proporcione se mantendrá privada. Nosotros crearemos un número de identificación (ID) que se usará en lugar de su nombre para identificar su información, lo cual va a prevenir que alguien pueda averiguar sus respuestas. Sólo el personal del proyecto verá la información que recopilamos de los participantes del estudio. Nosotros combinaremos su información con la información de otros participantes para crear reportes con los resúmenes del estudio.

Appendix E
Impact Evaluation Methodological Analyses

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- Table E-1. Baseline Demographic Characteristics for Parent Respondents and their Children who Participated in the Eagle Adventure Evaluation Study, by Grade
- Table E-2. Baseline Demographic Characteristics for Parent Respondents and Their Children Who Participated in the Eagle Adventure Evaluation Study, by Condition
- Table E-3. Unadjusted Baseline Means of Participants Providing Post-intervention Follow-Up Data for the Evaluation of the Eagle Adventure Program, by Condition
- Table E-4. Unadjusted Post-test Means for the Evaluation of the Eagle Adventure Program, by Condition
- Table E-5. Baseline Outcome Measures for the Evaluation of the Eagle Adventure Program, Overall and by Grade
- Table E-6. Baseline Outcome Measures for the Evaluation of the Eagle Adventure Program, by Condition
- Table E-7. Attrition Analysis for the Evaluation of the Eagle Adventure Program

Table E-1. Baseline Demographic Characteristics for Parent Respondents and their Children who Participated in the Eagle Adventure Evaluation Study, by Grade

Characteristic	First Grade	Second Grade	Third Grade
Child's sex, % male	50.73	50.19	48.73
Child's age (SD)	7.26 (0.4656)	8.25 (0.5481)	9.16 (0.6415)
Parent ^a /household demographics			
Respondent's age, %			
18 to 34	58.39	55.81	48.41
35 to 44	31.02	33.33	41.72
45 or older	10.58	10.86	9.87
Respondent's sex, % male	7.69	8.99	9.84
Respondent's ethnicity, %			
Hispanic or Latino	3.65	4.89	2.54
Not Hispanic or Latino	96.35	95.11	97.46
Respondent's race, %			
American Indian or Alaska Native	16.42	13.51	13.78
Asian	0.00	0.39	0.00
Black or African American	1.87	1.54	1.60
Native Hawaiian or other Pacific Islander	0.00	0.39	0.00
White	71.27	72.2	74.36
More than one race ^b	10.45	11.97	10.26
Size of household (SD)	4.42 (1.5082)	4.54 (1.4719)	4.56 (1.4773)
Single-adult household, %	16.42	15.73	15.87
School-provided food, %			
Received no food from school	4.74	5.24	3.49
Received breakfast and/or snacks only	3.28	5.62	3.17
Received lunch ^c	20.07	20.97	26.67
Received breakfast and lunch ^c	71.90	68.16	66.67
Number of respondents (%)	274 (32.01)	267 (31.19)	315 (36.80)
Number of schools	10	10	10

^a Represents the parent/caregiver who completed the survey.

^b Includes respondents who selected more than one race category.

^c Some in this category also reported receiving school-provided snacks.

Note: SD = standard deviation.

Source: Parent Baseline Survey, data collected February–March 2010.

Table E-2. Baseline Demographic Characteristics for Parent Respondents and Their Children Who Participated in the Eagle Adventure Evaluation Study, by Condition

Characteristic	Intervention Group (SE)	Comparison Group (SE)	Difference	t-statistic	p-value
Child demographics					
Sex, % male	50.69 (1.6969)	49.59 (1.9210)	1.09	0.43	0.6806
Age	8.31 (0.0477)	8.23 (0.0459)	0.08	1.18	0.2719
Parent ^a /household demographics					
Respondent's age, %					
18 to 34	47.66 (3.3665)	58.80 (3.1762)	-11.14*	-2.41	0.0427
35 to 44	40.85 (3.9896)	31.34 (3.8078)	9.50	1.72	0.1232
45 or older	11.70 (2.5621)	9.89 (2.4458)	1.81	0.51	0.6238
Respondent's sex, % male	10.22 (1.7304)	8.06 (1.6325)	2.16	0.91	0.3900
Respondent's ethnicity, %					
Hispanic or Latino	3.64 (1.2747)	3.90 (1.2047)	-0.26	-0.15	0.8863
Not Hispanic or Latino	96.36 (1.2747)	96.10 (1.2047)	0.26	0.15	0.8863
Respondent's race, %					
American Indian or Alaska Native	14.48 (3.2997)	12.19 (3.1633)	2.29	0.50	0.6295
Asian ^d	0.11 (—)	0.00 (—)	0.11	—	—
Black or African American	0.82 (0.8967)	2.16 (0.8446)	-1.34	-1.09	0.3081
Native Hawaiian or other Pacific Islander	0.00 (0.1698)	0.23 (0.1633)	-0.23	-0.97	0.3584
White	70.49 (4.3178)	76.94 (4.1485)	-6.45	-1.08	0.3131
More than one race ^b	13.72 (1.8801)	8.65 (1.7671)	5.07	1.96	0.0852
Size of household	4.65 (0.0937)	4.41 (0.0884)	0.24	1.85	0.1020
Single-adult household, %	13.92 (1.4641)	18.31 (1.5088)	-4.40	-2.09	0.0699
School-provided food, %					
Received no food from school	4.77 (1.6571)	3.65 (1.5790)	1.13	0.49	0.6352
Received breakfast and/or snacks only	3.97 (1.5185)	3.68 (1.4439)	0.29	0.14	0.8926
Received lunch ^c	23.11 (4.4502)	19.87 (4.3132)	3.23	0.52	0.6160
Received breakfast and lunch ^c	68.92 (6.9104)	72.74 (6.7995)	-3.82	-0.39	0.7037
Number of respondents	411	445			
Number of schools	5	5			

* Indicates statistical significance if the *p*-value is less than or equal to 0.05.

^a Represents the parent/caregiver who completed the survey.

^b Includes respondents who selected more than one race category.

^c Some in this category also reported receiving school-provided snacks.

^d Only two respondents in the intervention group selected "Asian" as their race; therefore, no statistics were produced.

Note: Standard errors (SEs) and *t*-statistic used to test the null hypothesis of no difference between intervention and comparison groups were derived from model-based comparisons adjusted for clustering of students within schools.

Source: Parent Baseline Survey, data collected February–March 2010.

Table E-3. Unadjusted Baseline Means of Participants Providing Post-intervention Follow-Up Data for the Evaluation of the Eagle Adventure Program, by Condition

Measure ^a	Baseline Means (SE)		Difference	t-statistic	p-value
	Intervention Group	Comparison Group			
Primary outcomes (daily at-home consumption)					
Cups of fruits and vegetables	2.17 (0.0978)	2.36 (0.0911)	-0.19	-1.40	0.1984
Cups of fruits	1.06 (0.0499)	1.18 (0.0466)	-0.12	-1.72	0.1230
Cups of vegetables	1.11 (0.0661)	1.17 (0.0620)	-0.06	-0.67	0.5206
Child's other dietary behaviors at home					
Ate variety of fruits ^b	3.08 (0.1356)	3.10 (0.1266)	-0.02	-0.09	0.9329
Ate variety of vegetables ^b	4.00 (0.1539)	4.25 (0.1438)	-0.25	-1.20	0.2662
Helped self/requested fruit as snack ^b	2.38 (0.1517)	2.47 (0.1422)	-0.08	-0.40	0.6963
Helped self/requested vegetable as snack ^b	0.77 (0.0953)	0.99 (0.0891)	-0.22	-1.70	0.1268
Helped parent make snacks or meals ^b	2.25 (0.1057)	2.28 (0.1008)	-0.03	-0.20	0.8471
Willingness to try new fruits ^c	56.53 (2.3934)	58.74 (2.3476)	-2.21	-0.66	0.5288
Willingness to try new vegetables ^c	33.72 (2.6050)	40.63 (2.4818)	-6.91	-1.92	0.0910
Parent behavior and household variables					
Availability of fruits and vegetables ^d	4.80 (0.1043)	4.64 (0.0975)	0.16	1.13	0.2903
Parent offered fruit for snack or dinner ^e	4.11 (0.1906)	4.05 (0.1787)	0.06	0.25	0.8118
Parent offered vegetables for snack or dinner ^e	5.91 (0.1785)	6.19 (0.1670)	-0.28	-1.16	0.2780
Number of respondents	344	379			
Number of schools	5	5			

^a Based on continuous measures of the identified construct, unless otherwise indicated.

^b Reported as the number of days in the past week.

^c Dichotomous variable indicates the proportion responding yes.

^d Index score (0–8) based on reported household availability of eight fruits and vegetables.

^e Reported as the number of times in the past week.

Note: Standard errors (SEs) and t-statistic used to test the null hypothesis of no difference between intervention and comparison groups were derived from model-based comparisons adjusted for clustering of students within schools.

Source: Parent Baseline Survey, data collected February–March 2010.

Table E-4. Unadjusted Post-test Means for the Evaluation of the Eagle Adventure Program, by Condition

Measure ^a	Post-test Means (SE)		Difference	t-statistic	p-value
	Intervention Group	Comparison Group			
Primary outcomes (daily at-home consumption)					
Cups of fruits and vegetables	2.22 (0.0724)	2.34 (0.0684)	-0.12	-1.17	0.2741
Cups of fruits	1.14 (0.0413)	1.18 (0.0390)	-0.04	-0.68	0.5159
Cups of vegetables	1.08 (0.0354)	1.16 (0.0350)	-0.08	-1.70	0.1284
Child's other dietary behaviors at home					
Ate variety of fruits ^b	3.38 (0.1069)	3.28 (0.1020)	0.10	0.70	0.5032
Ate variety of vegetables ^b	3.89 (0.1958)	4.11 (0.1846)	-0.22	-0.82	0.4372
Helped self/requested fruit as snack ^b	2.71 (0.1146)	2.74 (0.1080)	-0.03	-0.16	0.8749
Helped self/requested vegetable as snack ^b	0.88 (0.0530)	0.98 (0.0611)	-0.10	-1.27	0.2390
Helped parent make snacks or meals ^b	2.45 (0.1427)	2.38 (0.1336)	0.07	0.34	0.7436
Willingness to try new fruits ^c	66.20 (3.3920)	63.29 (3.1550)	2.91	0.63	0.5478
Willingness to try new vegetables ^c	43.98 (3.0763)	43.32 (2.8586)	0.66	0.16	0.8790
Parent behavior and household variables					
Availability of fruits and vegetables ^d	5.06 (0.0551)	4.58 (0.0652)	0.47**	5.54	0.0005
Parent offered fruit for snack or dinner ^e	4.51 (0.1566)	4.42 (0.1506)	0.08	0.38	0.7168
Parent offered vegetables for snack or dinner ^e	6.12 (0.2189)	6.18 (0.2047)	-0.06	-0.20	0.8463
Number of respondents	344	379			
Number of schools	5	5			

** Indicates statistical significance if the *p*-value is less than or equal to 0.01.

^a Based on continuous measures of the identified construct, unless otherwise indicated.

^b Reported as the number of days in the past week.

^c Dichotomous variable indicates the proportion responding yes.

^d Index score (0-8) based on reported household availability of eight fruits and vegetables.

^e Reported as the number of times in the past week.

Note: Standard errors (SEs) and *t*-statistic used to test the null hypothesis of no difference between intervention and comparison groups were derived from model-based comparisons adjusted for clustering of students within schools.

Source: Parent Follow-Up Survey, data collected May-July 2010.

Table E-5. Baseline Outcome Measures for the Evaluation of the Eagle Adventure Program, Overall and by Grade

Measure ^a	Overall	First Grade	Second Grade	Third Grade
Primary outcomes (daily at-home consumption)				
Cups of fruits and vegetables (SD)	2.30 (1.4079)	2.31 (1.4617)	2.32 (1.3582)	2.28 (1.4060)
Cups of fruits (SD)	1.13 (0.7867)	1.13 (0.8112)	1.13 (0.7246)	1.14 (0.8176)
Cups of vegetables (SD)	1.17 (0.8405)	1.19 (0.8717)	1.19 (0.8393)	1.14 (0.8155)
Child's other dietary behaviors at home				
Ate variety of fruits ^b (SD)	3.12 (2.0368)	3.18 (2.0198)	3.14 (2.1115)	3.05 (1.9905)
Ate variety of vegetables ^b (SD)	4.17 (2.2788)	4.07 (2.2736)	4.22 (2.2461)	4.20 (2.3153)
Helped self/requested fruit as snack ^b (SD)	2.46 (2.0109)	2.37 (1.9719)	2.68 (2.1260)	2.36 (1.935)
Helped self/requested vegetable as snack ^b (SD)	0.87 (1.4546)	0.89 (1.4937)	0.99 (1.6006)	0.75 (1.2735)
Helped parent make snacks or meals ^b (SD)	2.26 (1.9472)	2.21 (1.9257)	2.26 (1.977)	2.29 (1.9457)
Willingness to try new fruits ^c	58.55	55.88	61.05	58.73
Willingness to try new vegetables ^c	36.45	35.40	38.20	35.87
Parent behavior and household variables				
Availability of fruits and vegetables ^d (SD)	4.72 (1.6051)	4.68 (1.6831)	4.72 (1.4998)	4.76 (1.6260)
Parent offered fruit for snack or dinner ^e (SD)	4.06 (3.0369)	4.25 (3.1353)	4.13 (3.1535)	3.85 (2.8376)
Parent offered vegetables for snack or dinner (SD) ^e	6.06 (2.8678)	6.00 (3.1035)	6.30 (2.8354)	5.90 (2.6692)
Number of respondents	856	274	267	315
Number of schools	10	10	10	10

^a Based on continuous measures of the identified construct, unless otherwise indicated.

^b Reported as the number of days in the past week.

^c Dichotomous variable indicates the proportion responding yes.

^d Index score (0–8) based on reported household availability of eight fruits and vegetables.

^e Reported as the number of times in the past week.

Note: SD = standard deviation.

Source: Parent Baseline Survey, data collected February–March 2010.

Table E-6. Baseline Outcome Measures for the Evaluation of the Eagle Adventure Program, by Condition

Measure ^a	Baseline Means (SE)		Difference	t-statistic	p-value
	Intervention Group	Comparison Group			
Primary outcomes (daily at-home consumption)					
Cups of fruits and vegetables	2.25 (0.0957)	2.38 (0.0902)	-0.13	-0.96	0.3641
Cups of fruits	1.08 (0.0425)	1.18 (0.0403)	-0.10	-1.66	0.1363
Cups of vegetables	1.17 (0.0724)	1.19 (0.0692)	-0.02	-0.21	0.8426
Child's other dietary behaviors at home					
Ate variety of fruits ^b	3.09 (0.1019)	3.14 (0.0976)	-0.05	-0.38	0.7106
Ate variety of vegetables ^b	4.10 (0.1769)	4.29 (0.1682)	-0.19	-0.79	0.4541
Helped self/requested fruit as snack ^b	2.38 (0.1027)	2.54 (0.0981)	-0.16	-1.12	0.2972
Helped self/requested vegetable as snack ^b	0.75 (0.0843)	1.00 (0.0796)	-0.25	-2.16	0.0630
Helped parent make snacks or meals ^b	2.23 (0.0961)	2.28 (0.0925)	-0.05	-0.41	0.6959
Willingness to try new fruits ^c	56.78 (1.6346)	59.36 (1.8750)	-2.58	-1.04	0.3298
Willingness to try new vegetables ^c	33.58 (2.3729)	39.1 (2.2804)	-5.52	-1.68	0.1317
Parent behavior and household variables					
Availability of fruits and vegetables ^d	4.81 (0.1064)	4.65 (0.1004)	0.16	1.12	0.2963
Parent offered fruit for snack or dinner ^e	4.09 (0.1585)	4.06 (0.1512)	0.03	0.15	0.8857
Parent offered vegetables for snack or dinner ^e	5.99 (0.2175)	6.19 (0.2062)	-0.20	-0.68	0.5146
Number of respondents	411	445			
Number of schools	5	5			

^a Based on continuous measures of the identified construct, unless otherwise indicated.

^b Reported as the number of days in the past week.

^c Dichotomous variable indicates the proportion responding yes.

^d Index score (0–8) based on reported household availability of eight fruits and vegetables.

^e Reported as the number of times in the past week.

Note: Standard errors (SEs) and *t*-statistic used to test the null hypothesis of no difference between intervention and comparison groups were derived from model-based comparisons adjusted for clustering of students within schools.

Source: Parent Baseline Survey, data collected February–March 2010.

Table E-7. Attrition Analysis for the Evaluation of the Eagle Adventure Program

Characteristic	Estimated Odds Ratio ^a	95% Wald Confidence Limits		p-value
		Lower	Upper	
Child demographics				
Sex				
Male (reference group)	1.00	—	—	—
Female	1.12	0.764	1.642	0.5606
Age	0.75**	0.611	0.914	0.0045
Parent ^b /household demographics				
Respondent's age				
18 to 34 (reference group)	1.00	—	—	—
35 to 44	1.42	0.937	2.147	0.0985
45 or older	2.67*	1.168	6.096	0.0199
Respondent's sex				
Male (reference group)	1.00	—	—	—
Female	0.35**	0.201	0.620	0.0003
Race/ethnicity				
American Indian or Alaska Native	0.99	0.634	1.535	0.9517
Hispanic ^d	—	—	—	—
Black, non-Hispanic ^d	—	—	—	—
White, non-Hispanic (reference group)	1.00	—	—	—
Other or more than one race ^{c, d}	—	—	—	—
Size of household	0.87*	0.759	0.987	0.0309
Number of adults in the household				
More than one adult (reference group)	1.00	—	—	—
One adult	0.80	0.451	1.412	0.4391
Number of respondents	846 ^e			

* Indicates statistical significance if the p -value is less than or equal to 0.05.

** Indicates statistical significance if the p -value is less than or equal to 0.01.

^a Estimate (with 95% confidence limits) indicates the odds ratio of completers (completed the follow-up survey) to attriters (did not complete follow-up survey) for each demographic characteristic.

^b Represents the parent/caregiver who completed the survey.

^c Includes respondents who selected more than one race category.

^d Low cell counts inhibited odds ratio estimation.

^e Attrition analysis includes 714 completers and 132 attriters.

Notes: Generalized linear mixed model (SAS PROC GLIMMIX) used to evaluate program attrition while accounting for the clustering of students within schools. Dichotomous participation indicator (based on availability of post-intervention data) regressed on child and parent demographic characteristics and household descriptors.

Source: Parent Baseline Survey, data collected February–March 2010.

Appendix F
Instruments for Assessment of the Demonstration
Project's Evaluation

List of Contents

- F.1: Pre-evaluation Interview Guide for Evaluation Lead
- F.2: Review Form for Assessment of the Demonstration Project's Evaluation
- F.3: Outline for Demonstration Project's Evaluation
- F.4: Post-evaluation Interview Guide for Evaluation Lead
- F.5: Resource and Expense Tracking Form

F.1: Pre-evaluation Interview Guide for Evaluation Lead

Discussion Guide for Implementing Agency Evaluation Manager

[Pre-Implementation]

State: _____ Interviewer: _____
Respondent: _____ Date of Interview: _____
Title: _____ Study ID No: _____
Organization: _____
Address: _____

Phone: _____
Fax: _____
Email: _____

OMB No. 0584-0554

Expiration date: 01/31/2013

Public reporting burden for this collection of information is estimated to average 30 minutes per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. **An agency may not conduct or sponsor, and a person is not required to respond to, a collection of information unless it displays a currently valid OMB control number.** Send comments regarding this burden estimate or any other aspect of this collection of information, including suggestions for reducing this burden, to: U.S. Department of Agriculture, Food and Nutrition Services, Office of Research and Analysis, Room 1014, Alexandria, VA 22302 ATTN: PRA (0584-0554). Do not return the completed form to this address.

Thank you for taking the time for this interview. The U.S. Department of Agriculture's Food and Nutrition Service has contracted with Altarum Institute to conduct a study of the Eagle Adventure program. Altarum is a health and nutrition policy research and consulting institute and our work focuses on helping to improve the health and nutrition status of children, families, and adults. This study will include not only outcome evaluation information but also process information on how it is being implemented and how you are evaluating the intervention. All of this will be useful to both FNS and to other SNAP-Ed implementing agencies that are planning to evaluate their own SNAP-Ed interventions.

We will be using first names only today. Everything you say will be kept private. After we conduct several of these interviews, we will write a report for the U.S. Department of Agriculture's Food and Nutrition Service. Your name will not appear anywhere in the report. Nothing said today will be attached to your name at any point. Nothing that you say will affect your job or be shared with your employers.

I expect that our discussion today will take 30 minutes. Before I begin, do you have any questions?

Overview of IA-Led Evaluation Design, Budget and Staffing

Several weeks ago we reviewed the IA application submitted to FNS, 2010 SNAP-Ed Plan, and additional updated materials you have provided to us about your evaluation plans. We summarized this information and sent you a synopsis for your review. To begin our discussion today, we would like to go over that

summary document with you and give you the opportunity to comment or suggest revisions and provide additional information that we could not fill in from the written materials.

1. After reading the summary does any information appear to be incorrect or inaccurately describe your project in any way? Please highlight any information that is incorrect or needs more clarification and make the necessary corrections or additions.

Is this information incorrect because your project has changed in some way since submitting your 2010 SNAP-Ed Plan or did we misunderstand or misinterpret something?

2. We want to be sure we understand your staffing plan for the evaluation. Which project staff or other staff will be responsible for conducting the evaluation? Please name staff and time allotted and if they will be involved in data collection only, data analysis only, in project implementation, or in any combination of these three activities.
3. Will any quality control or monitoring take place during data collection? If so, please describe.

Evaluation Planning Phase

Now let's briefly talk about your experiences in the design and planning phase for this evaluation.

1. What challenges, if any, have you faced during the design and planning phases of this evaluation?
2. What factors do you feel have contributed most to a successful design and planning phase?
3. What lessons have you learned during this key phase of the evaluation design? What would you do differently? What would you do the same?

Anticipated Challenges for Implementation

1. What challenges do you anticipate for this evaluation as you now approach your initial evaluation data collection phase?

Dissemination of Evaluation Results

1. When do you expect to complete data collection? When do you anticipate that you will complete data analysis?
2. How do you intend to use and/or disseminate your evaluation results?

That ends my formal interview questions. Do you have any information about your evaluation plans, comments or recommendations that you would like to add?

Thank you very much for your time and input on this very important project.

F.2: Review Form for Assessment of the Demonstration Project's Evaluation

ASSESSMENT OF IA-LED IMPACT EVALUATION

REVIEW FORM

To develop the evaluation review form, we started by emulating the data abstraction form that the Center for Substance Abuse Prevention (CSEP) used in development of the National Registry of Evidence-based Programs and Practices (NREPP) database, a service of the Substance Abuse and Mental Health Services Administration (SAMHSA; <http://www.nrepp.samhsa.gov/>). Then we compared the data abstraction form against the Society for Prevention Research Standards of Evidence criteria to ensure that the review form captured all relevant evaluation components (<http://www.preventionresearch.org/StandardsofEvidencebook.pdf>).

We expect raters to complete this review form after reading Implementing Agencies' (IA) State SNAP Ed Annual Final Reports and information extracted from other data sources as indicated in the accompanying matrix. We plan to collect much of the data for this review from data abstractions of IAs' applications and evaluation reports. Other data will be obtained from in-depth interviews with the evaluation manager at each of the IA sites.

Implementing Agency: _____

Reviewer: _____ **Date:** _____

Rating scale

The evaluation component being rated...		
Not Acceptable	1	...is missing or so poorly described that its value to the evaluation cannot be determined.
	2	...is inappropriate, misunderstood, or misrepresented in such a way that it cannot contribute to an effective evaluation of the program. The actions or materials reported are not appropriate from the evaluation effort proposed.
	3	...shows a general understanding of its role in the evaluation. However, key details have been overlooked or not thoroughly reported. Needs moderate revision to be considered acceptable.
Acceptable	4	...is appropriate for the evaluation, technically correct, and is described well enough to show a general understanding of its role in the overall evaluation. Evidence shows that it will or has been implemented properly, but minor details may be missing or unclear.
	5	...is appropriate for the program being evaluated and is presented in a way that shows the evaluator has a clear understanding of its role in the evaluation.

A. Research Objectives and Hypotheses

Score: _____

- **Clarity of research questions/hypotheses the evaluation is addressing**
 - *Are the objectives stated in SMART terms (specific, measurable, achievable, realistic, time-bound)?*
 - *A clear theory of causal mechanisms should be stated.*
- **Alignment of evaluation goals and objectives with intervention activities**
 - *Do the objectives/hypotheses include endpoints that are behavioral, meaningful, and related to the program's theory of change?*

B. Viable Comparison Strategy

Score: _____

(Outcome Evaluation Research Design)

Note: under no circumstances should self-selection into treatment or control be viewed as an acceptable method for developing a comparison strategy.

- **Appropriateness of the control or comparison group**
 - *Are the members of the control/comparison groups likely to be similar to the members of the treatment group? Is the study an experimental (randomized) or a quasi-experimental (non-randomized) design? Does this strategy make sense in the context of the treatment program?*
- **Threats to the validity of the design**
 - *Have plausible threats to validity (i.e., factors that permit alternative explanations of program outcomes) been discussed?*
 - *The evaluator must be able to rule out other factors that could explain changes, such as competing programs, concurrent media campaigns, and the effects of maturation among evaluation participants.*
 - *Absent true randomization, there is additional onus on the program to identify and rule out alternative explanations of program effects.*

C. Sampling Size/Sampling Strategy

Score: _____

- **Sample size estimations**
 - *Should be supported by power analysis that indicates the sample is sufficient to detect statistically significant differences in outcomes between treatment and control/comparison groups.*
 - *The power analysis should be matched to the outcome evaluation design. It should be based on an anticipated program effect size that is empirically valid (i.e., drawn from published literature or pilot work).*
- **Method of selecting sample participants from the population.**
 - *Should specify what/who the sample is and how it was obtained. Should be detailed and provide a reasonable basis for generalization of program effects to the broader population of people 'like those' in the study.*
- **Recruitment plans.**
 - *Description of steps to be taken by project staff to increase the likelihood that members of the target population approached by the program will agree to participate in the program*
NOTE: no program will have 100% recruitment, but rates below 70% - 80% should be closely examined for justification.

D. Outcome Measures

Score: _____

- **Quality of the data collection instruments (surveys, interviews)**
 - *Information on reliability (internal consistency (alpha), test-retest reliability, and/or reliability across raters) and construct validity of measures should be provided.*
 - *When possible, the use of scales is preferable to single item measures.*
- **Alignment of evaluation measures with the intervention activities.**
 - *Outcome measures assess actual behavior change.*
 - *Outcome measures should map onto research objectives/hypotheses*
 - *Higher scores should be considered for measures that include intermediate factors in the behavior change process.*

E. Data Collection

Score: _____

- **Overview of data collection schedule**
 - *Timing of data collection should align with program activities*
 - *Should be realistic and achievable*
- **Rigor of the data collection process**
 - *Data collection for the intervention and comparison group participants should be similar. Any differences should be noted and justified.*
 - *Participant data should be anonymous (no names linked to data) or confidential (names linked to data are kept private).*
 - *Should include description of data management and data security measures*
 - *Describe longitudinal tracking procedures*
- **Quality of the data collection process**
 - *Evidence of thorough training of data collectors*
 - *High scores should be given for data collection procedures that are least likely to introduce bias or promote non-response.*

F. Data Analysis

Score: _____

Note: Descriptive statistics are not sufficient to show program effects!

- **Sample characteristics and baseline comparability**
 - *Tables showing demographic information and number of participants in the intervention and comparison groups*
 - *Statistical tests assessing baseline comparability across treatment conditions*
- **Statistical methods used to assess the program impacts**
 - *Multivariate statistics should be used to assess program effects*
 - *Statistical approach should be matched to the characteristics of the research design and the data being collected*
- **Additional Statistical Procedures and Analyses**
 - *Analyses/Methods for handling attrition bias are proposed/conducted properly*
 - *Procedures for accounting for missing data are proposed/conducted properly*
 - *Subgroup analyses proposed/presented for primary outcomes*
Potential indicators for specifying sub-groups include demographic and socioeconomic variables.

G. Attrition (loss of participants)

Score: _____

- **Attrition is program drop out.** *It is the differences between the number of participants completing baseline survey and the number completing the post-intervention and follow-up survey(s). Modest attrition should be anticipated in the design. Lowest scores given for extraordinary attrition rates.*

H. Missing Data (incomplete survey/items)

Score: _____

- **Missing data is survey non-response.** *It represents the absence of, or gaps in, information from participants who remain involved in the evaluation. Lowest scores given for a large amount of missing data.*

F.3: Outline for Demonstration Project's Evaluation

Outline of Information Needed on CNNS-led Evaluation of the *Eagle Adventure* Program

A. Research Objectives and Hypothesis

- 1. Provide hypotheses (research questions) addressed by the evaluation**

Project Level Goals:

Project Level Objectives:

- 2. Specify each outcome variable assessed by the evaluation**

- a. Primary Impacts (most important outcomes; main focus of the intervention activities)**

- b. Secondary Impacts (intermediate outcomes, variables of interest that indirectly addressed by intervention activities)**

B. Research Design

C. Sample Size/Sampling Strategy

- 1. Describe the study population and the number of individuals in the study population**

- 2. Provide sample size and describe method used to select sample participants for the evaluation study from the population**

- 3. Describe steps taken to increase likelihood that members of the target population approached by the program would participate (i.e., recruitment strategies used to increase the program response rate)**

D. Outcome Measures

1. **For each impact (outcome variable) being assessed by the evaluation (including intermediate factors in the behavior change process, if appropriate):**
 - a. **Describe key measures or indicators used to assess the intervention’s impact (outcome variable)**
 - b. **State whether the measures were scales or single item measures**
 - c. **Provide information on reliability (internal consistency [alpha], test-retest reliability, and/or reliability across raters) and construct validity of each measure**

Impact	Measure/Indicator	Scale or Single Item Measure	Information on Reliability and Validity

E. Data Collection

1. **Describe data collection methods and timing of pre- and-post intervention data collection**
2. **Describe procedures used to track participants longitudinally**
3. **Describe training provided to data collectors**
4. **Provide information on survey response rates at pre- and post-intervention**

F. Data Analysis

1. **Provide table showing demographic information for the participants who completed the pre-intervention survey. Table 1 provides a suggested format for providing this information.**
2. **For each outcome measure, compare the intervention group at pre- and post-intervention, the number of participants measured at each time period, and the**

change between pre- and post-intervention. Describe tests of statistical significance and their results. **Table 2 provides a suggested format for providing this information for means and Table 3 provides a suggested format for providing this information for percentages.**

3. If modeling was conducted, describe modeling approach (model specification) used, including variables included in the model, software package used, and estimation procedures

G. Attrition

1. **Describe analyses and methods used to handle attrition bias, if any**
2. **If conducted, provide results of attrition analyses.** (For example, indicate if any characteristics distinguished between participants lost to attrition and those who completed the post-intervention data collection.)

H. Missing Data (item non-response)

1. **Describe procedures used to account for missing data, if any**
2. **Provide amount of missing data on an item-by-item basis for the demographic and outcome variables included in the model (# of cases, % missing)**

Table 1. Suggested Format for Providing Information on the Demographic Characteristics of the Intervention Group for the Pre-Intervention Survey

Characteristic	Intervention (<i>n</i> = 246)
Age in years <i>M</i> (<i>SD</i>)	48.34 (13.74) ^a
Gender %	
Female	81.30
Male	18.70
Etc.	

^a Mean (standard deviation)

Table 2. Suggested Format for Providing Information on Outcome Measures (Means)

	Intervention		<i>t</i>	<i>p</i>
	Pre	Post		
Outcome				
Variable 1				
Sample size	246	175		
Mean (<i>SE</i>)	1.42 (0.14)	1.69 (0.15)	1.92	0.057
Etc.				

Table 3. Suggested Format for Providing Information on Outcome Measures (Percentages)

	Intervention		χ^2	<i>p</i>
	Pre	Post		
Outcome				
Variable 2				
Sample size	246	174		
Percent (<i>SE</i>)	53.91 (4.41)	67.92 (4.13)	7.45	0.059
Etc.				

F.4: Post-evaluation Interview Guide for Evaluation Lead

**Discussion Guide for Implementing Agency Evaluation Manager –*Eagle
Adventure Program***
[Post-Implementation]

OMB No. 0584-0554

Expiration date: 1/31/2013

Public reporting burden for this collection of information is estimated to average 30 minutes per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. **An agency may not conduct or sponsor, and a person is not required to respond to, a collection of information unless it displays a currently valid OMB control number.** Send comments regarding this burden estimate or any other aspect of this collection of information, including suggestions for reducing this burden, to: U.S. Department of Agriculture, Food and Nutrition Services, Office of Research and Analysis, Room 1014, Alexandria, VA 22302 ATTN: PRA (0584-0554*). Do not return the completed form to this address.

Thank you for taking the time for this interview. As you know, the U.S. Department of Agriculture's Food and Nutrition Service has contracted with Altarum Institute to conduct a study of the CNNS Eagle Adventure Program. Altarum is a health and nutrition policy research and consulting institute and our work focuses on helping to improve the health and nutrition status of children, families, and adults.

This study will include not only outcome evaluation information but also process information on how it is being implemented and how you are evaluating the intervention. All of this will be useful to both FNS and to other SNAP-Ed implementing agencies that are planning to evaluate their own SNAP-Ed interventions.

As I mentioned during our last meeting, we will be using first names only today. Everything you say will be kept private. After we conduct several of these interviews, we will write a report for the U.S. Department of Agriculture's Food and Nutrition Service. Your name will not appear anywhere in the report. Nothing said today will be attached to your name at any point. Nothing that you say will affect your job or be shared with your employers.

I expect that our discussion will take about 45-60minutes today. Before I begin, do you have any questions?

Impact Related Questions

(If needed) Ask questions to clarify information provided in evaluation report.

Process Related Questions

Changes from what was planned

1. The language used to describe your project outcome level objectives varies from what was included in your application to FNS. For example, previously, your objectives indicated that children would “increase their choice of fruit by one” or “their choice of vegetables by one.” These objectives now seem to be addressed through an “intent to choose” and a more specific consumption objective. Also, an objective to assess children’s “intent to participate in physical activity” was added. Could you please describe your rationale for making these changes? Were your data collection instruments revised as a result of these changes?
2. Your original research design called for the administration of pre-intervention surveys 1 to 7 days prior to the start of the intervention. In your evaluation report, you indicate that the number of days between the pre-survey and the start of the intervention was actually between 11-14 days. Could you please explain why or identify reasons for this deviation from what was originally planned?
3. Did you make any changes to your data collection tools based on results from the pilot?
4. Did you make any changes to your planned data collection techniques? What caused these changes?
5. What changes, if any, did you make in the methods for protecting participant privacy? What caused these changes?
6. What changes did you make to your data analysis plan? What caused these changes?
 - a. What changes if any did you make in the staffing for your data collection or staffing for your data analysis?
 - b. Did you need more or less time than budgeted for staff to spend on the data collection? On the data analysis? Why do you think you needed more/less time than budgeted for these evaluation tasks?
7. Did you have any increased non-personnel costs or resources required for the evaluation? If yes, what additional costs or resources were needed compared to what you planned for?
8. With many programs, there are alternative explanations of program outcomes that need to be ruled out due to plausible threats to validity. Based on your analysis, you saw changes in Food Choice Scale, Physical Activity Choice Scale, Physical Activity Knowledge Scale, and Physical

Activity Behavior Scale. Are there any other factors that could explain the changes you observed (e.g. competing programs, concurrent media campaigns, effects of maturation among evaluation participants)?

Lessons Learned

9. Other than those we discussed above, what challenges, if any, have you faced during the implementation of this evaluation?
10. What do you think worked very well in the implementation of your evaluation? What factors contributed to what worked well?
11. What do you think did not work well and what factors contributed to this?
12. What lessons have you learned from conducting this evaluation?
13. Are you planning a future evaluation of your program?
14. Whether or not you are planning a future evaluation, what would you do differently?
15. What would you be sure to do the same?
16. Was your evaluation influenced/impacted at all because of the need to coordinate with an external evaluator? If so, how?

Dissemination Plans

17. How do you now plan to use and/or disseminate your evaluation results?

That ends my formal interview questions. Do you have any comments or recommendations that you would like to add? Thank you very much for your time and input on this important project.

F.5: Resource and Expense Tracking Form

Project Resource and Expense Tracking Form for CNNS *Eagle Adventure* Program

This data collection form will be used to summarize information about ACTUAL resources used for and expenses related to your evaluation of the *Eagle Adventure* program.

2.1 Summarize actual staff costs (human capital) used for your *evaluation*

a) At the administrative, coordination, oversight level

Title of position	Brief description of responsibilities	FTEs	Average salary for this position	Salary range for this position

b) At the evaluator level, IF APPLICABLE

Title of position	Brief description of responsibilities	FTEs	Average salary for this position	Salary range for this position

c) IT/Technical Staff, IF APPLICABLE

Title of position	Brief description of responsibilities	FTEs	Average salary for this position	Salary range for this position

d) Other

Title of position	Brief description of responsibilities	FTEs	Average salary for this position	Salary range for this position

2.2 Describe the ACTUAL physical capital required to *evaluate* this project

- a) Space
- b) Audio/visual
- c) Computer/software
- d) Other

2.3 Please provide the following information for ACTUAL expenditures related to the evaluation of your SNAP-Ed intervention only (NOT FOR IMPLEMENTATION)

Expenses	(a) Non-Federal Public Funds		(b) Non-Federal, Non-cash	(c) Total Non-Federal Funds (a+b)	(d) Federal Funds	Total Funds (c+d)
	Cash	In-kind Donations				
1. Salary/benefits						
2. Contracts/grants agreements						
3. Non-capital equipment/ supplies						
4. Materials						
5. Travel						
6. Administrative						
7. Building/space						
8. Maintenance						
9. Equipment and other capital expenditures						
10. TOTAL Direct Costs						
11. Indirect costs						
12. TOTAL Costs						

Appendix G
Process Evaluation Methodology

PROCESS EVALUATION METHODOLOGY

As described in chapter I, the following seven broad research questions provided the framework for the process evaluation design and approach:

- What was the demonstration project's overall objectives and approach?
- How was the intervention implemented and administered?
- How many people were reached and how much exposure did participants have to the intervention?
- What environmental factors could have influenced the ability of the intervention to achieve desired behavioral outcomes?
- What resources and associated costs were needed for design and implementation of the intervention?
- What were the facilitators, challenges, and lessons learned regarding implementation and administration of the intervention?
- What feedback did participants have about the implementation of and their satisfaction with the intervention?

These broad research questions and more specific indicators, also described in section I, guided the design of the Eagle Adventure evaluation, including respondent samples, instrument development, data collection procedures, response rates, and analysis approach, all of which are described in detail in the following sections.

1. Research Design and Data Sources

As noted in the introductory chapter, the process evaluation methodology was designed to ensure comparable data collection across the four demonstration projects while allowing for project-specific tailoring of the approach. The research design for the Eagle Adventure process evaluation was primarily qualitative in approach. The distinctive characteristics of this program as well as their influence on the tailored research design are summarized in exhibit VI-1.

Exhibit G-1.— Characteristics of the Eagle Adventure Program that Contributed to a Tailored Process Evaluation Research Design.

Characteristic	Implications for research design
<p>1 The Eagle Adventure curriculum was developed by CNNS during the FNS evaluation study period.</p>	<p>Because the Eagle Adventure curriculum had not previously been implemented, it was especially important to document barriers, challenges, and successes of the program from the perspective of the Chickasaw Nation Nutrition Services (CNNS) administrators and implementers, as well as lessons learned for the purpose of replication. It was also important to capture the perspective of the target audience(s) in terms of their experience and level of satisfaction with the nutrition education messages and materials.</p>
<p>2 The program was administered by a relatively small, but very collaborative, group.</p>	<p>The Eagle Adventure team—the individuals responsible for the design, planning, evaluation, and implementation of the program—was relatively small and worked collaboratively to design, plan, and implement the demonstration project. Because of the collaborative nature of the group and the sharing of roles and responsibilities, it was important to be flexible and inclusive when conducting key informant interviews. Likewise, it was important to recognize that there would be a limited number of respondents contributing information for the process evaluation.</p>
<p>3 The Eagle Adventure curriculum was based on some existing resources that were designed for a Native American audience.</p>	<p>The schools included in the intervention had higher than average proportions of Native American students. Still, a considerable proportion of the students at the selected schools were not Native American, thus it was important to capture how well the messages and materials resonated with the target audience(s) overall.</p>

To address each of the research questions it was necessary to gather both objective and subjective information, as such, the process evaluation team acquired and assessed data from secondary and primary data sources using multiple methods, including data abstraction; in-depth, open-ended interviews with stakeholders; direct nutrition education observation; focus groups with parents or caregivers of nutrition education recipients; and paper questionnaires designed to collect information on other nutrition education activities. Exhibit VI-2 summarizes how various sources were used to inform the seven broad process-related research questions by providing a crosswalk of data sources—both secondary and primary—to the indicators that were collected and analyzed. More detail on the specific secondary and primary sources of information for the process evaluation is provided below.

Exhibit G-2.—Crosswalk of Process Evaluation Research Questions and Indicators to Eagle Adventure Data Sources

Research Questions and Indicators	Secondary Data Sources	Primary Data Sources				
		Program Manager and Administrator(s)	Direct Educator	School Principals	Parents and Caregivers	Nutrition Education Observation
What was the demonstration project’s overall objectives and approach?						
Target audience and intended reach	✓					
Intended impacts	✓					
Method and setting of education delivery	✓					
Theoretical underpinnings	✓					
Project development timeline	✓	✓				
Formative research and pilot testing	✓	✓				
Number and topic of lessons in the curriculum	✓					
Key nutrition education messages and activities	✓					
Planned education dose and intensity	✓					
Types and sources of nutrition education materials	✓					
How was the intervention implemented and administered?						
Management and oversight structure		✓				
Partnerships	✓	✓				
Direct educators’ qualifications, characteristics, or training	✓	✓	✓			
Recruitment approach (for intervention sites, for parents)		✓				
Quality control and monitoring procedures		✓	✓			
How many people were reached and how much exposure did participants have to the intervention?						
Number of participating schools and classrooms	✓					
Number and demographics of participating children	✓					
Indirect education reach and dose	✓				✓	

continued

Exhibit G-2.—Crosswalk of Process Evaluation Research Questions and Indicators to Eagle Adventure Data Sources (continued)

Research Questions and Indicators	Secondary Data Sources	Primary Data Sources				
		Program Manager and Administrator(s)	Direct Educator	School Principals	Parents and Caregivers	Nutrition Education Observation
What environmental factors could have influenced the ability of the intervention to achieve desired behavioral outcomes?						
Exposure to other nutrition education messages				✓		✓
Teacher and staff support of intervention			✓	✓		✓
Teacher reinforcement of messages			✓			✓
Availability of fruits and vegetables on lunch menus						✓
What resources and costs were needed for the design and implementation of the intervention?						
Range and mean salary, by staff type	✓					
Number of FTEs, by staff type	✓					
Other direct costs	✓					
Physical capital used	✓					
What were the facilitators, challenges, and lessons learned regarding implementation and administration of the intervention?						
Deviations from plan, reasons for deviations		✓	✓	✓		✓
Key challenges		✓	✓	✓		
Key facilitators		✓	✓	✓		
Recommendations for program improvement		✓	✓	✓		
What feedback did participants have about the implementation of and their satisfaction with the intervention?						
Facilitators of and barriers to participation					✓	
Parent perception of the intervention goals					✓	
Parent satisfaction with the education					✓	
Reported changes in nutrition behaviors					✓	
Barriers or challenges to changing nutrition behaviors					✓	
Recommendations for improving program accessibility					✓	
Recommendations for improving program usefulness					✓	

a. Secondary data sources

The secondary data sources that were collected and reviewed at various stages of the evaluation are provided in exhibit VI-3. These sources served as rich sources of descriptive, objective information on key aspects of the demonstration project’s design and implementation. Abstracting this type of information from secondary sources helped to reduce the burden on key informants who would have otherwise needed to supply this information through interviews or surveys. The existing sources that were collected and reviewed by the evaluation team can be categorized into four groups: planning and reporting, implementation documents, administrative data on program reach and dosage, and program costs.

Exhibit G-3.— Secondary Data Collected for the Process Evaluation of the Eagle Adventure Demonstration Project.

Document Category	Specific Documents Reviewed
Planning and Reporting Documents	<ul style="list-style-type: none">• Demonstration project application• FY 2010 SNAP-Ed Plan
Implementation Documents	<ul style="list-style-type: none">• Nutrition education lesson plans• Nutrition education materials• Training curriculum and protocols
Administrative Data on Program Reach and Dosage	<ul style="list-style-type: none">• Type and number of indirect contacts made• Demographic information on participants at each intervention site• Planned and actual number of children in the direct education interventions at each site• Type of educator implementing the direct education at each site (e.g., professionals or paraprofessionals)• Activity logs documenting lesson duration and implementation schedule by classroom
Program Costs *	<ul style="list-style-type: none">• Standardized cost tables consistent with FNS SNAP-Ed expenditure reporting requirements

*Altarum Institute provided a form for CNNS to complete to ensure cost data were collected in a standardized way (see “Resource and expenss tracking form” in Appendix A).

i. Planning and reporting documents

The application CNNS submitted to FNS in response to the solicitation for this study provided detailed background and objective information related to how CNNS planned to develop, implement, and evaluate the Eagle Adventure demonstration project. The FY 2010 SNAP-Ed Plan, however, contributed limited information to the analysis. This type of report is used to aggregate and summarize information across all planned activities related to SNAP-Ed in the State, thus, it included minimal information on the Eagle Adventure program specifically.

ii. Implementation documents

Implementation documents, such as final nutrition education lesson plans and materials as well as training curriculum tools and protocols, contributed substantial objective information on the program’s actual (rather than conceptualized or planned) goals and objectives, nutrition education messages and activities, and preparation for planned implementation of the demonstration project.

iii. Administrative data on program reach and dosage

The Eagle Adventure team collected and shared a substantial amount of process data related to the implementation of their program with the evaluation team. Some of this information had already been tabulated and was provided in the form of summary tables, such as classroom characteristics (number of classrooms and students in each school, by grade) and the number of days between each lesson by school. The remainder of the process data collected by the Eagle Adventure team (e.g., number of indirect contacts made, duration of each lesson) was provided in an Excel file format, which the evaluation team subsequently tabulated and summarized.

iv. Program costs

The CNNS team provided data on resources and costs associated with designing, implementing, and evaluating the Eagle Adventure program. Although we provided CNNS with a series of cost-related tables to complete, this information was categorized as a secondary data source because it was requested in a format that is consistent with FNS SNAP-Ed reporting requirements, thus it should have already existed in some form.

b. Primary data sources

Primary data were collected from three categories of key informants—program-level staff members, intervention site key contacts, and program participants—as well as through direct nutrition education observation. The information gathered from key informants was descriptive and primarily qualitative in nature. The timing of data collection from key informants was strategic, with onsite visits taking place approximately one month prior to the start of the intervention (February 2010) and immediately following completion of the intervention (May 2010). Key informant interviews were conducted during both time periods with all of the CNNS staff involved in the planning, design, and implementation of the Eagle Adventure intervention (n=5) as well as administrators from each of the five intervention schools (n=5). The types of respondents and timing of data collection are presented in Exhibit VI-4. Parent focus groups were only conducted post-intervention. Descriptive statistics on the demographics of focus group participants are provided in Appendix B.

i. Program-level staff

We interviewed all of the Eagle Adventure individuals involved in the planning, design, and implementation of the Eagle Adventure intervention. Our data collection plan included interviewing program administrators, evaluators, direct educators, and trainers of the direct educators. To this end, we worked directly with the program manager to identify key members of the Eagle Adventure team and to gain a basic understanding of their respective roles and responsibilities. During this process, it became clear that the Eagle Adventure staff played multiple roles and had many responsibilities; therefore, they did not clearly fit under any one respondent type (e.g., trainer, direct educator). In fact, the Eagle Adventure team worked in such a collaborative manner that the program manager really thought it was important to include everyone on her team. The evaluation team agreed and was able to accommodate this suggestion by conducting a group key informant interview.

Exhibit G-4.—CNNS Respondent Types, Data Collection Methods and Number of Respondents

Type of Respondent	Data Collection Method	Number of Respondents (n)	
		Pre-Intervention	Post-Intervention
Program Staff (N=5)			
Program Manager or Administrator	Interview	1	1
Outcome Coordinator	Interview	1	1
Program Coordinator or Direct Educator	Interview	1	1
Direct Educator	Interview	1	1
Evaluation Coordinator	Interview	1	1
Intervention School Staff (N=5)			
School Principals or Superintendents	Interview	5	5
Program Participants			
Parents or other primary caregivers of children who participated in Eagle Adventure Program nutrition education	Focus Group	n/a	23
	Survey (process questions included in parent follow-up survey)	n/a	344

Note: n/a= not applicable

ii. Intervention site key contacts

As previously described, the intervention sites for the Eagle Adventure program were first- through third-grade classrooms in five elementary schools. As the intervention site of a nutrition education program that had not yet been piloted, there was the potential for the schools to be affected in unintended ways. For this reason, it was important to capture the perspective of this stakeholder group. School principals and superintendents were identified as the best first point of contact and a potential key informant for this stakeholder group because they serve as “gatekeepers” for their schools and would need to approve the implementation of a nutrition education intervention with their students. The recruitment process is described later in section 4.c. The individuals selected from each site also served as the primary respondents or points of contact for the brief questionnaire on other nutrition education activities taking place in their school. Teachers from the intervention classrooms were not identified as key informants for this project’s evaluation because they were not required to be present during the Eagle Adventure nutrition education lessons.

iii. Members of the target audience

Again, particularly because the Eagle Adventure program had not previously been piloted, it was critical to capture the perspective of nutrition education recipients. Because they would be both knowledgeable about their child’s nutrition related behaviors and were indirect recipients of the program, parents or caregivers of the nutrition education recipients (first- through third-graders) were determined to be the

most appropriate respondents from this key stakeholder group. Parents or caregivers were an important source of information related to accessibility of the nutrition education materials to parents, participant satisfaction, relevance of the messages and materials, and recommendations for improvement. As shown in exhibit VI-4 above, a total of 23 adults participated in the three focus groups and 344 parents and caregivers responded to the post-intervention survey. The number of discussants in each group and their demographic characteristics are provided in appendix B.

iv. Direct observation of nutrition education

The fourth primary data collection source was direct observation of a convenience sample of intervention classes. The focus of these observations was on the education environment (e.g., classroom setting, classroom teachers' engagement) and factors related to program fidelity (e.g., implementation of lessons as planned by the nutrition educator, across the classrooms).

2. Instrumentation

Data collectors used standardized secondary data abstraction tools and primary data collection instruments across the four demonstration projects. The wording of many of the questions in each key informant interview and the focus group discussion guide was tailored to each of the demonstration projects. While such customization was important to capture the unique aspects of each demonstration program, at each data collection occasion, we worked from the same core set of questions. All data collectors were trained on the use of these approved instruments to collect information essential to answering the process-related research questions and queries.

In addition, key informant interviews included relevant, probing questions to allow for in-depth discussions of critical issues or topics.

Data collection commenced in late winter and early spring of 2009. Detailed descriptions of the instruments developed and implemented as part of the process evaluation of the Eagle Adventure program, including their intent and various characteristics of their administration, are provided below. Secondary data collection tools are described first, followed by descriptions of the primary data collection tools. Copies of most of the instruments are provided in appendix A. The parent follow-up survey instrument is included in appendix C.

a. Secondary data collection instruments

i. Data abstraction tools

Data abstraction from secondary data sources helped to reduce the burden on key informants who would have otherwise needed to supply this information through interviews or surveys. The data abstraction tool was designed to capture objective, yet descriptive information related to: formative research conducted to inform the project; the demonstration project's design (e.g., descriptions of the target audience, intervention goals, nutrition education delivery methods, curriculum content); and operational aspects of the program's implementation.

Data Collection Instruments Used to Collect Process Data on the Eagle Adventure Program.

- Data abstraction tools
- Other nutrition education documentation form
- Program cost form
- In-depth, open-ended key informant interview guides
- Parent and caregiver focus group guide
- Parent and caregiver follow-up survey (the subset of process questions)
- Nutrition education observation protocol

ii. Other nutrition education documentation form

Nutrition education documentation forms were developed to capture key information about nutrition education activities, other than the planned SNAP-Ed intervention, that were implemented at the intervention and control schools either in the year prior to each demonstration project's planned intervention or during the demonstration project's intervention period. The form was designed to collect the name of these other nutrition education curricula (if any), the time period of their implementation, and the grades of participants.

iii. Program cost form

The Eagle Adventure team compiled and provided us resource and cost information for the three key phases of the demonstration project—program design, program implementation, and program evaluation. We provided a standardized program cost information form that was consistent with FNS SNAP-Ed reporting requirements. Specifically, we requested data on: human capital (e.g., staff roles and responsibilities, number of FTEs, as well as averages and ranges of salaries for each), physical capital (e.g., printing, labels, computers, folders), and line-item expenditures (e.g., salary and benefits, materials, travel) by funding source (i.e., non-Federal or Federal funds).

b. Primary data collection instruments

i. In-depth, open-ended key informant interview guides

Consistent with a participant-oriented approach, primary data were elicited from a number of stakeholders—namely, CNNS program staff members, intervention site contacts, and participants—through in-depth, open-ended discussions. This method was used to capture rich, subjective information from key informants both pre- and post-intervention. The pre-intervention interviews focused on the planning and design of the demonstration project and sought to capture the experiences and perspectives of, as well as lessons learned by, various key informants during this phase of the project. Post-intervention interviews also sought to capture the experiences and perspectives of, as well as lessons learned by, various key informants, but specifically for the implementation phase of the project. Because of the varying foci of the interviews at each of these key time periods, two interview guides were developed for each key informant type—one for use prior to intervention and one for use post-intervention. The key informant types for whom instruments were developed include program manager, evaluation manager, trainer of direct educators, direct educator, and school principal or superintendent.

ii. Parent and caregiver focus group discussion guide

The focus group guide was designed to elicit experiences and perspectives from parents or caregivers whose children participated in the Eagle Adventure intervention and who were the recipients of indirect education through the distribution of nutrition education take-home materials. Topics related to exposure to and accessibility of the intervention, level of satisfaction with the program, relevancy of the information and materials provided, perceived impacts on their or their child's nutrition related behaviors, factors affecting fruit and vegetable availability at home, and recommendations for improving the program were covered during each focus group

iii. Parent follow-up survey (subset of process questions)

A short series of process-related questions were included on the parent and caregiver follow-up survey. The process questions focused on respondents' usage of the educational materials that accompanied the

intervention (e.g., Eagle Books, recipes, Nestworks) and perceived usefulness of the intervention's nutrition education materials to the recipient's parent or caregiver. Because of the limited Eagle Adventure data available on program dosage, parent survey responses were the only source of information on the average dose of education received by the parent and child participants in the Eagle Adventure program. The survey also included an open-ended question to capture respondents' other views and recommendations for the program. (See appendix C.)

iv. Structured nutrition education observation protocol

The nutrition education observation tool allowed for the documentation of environmental influences (e.g., classroom setting, classroom teachers' engagement), participants' interest in the nutrition education lessons, and program fidelity. The tool also included several questions that were to be asked of the direct educator at the completion of each of the observed lessons. These questions offered the direct educator to reflect on the previous lesson and describe any deviations from their lesson plan as well as anything that did or did not go particularly well.

3. Data Collector Training

Several months prior to onsite data collection, data collection team members participated in a comprehensive training. The purpose of this training was to review the logistics of the data collection plan, walk through the process of respondent recruitment, and provide guidance and instructions on scheduling these early site visits and coordinating interviews with multiple respondents. In addition, to ensure that data collectors used each interview instrument correctly and consistently, the training also included a review of the intent of each data collection instrument, the schedule of interviews, and the specific study research questions underlying the topics and questions within each of the respondent-specific interview discussion guides.

4. Data Collection Procedures

The data collection team for the Eagle Adventure process evaluation comprised two evaluators from Altarum. One evaluator, a senior staff member, took the lead role on all recruitment and data collection activities. A detailed description of the procedures used to recruit program participants, collect process information from various sources, and document responses is provided in this section.

a. Data abstraction from secondary sources

All secondary data sources were collected directly from the demonstration project administrators as they became available. Because most secondary data sources were available prior to implementation, data abstraction was completed before onsite data collection commenced. Members of the evaluation team carefully reviewed all documentation provided by the demonstration projects and abstracted key information to be included in the analysis and final summation of the project. Further, this review of materials substantially informed revisions made to key informant interview guides. This data abstraction tool and the information contained within it were used to develop a summary of the demonstration project's design and program content. When updated materials were provided to the project team or updated information was obtained through interviews, this summary was revised accordingly.

b. Data collection procedures for program-level key informant interviews

At the onset of the study and throughout the study period, the evaluation team maintained informal communication with the demonstration project staff—primarily the program manager. This ongoing

communication fostered a strong working relationship, and as a result, formal recruitment of the program manager and other program-level staff members for key informant interviews was not necessary. However, to officially kick off our recruitment effort and to ensure timely, efficient communication of information required to finalize plans for onsite data collection, the following packet of materials was submitted to the program manager approximately 3 months prior to the start of their intervention—or 2 months prior to onsite data collection. This packet, which was sent electronically, included the following:

- Brief overview memorandum, or cover email, which described the packet of materials (sent as attachments) and outlined next steps, including timelines and expectations;
- Respondent contact information form for the program manager to complete with potential respondents' contact information;
- Draft letter for the program manager to review, revise as necessary, and submit to intervention site contacts to inform them about the independent evaluation and request their cooperation; and
- Data collection plan summary, which provided an overview of our data collection plan for each site, including the number and type of respondents and timing of data collection.

The program manager was very responsive to this form of communication and effectively facilitated the recruitment of her staff and identified a date, block of time, and facility for the evaluation team to conduct onsite interviews. The same facility and a similar interview schedule were followed in order to streamline this process when planning post-intervention onsite interviews.

c. Data collection procedures for implementation site key informant interviews

In addition to facilitating and accommodating onsite data collection with demonstration project staff, the Eagle Adventure program manager, along with her program coordinator and nutrition educator, hand-delivered the introductory letter described above to the principals and superintendents of each intervention school. Once delivery of these letters was confirmed, the evaluation team took the following steps to complete recruitment of the intervention site contacts:

- **Follow-up letter to provide overview of the impact and process evaluation design.** A follow-up email, which provided a detailed description of the type and timing of data we planned to collect and what we would need from them during the study period, was sent to school principals and superintendents of the five intervention schools. The communication also described our plans to recruit parents of students in the intervention classrooms into focus groups.
- **Follow-up telephone call.** Once the above correspondence was sent, the Altarum Institute evaluation team followed up with the school principals and superintendents by telephone to formally recruit them into the study and to schedule a convenient time for the interviews.

Four out of the five intervention site contacts were school principals. A superintendent served as the intervention site key contact for the fifth school.

d. Recruitment and data collection procedures for parent and caregiver focus groups

A total of three parent and caregiver focus groups were conducted post-intervention in May 2010. Approximately three weeks prior to the focus group date, we mailed a recruitment letter and flier to the

homes of parents or caregivers of the nutrition education recipients who had responded to the pre-intervention impact survey. These materials provided a toll-free phone number for parents or caregivers to call if they were interested in registering. The groups were offered at varying times during the day and were all held at the same location—a local community center in Ada, Oklahoma. To meet an ideal group interview size of 6 to 8 participants, 10 to 12 parents or caregivers were recruited for each focus group to allow for an approximate 50 percent no-show rate. The following measures were taken to meet recruitment targets and maximize response rates:

- Offered childcare during each focus group;
- Offered \$50 gift card incentives;
- Sent reminder note cards to parents or caregivers who were registered for one of the group interviews approximately 1 week prior to the interview; and
- Made reminder phone calls to parents or caregivers who registered for one of the focus groups approximately 1 day before the interview.

Gift cards were distributed to participants at the time of the interview, after each adult had signed an informed consent form. In addition to the privacy-related information provided on the consent form, privacy assurance was offered verbally prior to the start of the interview, as was a reminder that their participation in the interview was voluntary. The focus group discussions were recorded using a digital recorder and transcribed for future coding and analysis.

e. Classroom observations

Every effort was made to observe both Eagle Adventure nutrition educators as well as a variety of schools, classrooms, and nutrition education lessons. Nutrition education observations took place in April 2010. At that time, one evaluation team member observed nine nutrition education lessons. These observations encompassed two of the four Eagle Adventure lessons (“Knees Lifted High” and “Plate Full of Color”), both direct educators, and classrooms from each grade (first–third) across two intervention schools. The evaluation team member completed the observation form during each lesson, administered the few questions to the direct educator at the end of each lesson, reviewed the form for completeness, and transcribed hand-written information into an electronic copy of the form before the end of the observation day.

5. Analysis Approach

The evaluation team applied an analysis approach to the data that takes into account the range of data and respondent types used in the process evaluation. Key informant responses from CNNS program staff and school administrators to each interview question were compiled into a master Microsoft Word 2007 document and organized by broad process evaluation research question and process indicators. This approach helped to organize the extensive amount of information that was available and allowed for the identification of broad themes (e.g., implementation challenges) and specific topics (e.g., lesson plan scheduling) as well as agreement and disagreement amongst respondents. Direct quotations were also identified where relevant and used to support key findings.

Transcripts from the focus groups with parents and caregivers were coded in QSR International NVivo Version 8, which allowed us to systematically organize, process, and summarize information provided by this key stakeholder group. It also allowed us to capture the breadth of opinions offered by parents or

caregivers, while identifying common themes and issues. Direct quotations were also identified and used to support key findings.

Quantitative process data were primarily used to describe objective aspects of the Eagle Adventure program, such as those related to dose, reach, and costs. Quantitative process data collected from parents and caregivers through the follow-up parent survey were analyzed using SAS 9.2. Frequencies of participant responses to each process question were reported. Qualitative information collected through key informant interviews, the teacher questionnaires, and the parent focus groups, including direct quotes, was used to further explain any quantitative findings. Integrating methods in this way provides the context needed to obtain a complete picture of the evaluation results.

Appendix H
Impact Evaluation Methodology

This appendix describes the methodology for the impact evaluation of the Eagle Adventure Program. We identify the research questions and describe the research design and sample selection, the survey instrument development and testing procedures, and the survey administration procedures for the baseline and follow-up surveys. We describe the procedures for data handling and data processing and the methodology for the impact analysis.

1. Impact Evaluation Research Questions

The primary objective of the impact evaluation was to assess whether the Eagle Adventure nutrition education intervention yielded positive and statistically significant changes in observed nutrition behaviors. The specific primary and secondary outcomes for the impact evaluation are described below.

▲ Primary Outcomes

Based on FNS' interest in observing a minimum increase in children's dietary intake of 0.30 standard deviation units, we hypothesized that children participating in the program would increase their average daily in-home consumption of fruits and vegetables by approximately 0.30 cups per day compared with children not participating in the program.

▲ Secondary Outcomes

We hypothesized that children participating in the program will increase other nutrition behaviors that may lead to increased fruit and vegetable consumption compared with children not participating in the program and that the behavior of parents or caregivers of children participating in the program will change in ways that support increased fruit and vegetable consumption in the home. Specifically, we considered the following secondary outcome measures in the impact evaluation:

- Variety: eat more than one type of fruit or vegetable each day
- Snacking: help self to or request a fruit or vegetable as snack
- Preparation: help parent make snacks or meals
- Willingness: willingness to try new fruits and vegetables
- Availability: average weekly in-home availability of fruits and vegetables
- Parental offerings: frequency of parental offerings of fruits or vegetables as a snack and at dinner

2. Research Design and Sample Selection

Cost constraints prevented CNNS from providing the intervention to schools outside of Pontotoc County. To provide the most rigorous design possible under this constraint, we developed a quasi-experimental design and identified Bryan County, a neighboring county with similar percentages of Native American students and students receiving free and reduced-priced meals, for selection of comparison schools.

We matched schools in Pontotoc County to schools in Bryan County using an algorithm that included the following three variables describing characteristics of the schools: percentage of Native American students, percentage of students receiving free and reduced-priced meals, and school size. We weighted variables according to their importance on influencing dietary intake, and a distance value (D_{ij}) between each school in treatment ($i = 1 - 5$) and each school in comparison ($j = 1 - 5$) was generated. The algorithm applied the following formula:

$$D_{ij} = (3 * \text{Abs}(\text{FARM}_i - \text{FARM}_j) + 2 * \text{Abs}(\% \text{NA}_i - \% \text{NA}_j) + \text{Abs}(\text{SS}_i - \text{SS}_j)) * 100$$

where “Abs” indicates the absolute value, “FARM” indicates free and reduced-price meals, “%NA” indicates the percentage of Native American students, and “SS” indicates school size. For each intervention school, *i*, the lowest distance value, was deemed the best match. If two intervention schools were matched to the same comparison school, the difference between the best match D_{ij} and the second best match D_{ij}' was estimated for each. The intervention school with the larger difference retained the best match, and the other intervention school was assigned to its second best match. Table H-1 presents the assignment of schools in the intervention and comparison groups.

Table H-1.—Assignment of Schools for the Eagle Adventure Program Impact Evaluation

Intervention Group Pontotoc County				Comparison Group Bryan County			
School	Size	%FARM	%NA	School	Size	%FARM	%NA
Francis	109	71	45	Silo	114	75	40
Homer	255	61	43	Northwest Heights	279	61	27
Allen	85	67	54	Calera	132	68	37
Vanoss	97	83	30	Ward Elementary	135	87	29
Roff	77	71	21	Washington Irving	252	63	27
Total	623	—	—	Total	912	—	—

Notes: Size = number of students enrolled in first through third grades at time of sample selection. %FARM = free and reduced-price meals and %NA = percentage of Native American students.

▲ Sample Size Estimation

Sample size estimation procedures are used to quantify researchers’ level of confidence regarding their ability to accurately reject the null hypothesis when empirical differences are statistically significant. Our main outcome measure and the focus of sample size estimation was the change in consumption of servings of fruits and vegetables by children participating in the Eagle Adventure Program as reported by their parents or caregivers. Our sample size estimation procedures followed the convention of estimating sample size allowing for a type II error rate of 0.20 (yielding 80 percent statistical power) and a type I error rate of 0.05, with a two-tailed test.

Sample size estimation was predicated on FNS’ interest in observing a minimum increase in children’s dietary intake of 0.30 standard deviation units and was carried out to identify the minimum number of parents from each school that would be needed to obtain sufficient statistical power. Few studies in the published literature provide data on parent-reported values of children’s fruit and vegetable consumption. We used estimates from a trial in Chicago that includes means and standard deviations for parent-reported measures of their children’s intake of fruits and vegetables. The study included six lower socioeconomic status communities and collected data from 516 parents. In this study population, mean fruit and vegetable consumption was 3.83 servings per day, with a standard deviation of 2.04 servings (Evans, Necheles, Longjohn, & Christoffle, 2007). Next, we determined an appropriate expectation for the magnitude of the program impact, often referred to as the effect size or the minimum detectable effect. This number describes the anticipated change in observed outcomes among participants as a result of participating in the intervention. Based on the findings from the Chicago study, the realized net change is expected to be 0.30 cups of fruits and vegetables from baseline values between the two groups. This

expectation is consistent with findings reported in a recent meta-analysis by Knai, Pomerleau, Lock, and McKee (2006) who found that across a range of dietary interventions, children’s fruit and vegetable consumption increased by 0.30 to 0.99 servings (i.e., 0.15 to 0.50 cups) per day.

Additional assumptions related to the form of the standard error of the test of the intervention effect. These assumptions included the anticipated intraclass correlation coefficient (ICC), the proportion of variation attributable to the cluster (i.e., school) over and above the variation attributable to the individual, and the form of the statistical model. At present, we are unaware of any study that has published ICC estimates on parents’ reports of children’s dietary intake. However, a study of middle school youth reported an ICC of 0.034 for self-reported fruit and vegetable consumption (Murray, Phillips, Birnbaum, & Lytle, 2001). Using this study as a starting point and recognizing the differences between the participants in Murray et al. (2001) and our study, we employed an ICC 0.05 for our calculations.

The final assumption involves the form of the statistical model. Our calculations are appropriate for a mixed-model regression model that includes baseline and follow-up measures of the outcome of interest (i.e., pre-test and post-test model) and allows for the inclusion of covariates associated with the outcome variable, but independent of the intervention. This model allows for two sources of reduction to the variance of the outcome. First, the use of a pre-test and post-test model helps ensure that baseline differences and potential confounding influences will be minimized. Second, the inclusion of covariates associated with the outcome of interest, but independent of the intervention, can further reduce unwanted variation in the outcome and improve statistical power. We decided which (if any) variables to include in the model by examining the baseline data. Demographic variables such as age, sex, and race or ethnicity are typically included.

We estimated sample size with the aim of detecting a change in consumption of servings of fruits and vegetables of 0.30 standard deviation units or better based on the parameters described above. Our calculations indicate an 80 percent probability of properly rejecting a false null hypothesis given complete data (pre-test and post-test) on an average of 70 participants per school with five schools in each condition. Table H-2 provides details of the sample size estimate for the Eagle Adventure evaluation and our assumptions regarding response rate and attrition.

Table H-2.—Sample Size for the Eagle Adventure Program Impact Evaluation

Group	Number of Schools	Number of Children	Number of Completed Surveys	
			Baseline Survey (Number of Parents and Caregivers) ^a	Follow-Up Survey (Number of Parents and Caregivers) ^b
Intervention	5	623	383	318
Comparison	5	740 ^c	455	378

^aAssumed that 82 percent will consent to providing contact information and a 75 percent response rate for the baseline survey.

^bAssumed an 83 percent response and retention rate between the baseline and follow-up surveys.

^cAssumed subsampling of students from larger schools in Bryan County.

3. Survey Instrument Development and Testing

We developed drafts of the survey instruments for the baseline (pre-intervention) and follow-up (post-intervention) surveys and conducted two rounds of interviews with parents and caregivers to test and refine the instruments. The impact instruments for the three demonstration projects with children as the target audience (the Eagle Adventure, Eat Well Play Hard in Child Care Settings, and All 4 Kids programs) were very similar because the primary outcome measures and some of the secondary outcome measures were the same. Our survey instrument development and testing procedures are described below.

a. Outcome measures and instrument development

To develop the impact evaluation instrument, we reviewed CNNS' application and the Eagle Adventure Program curriculum and talked with the CNNS project staff to identify the primary and secondary outcome measures for the intervention. We then reviewed the instruments compiled as part of the literature review conducted for this study (Altarum Institute and RTI International, 2009) to identify instruments that address these outcomes and are feasible, appropriate for the target audience, reliable, valid, and sensitive to change. We worked with our consultant, Dr. Marilyn Townsend, a Cooperative Extension specialist at the University of California–Davis, to develop the impact evaluation instrument.

The impact evaluation instrument for the Eagle Adventure Program collected information on the following:

- Primary outcomes: child's average daily in-home consumption of fruits and vegetables
- Secondary outcomes: child's other dietary behaviors (i.e., variety, snacking, preparation, and willingness)
- Secondary outcomes: parent behavior and household variables
- Parent use of the educational materials sent home with the child
- Parent satisfaction with the educational materials sent home with the child
- Demographic characteristics of the household, respondent, and child

In developing the impact instrument, we assessed the appropriateness of the instrument for collecting data on fruit and vegetable outcomes. Exhibit H-1 provides information on the study population, mode(s) of data collection, reliability, validity, and sensitivity to change for the instruments used to develop the questionnaire items on outcome measures for the Eagle Adventure Program impact evaluation. The majority of the items were taken or adapted from instruments that have been administered successfully with low-income audiences, validated, and demonstrated to be reliable and sensitive to change in previous studies.

For the primary outcome measures, child's dietary behavior, we modified questions from the Food Stamp Program Fruit and Vegetable Checklist (Townsend, Kaiser, Allen, Joy, & Murphy, 2003) and University of California Cooperative Extension Food Behavior Checklist (Townsend, Silva, Martin, Metz, & Wooten-Swanson, 2008) to ask the respondent (parent or other caregiver) to report on his or her child's consumption of fruits and vegetables. Respondents were instructed not to include meals eaten at school or day care so that they were reporting only on observed consumption behavior.

We assessed the readability of the instrument using the Fry Test (Fry, 1968). This test examines the proportion of syllables and sentence length and is a commonly used measure of reading level. Generally, the questions themselves were at the fifth-grade reading level.

Exhibit H-1.— Summary of Instruments Used to Develop Impact Instrument for the Eagle Adventure Impact Evaluation

Outcome Measures	Instrument	Study Population(s)	Mode(s) of Data Collection	Reliability	Validity	Sensitivity to Change
Cups of fruits, vegetables, and fruits and vegetables consumed by child each day^a Child ate variety of fruits each day^a Child ate variety of vegetables each day^a	Food Stamp Program Fruit and Vegetable Checklist (Townsend et al., 2003) University of California Cooperative Extension Food Behavior Checklist (Townsend et al., 2008)	Low-income women	Self-administered, self-administered in group setting, and interviewer administered individually and in groups	The internal consistency for the 7-item fruit and vegetable subscale was high ($\alpha = 0.80$)	The 7-item fruit and vegetable subscale showed a significant correlation with serum carotenoid values ($r = 0.44$, $p < 0.001$), indicating acceptable criterion validity and showing significant correlation with dietary variables	Demonstrated sensitivity to change for items expected to change as a result of the study intervention
Willingness of child to try new fruits Willingness of child to try new vegetables	Willingness to try new fruits and vegetables (Jamelske, Bica, McCarty, & Meinen, 2008)	4th, 7th, and 9th graders	Self-administered	Not reported	Not reported	Compared with controls, intervention participants reported an increased willingness to try new fruits and vegetables at school ($p < 0.01$)
Availability of fruits and vegetables at home during past week	Fruit, juice, and vegetable availability questionnaire (Marsh, Cullen, & Baranowski, 2003; Cullen et al., 2003)	Parents of 4th and 6th graders	Self-administered and interviewer administered via telephone	The internal consistencies for the fruit and vegetable availability items were high	There was significant agreement between self-reported and observed in-home availability for all fruit juices and most fruits and vegetables	Fruit, juice, and vegetable availability was a significant predictor of child fruit, juice, and vegetable consumption ($p < 0.05$)

(continued)

Exhibit H-1.— Summary of Instruments Used to Develop Impact Instrument for the Eagle Adventure Impact Evaluation (continued)

Outcome Measures	Instrument	Study Population(s)	Mode(s) of Data Collection	Reliability	Validity	Sensitivity to Change
Child helped self to/requested fruit as snack	Questionnaire items were developed and tested by RTI	—	—	—	—	—
Child helped self to/requested vegetable as snack	Questionnaire items were developed and tested by RTI	—	—	—	—	—
Child helped parent make snacks or meals	Questionnaire items were developed and tested by RTI	—	—	—	—	—
Parent offered fruit at dinner and snack time	Questionnaire items were developed and tested by RTI	—	—	—	—	—
Parent offered vegetables at dinner and snack time	Questionnaire items were developed and tested by RTI	—	—	—	—	—

^aThe questions were modified to ask the respondent (parent or other caregiver) to report on his or her child's consumption of fruits and vegetables.

b. Instrument testing

To pretest the draft impact instrument, we conducted telephone interviews in July 2009 with parents and caregivers of children in the first through third grades who receive free lunch through the National School Lunch Program and reside in the Chickasaw Nation. Using a list of names provided by CNNS, we recruited and interviewed five individuals, all of whom were female Native Americans. After obtaining informed consent, the interviewer went through the draft instrument question by question. After asking each question, the interviewer asked the respondent to provide her response, explain the reason for her response choice, and whether the question or its responses were confusing or difficult to understand. Each interview lasted approximately 30 minutes, and participants received a \$60 honorarium.

Based on the findings from these interviews and the interviews conducted for the evaluations of the Eat Well Play Hard in Child Care Settings and All 4 Kids demonstration projects, we modified questions and response items to improve understanding and deleted several questions that were redundant. The draft impact instrument asked questions about fruit and vegetable intake in terms of both servings and cups. We found that participants were not consistent in their responses for these questions and decided to limit the intake questions to ask for intake in terms of cups because this is the unit of measure used by My Pyramid.

In August 2009, we conducted five in-person interviews in Raleigh, NC, to test the revised instrument. The purpose of the interviews was to test the revised questions on fruit and vegetable intake using cups (instead of servings) and to test the revised scale for questions that ask about the frequency of certain activities during the week (number of days or a scale with “yes, sometimes,” “yes, often,” “yes, every day,” and “no” as response options). We worked with an extension associate for the Expanded Food and Nutrition Education Program (EFNEP) at the Wake County Cooperative Extension Center to recruit individuals for the interviews. Participants were parents of children aged 3 to 8 years and SNAP recipients or eligibles. One participant was male and four were female; two participants were White, Hispanic, and three were Black, non-Hispanic. One participant was 18 to 24 years old, three participants were 25 to 34 years old, and one participant was 35 to 44 years old. After reading and signing the informed consent form, participants completed the questionnaire, and the interviewer timed how long it took each participant to complete the questionnaire. Following completion of the questionnaire, the interviewer used a debriefing guide to lead participants in a discussion to understand why they chose their responses and to identify questions or terms that were confusing or difficult to understand. Participants received a cash honorarium of \$60 for participating in the 30-minute interview.

Participants were able to answer the questions on their child’s intake of fruits and vegetables in terms of cups. They found the graphics of the fruits and vegetables shown in measuring cups for different quantities (1, 2, and 3 cups) useful. These graphics were developed by Drs. Marilyn Townsend and Kathryn Sylva, University of California–Davis. Participants were able to answer questions with the revised scale of none, 1 to 2 days, 3 to 4 days, 5 to 6 days, every day. Participants were able to think back over the past week and “count” the number of times their children did a particular activity (e.g., number of days ate more than one kind of fruit or vegetable), so we decided to use the revised scale in the final instrument. Additionally, we made some revisions to questions and response items to improve understanding and consistency in answering the questions.

We developed three versions of the instrument.

- **Baseline survey**—The same instrument was used for the intervention and comparison groups. This instrument collected information on the primary and secondary outcomes and demographic information.
- **Follow-up survey for the intervention group**—This instrument collected information on the primary and secondary outcomes and included questions on use and satisfaction with the intervention materials.
- **Follow-up survey for the comparison group**—This instrument collected information on the primary and secondary outcomes.

Each survey took about 15 minutes to complete. We prepared separate versions of the instruments for administration by mail (survey booklet) and telephone (computer-assisted telephone interviewing [CATI] script). For the CATI version, respondents did not have access to the graphics with cups of fruits and vegetables. Copies of the final survey instruments for administration by mail are provided as Appendix C.

4. Survey Administration Procedures and Response

To maximize the response rate for the survey, we used a multimodal survey approach. Working with the schools in the study, we sent information packets for students to take home and obtain the parents' or caregivers' consent to participate in the study. Parents consenting to participate were mailed the baseline survey instrument. If participants did not respond to the mail survey, we contacted them by telephone and attempted to complete the survey over the phone. We used a similar procedure for the follow-up survey. We mailed the survey questionnaire and contacted nonrespondents and attempted to complete the survey by phone. We describe below the training of data collectors, the survey administration procedures, and the response to the survey.

a. Data collector training

We trained two types of data collectors: (1) field representatives who coordinated the distribution of the parent information packets at the schools and receipt of the completed contact cards and (2) telephone interviewers who administered the baseline and follow-up surveys to study participants who did not respond to the mail survey.

Each training class included a detailed training manual. The training manual provided background materials, including a study overview and glossary of terms, answers to frequently asked questions, description of likely data collection challenges and recommendations for avoiding or resolving them, confidentiality and data security procedures, interviewing techniques for the telephone interviewing training, procedures for logging completed interviews, and procedures for submitting data from the field.

Field representatives attended a 1-day in-person training in Pontotoc County approximately 8 weeks before the intervention started. Before attending training, each candidate received a training manual to read and home-study exercises to complete. Each field representative had to pass a certification exercise demonstrating proficiency in the required skills before beginning work.

Telephone interviewers were trained to work on the data collection for all four demonstration projects. Interviewers attended a 2-day evening training totaling 8 hours for baseline survey administration and then a second 8 hours of training over two evenings for the follow-up survey administration. Before beginning work on the administration of either round of surveys, each telephone interviewer had to pass certification

exercises demonstrating knowledge of the study, facility with the instruments and control system for documenting their work, and use of the equipment. The training included information on gaining respondent cooperation and time for interviewers to practice administering the questionnaire and documenting calls. The training used multiple formats, including classroom-style teaching, discussions, and role-playing. The survey protocol was reinforced by trainer demonstrations and post-classroom practice.

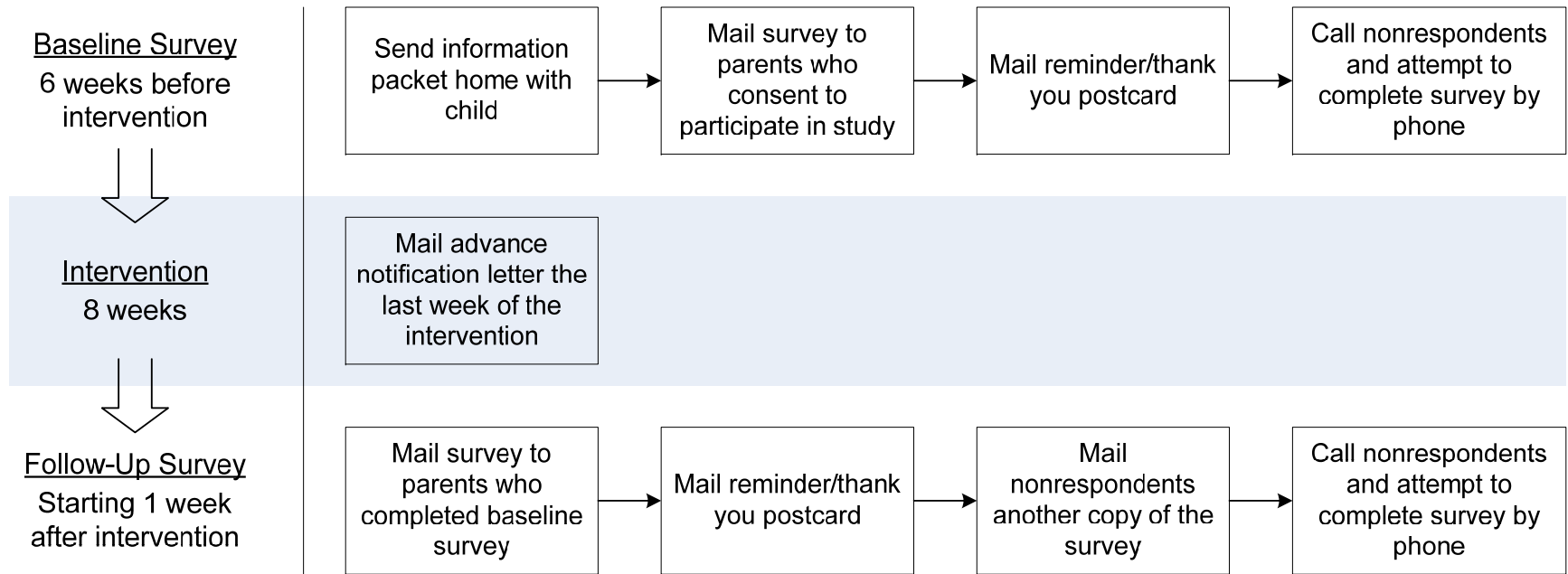
b. Data collection procedures

Exhibit H-2 illustrates the data collection procedures for the baseline and follow-up surveys. The baseline data collection was conducted during February and March 2010. We worked with CNNS and the schools to coordinate the recruitment for the baseline survey at the intervention and comparison schools. CNNS made the initial contact with the intervention and comparison schools to encourage their cooperation in the study. Approximately 6 weeks before the start of the intervention, teachers were asked to send home with the child (via their backpacks) a preassembled informational packet with an invitation to participate in the study. Caregivers were asked to return a contact card indicating whether they wanted to participate and, if so, to provide contact information (e.g., name, mailing address, phone number, or contact number) sealed in the return envelope provided for this purpose. Children received a token incentive (e.g., pencil case, friendship bracelet) for returning the envelope to their teachers regardless of whether their parent or caregiver agreed to participate in the study. Teachers tracked the return of these envelopes and distributed the incentive to children who did so. Our field representatives collected the sealed envelopes with the contact cards from the schools, entered contact information for cooperating parents and caregivers into a computer template, and transmitted it on a flow basis to the home office so that the mail survey could be sent to study participants. We provided monetary incentives to the schools (\$200 for each school), the school coordinator (\$50 for each school), and teachers (\$20 per teacher at each school) in appreciation for their assistance with the recruiting process.

To caregivers for whom we received contact information, we mailed a hard copy of the baseline survey with a cover letter. The cover letter reiterated the study description and offered a cash incentive (\$10) for completing and returning the survey in the enclosed self-addressed postage-paid return envelope. Five days later, we mailed a follow-up postcard reminding participants to complete the survey and thanking them for their participation if they had already completed it. One week later, nonrespondents were contacted by telephone interviewers to see if they would prefer to complete the survey over the phone. At least 15 call attempts were made to each working phone number at various times and days.

The data collection for the follow-up survey was conducted from May through July 2010. During the last week of the intervention, an advance notification letter was mailed reminding study participants about the follow-up survey. The mail survey was sent approximately 1 week later, which was 1 week after the completion of the intervention. Five days later, we mailed a follow-up postcard reminding participants to complete the survey and thanking them for their participation if they had already completed it. A second mailing of the survey was sent 1 week after the postcard was sent. Telephone contact of nonrespondents began 2 weeks after the second mailing; at least 15 call attempts were made to each working phone number at various times and days. Respondents received \$15 cash for completing the follow-up survey. Appendix D provides a copy of the survey packet materials for the baseline survey.

Exhibit H-2.— Data Collection Procedures for the Impact Evaluation of the Eagle Adventure Program



c. Survey response

Table H-3 provides the number of completed surveys for the intervention and comparison groups at baseline and follow-up. At baseline, 411 participants in the intervention group and 445 participants in the comparison group completed the survey. The combined consent and response rate for the baseline survey was 58 percent for the intervention group (70.13 x 82.80) and 53 percent (62.89 x 84.63) for the comparison group. At follow-up, 344 participants in the intervention group and 379 participants in the comparison group completed the survey. The response rate for the follow-up survey was 84 percent for the intervention group and 85 percent for the comparison group. We achieved the required number of completed surveys based on the power calculations.

Table H-3.—Number of Completed Surveys and Response Rates for the Baseline and Follow-Up Surveys

School	Eligible Population (Number of Students) ^a	Consent Rate (%) ^b	Number of Completed Baseline Surveys	Response Rate for the Baseline Survey (%) ^c	Number of Completed Follow-Up Surveys	Response Rate for the Follow-Up Survey (%) ^d
Intervention						
Allen Elementary	101	82.18	66	79.52	53	80.30
Francis Elementary	120	60.00	63	87.50	54	85.71
Homer Elementary	312	68.59	182	86.45	156	85.71
Roff Elementary	71	67.61	38	79.17	28	73.68
Vanoss Elementary	109	76.15	62	74.70	53	85.48
Total	713	70.13	411	82.80	344	83.70
Comparison						
Silo Elementary	140	61.43	67	77.91	55	82.09
Calera Elementary	143	67.83	81	83.51	72	88.89
Westward Elementary	177	71.75	107	85.04	90	84.11
Northwest Heights Elementary	186	49.46	86	93.48	70	81.40
Washington Irving Elementary	192	65.10	104	83.20	92	88.46
Total	838	62.89	445	84.63	379	85.17

^a The eligible population is based on student enrollment data available at the start of the intervention. The eligible population may differ from the reach data reported in chapter II, which was collected by CNNS before the start of the intervention.

^b Consent rate = $\frac{\text{number of parents who returned the contact card and agreed to participate in the study}}{\text{eligible population}}$

^c Response rate for the baseline survey = $\frac{\text{number of completed baseline surveys}}{\text{number of parents who returned the contact card and agreed to participate in the study}}$

^d Response rate for the follow-up survey = $\frac{\text{number of completed follow-up surveys}}{\text{number of completed baseline surveys}}$

5. Data Processing and File Production Procedures

Data processing steps included entering the survey data, editing and cleaning the data, creating derived variables, creating the analysis data files, and producing data documentation. Throughout data processing and file production, we implemented quality control and assurance procedures as described below.

a. Data entry

Data entry consisted of entering data from the contact cards and mail surveys as well as entering data through computer-assisted telephone interviews (CATI) for respondents contacted by phone. Double-keying verification was performed on all contact cards and mail surveys. All data entry errors were resolved by comparing the first- and second-keying files. Item nonresponse was keyed as a “refusal,” and data were checked for chronic item refusals. Parents or caregivers who did not complete the mail survey in a specific amount of time were contacted by telephone. Telephone interviewers entered the survey responses using CATI; thus, data entry was not required. The CATI program incorporated the questionnaire skip logic and included out-of-range checks for numeric responses.

b. Data editing

To prepare the analysis data files, we made the following edits to the survey data:

- Investigated and addressed responses that fell outside a specified range for the contact card and mail survey data. For example, child’s age was reviewed to isolate observations that fell outside a reasonable range for children in a certain grade. Parents or caregivers of children whose age fell outside a reasonable range were contacted to verify date of birth.
- Verified responses to categorical questions to ensure that they corresponded to a valid response.
- Checked for contradictory responses and investigated and addressed inconsistent responses, if necessary.
- Checked for incorrect flows through prescribed question skip patterns. This step was not necessary for CATI surveys because the programming logic incorporated the skip patterns.
- Checked for omission or duplication of records; for example, several missing items in a row can indicate that one or more pages in the survey were not keyed or there are other errors in the data entry process.
- For questions with an “other, specify” response, responses were coded to existing categorical responses and additional response codes were added as necessary. Additions of response codes are noted in the survey result tables.

c. File production

Preparing the analysis data file for the impact analysis required several steps as described below.

- Combine the mail and phone survey responses: In cases when a CATI survey was completed before a mail survey was received for the same respondent, the mail survey data were kept for analysis.
- Create derived variables: Several analysis variables were derived using contact card information, survey responses, or a combination of both. Creation of these variables is described in the next section.

- Combine the baseline and follow-up survey data: Baseline and follow-up survey responses were combined to form a single analysis data file. Demographic information provided by respondents in the baseline survey and child contact card data were merged with the respective follow-up survey responses.

6. Impact Analysis

We compared changes in an intervention group that participated in the Eagle Adventure Program (five schools in Pontotoc County) and a comparison group that did not participate in the program (five matched schools in Bryan County). We used parent or caregiver reports of the child's behavior to collect information on the child's consumption and other dietary behaviors at baseline and follow-up. We describe below the measures and variables used in the statistical analyses and our modeling specifications.

a. Description of measures and variables used in statistical analyses

The contact card collected information on the child's age and gender, and the baseline survey collected demographic information on the parent or caregiver respondent and their household. Exhibit H-3 identifies the demographic variables included in the impact analysis and provides information on procedures used to derive new variables.

The baseline and follow-up surveys collected information on the primary outcomes, the child secondary outcomes, and the parent secondary outcomes. Exhibits H-4 through H-6 identify the variables for the impact analysis and provide information on procedures used to derive new variables.

b. Model selection

The independent evaluation of the Eagle Adventure Program was based on a quasi-experimental design that included five schools in Pontotoc County that received the intervention and five schools in Bryan County that served as comparisons. The Bryan County schools were selected based on a matching algorithm that considered the percentage of Native American students in the school, percentage of students receiving free and reduced-price meals, and school size.

Matching is commonly used for two purposes. First, it ensures a similar distribution of factors that might otherwise bias the impact estimates. For CNNS, we felt it was important to have a similar distribution in terms of percentage of Native American students in the schools, percentage of students receiving free and reduced-price meals, and school size. We retain this benefit regardless of which analytic model we choose. Second, matching can improve the precision of the model when the matching of similar units reduces random error by a degree that is strong enough to offset the reduction in degrees of freedom. In a matched design, the loss of degrees of freedom is a function of basing the analysis on independent pairs (5), rather than schools (10).

The information in table H-4 provides a comparison of the standard error and the Akaike information criteria (AIC) from the pair-matched model and a repeated-measures cohort model. For each metric, smaller values are preferable. The observed treatment impact and degrees of freedom are also provided as points of reference. This information suggests that the precision gained from employing pairs in the analysis is offset by the reduction in statistical power that occurs because of the loss of degrees of freedom. In balance, our evaluation of modeling options shows that the repeated-measures cohort model comparing intervention schools to comparison schools offers a greater parsimony and provides a level of precision that is similar to the pair-matched model.

Exhibit H-3.— Description of Demographics Variables Used in the Analysis

Variable	Question(s) ^a	Analysis Variable Derivation
Child sex	Contact card	Male children were included as the reference group for the analysis.
Child age	Contact card	Child's age was determined using the date of birth information provided on the contact card (month and year of birth) at study enrollment and the date the baseline survey was received.
Respondent age	Question 29, "Which of the following best describes your age?"	Age categories were combined to create a three-level categorical variable: "18 to 34" (reference group for the analysis), "35 to 44," and "45 or older."
Respondent sex	Question 30, "What is your gender?"	Male respondents were included as the reference group for the analysis.
Size of household	Question 27, "How many people under 18 years of age live in your household?" and Question 28, "Including yourself, how many people 18 years or older live in your household?"	Responses to the two questions were summed to calculate the total number of individuals in the household, provided the respondent provided information for both questions.
Single-adult household	Question 28, "Including yourself, how many people 18 years or older live in your household?"	Binary variable was created with households having more than one adult in the household assigned a value of "0" and households with one adult assigned a value of "1."
Respondent race or ethnicity	Question 31, "Are you Hispanic or Latino?" and Question 32, "What is your race?" Multiple responses were allowed for the race question.	Responses to the two questions were combined to create a five-level categorical variable. Respondents indicating they were American Indian or Alaska Native were given priority over other race and ethnicity designations and assigned to "American Indian/Alaska Native." Respondents who selected Hispanic for the ethnicity question were assigned to "Hispanic." Respondents indicating they were not Hispanic and only selected Black or African-American as their race were assigned to "Black, non-Hispanic." Respondents indicating they were not Hispanic and only selected White or Caucasian as their race were assigned to "White, non-Hispanic" and they are the reference group for the analysis. Respondents indicating they were Asian or Native Hawaiian or who selected more than one race were assigned to "other or more than one."

^aAppendix C provides copies of the survey instruments. The contact card is provided in appendix D.

Exhibit H-4.—Description of Primary Outcome Variables

Variable	Question(s)	Analysis Variable Derivation
Cups of fruits	Question 3, "During the past week, how many cups of fruit did your child eat <u>each day</u> ? Do <u>not</u> include fruit juice." ^a	Continuous variable in half-cup increments.
Cups of vegetables	Question 5, "During the past week, how many cups of vegetables did your child eat <u>each day</u> ?" ^a	Continuous variable in half-cup increments.
Cups of fruits and vegetables	Questions 3 and 5 (above)	Summed responses to questions 3 and 5 to create continuous variable in half-cup increments.

^aResponse options were in half-cup increments ranging from 0 to 3 cups. Mail questionnaires provided visuals for none, 1, 2, and 3 cups.

Exhibit H-5.— Description of Child Secondary Outcome Variables

Variable	Question(s)	Analysis Variable Derivation
Ate variety of fruits	Question 2, "How many days during the past week did your child eat more than one kind of fruit each day? Do not include fruit juice." ^a	Created continuous variable ranging from 0 to 7 using the midpoint for the 2-day responses (e.g., "1 to 2 days" was assigned a value of 1.5).
Ate variety of vegetables	Question 4, "How many days during the past week did your child eat more than one kind of vegetable each day? Do not include vegetable juice." ^a	Created continuous variable ranging from 0 to 7 using the midpoint for the 2-day responses.
Helped self to/requested fruit as snack	Question 9, "How many days during the past week did your child ask for or help himself or herself to fruit for a snack?" ^a	Created continuous variable ranging from 0 to 7 using the midpoint for the 2-day responses.
Helped self to/requested vegetable as snack	Question 13, "How many days during the past week did your child ask for or help himself or herself to a vegetable for a snack?" ^a	Created continuous variable ranging from 0 to 7 using the midpoint for the 2-day responses.
Helped parent make snacks or meals	Question 15, "How many days during the past week did your child help you make a snack or cook a meal? For example, did your child wash fruits or vegetables or crack an egg?" ^a	Created continuous variable ranging from 0 to 7 using the midpoint for the 2-day responses.
Willingness to try new fruits	Question 7, "Is your child willing to try a new kind of fruit?"	Binary variable was created with "Yes" responses assigned a value of "1" and "No" or "Maybe" responses assigned a value of "0."
Willingness to try new vegetables	Question 11, "Is your child willing to try a new kind of vegetable?"	Binary variable was created with "Yes" responses assigned a value of "1" and "No" or "Maybe" responses assigned a value of "0."

^aResponse options were "None," "1 to 2 days," "3 to 4 days," "5 to 6 days," and "Every day."

Exhibit H-6.— Description of Parent Secondary Outcome Variables

Variable	Question(s)	Analysis Variable Derivation
Availability of fruits and vegetables	Question 1, "For each food, please tell me if it was available in your home during the past week. Please include fresh, frozen, canned, and dried foods."	Created continuous variable ranging from 0 to 8 based on the number of "Yes" responses for availability of eight fruits and vegetables (bananas, apples, grapes, peaches, oranges, carrots, celery, and raisins).
Parent offered fruit for snack or dinner	Question 8, "How many days during the past week did you give your child fruit as a snack?" Question 10, "How many days during the past week did you give your child fruit at dinner?" ^a	If the respondent answered both questions, created a continuous variable ranging from 0 to 14 by summing the responses to the two questions using the midpoint of the 2-day responses (e.g., "1 to 2 days" was assigned a value of 1.5). This variable is the number of times in the past week the parent offered fruit as a snack or at dinner.
Parent offered vegetables for snack or dinner	Question 12, "How many days during the past week did you give your child a vegetable as a snack?" Question 14, "How many days during the past week did you give your child a vegetable at dinner?" ^a	If the respondent answered both questions, created a continuous variable ranging from 0 to 14 by summing the responses to the two questions using the midpoint of the 2-day responses (e.g., "1 to 2 days" was assigned a value of 1.5). This variable is the number of times in the past week the parent offered vegetables as a snack or at dinner.

^aResponse options were "None," "1 to 2 days," "3 to 4 days," "5 to 6 days," and "Every day."

Table H-4.—Comparison of Factors Used to Select Statistical Models for the Independent Evaluation of the Eagle Adventure Program

	Treatment Impact	Std Error	Degrees of Freedom	AIC (model fit)
Pair-matched model	0.06995	0.1201	4	5301.3
Repeated-measures cohort model	0.08273	0.1025	8	5298.2

c. Repeated-measures cohort models for program outcomes

The Eagle Adventure Program was evaluated with a research design that includes multiple levels of nesting. The term “nested” refers to situations that arise when one unit of analysis is uniquely located in a supra-ordinate unit of analysis (i.e., cluster). The Eagle Adventure evaluation included repeated measures on individual respondents (e.g., observation nested within respondent), with respondents who are nested within schools, and schools that are nested in a study condition (i.e., intervention or comparison). When data are nested, responses within the same cluster tend to be correlated. If the correlated nature of the data is ignored in the selection and specification of the model, it is likely to lead to inflated type I error rates. The study team developed a series of hierarchical, or mixed-effects, regression models to evaluate the Eagle Adventure Program outcomes. These models account for correlated responses by allowing for the inclusion of multiple sources of random variation.

Below we provide additional detail on the sampling models and link functions that describe the statistical models used to assess program outcomes and the structural models that detail the explanatory variables and the model coefficients. The sampling models vary at level one depending on the characteristics of the outcome measure; these characteristics determine the appropriate link function. All sampling models at level two and higher are assumed to conform to the assumptions of linearity (McCulloch & Searle, 2001; Raudenbush & Bryk, 2002).

Primary outcomes include parents’ reports on children’s fruit and vegetable consumption in the home and a combined fruit and vegetable score derived from these measures. These outcomes have a continuous measure, so we employed general linear mixed models with Gaussian (i.e., normal) distributions and an identity link function. Secondary impact variables include both a continuous measure and dichotomous measures. For those based on dichotomous measures, we employed generalized linear mixed models with a binomial distribution and a logit link function.

The structural model is assumed to be a linear and additive function of the outcome variable; for the binary models, the assumptions of linearity and additivity apply to the transformed outcome variable. These models are determined by the research question addressed rather than by the characteristics of the outcome.

i. Sampling models and linking functions

The sampling model describes the expectation and distributional characteristics of the outcome at each level of the model. For the variables that constitute the outcomes of interest for this evaluation, level-one sampling models vary according to the characteristics of the outcome under consideration.

For variables that express the outcome of interest as a continuous measure, the level-one sampling model can be expressed as

$$Y_{i:j,k} | \mu_{i:j,k} \sim N(\mu_{i:j,k}, \sigma^2). \quad (1)$$

This indicates that, given the predicted value $\mu_{i:j,k}$, the outcome ($Y_{i:j,k}$) measured at time t ($t = 0, 1$) for respondent i ($i = 1 \dots m$) from the j^{th} school ($j = 1 \dots 10$) assigned to the k^{th} condition ($k = 0, 1$) is normally distributed with expected value of $\mu_{i:j,k}$ and a constant variance, σ^2 . The expectations of these values are expressed as:

$$E[Y_{i:j,k} | \mu_{i:j,k}] = \mu_{i:j,k} \text{ and } \text{Var}(Y_{i:j,k} | \mu_{i:j,k}) = \sigma^2 \quad (2)$$

for the mean and variance, respectively. When the outcome of interest follows a normal distribution, it can be expressed directly as a function of a set of explanatory variables. However, to simplify the expression of the structural models that follow, we note that

$$\eta_{i:j,k} = \mu_{i:j,k}, \quad (3)$$

which indicates that the modeled outcome $\eta_{i:j,k}$ is equal to the expected value of $Y_{i:j,k}$.

The level-one sampling model for variables that express the outcome of interest as a binary outcome follows a binomial distribution that can be expressed as

$$Y_{i:j,k} | \varphi_{i:j,k} \sim B(s_{i:j,k}, \varphi_{i:j,k}), \quad (4)$$

where ($Y_{i:j,k}$) is the number of “successes” in each of $s_{i:j,k}$ trials, and $\varphi_{i:j,k}$ represents the probability of success on each trial. In the evaluation of the Eagle Adventure Program, $s_{i:j,k} = 1$ and the binary variable follows a Bernoulli distribution where $Y_{i:j,k}$ takes on the value 1 (success) with probability $\varphi_{i:j,k}$, and the expected value and variance of $Y_{i:j,k}$ can be expressed as

$$E[Y_{i:j,k} | \varphi_{i:j,k}] = \varphi_{i:j,k} \text{ and } \text{Var}(Y_{i:j,k} | \varphi_{i:j,k}) = \varphi_{i:j,k} (1 - \varphi_{i:j,k}). \quad (5)$$

The canonical link when the level-one sampling distribution is binomial is the logit link, which can be expressed as follows:

$$\eta_{i:j,k} = \log\left(\frac{\varphi_{i:j,k}}{1 - \varphi_{i:j,k}}\right) \quad (6)$$

and indicates that the modeled outcome $\eta_{i:j,k}$ is equal to the log of the odds of success.

The sampling distributions for level-two (and higher) models express the characteristics of the modeled random effects. Here, the term ($u_{0:j,k}$) is used to indicate random effects. For all of the structural models presented below, random effects are assumed to follow a normal distribution with

$$u_{0:j,k} | \zeta_{0:j,k} \sim N(\zeta_{0:j,k}, \sigma_u^2). \quad (7)$$

ii. Structural models

The structural models are used to express the expectation of the outcome as the function of a series of explanatory variables. In general form,

$$\eta_{ti:j,k} = \sum x_{ti:j,k} \beta_{ti:j,k} + \sum z_{0:j,k} u_{0:j,k} . \quad (8)$$

Here, $\eta_{ti:j,k}$ is the expected value of the outcome; $\sum x_{ti:j,k} \beta_{ti:j,k}$ is a shorthand representation for the set of fixed-effect covariates and coefficients; and $\sum z_{0:j,k} u_{0:j,k}$ is a shorthand representation for the set of random-effect covariates and coefficients.

As noted in the previous section, when the outcome of interest is represented by a variable that has a continuous measure, $\eta_{ti:j,k}$ represents the identity link, and from equation (3) it follows that

$$E[Y_{ti:j,k}] = \eta_{ti:j,k} . \quad (9)$$

When the outcome of interest is represented by a binomial variable, $E[Y_{ti:j,k}]$ is the predicted probability $\varphi_{ti:j,k}$, which can be derived from equation (6) by taking $\exp(\eta_{ti:j,k})$ as follows:

$$E[Y_{ti:j,k}] = \frac{1}{1 + \exp(\eta_{ti:j,k})} . \quad (10)$$

For continuous outcomes, we employ general linear mixed models where the expectation for $Y_{ti:j,k}$ in equation (9) is the appropriate form. However, when response options are binary, we employ generalized linear models where the expectation for $Y_{ti:j,k}$ in equation (10) is the appropriate form.

Generalized Hierarchical Linear Model (HLM) Presentation

The structural model used to assess the effects of the Eagle Adventure Program can be articulated as a three-level HLM. The observation-level model (level one) describes the outcome of interest as a function of initial status and change over time. The individual-level model (level two) includes two models, one for each of the two parameters of the observation-level model. The school-level model (level three) also includes two models, one for each of the intercepts in the two individual-level models.

Observation-level model (level one). In this model, $\eta_{ti:j,k}$ represents the response of the i^{th} parent or caregiver measured on occasion t , whose child attends the j^{th} school and is in the k^{th} condition. The model includes two parameters, one describing initial status ($\beta_{0i:j,k}$) and the other describing the incremental change in $\eta_{ti:j,k}$ associated with a one-unit change in the variable TIME. For this model, TIME is indexed as “0” for baseline measures and as “1” for follow-up measures, leading to the interpretation of $\beta_{1i:j,k}$ as a change, or growth, parameter. Any variation between the predicted value and the observed value is accounted for by residual error ($e_{ti:j,k}$) in the Gaussian model but is a function of the expected probability in the Bernoulli model:¹

$$\eta_{ti:j,k} = \beta_{0i:j,k} + \beta_{1i:j,k} \text{ TIME} + e_{ti:j,k} . \quad (11)$$

¹ For the Bernoulli model, $\varepsilon_{ti:j,k}$ is $\varphi_{ti:j,k} (1 - \varphi_{ti:j,k})$.

Individual-level models (level two). At the respondent level, each of the parameters (β) from the observation-level model is expanded. The first individual-level model equation (12) describes $\beta_{0i:j:k}$, the initial status of the i^{th} student or parent in the j^{th} school of the k^{th} condition, as a function of the intercept value of all persons in school j ($\gamma_{00:j:k}$) and a random effect ($u_{0i:j:k}$) that allows for variation from the intercept value. A set of covariates characterizes the survey respondent (R_SEX, R_AGE, R_RACE), the index child (CH_SEX, CH_AGE), and the family household (SINGLE [number of parents in the home] and HH [size of household]); the coefficients associated with these covariates are not of direct interest.

$$\beta_{0i:j:k} = \gamma_{00:j:k} + \gamma_{01:j:k} \text{CH_SEX} + \gamma_{02:j:k} \text{CH_AGE} + \gamma_{03:j:k} \text{R_SEX} + \gamma_{04:j:k} \text{R_AGE} + \gamma_{05:j:k} \text{R_RACE} + \gamma_{06:j:k} \text{SINGLE} + \gamma_{07:j:k} \text{HH} + u_{0i:j:k} \quad (12)$$

$$\beta_{1i:j:k} = \gamma_{10:j:k} + u_{1i:j:k} \quad (13)$$

The second individual-level model—equation (13)—describes $\beta_{1i:j:k}$, the change or growth over time of the i^{th} student or parent in the j^{th} school of the k^{th} condition as a function of the mean slope associated with school j ($\gamma_{10:i:k}$) and a random effect ($u_{1i:j:k}$) that allows for individual variation from the school-specific slope. Given the structure of the data being modeled, $u_{1i:j:k}$ is not directly estimable separate from $e_{ii:j:k}$, as noted in the mixed-model specification by the brackets [] in equation (16).

School-level models (level three). At the school level, the intercepts from the individual-level models are expanded. The first school-level model—equation (14)—describes $\gamma_{00:j:k}$, the initial status of the j^{th} school of the k^{th} condition as a function of the mean intercept value across all schools ($\lambda_{00:0:k}$) and a random effect ($u_{00:j:k}$) that allows for school-to-school variation from the overall intercept value. This model includes an indicator variable (COND) identifying schools as a member of either the treatment or comparison condition; its coefficient ($\lambda_{00:1:k}$) accounts for any difference in initial status between schools in the two conditions.

$$\gamma_{00:j:k} = \lambda_{00:0:k} + \lambda_{00:1:k} \text{COND} + u_{00:j:k} \quad (14)$$

$$\gamma_{10:j:k} = \lambda_{10:0:k} + \lambda_{10:1:k} \text{COND} + u_{10:j:k} \quad (15)$$

The second school-level model—equation (15)—describes $\gamma_{10:j:k}$, the change over time of the j^{th} school of the k^{th} condition as a function of the mean slope across all schools $\lambda_{10:0:k}$ and a random effect ($u_{10:j:k}$) that allows for school-to-school variation from the condition-specific mean slope. This model also includes an indicator variable (COND) identifying schools as a member of either the treatment or comparison condition; its coefficient ($\lambda_{10:1:k}$) accounts for any difference in mean slope between schools in the two conditions.

Generalized Mixed-Model Presentation

The five models described above can be combined into the familiar mixed-effects model shown in equation (16). In this expression of the model, fixed-effect terms are presented in standard typeface, and random-effect terms are presented in bold typeface. Fixed effects associated with lambdas (λ) represent school-level effects, while those associated with gammas (γ) represent individual-level effects.

$$\begin{aligned}
\eta_{ti:j,k} = & \lambda_{00:0:k} + \lambda_{00:1:k} \text{COND} + \lambda_{10:0:k} \text{TIME} + \lambda_{10:1:k} \text{COND} * \text{TIME} + \gamma_{01:j,k} \text{CH_SEX} \\
& + \gamma_{02:j,k} \text{CH_AGE} + \gamma_{03:j,k} \text{R_SEX} + \gamma_{04:j,k} \text{R_AGE} + \gamma_{05:j,k} \text{R_RACE} + \gamma_{06:j,k} \text{SINGLE} + \gamma_{07:j,k} \text{HH} \quad (16) \\
& + \mathbf{u}_{00:j,k} + \mathbf{u}_{0i:j,k} + \mathbf{u}_{10:j,k} \text{TIME} + \left[\mathbf{u}_{1i:j,k} \text{TIME} + \mathbf{e}_{ti:j,k} \right]
\end{aligned}$$

In equation (16), $\mathbf{u}_{1i:j,k} \text{TIME}$ is the component of variation associated with repeated measures within a person at a given point in time; as previously noted, that component cannot be estimated apart from residual error in this model and is dropped from further notation. Thus,

$\mathbf{u}_{0i:j,k} + \mathbf{u}_{00:j,k} + \mathbf{u}_{10:j,k} \text{TIME} + \mathbf{e}_{ti:j,k}$ represents the total variation in the outcome, $Y_{ti:j,k}$.

d. Analytic approaches for mixed-model regression

To account properly for the multiple sources of random variation that result from randomizing schools to conditions with measurements taken on students nested within those schools, the study specified multilevel regression equations using SAS PROC MIXED (SAS Institute, 2004) and SAS PROC GLIMMIX (SAS Institute, 2006) for general and generalized linear mixed models, respectively. These two procedures offer a flexible approach to modeling the longitudinal and multilevel regression models specified here. A primary strength of the mixed-model approach is that multiple random effects can be modeled independently. Under the general linear mixed model, the random effects are assumed to be independent and normally distributed; the random effects necessary to avoid misspecification for each model are identified in the preceding subsection. The analyses can be extended to non-Gaussian data in the generalized linear mixed model through the appropriate specification of an alternative error distribution and link function. The standard errors estimated and significance tests conducted account for the fact that schools (not students) are the units of random assignment.

The models were estimated using restricted maximum likelihood (REML) for generalized linear mixed models and the restricted pseudo-likelihood (RPL) for generalized linear mixed models. These approaches provide parameter estimates by maximizing the probability that the predicted values agree with the observed data. They are iterative, similar to maximum likelihood (ML) estimation, but provide separate estimation for fixed and random effects. Separate estimation of the fixed and random components is less efficient, which may result in a slightly larger mean square error; however, estimates obtained in this manner are considered preferable because they produce less of a downward bias than ML estimates (Murray, 1998; SAS Institute, 2004, 2006).

Appendix I
Methodology for Assessment of the Demonstration
Project's Evaluation

This appendix describes the methodology for our assessment of CNNS' self-evaluation of the Eagle Adventure program. We identify the research questions, describe the research design and data sources, and discuss the analysis approach.

1. Research Questions

The purpose of the assessment of CNNS' self-evaluation was to provide a detailed description of their evaluation methods, measure the quality of their evaluation, examine the soundness of the outcome measures, and determine the strengths and weaknesses of the evaluation's design and implementation. Specifically, this assessment addressed the following three broad research questions:

- How did each demonstration project plan to and actually evaluate the success of its intervention(s)?
- What were the results of each demonstration project's evaluation, and how do they compare with the independent evaluation?
- What lessons are learned about each demonstration project's evaluation?

2. Research Design and Data Sources

Determining the effectiveness of CNNS' evaluation required a clear understanding of the planning, design, and implementation of the evaluation based on both objective and subjective measures. To the extent possible, our assessment was based on objective information (e.g., the evaluation report prepared by CNNS). Qualitative methods were used to gather in-depth information as well as perspectives of key players in the evaluation (e.g., program administrators and the evaluation manager). We describe below the data sources for our assessment of CNNS' evaluation, including the evaluation review form, evaluation cost form, abstraction of CNNS' evaluation report, and the interview guides for interviews with key informants.

a. Evaluation review form

To assess the quality of CNNS' evaluation, we used the evaluation review form provided in appendix F. To develop the evaluation review form, we adapted a scoring tool based on the one used by the Center for Substance Abuse Prevention in developing the National Registry of Evidence-based Programs and Practices (NREPP) database (see <http://nrepp.samhsa.gov/> for additional information). This is an evaluation form that we had previous experience with and had found to be valuable.

The evaluation review form (see exhibit I-1) includes eight components, each of which is scored on a scale of 1 to 5, with 1 = "missing or so poorly described that its value to the evaluation cannot be determined" and 5 = "is appropriate for the program being evaluated and is presented in a way that shows the evaluator has a clear understanding of its role in the evaluation."

b. Evaluation cost form

To document the resources used and costs incurred by CNNS to evaluate the Eagle Adventure program, we provided CNNS with a series of tables to complete at the end of their project. These tables, which were specific to the evaluation phase of the Eagle Adventure project, were included in the previously referenced Research and Expense Tracking Form (see appendix B for completed evaluation cost information). The format of the tables and the information requested therein was consistent with FNS

Exhibit I-1.—Criteria for Assessing the Quality of CNNS' Self-evaluation

Evaluation Component	Specific Criteria
Research objectives and hypothesis	<ul style="list-style-type: none">• Clarity of research questions and hypotheses that the evaluation addresses• Alignment of evaluation goals and objectives with intervention activities
Viable comparison strategy	<ul style="list-style-type: none">• Appropriateness of the control or comparison group• Threats to the validity of the design
Sampling size and strategy	<ul style="list-style-type: none">• Sample size estimation• Method of selecting sample participants from population• Recruitment plans
Outcome measures	<ul style="list-style-type: none">• Quality of data collection instruments• Alignment of evaluation measures with intervention activities
Data collection	<ul style="list-style-type: none">• Overview of data collection schedule• Rigor of data collection process• Quality of the data collection process
Data analysis	<ul style="list-style-type: none">• Sample characteristics and baseline comparability• Statistical methods used to assess program impacts• Additional statistical procedures and analyses
Attrition	<ul style="list-style-type: none">• Attrition rate
Missing data	<ul style="list-style-type: none">• Level of item nonresponse

SNAP-Ed reporting requirements, thus minimizing reporting burden. Specifically, we requested data on:

- Human capital (e.g., staff roles and responsibilities, number of FTEs, as well as averages and ranges of salaries for each);
- Physical capital (e.g., printing, labels, computers, folders); and
- Line item expenditures (e.g., salary and benefits, materials, travel) by funding source (non-federal or federal funds).

The evaluation cost tables were completed by CNNS and submitted at the completion of the demonstration project, or once all evaluation-related costs had been incurred. We reviewed these forms for completeness and used this information to summarize CNNS evaluation-related costs.

c. Abstraction of demonstration project's evaluation report

We provided CNNS with an outline for their evaluation report that followed directly from the evaluation review form. For each evaluation component, we developed an outline heading, thereby facilitating the CNNS evaluation manager in providing the type of data necessary for us to evaluate that aspect of their evaluation. The outline also included tables for providing information on outcome measures and the results of the evaluation. We pre-populated sections of the report based on data from prior interviews, reports, or conversations with the evaluation manager. We then sent the partially completed report to the evaluation manager to review the populated information and provide the additional information requested.

We reviewed and abstracted key information from the report to complete our assessment of CNNS' evaluation.

d. Pre-evaluation and post-evaluation interview guides for key informant interviews

Primary data related to CNNS' evaluation of the Eagle Adventure program was elicited from two key stakeholders—the program manager and the outcomes coordinator— through in-depth, open-ended discussions. This method was used to capture rich, subjective information both pre- and post-intervention. A pre-intervention interview, which focused on the planning and design of the evaluation, sought to capture the experiences and perspectives of, as well as lessons learned by the outcomes coordinator on this phase of the project. Several questions related to anticipated challenges were also administered at this time. A post-intervention interview with the outcomes coordinator sought to capture similar information, but for the implementation and analysis phases of the evaluation. Additionally, a post-intervention interview with a similar focus was conducted with the Eagle Adventure program manager to document lessons learned with regard to the evaluation from a programmatic perspective as well as plans for future evaluations of the Eagle Adventure program. Because of the varying foci of the interviews at each of these key time periods, two interview guides were developed—one for use prior to implementation and one for use post-intervention. The post-intervention interview guide for the program manager consisted of a subset of questions that were included in the outcomes coordinator interview guide. Each guide was developed to be as concise as possible. Anticipated response time ranged from 15 to 60 minutes, based on the timing of the data collection and respondent type.

3. Analysis Approach

The assessment of the evaluation conducted by CNNS included a descriptive assessment of the management and costs of the evaluation; a descriptive assessment of the quality of their evaluation; a comparison of CNNS's study design and results with the FNS independent evaluation; and an assessment of lessons learned based on the quality assessment, cost analysis, and reported factors affecting evaluation implementation. Our analysis procedures are described below.

a. Descriptive assessment of evaluation management and costs

To assess and describe CNNS' management of their evaluation, including roles and responsibilities, training, and aspects of quality control, we gathered and compared descriptive information provided by CNNS through their evaluation report and key informant interviews. We applied an analysis approach similar to that described for the process evaluation, which entailed compiling key informant responses to each interview question into a master Microsoft Word 2007 document and identifying direct quotations where relevant to support key findings. Costs associated with the demonstration project's own evaluation were reported directly by CNNS through the previously described evaluation cost form; these numbers were reported as is and were not manipulated or used for any additional calculations.

b. Descriptive assessment of the quality of CNNS' self evaluation

To assess the quality of CNNS' evaluation, we used the evaluation review form provided in appendix F. We collected much of the data to complete the review form by examining CNNS' evaluation report that was organized explicitly to address each of the evaluation criteria on our form. Other data were obtained from in-depth interviews with the CNNS program staff. RTI had two people rate the evaluation (one rater was the designated impact evaluation leader for the FNS evaluation). We assessed inter-rater agreement

and came to a consensus score. In addition to reporting the score for each evaluation component, we prepared a descriptive assessment of the strengths and weaknesses of CNNS' evaluation.

c. Comparison of CNNS' study design and results with the FNS independent evaluation

RTI described the study design employed by CNNS for their evaluation and compared the design of CNNS' evaluation with the design of the FNS independent evaluation, noting the similarities and differences in the two research designs and anticipated effects. The description of CNNS' evaluation was based on the abstraction of CNNS' application and evaluation report and the interview with the evaluation manager and other program staff members.

RTI compared the results of CNNS' evaluation with the FNS independent evaluation, noting whether the results were similar or different in terms of direction and magnitude. The description of the results of the CNNS' evaluation was based on the abstraction of CNNS' evaluation report and the interview with the evaluation manager and other program staff members.

d. Assessment of lessons learned

Altarum Institute used information collected primarily through key informant interviews to assess and describe lessons learned from the perspective of the demonstration project staff. Key informant responses to each interview question were entered into a master Microsoft Word 2007 document to allow for the identification of similarities and differences between lessons the program manager and outcomes coordinator reported learning through their evaluation of the Eagle Adventure program. The assessment of lessons learned also described approaches for improving evaluations based on the weaknesses identified in our assessment of the quality of CNNS' self-evaluation.

Appendix J
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