Hello, my name is Pascale Jean, I am from IFSN and I am program specialist. Welcome to Institute of Food Safety and Nutrition Seminar Series. This is my first time using WebEx. We are moving slow. I apologize in advance.

My name is Pascale Jean, program specialist with IFSN. At the pleasure of introducing Dr. Leslie Cunningham-Sabo. She has led a physical activity research program for the 20 years. Her experience is skilled at developing and disseminating theory-based health education for adolescent youth. For much of her research, and actively involves a partnership with diverse population, including no income American Indian and Hispanic communities. Also, urban communities. She has experience in the development of dietary, cooking and food choice assessment tools. As well a school-based assessment strategies, such as school lunch from conception and food waste. Most recently, she has led wide scale school-based studies of up to participate annually using a variety of quantitative and qualitative methods. We will go ahead and get started.

All participants are in listen only mode.

This conference is being recorded.

>> 888-844-9904 and 5531019.

Please mute your phone. Please go ahead.

One moment. Thank you to the host, the Institute of safety and nutrition. In addition, delighted to be with you. I am sorry about the delay. I will be talking about consideration for youth insemination and adoption of school-based childhood prevention program. I hope to accomplish that you will be able to define terms related to the implementation and dissemination of community-based research projects. And you will be able to describe components and the implementation of a project that I am involved with called fuel for funds. We would like to discuss challenges and considerations for disseminating and promoting adoption. Implementation 2.0. A school a family-based intervention. I hope everyone can hear me okay. I want to let you know that I have references in my presentation and citations are listed at the end of each slide. You will receive a copy. My first objective is compliance related to implementation and dissemination. Of the community-based research project. Let us jump into that. Many of you know of these related terms. I am not certain everyone does. Let us get on the same page. Research designs are particularly important. Randomized control trials are the most rigorous and challenging to implement in a community setting. Where there are random assignments or groups. For example, groups, schools in my case, randomized trials give us the strongest evidence.

We have, what is called efficacy trials versus protected trials. Efficacy are often randomized trials, implemented in a controlled way. They are used to determine outcomes and impact on an intervention or therapy.

Clinical trials and clinical research ultimately applies to the real-world setting. With a goal to enhance human health. The division of innovation theory examines factors at the uptake and advance of new technologies or other advances. In my case, it could be the adoption of a research project by community practitioners. Community-based participatory research, allows you to participate fully in the process. From developing the research questions, to determining research design, implementation, evaluation,
to dissemination. This is sustainability. This is something we really want to see the results. Wide adoption and continued use of impactful evidence-based program. We want to see the increased use of partners. Also, that are significant and important research activities with each of these terms. Now, let’s turn our focus to the topic of today’s webinar. We will define these terms.

Those of us working in research have considered these concepts all along. The dissemination is the target of distribution of information and research-based intervention materials. Let me define these terms. For the individual willing to participate in the program. Related to the impact of the intervention on important outcomes. Adoption is the absolute number representativeness of the setting for agents willing to initiate the program. Implementation is the setting level. It refers to the intervention agents to the various article. [Indiscernible] is the extent to which the program or policy. To reach a large number of people, especially those that benefit the most. Replicable and long-lasting change. I am particularly interested in the Association -- let me go back a second. What I would like to do is transition to a description of my project. I am particularly interested in the association between children’s involvement in home cooking and their health. To eat more fruits and vegetables for example. And that there are associations between children’s enjoyment and the frequency of cooking and other health outcomes. Such as increasing their cooking skills and increasing their cooking some advocacy. And improvements in mental health and family connections. Primarily due to them eating meals at home together. And their body mass index. I do want to note, gender differences. And that children as they get older cook more often. The lasting effect. As you can imagine, there is quite a bit of study and literature from research-based cooking interventions. Much of it is funded by USDA.

Research interventions typically focus on intervention. Improving the quality. Increasing vegetable intake. The setting is often in school or after school. Frequently measured outcomes include willingness to combine foods or overcoming food phobia. Sometimes called the IKEA affect. I like it because I made it. Other outcomes include increasing vegetable intake. And self-efficacy and knowledge. Randomized control trials are quite right experimental. >> [Poor audio due to unmuted lines. ]

Studies noted poor food outcome. The quality of the study designs very. Limiting our confidence in the results. Only two studies rated strong research design. They were the two I will mention now. A tool based research intervention. I will focus first on a program called cooking with kids. Then focus on the next generation, fuel for fun, cooking with kids. The result of these have been funded through childhood obesity prevention. I would be remiss if I did not share some of my colleagues. I will take time to introduce the Rochester introduce -- Institute of technology. Also, the University of Colorado. Melissa Prescott, a postdoc and assistant professor at University of Illinois. And our research assistant and coordinator. Many graduate students.

Essentially the program involves to our food educator cooking classes. And when our teacher led tasting classes. The tasting classes would be tasting different varieties of salad greens, apples etc.

You would cook with the kids with recipe inspired items.

The bottom left pictures. There was a need to find out how the students liked the program and there was a need to get funding. I began my involvement with cooking with kids primarily to provide evaluation activities for a community-based program. I would like to briefly describe two studies. The first on the left column with black type. To evaluate what cooking with kids it does. I will share with you and go to that one first. I will share the second column. The initial cooking with kids project and the
years it was implemented. 1200 students, all fourth-graders. It was taught throughout the school year.
About every six weeks, there were five, to our cooking classes work and five tasting lessons. They
alternated cooking and tasting. It was taught through the school year. Through the educator, cooking
with kids. Outside educator was the one who came in and taught the lessons. The teacher led the
tasting lessons. Some had prior exposure to cooking with kids. We were not able to randomly assign for
three intervention components. They were assigned a some prior exposure. We have a third of the
group that received the whole curriculum. Cooking and tasting lessons. We have a third receiving the
tasting lessons only. And we had a comparison group who did not receive either. As I mentioned, these
are low income, primarily Hispanic students. The right column with red letters is a pilot in Colorado.
They wanted to determine the impact of another demographic. And a different audience. You can see
the Colorado pilot. This was still fourth grade. We taught it with three lessons each. The educator led the
tasting and cooking lesson. We have for school, -- 4 schools with no fire exposure. They were randomly
assigned with no control group. They were put on a late White students in moderate income schools.
We compared the research design and compared results, based on how the program was led. And a
difference in demographic. One of the ways we evaluated was based on a survey we developed. That’s
what self-reported with fourth-grade students. We designed the report in a survey after underscoring
the foundation of cooking with kids. We wanted to determine the measures and impact as robustly as
we could. We designed and tested a survey that included asking the students there prior cooking
experience. We conducted the validity as well as reliability. You can see the reference on bottom right.

We have items related to self-efficacy and attitude toward cooking. 18 items asking about preferences
toward specific food groups. What did we find? We saw that there were significant improvement in
cooking self-efficacy and self-advocacy. For example, students would tell us about how confident they
are in measuring ingredients. Or following a recipe. Are preparing a snack or meal. Self-advocacy --
efficacy is hard to measure. Children do not know what they do not know. They likely gained experience.
We saw improvement with our intervention students. The greatest improvement in self-efficacy was
when the children had cooking and tasting lessons.

There is not a whole lot of room to improve. Vegetables are another story. We really see that fruit and
vegetable preference are a marker or key to improving vegetable or diet quality. We noted that the
greatest gains were in non-cookers. Student who had cooking and tasting lessons. Impact was less clear
and had mixed results. In all cases, the greatest gains were non-cookers. And most were boys. I want to
point out that from this; we determined there was significant value. Results were positive. To gain more
funding for a research project. Training the next generation. Now, I would like to share our current study
and help it is built on the cooking with kids program. With that funding, we have resources to conduct
our current study. You can see beneath the pictures, cooking with kids Colorado. We adapted the
cooking with kids program to better address the Colorado academics.

We also adopted a program called SPARK which was evidence-based. We adopted a cooking with kids’
recipe. Those children learned in the classroom. For the cafeteria. We developed a family program. It is
related to this. We designed an activity to engage parents and families. We have family night. The
students go after each cooking and tasting lesson to do what they learned with their family. We also
have an online program for parents. It all took place in eight schools within two school districts. With
fourth-graders. We recruited and worked with 1400 students. A cluster randomized study design. Here
is a picture of our student educators, who helped implement and evaluate the study. Here are some of
our initial findings. I want to note we are in the process of finalizing this. We have preliminary results.
With child to parent survey responses. The parent survey was comparable to the student survey. I would like to share the results with you. The number of students, parents etc. The cooking efficacy and vegetable preferences -- gains were most significant or greater as compared to the control. It repeated the results from the earlier study. We noted that attitude -- I really like to cook. Versus I kind of like to cook. Attitude improved.

Children vegetable preference, related to cooking and food related attitudes and behaviors to themselves and parents -- just having festivals at home was not related to their preference. What are the implications? Do we want to enhance the vegetable preference? We know we need to do this for activities and increase cooking. Increase parent self-efficacy and modeling fruits and vegetables. We realize that home-based intervention could focus on making vegetables available. For example, putting carrots and celery cut up in the fridge raider will likely not make an impact -- in the refrigerator will likely not make an impact. There was an association between survey results and intake results.

We will hopefully publish our data. For our objective, we want to discuss the challenges and considerations for disseminating and promoting adoption of family based induction by our community partners. I talked with you about implementation about the research project itself. Now, we want to think about implementation. Some lessons learned, especially working with in a school setting. We note that we must have district approval. As many of you know, we need to work with folks that want to use our program. In the proposal development. For example, we had to negotiate the number of hours we can have during the school day. We are talking about 15 hours of programming across the school year. We had to negotiate that number. For example, another situation let me tell you a story. As we put the proposal together, it was working with a district principal -- school principal. A school principal who led a school wellness program. He agreed to support our project because our grant paid a portion. It was an effective way to partner with a research program. And have a program pay a portion of a staff salary. I took that away and we were finalizing the budget before we submitted the proposal. Because I thought the reviewers will question why we would be paying for 10 percent of a school district wellness coordinators salary. One degree of involvement was not to 10 percent. Because of this, the principal lost his bragging rights. He almost did not approve the project. I had to wait until the last day to meet with him before we got the letter of support. Another thing we want to be aware of is to address the differences between the health and education world. For example, we have two-hour cooking lessons. We schedule them well in advance. Often, we had to be flexible and change the date and time. Because of what was happening in school. Unfortunately, the schools had to take away some special classes, such as music, art or physical education. Again, we need to make sure this is a win-win for school and education. Finally, we need to make sure about the readiness of school administrators and teachers. We do note that they value wellness. They have so many priorities on their plate. The pressure for academic test scores.

One had to drop out due to poor standardized test scores. In Colorado, one performance review showed improvements.

Some other things that we learned that successfully involved parents that

You are sharing personal information. I am sure you do not want hundred people to hear.
This is an integrated project for research education. Training the next generation of scientists. Now what I would like to be able to do is show you dissemination and efforts. They had health education funding and were able to provide us a small contract. Similar to science kits. The teachers will check out a science kit from the district. And all of the experiments and equipment is available. And they will bring the instruments to the classroom.

They will have several lesson plans and instructions for the teacher. We provide professional development training for the teachers. They really enjoyed it. It was great enthusiasm. We had 25 people who participated in the training. Everyone wanted to check out the kids. The reality was it took over a year to work out the logistics for the teachers. To be able to be reimbursed for the fresh ingredients. We do have some evidence of use of checking out the kits. The evaluation and information we have been able to gain has been limited. We also provided training in the curricula for afterschool programs locally. We had a number of people, 25 or 30 people trained. However, the uptake, adoption and use of the program has been quite limited. I like to share with you dissemination efforts to our cooperative extension program. It is in Colorado. We worked with the University extension program to develop the intervention program. Much like everyone else, they were interested in the classroom. To some extensive -- extent, the parent materials. We provided training and we involve the -- about them from the beginning. We provided equipment. There was fairly limited implementation. We are quite excited about our new partnership.

We note that we have been doing investigating and that it will fill a gap in youth ethnic programming needs.

I do not see any question coming into the chat room. I think everyone was trying hard to hear information. This will be recorded and edited. And uploaded to the website. Dr. Cunningham, I will work with you to record again. My sincere apologies for the mishap.

That is fine. I am happy if anyone wants to contact me via email. I'm happy to share resources with you.

I will end the meeting now. If you have questions, my sincere apologies. Feel free to email me. And I will call you, Dr. Cunningham. Thank you for your time. I hope your week is wonderful. Have a good one.

Thank you.

[Event Concluded]