

## **Topic: Measuring Our Progress: Applying What We Know and Learning More!**

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### **Effective Strategies in Nutrition Communication**

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Hi, I am pleased to be here and to see so many of you. Today, I'm going to talk about effective strategies in nutrition education that are based on a review of evaluation studies. In 1995, I was senior author on a review in the Journal of Nutrition Education of what we learned about nutrition education over the previous 15 years. Last year, someone invited me to update the 1995 review and present my findings. Well, I did, and, today, I want to share results of that update with you.

For those of you who did not read the 1995 review, here is just a quick recap. It is based on 220 studies and addresses these two questions:

1. Is nutrition education effective?
2. If so, what makes it effective?

Based on the 220 studies reviewed by my co-authors and myself, I concluded that nutrition education is a significant factor in improving dietary practices when behavior change is set as the goal and educational strategies employed are designed with that as a purpose. At the time, focusing on nutrition behavior was somewhat controversial. I can understand why. Nutrition education, after all, is very complex. Our food patterns are based on many, many different factors. We should be teaching people the skills needed to make informed choices, so focusing on specific behaviors was considered too limiting. But, I think that the 5-A-Day Program and a number of other programs reaffirmed the importance of focusing on behavior change.



Since 1995, there have been several other comprehensive reviews, and I thought I would share with you the results of some of those. One is the 5-A-Day for Better Health Program Evaluation Report, which looks at the impact of their program in two ways. One approach maps the national campaign onto food intake surveys already occurring. A National Cancer Institute (NCI) survey suggests that U.S. adults increased their consumption of fruits and vegetables from 3.8 servings at the time the 5-A-Day campaign began to 3.9 in 1997. The percent of people who actually eat five servings of fruits and vegetables each day went from 23 to 26 percent. More recently, data show that some of these numbers go up and down making it difficult to draw clear conclusions about effectiveness.

The second approach was the use of experimental studies or randomized trials. Here the data show a positive impact. Some of the studies with school-based settings show that the effect size, that is the increase in consumption due to nutrition education, increased, on average, 0.62 servings per day, with a range of 0.2 to 1.68. That may not sound like a very big change, but averaged over a large population it's actually encouraging. In terms of adults getting nutrition education through work sites, WIC programs, or black churches, the average effect size is 0.48 servings, with a range from 0.2 to 1.68 additional servings. These findings suggest that nutrition education can have some impact.

Another NCI study, entitled "Efficacy of Interventions to Modify Dietary Behavior Related to Cancer Risk," looked at fruit and vegetable, as well as fat intake. Only 92 studies from the 907 that they originally identified met all the criteria set for inclusion in the review. This review looked at the results in three different ways to capture the variety of study methods. One was to do a meta-analysis of studies with intervention and control groups. The data came from the subset of the 92 studies looking at percentage of total calories from fat. The results show small to moderate change for the intervention groups that are statistically significant. Thus nutrition education does have a moderate effect in reducing fat consumption.

The second way that they looked at study results focused on differences in deltas; that is, mean differences in dietary change between intervention and control group participants. The intervention groups improved but often, so did the control groups. If you're comparing those two groups, you want to examine which group changed more. They found greater improvement among intervention groups in fruit and vegetable intake as well as in fat intake.

The third way of reviewing the studies involved identifying how many reported statistically significant outcomes. In this case, the comparison again showed that there was some improvement. Collectively, these suggest some slight improvements that are statistically significant. The average increase in fruit and vegetable intake is 0.6 servings, and the average decrease in fat calories as a percentage of total calories is 7.3 percent. I emphasize this general trend because I think we're constantly being challenged as to whether nutrition education works or not. People at the highest levels keep asking because they want to decide whether to spend money on nutrition education. I keep trying to suggest that nutrition education does work.

So, what are some factors that contribute to the effectiveness of nutrition education? Repeating what I said in 1995 that is even more true today: nutrition interventions are more likely to be effective if they are behaviorally focused and based on appropriate theory and research. What does that mean? Behaviorally focused nutrition education uses:

- a set of learning experiences or communications, and
- environmental supports to facilitate the voluntary adoption of food and nutrition-related behaviors that are conducive to health and well-being.

I know that nutrition education is very complex because food decisions are complex. But, ultimately when people decide to eat something or choose to have particular foods available to eat, we end up talking about behavior. That is, the behavior could be eating fruits and vegetables, or choosing organic versus non-organic; biotech food versus not biotech food; or locally produced food versus food transported long distances. It all boils down to behaviors. Nutrition education is about behaviors. But, it is not only about behaviors. The behaviors occur in context, and so nutrition education also needs to facilitate environmental supports and hence the voluntary adoption of these behaviors. Effectiveness is enhanced when nutrition interventions are directed at both the individual and environmental levels. The individual level includes intrapersonal and interpersonal facets, and the environmental level has organizational and community dimensions.

This morning, I was very interested to hear presentations on social marketing, partnerships, and on a vast array of community-related and community-based interventions. I'm going to focus, right now, on interventions involving the intrapersonal and interpersonal. Interestingly, that's where studies have provided the most results. Many of the activities we heard about today, like community-focused efforts, have not yet reached the research press. Maybe they never will because they are so complex.

My updated review is based on the original 220 studies reviewed in 1995 and an additional 150 studies published between 1995 and 2001 that met similarly strict criteria. This is probably not the universe of all published studies because I did not do an absolutely exhaustive search. I learned subsequently that the Europeans have also conducted even more intervention studies, so I'm sure that the total number of additional studies is up to 200 at this point. Nutrition education has really just blossomed in the last few years.

What are some important factors contributing to the effectiveness of nutrition education? **Attention to motivators and reinforcers** that are personally relevant to people in the target audience is of prime importance. That finding has not changed between 1995 and 2001; indeed, it is even more important now. What are some of the motivators and reinforcers? We have some indication which motivators and reinforcers matter from recently published studies. A national survey, sponsored by the National Cancer Institute (NCI), found that one unit increase in awareness knowledge led to a 33 percent increase in fruit and vegetable consumption. In this case, knowledge was defined as awareness of the message to eat five servings a day. A lot of people did not know how many vegetables and fruits they were supposed to eat a day (many thought it was one a day). Once they found out that they're supposed to eat five a day, many of them did just that. So, knowledge of the behavior being promoted is powerful.

Other intrapersonal factors include affect (which is taste), self-efficacy, the ability to actually select and prepare fruits and vegetables, as well as perceived benefits and barriers. And, among the interpersonal factors are social norms. This gives you some sense of the motivators for fruit and vegetable consumption. In another study, which took place at work sites, researchers with the Working Well Trial found the following were predisposing factors: perceived benefits of a healthful diet, motivation to eat a healthful diet, and knowledge of fat and fiber in foods. Among the enabling factors were perceived barriers, social norms, and social support.

Other factors found to affect change are: belief in diet/disease connections, perceived susceptibility of or a threat to disease, and outcome expectancies (meaning: do you anticipate some kind of a positive outcome from eating a healthy diet). And, now studies have found that the relative importance of the pros and cons of change is predictive. Of course, appearance is actually very important but it doesn't show up in too many studies. I think that we could do more with that.

Studies examining these motivators and reinforcers remind us that such factors only account for something like 30 percent of observed behavior change. This means there are many other motivators of change that we haven't yet tapped; so, we should broaden our search. Here is another possibility—self-identity—that is, what kind of person are you? Do you think of yourself as a health-conscious person or an ecologically-minded person? For example, if you support green consumerism, it will be important to eat locally produced food and avoid products altered by biotechnology. Such views will be associated with an ethical obligation to make certain food choices for yourself and your family. This brief review should provide some idea of the number and variety of motivating factors that may influence eating behavior.

Now, what about delivering nutrition education messages through the **mass media**? Mass media can increase awareness of the consequences of diet, as well as knowledge about behaviors to reduce risk and attitudes about what is desirable. A change in actual behavior can sometimes be accomplished if the behavior is highly targeted, and messages about the behavior are carefully focused. I think that that is why the fruit and vegetable media campaign has been as effective as it has been. It delivers a very clear behavioral message. There are many variations on fruit and vegetable media campaigns. They include Fat Watch in the Netherlands, 5-A-Day USA, and in Australia, the Two Fruit and Five Vegetables Every Day.

In general, **active personal intervention strategies** combined with a behavior change process are more likely to facilitate dietary change. Some of the strategies that are identified as contributing most strongly are accurate self-assessment compared to a standard, personal goal setting, self-monitoring with feedback, social support from small groups and family, along with interactions with food. This information comes from the NCI report and other studies that I looked at.

One thing that is now very clear is the importance of **accurate self-assessment**. Many people are not aware of their own intake status and do not perceive a need to change. For example, researchers in the Netherlands found that most people thought that they were eating a lot less fat than they really were. Similarly, they also thought that they were eating like everyone else and that everybody else was eating about the right amount. Of course, if you don't know what you're eating, then there's no need to change. Building on this perspective, we find that communications

through non-personal media, such as computers, offer an effective way to provide tailored or individualized self-assessment and feedback.

A good deal of concern exists about the slow and labor-intensive process of working in small groups or one-on-one in individual counseling. How can we expand our reach? Of course, social marketing is one way to do this. Many recent studies, **using non-personal media**, such as computers, for self-assessment and feedback show improved communication, attention, and satisfaction. This approach may enhance effectiveness compared to a general communication approach.

Let me describe how the approach generally works. You might distribute a questionnaire to people in a work site and use their responses to find out their stage of change, as well as some of their motivators and beliefs. With this information, computer-generated letters can be tailored to each person. For example, if the person who has not even thought about making a change yet gets a newsletter or something that tells him/her how to make changes, that's a mismatch because they're not even motivated to act. Telling them how to change wastes your resources and their time. Similarly, if someone is already very motivated to make a change and you send a brochure with a motivational message but no information on how to make the change, that is not helpful in producing a behavior change. Instead, if we match messages with individuals' readiness to change and their personal motivators, then maybe we can extend our reach.

Personal letters, newsletters, and magazines containing computer-generated messages that have been individually tailored are used in a number of studies. Target audiences include physicians' clients, healthy employees at their work sites, healthy volunteers, members of health maintenance organizations, and church members. In each of these studies, messages are tailored to the group or to the individual.

Another communication channel being used are interactive computers. People use a computer to find out how they are doing, compare their own intake with the standard, learn how to make some changes, and then track their progress. While attending another conference session today on the Healthy Eating Index, it occurred to me that this measure offers individualized information that can be used in the kind of interventions I've described. If you log in and figure out what your own intake is and see how it compares to the standard, that experience can be highly motivational.

**A variety of non-traditional communication approaches** have been investigated in the last few years, and these show promise. In one study, people calling the Cancer Information Service for general information, would be engaged in some kind of motivational interviewing on the phone and then be mailed information specific to their stage of change and their motivational factors. Using the telephone to do motivational interviewing is catching on. Nutrition educators are now exploring the use of web-based tailored messages and kiosks in supermarkets. As shoppers enter the store, they communicate what they plan to buy and get feedback about healthier alternatives. In another store setting, public service messages promoting fruits and vegetables replaced "Muzak." Shoppers also received an audiotope with additional nutrition guidance while shoppers in the control group received a tape with different information. In another study, Boy Scouts could earn a 5-A-Day badge as a means of encouraging them to eat five fruits and vegetables a day.

Marcy Campbell and her group have developed a video soap opera to deliver nutrition education in WIC clinics. While WIC participants are waiting for their appointments, they can log onto this interactive soap opera. They put in their information as they're going through the video and get infomercials back that are related specifically to their stage of change and motivations—all in the format of a soap opera.

Alan Krystal also tested an intervention taking into the account a group's stage of readiness to adopt dietary change. In this particular study, involving work sites and 11,000 people, the baseline people were at the pre-action stage. If participants stayed in the pre-action stage, there was no change in their fat intake. If they moved to the action stage, then their fat intake declined two percent. If they moved into maintenance, the decline was larger. The results were similar for fruit and vegetable consumption. The only qualification is that fat intake for the control group also went down, so there was no statistically significant impact.

These studies suggest that using the stages of change as a heuristic or communication model is very useful. If some people are at the pre-contemplation or contemplation stages, our goal is to enhance motivation and awareness. In contrast, if they're already considering a change in behavior, then we want to activate decision-making. Eliciting action calls for some skills training and creating social and other environmental supports in order to maintain the change. There are key psychosocial factors that you want to address for each stage.

It is also becoming clear that for nutrition education to be effective we need to pay attention to relevant **complex food-specific issues**. This may be obvious to you, but much of the recent nutrition education research has been initiated by psychologists, social psychologists, and researchers from other disciplines whose prior work involved anti-smoking or anti-drug initiatives. I think that some of them don't understand the complexities of food choices. Food consumption, unlike smoking, is not optional, it's needed for survival. Survival and quality of life require appetite and enthusiasm about eating. So, changes in diet are undertaken with ambivalence. Yet, many need to make changes for health reasons, even if current eating habits are psychologically or culturally satisfying.

And, of course, the criteria for making food choices are increasingly more complex. There are not only health concerns, but ecological concerns, moral and ethical concerns, social justice concerns, as well as safety concerns. Critical thinking skills are definitely needed. People must make trade-offs between criteria. For example, this food may be good for health, but is not produced in an ecologically sound manner although it was produced in a socially just manner. Which factor is most important to my choice? Making food choices is getting so complicated.

In some cases, dietary behavior change requires decreasing or avoiding foods, while in other cases adding certain foods or substituting or modifying foods. The psychological motivations, practical tasks, and the educational needs may be different for different categories of food. For example, someone may view fruit as a desirable snack but consider a meal as less appealing when fruit is substituted for desserts with more sugar and fat.

**Behavior**, well what exactly is a behavior? I've come to think of behavior as made up of many specific actions. You want to eat more fruits and vegetables but that involves many actions such as going to buy fruits and vegetables, peeling fruits and vegetables, cutting them up, and/or cooking them. There are many specific actions, so changing your fruit and vegetable intake also ends up influencing your eating out practices, as well as your food preparation practices. Involvement with food can affect preferences, motivation, and self-efficacy. So, adequate exposure to healthful foods is essential for people to come to prefer such foods. Cooking experience can also affect motivation and self-efficacy. I will give you some evidence for both of these points.

We tend to forget about the impact of experience with food. We weren't born loving hamburgers and cheesecake; we learned to like those foods. Exposure led us to liking those foods. Evidence suggests that associative physiological conditioning, as well as social conditioning, has helped to create the food habits that we have. It's familiarity that contributes to feeling good inside so you'll eat the same thing again. Leanne Birch's studies show that you may have to expose children to specific foods 15 to 20 times before they'll come to like it. So, not liking something the first time doesn't mean failure. We have to keep offering the foods. Social conditioning, which includes modeling and rewards, also affects preferences and motivation.

In terms of cooking, several years ago people did not want to consider that that was a serious part of nutrition education. But, we are realizing that it's the experience with food that ultimately gets people to like the foods that we want them to eat. In one intervention with children called "Cookshops," the experience of cooking in the classroom increased their knowledge, preferences, behavioral intentions, as well as self-efficacy and the intake of targeted foods at school lunch. In contrast, even lessons that involved a lot of interaction with food increased knowledge only. That is, learning experiences involving actual cooking were more effective than other forms of active participation.

Finally, I think that we are becoming more aware of the **importance of maintenance of dietary change**. Many of our programs are four or six weeks long, and we may be able to measure some changes after those short times. But, what happens several years down the road? Have people maintained those changes? The MRFIT program had a six-year follow-up; the Women's Health Trial had a follow-up of 20 months. In the latter case, fat calories were reduced initially from 39 percent to 20 percent of total calories. The lower number was actually maintained by 67 percent of the women even after 20 months. We have a few studies of long-term maintenance, but not many.

What factors are associated with long-term maintenance? In the studies that I have reviewed, people made choices within a general dietary framework and were not given a prescriptive diet. The approach provides participants with an opportunity to practice controlling their own diets and to make their own trade-offs. In the Women's Health Trial, participants were told to limit their consumption to a certain number of fat grams per day. So, if they wanted to eat cheesecake that day, it was fine.

It just meant that they had eaten their fat allotment for the day and, in fact, may have now needed to reduce their fat intake for the next two days or something like that to compensate. The intervention involved providing general principles but not specific food rules.

This approach requires some kind of self-monitoring system that is easy to use. For fruits and vegetables, you can count them, so that's easy. The Women's Health Trial gave participants a point system to use. The number of points depended on the amount of fat in different foods. This suggests that we will probably need to teach more on label reading skills because that is the way we track fat, sodium, and other nutrient content.

No specific food or food group changes are associated with maintaining dietary improvements. The studies show that lowering fat consumption occurred across the board—in all four food groups. In other words, improved diets, like lowering fat intake, come from the accumulation of small changes, not just avoiding one thing. Similarly, increasing fruit and vegetable consumption occurs through a combination of conventional eating changes, such as adding orange juice to breakfast and eating salad for lunch.

Some behaviors are easier to change than others, however. Avoiding fat from added flavorings contributes the most to fat reduction but is the most difficult to adopt. This means no longer frying foods, putting less mayonnaise on your sandwich, using less salad dressing, those kinds of things. Substitutions of manufactured alternatives, like low-fat dressings, are the easiest to do but don't really contribute a lot to fat reduction.

There is some debate about whether we should help people set big goals or small ones. We typically give people small goals so that they can achieve them. But, in fact, studies show that the people who change the most are the ones given instructions to make big changes in their diets. These results are confounded by the fact that people who are willing to make big changes are also the most highly motivated—perhaps because they have some health condition that requires them to make such changes. So, we still don't know whether telling people to make big changes or small changes is more effective.

What do we know about the role of an intervention's duration and intensity? There is ample research to show that if nutrition education is longer and more intense, it's likely to be more effective. Of course, once again, such findings are confounded by the fact that the persons who were willing to endure, if you want to call it that, a long program may be highly motivated already. So, we still don't know what the optimal intensity needs to be. Although, we can conclude that interventions need to be more than a "one shot deal."

It is also interesting that developing a distaste for fat encourages adherence to a low-fat diet. That is, the women in the Women's Health Trial who are still eating low-fat diets after many years reached the point that they didn't like the fat taste as much anymore. This is very important because we really want people to come to like the foods that they eat. They're only going to maintain healthier eating habits if they really like their new way of eating. And, it suggests that **we eat what we like, but we also come to like what we eat.** We can't forget that.

Let me just go back to a point I made earlier. In one study, people were randomly assigned to two different low-fat diets. One group changed the kinds of foods they ate, so that they ate foods naturally low in fat. The other group also ate a diet lower in fat, but they used foods manufactured to be low-fat—like different kinds of low-fat dressings.

These foods still leave a fatty taste and feel in the mouth. At the end of 12 weeks, the group that changed their foods altogether no longer liked the taste of fatty foods as much as before. Whereas, the group that ate the substitutions still liked the taste of fat as much as they did before. Twelve weeks after the study ended, both groups had increased their consumption of higher fat foods. However, the group that switched to eating foods that are naturally low in fat during the study maintained a lower of fat intake than before the study, whereas the control group went back to their previous levels of intake. This reaffirms that we eat what we like, but we also come to like what we eat. It is important to help people come to like the very foods that we want them to eat.

In summary, and this is paraphrasing Jay Hirschman, effective nutrition communications targeted to individuals must be messages that are behaviorally-focused and tailored, repeated through multiple channels, and reinforced over and over again. I think that that is part of the dilemma that nutrition educators face.

We don't have the money or the ability to keep delivering healthy eating messages to a large number of people for long periods of time. Here is where social marketing is very important; it provides a vehicle for broad coverage and repeated message delivery to individuals.

Interventions directed at the environmental context of food choices should not only make healthful foods available and accessible to children and adults, they also should provide repeated exposure and hands-on experience with healthy, tasty, and affordable foods.

Thank you.

## **Evaluation 101: Getting the Most Bang for the Buck**

**Debra Palmer Keenan, PhD, EdM, Director, Food Stamp Nutrition Education Program, Rutgers, New Jersey**

Thank you very much. I was asked to present a general evaluation talk, but I know from looking in the audience that there are many people who could do that as well or better than I can. So, I'm going to share some of the lessons I learned first hand about wasting research dollars. My hope is that by sharing these lessons you can avoid the same mistakes. I am going to run through the entire spectrum of evaluation activities—development of curriculum, implementation tracking and impact assessment—and interject some lessons and food for thought about getting the most for your evaluation dollars.

What I'm trying to do with this presentation is to prevent you from creating something that sits up on a bookshelf and never, ever gets used. I have seen this happen many, many more times than I would like to count. I have seen countless dollars spent on curriculum materials and all kinds of things that either end up on a bookshelf or in a trashcan. I think that that's something that we all need to guard against because we have such very limited resources.

I also want to share experiences that may help you avoid developing nutrition education messages that are misunderstood or just not meaningful to our target audience. I have this little cartoon that shows what can happen. The first person says, "It was pretty cool seeing what happens to a bone that sits in vinegar for three days, but I wonder what that had to do with nutrition."

And then, the next person says, "I agree, I thought it was also very interesting to learn that more people of color are being diagnosed with osteoporosis than ever before. Good thing we exercise. I'm just sorry I can't get more calcium. All those foods they showed us give me too much gas. You think we should avoid eating too much vinegar?"

This is the kind of situation that we get all the time, although we may or may not know it. We've been doing some focus groups recently to develop a social marketing campaign on increasing calcium consumption. We ask people, "What foods do you think are high in calcium?" Our audience, in this example and all the studies I'm going to talk about, is Food Stamp Program participants in New Jersey. They are predominantly African-American, and our second largest target audience is Hispanic. All the other audiences that we work with are pretty small by comparison.

We were doing focus groups with one of these two target audiences and we asked them what foods were high in calcium. One woman said to us, "Well, I know that WIC promotes calcium, so I think everything in my WIC package is...." And, she started naming everything that came in her WIC package. These are the kinds of perceptions people have. So, we have to think carefully about what are we doing, and how we can make it work a little better.

I want to divide my remarks into three parts. The first one is planning and developing an intervention. In the beginning, we want to do literature reviews, interviews with other researchers and developers, and some kind of formative evaluation, maybe with the target audience. If you're working in the area of nutrition education, you have to do multiple literature reviews. It is important to look at both the nutritional science and the pertinent social science literature. A lot of us have advanced degrees in nutrition and, therefore, think we know enough that we don't need to do a literature review. But, research in this field is a moving target and a review is essential.

One of the curricula we developed over the last three years, an example I'll use frequently, is called "Jump Start Your Bones." It is an osteoporosis prevention curriculum aimed largely at minority, middle school audiences. Right now, the recommendation for these kids is 1,300 mg of calcium a day. And guess what? Most of them can't get it from three servings of calcium-rich food a day. We spent a lot of time and had a lot of conversations with people in order to decide what recommendation to make. We went with four servings—I've noticed that almost every single

curriculum that spent time and research in developing this topic for that target audience is going with four servings.

We have to look at the pertinent nutrition science. I'm working with a group right now on omega-3 three fatty acids. The group includes both hard scientists and outreach people. I was talking to the scientists and I said, "Ok, I've got a little question for you. When we're recommending Albacore tuna, does it matter if they buy it in oil or in water?" This spurred a ten-minute debate amongst some of the top scientists in this country. I didn't expect that, and I thought I'd get an answer. But instead, some said, "Oh, definitely water." The others said, "Oh, no, it doesn't matter." They argued over this for ten minutes. I just want to know what to say to people and that's what most of us want. But, you really have to go to the science and research these things.

You also want to do literature reviews to find out who is doing similar programming. You want to find things out about your target audiences, applicable theories and models, as well as the availability of valid and reliable evaluation instruments for use in the impact part of the evaluation. If you find out who else has been doing similar work, then you can give them a call or email them. Alternatively, you can put something out on a listserv and ask if anybody has done something similar before. This upfront review is probably the single most important thing that you can do to save money. If somebody has already gone through all the thinking that you need to, then you can save days and hours of time by just contacting them. I think we often fail to do this. Besides, if you actually read their papers before you give them a call, they are usually very impressed and willing to talk with you. They can also tell you what things they didn't know until they got done, and what questions still need to be answered.

After you have done all that homework, then you're in a position to do more formative research if necessary. Sometimes you'll have enough information to go forward, but a lot of times you don't. For example, you may be working with a specific target audience and need to learn a little bit more about them and their circumstances. I can give you a couple examples of things we learned during formative evaluation that we use in our nutrition education program. We did some work recently to look at the food acquisition and food management practices of limited resource audiences. Part of that was published in the December issue of the Journal of the American Dietetic Association. The piece on food acquisition practices will be published in the Journal of Family Economics and Nutrition Review soon.

There are some papers on this topic but not a lot. We know the traditional things people do, but if you go out and look at their behavior and talk to them, you often learn something important. One thing that we learned is that in every single group we spoke with, people bought dented cans. This was totally counter to our objectives because we educate them to avoid eating from dented cans. So, we had to go back again to the scientists and say, "We've got a situation where our participants are buying food in dented cans. Some people go to stores where that's all they sell. Other people go to the back of the store to get them since they can buy them more cheaply than food in non-dented cans. Obviously they're not dying, and the stores are still selling them. There must not be too much risk or liability here. What can you tell us?" And, they told us that there's really little risk at this point in time. If the alternative is experiencing hunger, buying dented cans is probably fine. It is important, though, to look for premium dented cans. If a can is not punctured, not bulging, not dented along the primary seam or the secondary seam, and the primary is on the side, secondary is on the top, then it's most likely safe. So, that's what we teach now; we changed our message. I wouldn't have known that if we hadn't asked the questions and learned this is a common behavior among low-income people. I think that formative evaluation can be very, very helpful.

Some things happen in New Jersey that don't happen elsewhere and also affect our message. We have people buying directly from meat trucks that come around in Camden and other cities. They are basically old school buses that have been renovated, and they're not exactly a haven for food safety practices. Again, a lot of times you need to do some formative research, do some focus groups, conversations, and find out what's going on in your community after you've already done your research review.

If you do focus group research, I have a couple pointers for you. First, use trained staff. If you need to train staff, it takes pretty minimal training. You can get people ready in three days or so to conduct focus groups competently. There are also some important details that you will want to take into account. Children may need to be taken care of if you're working with low-income adults, and you have to plan for that. You might want to bring somebody extra along who can baby-sit; otherwise it may not be possible to hold the focus group.

Recruitment—in some situations it pays to do this in advance. For instance, if we offer to go to a homeless shelter on a Friday night with \$15 to give everybody who appears at 5:00, we can generally get the shelter manager to set it up for us. But, in other situations, like the Food Stamp office or WIC, where people are coming and going, we haven't had a lot of good experience recruiting focus group participants in advance. You can get yourself all set up—drive all the way there, take a couple people, bring food—and you get there and find out that you don't have the people who agreed to come. In cases like this, we have found that recruitment on-site works a lot better.

You also want to be careful if you have other people recruit for you. It is essential to be really specific about the recruitment criteria and make them understand that any person who does not meet the criteria will be turned away. We frequently have had situations where we have used others to recruit and then found that the people don't meet all the criteria. When that happens, we end up canceling the focus group, and the people who did show up are angry. One of our criteria is that we can have a maximum of about eight participants. We like to have eight to ten at the most. Sometimes we get there and there are 14 people. What are you going to do? You're going to make four people really mad and it's a bad situation. Be really careful if you ask other people to recruit for you.

The next recommendation for focus groups is to follow the application that you submitted to the Institutional Review Board for the Protection of Human Subjects (IRB), absolutely. Two times I've had students go to do some focus group work and not follow the IRB specifically. Once, we were to do a focus group in a school with a group of kids. When my graduate student arrived, the principal and the teacher told my student, "We've got this class that you can use. That's 30 kids," and that's not what our IRB allows. But, instead of saying no, the student felt intimidated because the kids were all there and ready to participate, and the principal was saying "go for it." In the end, I had to go ahead and pay for the participation of all those people, and yet we did not use the data. That is a waste of money and time, as well as a violation of your IRB. So, you want to be really careful and make sure that people follow the IRB exactly as directed.

You also want to make sure that your focus group questions and props are culturally appropriate. Consult your target audience before you conduct the first focus group. Meet with your research team, just after the interviews, and see if you need new probes. If you have any marketing companies that you have been working with, they can be terrific. Check in with your contact.

Finally, when you stop learning anything new, it's time to quit. These are just a few focus group lessons that I have learned.

By this point in time, you can probably clearly define your objectives. Write them on your walls, affirm them every day, ensure that they guide everything you do, and don't ever forget them. It's too easy to let something go by the wayside that you really meant to cover and find out later that you didn't. Keep your objectives in mind as you develop whatever it is you are trying to do, whether it's materials or an intervention, a campaign, or whatever—always hold your objectives in your head.

A note on translations—I want to talk briefly about that. We work with a lot of Hispanic audiences in New Jersey, and I have wasted serious money on so-called experts. We have gone to the Spanish Department at the University and have hired people who work in medical venues with Hispanics and asked them to do translations for us. Then, we put the translated materials into the field only to find out that they are no good. I'm sure this is true of many other cultures. I'm predominantly working with African-American and Hispanic populations, but I know that Asian immigrants and Indian immigrants come from many different countries, as well.

There isn't just one correct translation. We learned that if we want something translated appropriately into Spanish, then we need to bring in paraprofessional staff—that is, other lower income people from the area that we're targeting. We get people from different countries, who originate from different places, and we let them duke it out. We don't have enough money to make one publication for people from the Dominican Republic, one for Costa Ricans, and another for people from Puerto Rico. But, we have enough money to bring people together who are from all these different countries, and have them sit in the same room, and go through our draft Spanish translation line by line or food by food and tell us what works for them. If it doesn't, we make them talk to each other until they can come up with something on which they agree and that is nutritionally sound from our perspective. This approach works really well.

If you are working for an organization that doesn't have access to paraprofessionals, Cooperative Extension can be a good resource. You may be able to contact them ahead of time, and see if you can either contract for such services or get volunteers. Everything we have translated in this way has worked. Everything we have put out by hiring a professional has not. Maybe you can save some money this way; we have.

In the middle, if you are developing a campaign or materials or whatever, you're going to want some expert review. I suggest two pilot tests, with an assessment of instruments, if needed. I also recommend getting different kinds of experts, depending on what you're working on. I think that you should get some hard scientists to look at what you're doing on whatever nutrition topic. They stay on the cutting edge of the new recommendations, and they know the science. In addition, you need a nutrition educator as a reviewer. That's my second recommendation. Get somebody who knows the culture, somebody who knows the audience, and somebody who knows the foods that will be used to review your plans and materials.

Then, get input from the intended educators. Sometimes, we are the intended educators, and when that's the case, you probably don't need more feedback. Sometimes, you develop things for schoolteachers, church volunteers, or others to use. If so, then get an expert review there, get somebody who works in that venue to look at it from the very beginning. They will know whether or not the material and approach will fly in their environment. There might be little things, like no access to electrical outlets that could totally blow up your efforts. So, make sure you that have all three kinds of reviewers, if possible.

I suggest that you look at the content and process of your intervention with an initial pilot test. This is actually a recommendation of Becky Mullis from the 1980s. Either you or someone on your staff can do this. If you have classes or posters or whatever, put yourself in a position where you can see what's going on. If it's a handout or a lesson, then it's especially important to teach it. If you do, you can find out what is not working. The problem of having somebody who's unfamiliar with what you're doing is that the information you get back is more limited. When they are trying to teach and it falls apart, all that they will be able to tell you is that it didn't work, and you won't have any more information. On the other hand, if you do the teaching, you'll be able to ad lib as you need to and get a more specific feel for what's working. This helps later when it comes to making the necessary changes. It's really great if you can bring someone who follows along with the written material. If not, you can make an audiotape and do the same thing. By doing this, it's possible to see if and where you adlibbed and whether or not such changes need to be incorporated.

A second pilot should be done in which the intended educators deliver the intervention. You want to tell them nothing beforehand. Just give them the written instructions. That way you can see if it's going to work when the

material and instruction are disseminated later. If you can, observe the materials being used. Otherwise, call people and interview them, which you should do anyway.

Whenever possible, assess the target population afterward, as well. Here, I'm talking about a very loose assessment. Interview them, see what they liked, see what they didn't like, and see what really made an impression on them and what didn't. That's when you're going to find out if they thought that vinegar was something you should avoid if you don't want to get osteoporosis. It can be very, very effective.

Pilot tests should also be used to check out the quality of your assessment instruments. In my first job, I was a statistical consultant at the Institute for Policy Research at the University of Cincinnati. My job involved helping graduate students and professors who were trying to publish research results. They came to me with quantitative data collected with instruments that had not previously been checked for validity and reliability. When we checked the instruments for reliability, nine times out of ten the instrument didn't check out. And, they were ready to publish or graduate, and guess what? Their outcome instrument turned out to be no good. That's a bad time to find out.

If you aren't able to find an instrument with documented validity and reliability, then use the one that you developed in your pilot studies and see what happens. Even if you have an instrument that's been validated and checked for reliability, I would recommend that you use it when you're doing the pilot. Sometimes you can learn things of great use.

I will tell you about something that happened to me during the development of "Jump Start Your Bones." Our audience is primarily a minority audience, and many of them are lactose intolerant. Consequently, dairy is not always something that can be consumed in quantities large enough to get 1,300 mg of calcium a day. Furthermore, given their low income, they can't always afford fortified foods. So, we wanted to stress sources of calcium that were non-dairy. That was one of the objectives that we identified early and that we were supposed to keep in our minds. This time we failed to keep it on the wall.

We put non-dairy sources of calcium on several handouts that students received, but we had not really included them in the lesson activities. Because students used the handouts, we thought that was enough.

We did a pre- and a post-test during the pilot, and I'm so thankful that we did. One of the things that we learned is that nobody answered the questions regarding non-dairy sources of calcium correctly on either the pre-test or post-test. If that happens in your pilot, one of two things is going on. Either you have a bad question, and it's not valid, or you didn't teach the relevant material. When we went back and looked, we found information on the handouts, but we didn't highlight it, we didn't really do anything to emphasize the pertinent facts. I was glad to find out during the pilot because then we made the changes necessary to convey and reinforce a key concept. Everybody's going to make these kinds of mistakes at one time or another, and by pilot testing you can help keep problems from affecting you later.

The other challenge comes with developing your own evaluation instrument. Some mistakes are very common. For instance, avoid creating questions that have a ceiling effect. That is, if you are asking which foods are the most common sources of calcium and learn that everybody answers correctly on the pre-test, you won't observe any knowledge increase with the intervention. Participants already knew the correct answer before you got there.

Finally, we get to what everybody thinks of in terms of evaluation which is the impact evaluation. Impact evaluations address the question, "Does this intervention really do what it's supposed to do?" Whether you do a qualitative and/or quantitative assessment depends a lot on who your stakeholders are. Some stakeholders will be very moved by people stories, individuals' stories. Other stakeholders respond only to numbers. You need to know your stakeholders and what they're expecting to see. I believe that every stakeholder is accessible. Even if your stakeholders are members of Congress, you can talk to them or their staff. Contact these people, and let them know what you can and can not do.

My advice is first to be realistic. If you speak reasonably with your stakeholders, you can get them to think realistically. Initially, they may not understand the complexities involved with changing dietary patterns in food the way you do. But, if you just give them examples they can relate to, you will be successful.

We saw this challenge today during the opening session, when stakeholders were talking about the "Healthy People 2010" objectives. These goals are very ambitious, for example, reducing obesity to 15 percent. We can't set

those kinds of goals. We've got to set goals that we can reasonably meet. If you set unrealistic goals and your stakeholders are expecting you to reach them, they will conclude that you have failed when you can't deliver. So, be careful. I use the prayer for serenity a lot. This is a prayer to have the wisdom to know the things you can change as well as those you can't, and to have the serenity to accept the things that you cannot change!

So, how much does evaluation cost, how long does this all take and why bother anyhow? I can only speak from my experience. The "Jump Start Your Bones" program is a curriculum with 12 lessons, and we employed all the evaluation strategies that I have discussed. Sometimes, you don't have the funds or the time to do all this, but you should try to do as much as possible if you want something to be effective. It cost us about \$153,000 and two and a half years to develop that curriculum. We got money from three different sources and worked on it for a long time. That figure does not count my salary or the salaries of a few other people who volunteered as well. So, that's a ballpark estimate.

Evaluation takes time and I fought for the necessary time. The State was our first funding source and they wanted a whole curriculum in 18 months. I said that I only do research-based work, and it can't be done in that time frame. We fought back and forth, but in the end they gave us the \$40,000 and I got the project through the first pilot, which is how far I could get in a year and a half with \$40,000.

The other thing that will help with your resource needs is to leverage, leverage, and leverage. We are hearing over and over at this conference how important networking is. Jan Goodman's in the audience, and she's my network coordinator. We're working on a social marketing campaign, and she's done a great job of leveraging. Find out who the other people are with a vested interest in the kinds of things you're working on. Find out what their particular interests are and use their funds for that part. Our Dairy Council in New Jersey knows our objectives, our work, and our expected products. Since they're interested in education for health professionals, we're trying to get them to help with that part. We get money from many sources by leveraging and working with people, by finding out what their interests are and where our common ground is. This is my last piece of advice for trying to get the most bang for your evaluation buck.

Thanks.

## Topic: Team Nutrition: Partnering for Success

**Moderator: Karen Kettlewell, MS, RD, SFNS, Director, Nutrition and Education, American School Food Service Association, Alexandria, Virginia**

### Winner's Circle Healthy Dining Program in Schools

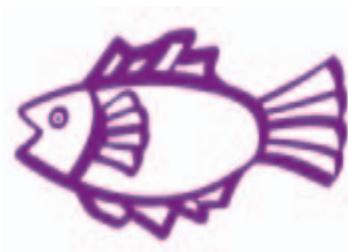
**Kathy M. Andersen, MS, RD, NET Program Coordinator, Department of Health and Human Services, Department of Nutrition Services, Raleigh, North Carolina**

Good morning everyone. I am doing this presentation today, but I need to thank several of my colleagues back in North Carolina who helped me put this together. Meg Molloy, Kim Shovelin, Kate Shirah, Suzanne Donohue, and David Yum were all part of this process, and one of my colleagues in the audience today, Janice Ezzell, has also been part of this current project.

Winner's Circle is a program that promotes healthy food choices in dining out establishments. For schools, it is a great marketing opportunity. I don't know how many of you were in this room yesterday when Michigan reported on what they are finding in evaluating the Changing the Scene Program. They are finding that marketing is one of the weakest components in the school nutrition environment. So, this program offers a great opportunity to market the healthy choices that are available in schools.

### Winner's Circle Program--the Result of a Partnership

Winner's Circle is the result of a partnership. Many agencies are involved in this program, that is, many programs within agencies. Our State health agency, our State education agency, and North Carolina Prevention Partners, a non-profit group, are all part of the partnership. The Winner's Circle project was initially developed with some funding from CDC through a cardiovascular health grant. That's how the program works at the State level. At the local level, Winner's Circle is also implemented by local coalitions—we are modeling this partnership at the State level for implementation at the local level.



## North Carolina Nutrition Education and Training (NET) Program Involved

One thing to note is that we still have a NET (Nutrition Education and Training) Program in North Carolina thanks to the support of our Child Nutrition Services. An interesting thing about the NET Program in North Carolina is that it is housed at the Department of Health and Human Services. I'm in the State Health Agency and receive financial support for the program through Child Nutrition Services that is in our Department of Public Instruction, our State education agency. The other thing that I do through NET is coordinate the Team Nutrition grants that we receive.

## Components of the Winner's Circle Program

Winner's Circle is based on a multi-level intervention. We are focusing on creating policy and environmental change in addition to providing education. There are three aims to the program. The first is that we identify menu items that meet the program criteria. We have specific criteria for the food items that can be labeled with the logo, with the purple star and gold fork.



Winner's Circle Aims:

1. To create healthy eating environments across NC by empowering local partners to offer various dining-out venues technical assistance to identify and promote healthy menu items;
2. To create consistent, credible and easily recognized nutritional guidance for consumers in participating dining venues on menus, doors, menu inserts, table tents, brochures, and others;
3. To increase consumer demand for healthy items eaten away from home with marketing tools and local promotions.

We don't ask the dining establishments, restaurants, schools, hospitals, and universities to change their menus. We just say, "If you have healthy options that meet the criteria, please label them so that people know." We try to use promotional messages that are consistent and simple. Finally, our ultimate goal is to increase the demand for healthier options by creating consumer awareness and by labeling some items so that people will hopefully say, "We want more of those."

Where is Winner's Circle located? Right now, we have it in restaurants, chain restaurants, schools, cafeterias, vending machines, convenience stores, recreation sites, hospitals, and universities. For example, one of those chains, "all you can eat kind of buffet" restaurants, participates in the program. There are several items in the buffet in that chain that meet the Winner's Circle criteria so we label those items. There are some foods that meet the criteria that we have labeled at one of our ballparks.

We have a billboard in Surry County, one of our rural counties on the Virginia border. Use of billboards is a way to create consumer recognition of the logo. We have also developed little sneeze guard slicks that we use to label items in schools. The criteria established for the Winner's Circle Program are consistent with the Dietary Guidelines, the Food Guide Pyramid, the Healthy People 2000 Objectives, American Heart Association, American Cancer Society, American Diabetes Association, and also with the USDA Team Nutrition School Meals Initiative. There are some differences between the Winner's Circle criteria and the School Meals Initiative criteria that I will mention later.

Example of a "sneeze guard slick"



## Winner's Circle Nutrition Criteria

The criteria were developed based on using a public health approach rather than a medical approach. So, when you see the criteria for sodium you might say, "That's a little high." But, we are looking at it from a public health perspective, rather than the individual or medical perspective.

We developed criteria for a single item or a side dish, a meal, and a snack to be labeled as a Winner's Circle item. The items definitely have to fall under the maximums shown below. The criteria for a single item or a side dish and a snack include:

**TEAM Nutrition**

**Nutrition Criteria - for a snack**

**Minimum of:**

- 12 grams complex carbohydrates per serving OR
- 245 mg of calcium

**Maximum of:**

- 30% of calories from fat AND
- 600 mg sodium

**TEAM Nutrition**

**Nutrition Criteria - for a single item or side dish**

**Minimum of:**

- 1 serving fruits or vegetables OR
- 1 serving grains or beans OR
- 245 mg calcium

**Maximum of:**

- 30% of calories from fat AND
- 1,000 mg sodium

The criteria for snacks were not part of the original Winner's Circle criteria. However, there has been a demand for labeling items in vending machines since we have gone into schools looking at many of the a la carte and supplemental sales items.

The criteria for a meal are that it has to have two servings of fruit or vegetables and one serving of grains or beans or 245 mg of calcium. It has to have the fruits and vegetables, and either the grains or beans or the calcium. It has to have no more than a maximum of 30 percent of the calories from fat and, for the meal, a maximum of 1,500 mg of sodium.

The criteria differ from the School Meals Initiative (SMI). There are no sodium levels specified for SMI. What about the fat? Saturated fat? Remember that with SMI, it is 30 percent of calories from fat averaging over the week. With Winner's Circle, we are calling for it on a daily basis. It has to be the meal for that day, we are not averaging over the week the way we are allowed to do with the School Meals Initiative.

### **Implementing Winner's Circle in North Carolina**

How have we implemented Winner's Circle in North Carolina? In 2000, the program started in restaurants. At the local level, we are using partnerships to implement Winner's Circle. Since 2000, we have been training coalitions at the local level to implement Winner's Circle primarily in restaurants. The program expanded to vending machines, ballparks, hospitals, and universities as a result of local coalitions comprised primarily of people from health departments, hospitals, and other public health entities. For the 2001/2002 school year, we implemented it as a pilot in three school systems. In June 2002, we trained 20 additional school systems and, of those 20, 16 school systems are currently implementing Winner's Circle.

How did we identify those school systems that would implement the pilot? The North Carolina Department of Human Services has worked closely with Child Nutrition Services at our Department of Public Instruction. We identified teams that have participated in previous Team Nutrition training workshops. For the last couple of years, we have been training teams using Team Nutrition funds and additional funds. These teams have always been comprised of staff from Child Nutrition and at least one public health partner. Therefore, we have many school systems that have been working with the public health agency over the last couple of years. We identified those school systems that had a committed Child Nutrition Director, and then we looked for communities where the Winner's Circle program was already active in restaurants.

We went to each school system and reviewed the nutritional criteria and how to do the nutritional analysis. We gave them some strategies for labeling, some resources for promotions such as sneeze guard slicks so

that they could label items on the line, and stickers. We did not tell them what the minimum requirements are for the Winner's Circle such as "You have to have at least one Winner's Circle meal each day" or "You have to have at least four a la carte items." It was up to them to do whatever they wanted. In terms of implementation, for example, one high school had T-shirts made, decorated their cafeterias, and they used the logo in many different ways.

Our next step was to conduct an evaluation. Up to this point, our evaluation has been pretty "soft." We have looked more at qualitative information. In each of the school systems that we piloted, we looked to see how many of their entrees qualified. We found that anywhere from one to four entrees qualified on a daily basis. Usually, there were about five a la carte items that met the criteria on a daily basis. They loved the sneeze guard slicks and they worked well. School systems wanted more materials. In the school systems where there was complete buy-in, from the cafeteria manager to the school principal, we found the greatest success.

The cafeteria staff loved the program. It took very little of their time. All they had to do was move the sneeze guard slicks, depending on what was on the menu that day. The Child Nutrition Directors did the nutrient analysis and told the managers which items to label. It worked better in elementary schools, for obvious reasons, because those kids are a little more impressionable. Teachers requested lesson plans, which we developed for them. Also, we were able to link Winner's Circle with other promotional activities that were going on in the school such as the 5-A-Day program.

Some of the things that the staff had to say about the program included: "The kids are trying things that they wouldn't try before," "They look at the stars (on the labeled foods) and say, "Hmm, I'll try it," and "Kids are becoming more aware of the healthy options available to them."

Based on our pilot, we have established nutrition standards or guidelines. The criteria remain the same in that they still have to have a fruit, a vegetable, and meet the levels for calcium, sodium, and fat. But we are now requiring that they have at least:

- one Winner's Circle meal every day,
- low-fat, one percent, or skim milk every day, and
- one Winner's Circle a la carte item every day.

That is what they have to have if they want to be a Winner's Circle cafeteria.

Once we established those criteria, we trained 20 more teams using the same criteria. We looked at the teams that participated in previous Team Nutrition training, and looked for committed Child Nutrition Directors, and a strong community Winner's Circle coalition. Then, when we conducted the training, we had them come as partners. We had the Child Nutrition Director attend the training as well as the public health partner that had been involved in implementing the program in the community. We relied heavily on the pilot school systems to do the training because they know what works best.

In our next round of training, we have 16 school systems and almost 500 schools participating in the program. In North Carolina, we have 117 school systems and about 2,000 schools. We now have a full-time State Winner's Circle coordinator who is paid through various funding resources. She is making site visits and providing technical assistance. Five hundred schools is a large number of schools, so getting out there is taking some time. It is a work in progress. We are still learning as we go and this is our first full year of being in schools. We are finding that what works the best is the partnerships. Schools are developing stronger partnerships with the community, the media, parents, and school staff.

### Challenges

We still have challenges. Some of the schools find that doing nutrient analysis is somewhat complicated. Some of them are struggling to meet the requirement for one Winner's Circle meal each day. The success we are finding depends on the individual cafeteria manager. If the cafeteria manager is "gung ho" it works really well. If he or she is dragging their feet, it's not quite as good.

A new challenge that has emerged is that there is the fear of labeling "good" foods and "bad" foods. If we are labeling the healthy foods as Winner's Circle foods, does that mean that the other unlabeled foods are bad? This question has been posed by one of the school systems and I'm not sure that we have resolved it yet.

### Next Steps

In April, we are going to be training additional teams as part of a larger Team Nutrition project. Our next goal is to develop a five star rating for schools. Right now, we are working on the cafeterias, but we also want to look at Winner's Circle schools in terms of the total school nutrition environment. Of course, we need to do some additional evaluation.

We are always going to provide ongoing technical assistance. Finally, if you want more information on the Winner's Circle program you can go to [www.ncwinnerscircle.org](http://www.ncwinnerscircle.org).

Thank you very much.

## **Eat Your Colors Every Day: Salad Bar and Salad Options Pilot Program**

**Sheila G. Terry, MEd, SFNS, School Food Service Consultant,  
Produce for Better Health Foundation, Wilmington, Alabama**

Hi there. I am so pleased to be able to tell you about this program. You may have heard about the Memorandum of Understanding (MOU) that USDA and the Department of Health and Human Services entered into last spring, with a major mission to promote the 5-A-Day program. You also may have heard about the fruit and vegetable pilot that operated in four States and on one Indian reservation. But, you have not heard about this partnership with USDA and Team Nutrition for the Salad Project in Florida.

This pilot project is sponsored by the Produce for Better Health Foundation, with funding from the Florida Department of Agriculture and Consumer Services. The funding was specifically for specialty crop promotion of Florida grown products. In addition, there was a whole component that allowed Produce for Better Health to develop materials that would be useful nationwide. You may have seen some of those materials here if you checked out the poster session and I will be showing you more materials today.

The project started out last spring under the name, "Fresh from Florida: Salad Bar Training Program;" that was the original grant concept. But, soon after, it was changed to "Fresh from Florida: Serving up More Fruits and Vegetables in Florida Schools." Then, the "5-A-Day the Color Way" campaign became formalized before we kicked off the project in the schools. The name of the program was officially changed to represent the national "Color" campaign so that there could be broader applications for this project than just in Florida.

## Project Goals

The project goals are similar to many of the other project goals that we have heard about in the last few days:

- Increase consumption of fruits and vegetables,
- Develop model salad bars and salad serving options (as opposed to a training program which was the original concept),
- Replicate and test the models that are being set up, and
- Work in partnership with a variety of stakeholders.

We are developing model salad bars and salad serving options. The term "salad serving options" is very broad. It includes promotions, marketing, merchandising, nutrition education, and comprehensive school health involvement. It provides many opportunities to promote fruit and vegetables and to educate students to change their behavior. For the future, we are focusing on replicating and testing models. We will look at what is being done in current schools, design a model, and then have expansion schools try to replicate and improve on the models before we firm them up and disseminate them nationwide. Then, we will work in partnership with a variety of stakeholders.

## Project Rationale

The Project Rationale is as follows:

- There is a national epidemic of childhood obesity.
- Less than 20% of school age children eat the recommended servings of fruits.
- Less than 15% eat the recommended servings of vegetables.
- Only 20% of children have access to a salad bar on a typical school day.
- Only 21% of public schools offer a salad bar once a week.
- Schools with salad bars offer a wider variety of vegetables and fruits than other schools.

You know most of these facts and figures. Some of the above statistics on fruits and vegetables were taken from the "School Lunch Salad Bars" report that USDA published in April 2002. These statistics are one of the driving forces behind the move to further our efforts in this area. In Florida, 24 percent of the children are overweight or at risk of being overweight and 12 percent eat five fruits and vegetables a day. So, there is a lot of work to be done in Florida.

Our overarching reasons for working on this project are to help children develop healthy eating behaviors and to encourage the increased consumption of fruits and vegetables. Produce for Better Health's mission is to increase consumption of fruits and vegetables.

### The Project's Partners

We started last spring by contacting many organizations that we thought would partner with us. USDA and the National Cancer Institute were at the top of the list. The American School Food Service Association, American Cancer Society, and American Dietetic Association were also on the list. At the State level, there are many Florida partners and the major agencies include the Florida Department of Agriculture and Consumer Services, Florida Department of Education, Florida Citrus, Florida Fresh Fruit and Vegetable Association, Florida School Food Service Association, Florida Department of Health, and Florida Dietetic Association.

One of our major partners has been USDA and Team Nutrition. They have been with us since the very beginning and the kick-off for this project. The partnership began when Dr. Peter Murano, Deputy Administrator for Special Nutrition Programs, made a presentation at our launch event that was held in Tallahassee. Vicky Urcuyo, from the Team Nutrition Office at FNS, also made a presentation at the launch event. Right from the very beginning, we have been partnering with Team Nutrition on this project. However, no direct Team Nutrition grant funds or Federal funds were provided to Produce for Better Health for this project. Federal funds were provided to the Department of Agriculture in Florida that in turn granted funds to the Produce for Better Health Foundation. I must also add that the schools are receiving very minimal amounts of financial support for this project. They are receiving materials, but not any funding. This is very different from the four-State pilot that receives substantial funding.

USDA staff have worked with us on our Steering Committee and a few USDA staff are working on our Steering Committee subcommittees. They have been very helpful in supporting the project with their time and knowledge. Vicky Urcuyo, USDA, has accompanied me on visits to the school districts for orientation purposes and has also visited almost every school with me to observe, make suggestions, and offer Team Nutrition materials. USDA is using the schools as a resource for the development of the fruit and vegetable guide that will be coming out this summer. We feel that this partnership has benefited both sides, and that is a true partnership.

Two of the stars of our show are here today. We have Gray Miller, from Pinellas County, and Paula Triana and Michelle Parenti, from Palm Beach County. They have been great and worked hard to make the project a success. Without them, we would not have had a pilot.

### **Project Steering Committee and Subcommittees**

We have four subcommittees as part of our Steering Committee. There was such interest in this project that we needed to break into subcommittees in order to work effectively. We have a Food Service Training Subcommittee, chaired by Harriet Hobbs from the food distribution section of the Florida Department of Agriculture. We have a Nutrition Education Subcommittee, chaired by Judy Cooper who is the 5-A-Day coordinator for Palm Beach County. We have a Promotion and Marketing Subcommittee, chaired by Linda Hawbaker, who is the marketing manager for Florida Citrus. We have an Evaluation Subcommittee that I am chairing. We have a list of the charges and activities for each of the subcommittees; it shows members what we expect from our partners, in terms of giving of their time, energy, and thought process.

### **Project Evaluation**

We have an evaluation project because we want to know if this is making a difference. The only way you really know what makes a difference is if you perform an evaluation. We were very fortunate that the National Cancer Institute, as a major partner, agreed to fund our evaluation. A firm called Nutritech is doing a plate waste study in two separate rounds. A pre-intervention plate waste study was done in September; it involved eight of the 12 schools that are in the project. There will be a concluding plate waste study in March in each of those same eight schools so that we can see if there is a pre-intervention and a substantial post-intervention difference. We knew that we would see a very big difference right after the kick-off events in each of the schools, and that more children would be interested in eating their fruits and vegetables. But, we needed to wait a little while to see what happened. The two plate waste studies will be coming out hopefully by July.

The overall project evaluation is being done by Florida State University. They have collected a lot of data already. They are also doing a pre-intervention, which will look at selected days in September, and an immediate post-intervention looking at selected days in October and in March. We will also compare school year 2003 to school year 2002, so that we have a baseline.

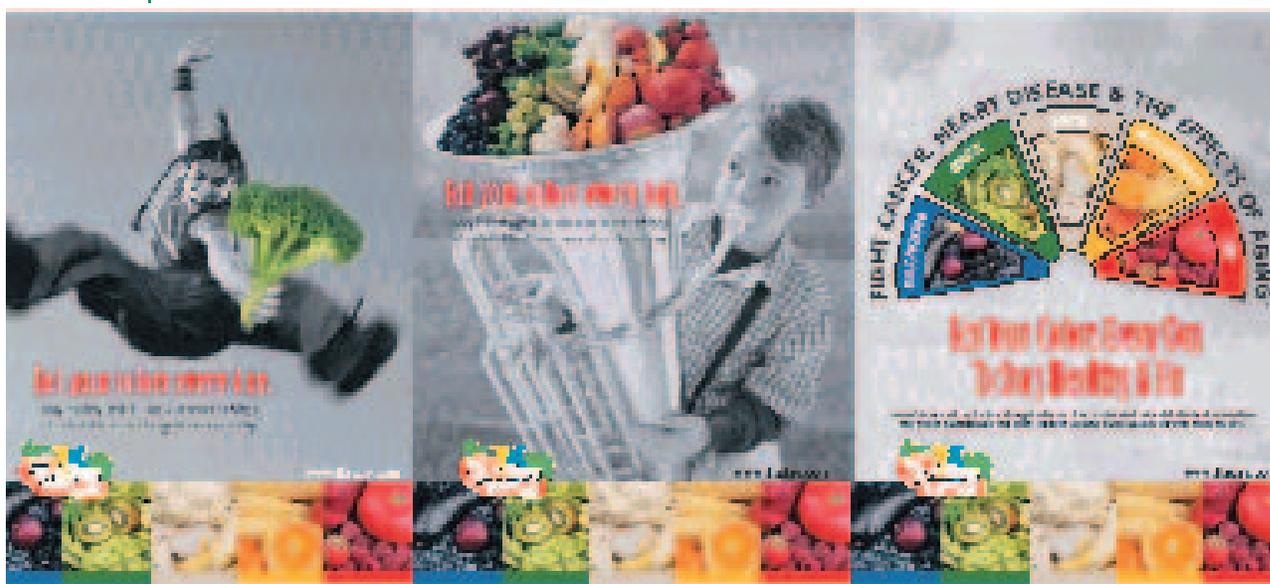
We have received preliminary data from the September 2002/September 2003 data collection. The University was satisfied that this was a good baseline to use because there was no significant difference in fruit and vegetable consumption and production between the September 2001/September 2002. We hope to publish a report on that data in April.

**Development of Promotional Materials**

Another part of this project was the development of promotional materials. The materials were developed by Produce for Better Health Foundation, working in conjunction with a marketing firm. They developed a variety of materials that only recently were distributed to the schools. We are not certain of the impact that that activity will have on the pilot this year. But, we do expect to get some feedback. We made point-of-choice cling-ons for salad bars and anyplace else that people might want to put them. We also developed a promotional handbook that includes many ideas, book covers, table tents, staff buttons, and other materials. These will all be available for sale. Now, we are looking for feedback from the pilot sites on how everything is going.

We developed a series of eight posters and we like this one with the horn (see below) the best. That is, I like it and so do a few of the schools that are involved.

**Example of Materials**



Curriculum materials, such as the Produce for Better Health 5-A-Day poster and a coloring book for students, were also developed. These materials have been sent to 12,000 schools nationwide in the last few days in conjunction with supermarket promotion. "There's a Rainbow on My Plate" is another piece of the "Color" campaign and it is much bigger than the Florida project. It will go to all 12,000 schools that are located in areas where there are supermarkets that have bought into the 5-A-Day Program.

### School Activities

What are the schools doing as stars of our show? They are doing many things including all kinds of promotions and marketing campaigns, and decorating is part of it. They are working with their produce suppliers to have demonstrations for students. In some cases, a produce company provides taste-testings free of charge. Also, the produce suppliers may lend their expertise and talk to the children about the value of eating fruits and vegetables. The schools also decorate the cafeteria and the bulletin boards in other parts of the school with seasonal themes or to go with a featured promotion for the month. This is done with materials from 5-A-Day, Washington Apples, Northwest Pears, and a variety of different commissions and bureaus. The schools have done a great job with this.

They are doing a wonderful job with the food. This is very important because we are after changes in student consumption. The salad bars have improved and enhanced the variety of fruits, vegetables, and salads offered for self-serve by using pre-portioned containers. The schools are working on displaying the fruits and vegetables more attractively. We have elementary, middle, and high schools in these projects—they are using different techniques at different grade levels. They are inviting special guests in to complement classroom activities or other activities in the cafeteria. The schools are having students help with the decorating. They have started using healthy food kiosks to display salads. In these truly innovative salad bars, each item is packaged in quarter cup serving sizes. In one school that used a novel approach, they did a beautiful job preparing pre-plated entrée salads and side salads for students to choose from.

### Future Plans

Our plans for next year are to add four or five additional districts with 12 additional schools, replicate and refine the models, and then disseminate the models nationally in 2004.

## **Project PA: A Model for Use of Theory in Design and Application of a State Nutrition Campaign**

**Vonda Fekete, MS, RD, Nutrition Education and Training Coordinator, Pennsylvania Department of Education, Harrisburg, Pennsylvania**

**Elaine McDonnell, MS, RD, Project Coordinator, Penn State University, University Park, Pennsylvania**

MS. FEKETE:

Good morning on this very cold and snowy morning. I'm going to take you back a few years and we are going to take a little step back in time to when USDA's School Meals Initiative (SMI) was implemented. When the SMI came about, there were many questions. In Pennsylvania, one of the biggest questions we had was, "How are we going to implement the School Meals Initiative in a consistent and timely manner throughout the State?"

In Pennsylvania, we have 500 school districts and 875 school food authorities. Pennsylvania is mostly rural, but we have two major metropolitan areas: Philadelphia on the east side and the Pittsburgh area on the west side of Pennsylvania. We were challenged with how we were going to implement the SMI across the State to all 500 school districts or the 875 school food authorities. In Pennsylvania, we are fortunate to have a reputable university, Penn State University, so we decided to make use of that resource. The Division of Food and Nutrition at the Department of Education developed a partnership with the Department of Nutrition at Penn State University--this partnership became known as Project PA. Project PA is an educational campaign that is targeted at school food service personnel. It is a statewide campaign.

### **Origin of Project PA**

Now, we will briefly touch on the origin of Project PA. This includes the educational opportunities that Project PA provides throughout the State, the target audiences when Project PA began, and our target audiences now. Elaine is going to talk about our current projects and projects that we are developing now. Our first endeavor with Project PA was a teleconference, and this was called "Making the Choice." It was designed to help food service staff decide which menu planning option to choose. With this teleconference, we were able to link up with 1,300 school food service staff at 28 downlink sites throughout the State.

## Computer Training

Recognizing that there was a need for computer training for food service staff directors, we developed hands-on workshops at the local level that provided skills training. These workshops were broken down into several categories, from the basics to the advanced. The basic classes started with the basics of operating a computer (such as how to turn one on and use a mouse) just to get people with no past experience in this area familiar with using a computer. Then, we taught them more advanced skills such as how to do menu analysis. Recognizing that there were a group of food service staff and directors that were not excited about using computers, we developed a computer exploration kit. This kit contained video and print materials, and it was designed for the food service staff that were resistant or hesitant to using computers in their school. The video and print materials were developed using a 1996 Team Nutrition grant. We were able to distribute the video and print materials to all school food service sponsors in the State of Pennsylvania.

## Development of the Cadre

Project PA developed a "Cadre"—a team of food service directors that were geographically located throughout the State and selected by the Department of Education, Division of Food and Nutrition. These directors were chosen based on their ability to act as a good role model to their peers. The Project PA Cadre served as local level workshop presenters at local level workshops to train others on implementing the Schools Meals Initiative, on the documentation process, and on choosing a menu planning option for their school.

The Cadre also served as teleconference facilitators since we had 28 downlink sites throughout the State. One of the more important aspects of the project is that the Cadre served as a good network and an information-sharing resource for the Department of Education and for Project PA. We could contact them to determine the needs of directors and staff throughout the State and how best to fulfill those needs. At the local level workshops, we were able to provide training to over 2,600 food service staff.

## Success of Teleconferences

Our next endeavor was our second teleconference that walked them through the SMI documentation and the State's review process. We

reached 570 school food service staff at 24 downlink sites with this teleconference. The teleconferences were so successful that we continued them. In 1998, we had a third teleconference entitled "Making It Work," funded through a 1998 Team Nutrition grant. "Making it Work" was a video documentary of two school districts implementing the SMI. The video included best practices throughout the State. During the teleconference, participants at downlink sites were able to fax in their own best practices from their schools—80 best practices were submitted from all over the State. An edited video and manual that included some of these best practices was developed from that teleconference. The video and manual were distributed statewide to all school lunch sponsors.

### The Master Instructor Program

Since the needs of the food service directors and staff have continued to grow, we decided to redefine the role of the Cadre into something more formal. It is now the Master Instructor Program; we currently have 20 master instructors. Currently, there are ten training topics. The topics originally started as SMI and CRE (Coordinated Review Effort) topics, but have now evolved into the hot topics of today, such as childhood obesity.

Our most recent topics are the healthy school nutrition environment and the school's response to the childhood obesity issue. That is, helping the food service staff take a positive approach to concerns or comments they receive from parents or anyone who is not familiar with the school system. The focus of the Master Instructor Program still remains on school food service staff. However, some of our recent topics cover a broader area, so they are open to administrators or other school personnel. Now, Elaine will talk about some of our current projects and the audiences that we target with those.

MS. MCDONNELL:

Thanks, Vonda. When our project began, and throughout the course of this eight-year campaign, our overall goal has been to help schools promote a healthy school nutrition environment—our ultimate target audience is school children. We have tried to accomplish that goal by working with a variety of audiences that have a direct effect on a child's ability to make healthy nutrition and physical activity decisions. Vonda described the work that we have conducted targeting school food service personnel. I will talk about

some of our projects that target other audiences, such as teachers, school administrators, parents, as well as some efforts we have instituted to bring these groups together and to work together to promote healthy school nutrition environments.

### **The Theories Behind the Project**

The title of our presentation mentioned theory. There are two theories that I will briefly mention so that you can see how this project has relied on aspects of specific theories. First, Social Cognitive Theory suggests that behavior is learned through modeling of the desired behaviors, or the desired outcomes. We have used this theory throughout our project in the way that we have presented and showcased best practices. Diffusion of innovations is a community-level theory that suggests involving opinion leaders and innovators at the outset of a program or an innovation and then supporting the spread of that innovation. This has been showcased through our Cadre that then evolved into the Master Instructor Program.

### **Recent Projects**

#### **Pennsylvania Showcase Schools Project**

We are targeting school food service personnel, hopefully helping them to plan menus that meet the Dietary Guidelines. We realized that that would benefit from some support through the Team Nutrition channels such as the cafeteria, the classroom, and the community. Through a 1999 Team Nutrition grant, we implemented a project called Pennsylvania Showcase Schools. This project involved awarding mini-grants to four schools in our State who came up with Team Nutrition action plans for activities that linked the cafeteria, the classroom, and the community.

You may be thinking that four schools does not sound like a lot, especially in a State like Pennsylvania with 501 public school districts and more than 3,500 schools on the National School Lunch Program. However, we have used an approach that was used throughout our project—that is, to work intensively with a small number of schools and create models in working with those schools that we can share with the rest of the State. We documented the activities in these schools, such as their implementation of their action plans in a video and print format, developed a Pennsylvania Showcase Schools kit, and then distributed those materials statewide to school administrators and school food service directors. We have downloadable PDF versions of these activities on our website.

One of the benefits of having the Master Instructor Program is that it provides sustainability for other project materials that are developed. For instance, these Showcase Schools materials were distributed to the schools. But, to assure that they don't just sit on someone's shelves, they are incorporated into the Master Instructor Program, and master instructors then can provide training using those materials.

### **Nutrition Friendly Schools Project**

We all know that school administrators can have a profound impact on school nutrition environments through their policies. So, in year 2000, we implemented a project targeting school administrators, which we called our Nutrition Friendly Schools Project. This involved developing a kit, a video, and some print materials for school decision-makers. This kit was used as the basis for presentations at professional meetings that targeted school board members, superintendents, and principals throughout our State. The materials were distributed statewide to motivate school administrators to consider nutrition when they are developing policies for their schools and districts.

We all know that parents can be a strong force for change within a school district. So, through a 2001 grant, we targeted parents to try to help them become advocates for healthy school nutrition environments. For this project, because parents in some ways are almost a more difficult audience to reach, we have partnered with our State PTA at a statewide level. This partnership has provided us with a link to parents to help us understand their concerns, issues, and training needs. It also provided a venue for our presentation that they will be and have been presenting at their statewide and regional conferences. They have also given us access to newsletters that go to their PTA president; we have been able to promote our project messages through those newsletters.

With this project, we hope to provide parents with information on what a healthy school nutrition environment is, why their children need a healthy school nutrition environment, best practices, and examples of parents working on a one-on-one level or in an organized group level in their school districts implementing positive changes towards healthy school nutrition environments.

We have just started a project that involves offering schools healthy school nutrition environment grants. We are offering eight to ten grants to schools;

the grants are between \$2,000 and \$4,000. We are asking schools to come up with a plan for improving their school nutrition environment, including developing a team consisting of all of the key players (administrators, food service staff, school nurses, parents), and developing a policy for their school district. We will be documenting their activities and sharing them with the rest of the State.

### Promoting School Breakfast Programs

Another focus area for Project PA is the School Breakfast Program. We are interested in promoting School Breakfast Programs in our State, so we are implementing a two-phase project that involves reviewing the literature and data related to school breakfasts. We have just completed a series of focus groups—nine focus groups on school breakfast—as well as interviews with food service directors who have successful school breakfast programs. Next, we will be implementing three different types of education strategies:

- A Master Instructor training that will allow master instructors to go out and do workshops promoting school breakfast;
- Development of a breakfast brigade, which is along the lines of our Master Instructor Program—it will include about eight to ten school food service directors who will be specially trained to work one-on-one with a school food service director in another school district to help them get a program started; and
- Our fourth teleconference that will focus on improving school meals participation, to be implemented next spring. There will be particular emphasis on promoting School Breakfast Programs, and we will highlight success stories as examples of best practices for school breakfast.

In 20 minutes, Vonda and I have attempted to review an eight-year campaign and we have just skimmed over many of the details of the campaign. I welcome you to visit our web-site that has been recently revised and updated. The website address is: <http://nutrition.psu.edu/projectpa/>. You will find more information about the projects that we have talked about today as well as downloadable versions of many of our training materials.

Thank you.

## Bringing Youth to the Table: Involving Youth in Planning Nutrition Education Programs Through Focus Groups

**Vivian Pilant, MS, RD, Director, Office of School Food Services and Nutrition, South Carolina Department of Education, Columbia, South Carolina**

I appreciate being here and, after listening to all of these wonderful projects, it's very exciting—I want to go home and do them; they are great! I am very interested in the breakfast project, because that has been a focus in South Carolina. We are one of the two States in the nation that require breakfast in all schools. We are struggling with the fact that we still don't have all children eating school breakfast every day that should be eating it. We have consistently had this problem and we are trying to address it in several different ways.

We had a contract with consultants who understand how to do focus groups and we asked them to help us determine why middle school students seem to be the biggest breakfast skippers, and if there is some way we could appeal to them. One of those consultants is with us today, Kelli Kenison. She and her cohort, Carol Rheaume, did the work for us. We helped them come up with the questions and helped them facilitate the project, but they actually went out to the school and did the focus group project.

We wanted to find out about the breakfast eating behaviors of middle school students, because they seem to be the ones that were eating less frequently than the others. Our statewide average for breakfast is 24 percent, but in middle schools it is 19 percent. We were hoping that the project would give us some ideas about how to design more desirable programs for them. An additional concern was how to increase calcium consumption through the School Breakfast Program, because we know that calcium consumption is low nationwide.

Our staff, working with the two consultants, developed a discussion guide. We recruited a middle school in the Columbia, South Carolina area. Just to give you an idea of the demographics of that school—enrollment was 929, and 24 percent were black, 47 percent white, and 7 percent were of other races. This included a combination of Spanish or Asian. In that school, 41 percent were eligible for free and reduced priced meals.

## Design of the Focus Groups

As part of the methodology, we first had to get parents permission. So, we notified the parents about what we would be doing and told them that if they did not want to participate, they should let us know. Also, the students completed a breakfast survey—its purpose was to determine if they were regular breakfast eaters or were not. We wanted to distinguish the two groups.

Based on the responses, we had four to six students from each class selected. The timeframe for the 12 focus groups was in December of 2001. Each focus group lasted about 30 to 35 minutes, and the average group had 4.5 students. We gave them snacks that were primarily good calcium sources such as milk and cereal bars, squeeze tube yogurts, calcium-fortified orange juice, and calcium-fortified orange-tangerine juice. We wanted to see how well they accepted these foods. The students loved the snacks, and they all ate at least one; boys ate more than girls.

## Discussion Guide Questions

We started with six questions for the discussion guide. Number one was, "Tell me your name, grade, address, and describe what you ate or drank this morning." If you notice, we didn't ask, "What did you have for breakfast this morning?" We asked, "What did you eat or drink this morning." Then, we had follow-up questions like, "Where did you have breakfast?," "With whom did you have breakfast?," and "Was it typical?"

The second question was, "Describe if you feel different when you eat or drink something in the morning than when you don't eat." Then, "On school days, if you could choose what you would eat or drink in the morning and where you would eat or drink in the morning, what and where would that be?"

The fourth question was, "Tell us the reasons that some students eat or drink in the morning and that some students don't." The fifth question was, "Tell us the reason that some students eat or drink in the morning at home and some students don't." The sixth question was, "If you were trying to persuade your friends to eat something in the morning, such as breakfast, what would you tell them?"

## Focus Group Results

The results that we found are as follows. The 54 students in these 12 focus groups, 28 males, 26 females, were equally represented in the sixth, seventh, and eighth grades. On the day of the focus group, 31 students, or 57 percent ate at home. Seventeen percent (nine students) ate at school. Four percent ate at the bus stop, and one of those had "oodles of noodles"; you figure that one out! Two students (4 percent) ate in the car on the way to school, and 19 percent said that they did not eat breakfast. We were very generous when we used the term "breakfast." "Breakfast" meant eating anything that had calories in it.

Regarding their usual breakfast habits, 34 students or 63 percent said that they usually eat breakfast. Thirty percent said that they sometimes eat breakfast, 6 percent said that they usually don't eat, and 2 percent of the students did not respond. In response to the question, "Describe what you ate or drank this morning," between 9-12 of the groups mentioned that they ate:

- Cereal with milk,
- Drank fruit juice including orange, apple, or grape juice.

Between five to eight of the groups mentioned that they:

- Ate a hot breakfast that had some combination of eggs, grits, hash browns, bacon, sausage, waffles, pancakes, or toast.
- Ate a toaster strudel or a Pop Tart.
- Ate grits, toast, or a bagel.
- Drank a soft drink.

In response to the question, "Describe if you feel different when you eat or drink in the morning, than when you don't," participants almost always described what happens when they don't eat breakfast. Only one group commented on how they felt when they ate breakfast. They mentioned that they:

- Feel full,
- Have more energy throughout the day.

For participants who did not usually eat breakfast, there was no difference between how they felt when they ate and when they did not eat. Between five to eight of the groups mentioned that if they did not eat or drink anything they were:

- Sleepy or tired in class,
- Hungry,
- Stomach aches or hurts/stomach cramps,
- Stomach growls,
- Lack of concentration/cannot focus/cannot pay attention in class.

In response to the question, "On school days, if you could choose where you would eat and drink in the morning, where would that be?," between 9-12 of the groups mentioned they would like to eat at home or at their grandmother's house. Between five to eight of the groups mentioned they would like to eat at well-known fast food restaurants. Mostly female groups mentioned eating at the fast food restaurants. Eating at school was also mentioned.

In response to the question about what they would like to eat and drink for breakfast, between 9-12 groups mentioned they would like to drink juice, including orange, apple or grape, and eat a hot breakfast including some combination of eggs, grits, hash browns, bacon, sausage, waffles, pancakes, or toast. Between five to eight of the groups mentioned they would like to have a sausage biscuit; bacon, egg, and cheese biscuit; pancakes; French toast; or waffles.

When asked whom they would prefer to eat with, the findings were very interesting. Nine to 12 of the groups mentioned that they would prefer to eat with family members. Five to eight of the groups mentioned they would prefer to eat with friends, which was more frequently mentioned by groups of females, or eat alone, which was more frequently mentioned by groups of males. This theme prevailed through some other group work that I did on diet recalls when we asked students where they ate. It was surprising how many males said that they ate breakfast alone. It's just something that they do.

In response to the question asking for some reasons that they thought that some students eat or drink in the morning and some don't, participants almost always described why students do not eat in the morning. Only one group commented on why they would eat in the morning and they mentioned that the reasons were hunger or being better able to focus in class.

When we asked them to tell us some reasons why some students eat or drink in the morning and some students don't, they said:

- They are not hungry, or
- They feel full from the meal the evening before, or
- There was not enough time to eat, or
- They didn't want to eat what was available because it was unappealing.

Five to eight of the groups said, "I don't like the food at school;" this was more frequently mentioned by females.

Between one to four of the groups described the following reasons why students might eat at home in the morning:

- Food at home is better quality/tastes better,
- Don't want other students touching, stealing, or coughing on their food,
- Prefer the more familiar foods available at home,
- Food is healthier at home,
- Prefer how food is prepared at home,
- Prefer to eat with family,
- Can select what to eat at home (versus school),
- Know who cooked the food at home,
- Prefer to eat at home,
- Home is less noisy than cafeteria,
- Home is more comfortable environment, can watch TV,
- Home is cleaner,
- Don't want to wait in line,
- Not enough time to eat at school,
- Can eat greater quantity at home,
- Can season food as desired at home,
- Don't like cafeteria workers,
- Parents who don't work have time to cook breakfast at home,
- Heavier students are embarrassed or self-conscious about eating in front of other students.

When we asked them why would they want to eat at school, between one to four groups described the following reasons:

- They're not hungry until they get to school,
- The cafeteria is serving something they liked,
- Food is not available at home,
- Parents don't have the money to buy food,
- Breakfast is free for some students, and
- Food is better at school.

When we asked them to tell us some reasons why some students eat or drink in the morning at home and others eat or drink in the morning at school, between one to four of the groups described the following reasons why students might **not eat** at school:

- Unappetizing food/foreign objects in food,
- Can't afford to eat at school,
- Not many choices,
- Food not cooked (properly),
- Fear of food poisoning,
- Frozen milk,
- Don't want to share food with others,
- Parents don't want them to eat at school.

In response to the question, "If you were trying to persuade your friends to eat something in the morning what would you tell them?", five to eight groups said:

- It is healthier to eat breakfast,
- Breakfast helps you focus better in class and helps you learn better,
- Come to the cafeteria, you might find something you like,
- Food is better at school.

In response to that same question, between one to four of the groups made the following statements:

- Won't be hungry later if eat breakfast,
- You will have more energy/be less sleepy if you eat breakfast,
- Eating breakfast prevents grouchiness,
- You will feel better if you eat breakfast,
- Breakfast will keep you from getting a headache,
- Breakfast is an important meal,
- If you eat breakfast your stomach won't growl (avoid the embarrassment),
- Eating breakfast is better than eating junk food,
- Eating breakfast will help you to lose weight,
- School cares enough about the students to serve breakfast so you should eat it,
- If you eat breakfast, you will be more satisfied with lunch,
- If you come with me to the store, you might find something to eat,
- Food is cheap in the cafeteria.

## Results from "Universal Breakfast" Question

At the end of the focus group, there was a little time left, so our consultants asked a question about universal breakfast in the classroom (this meant everybody having an opportunity to eat in the classroom). This was done with 8 of the 12 focus groups. They were asked about breakfast in the homeroom, and all eight groups thought it would be a great idea. The reasons given for why students would like breakfast provided in the homeroom included:

- It was quieter than the cafeteria,
- It was a good idea for when the buses are late,
- It would avoid those long lines in the cafeteria and students would do better in school, and
- They would like it if they had friends in homeroom and they could eat with their friends.

They also provided two reasons why students wouldn't participate in the homeroom breakfast program:

- Some people are scared to eat in front of other people,
- Some people just want to eat candy.

Participants suggested that the following types of foods be offered (students were offered milk/cereal bars, squeeze tube yogurts, and calcium-fortified orange juice during the focus groups):

- Milk/cereal bars,
- Squeeze tube yogurts,
- Juice (orange, apple),
- Milk (skim or chocolate were suggested),
- Fruit,
- Cereal treats or breakfast items like eggs/pancakes/grits, etc.,
- Cereal and milk,
- Protein bars,
- Toaster pastries,
- Pizza,
- Cheese toast,
- Hot drinks when it is cold.

Regarding the idea of the homeroom breakfast program, they provided these comments that fit into the category of problem solving:

- The idea that breakfast in the classroom could create a big trash problem, so they figured out how to handle the trash.
- Some students commented that they would still eat at home and use the school breakfast as a good morning snack. They seemed to be really excited about this.

## One Year Later

One year later, this school started a breakfast in the classroom program. I'm happy to report that the school has 41 percent free and reduced price eligible students, so they could not do what we call "universal free" where everybody eats at no charge. They still had to charge the paying students 75 cents, reduced price students 30 cents, and, of course, the free students at no charge. But, in that school alone, breakfast increased 216 percent. Participation went from 124 per day to 268. The percentage of participation in that school for breakfast went from 14.5 percent to 28 percent. The State average for middle schools is 19 percent, and the State average for all schools is 24 percent, so they went above the State average—that was good for that school.

We could not have done it without the focus groups and the schools participating. Also, Kelli Kenison and Carol Rheame were vital in doing this for us. And that's it.

Thank you.

## Topic: Let's Get Physical! Strategies that Work

**Moderator: Geraldine S. Perry, DrPH, RD, Centers for Disease Control and Prevention, Atlanta, Georgia**

### Getting People to Move More! Promotion and Education Strategies that Get Results

**Howell Wechsler, EdD, MPH, Health Scientist, Research Application Branch, Division of Adolescent and School Health, Centers for Disease Control and Prevention (CDC), Atlanta, Georgia**

Good morning. I love being the first speaker. One of the prerogatives of the first speaker is that I get to set some of the ground rules. And my first ground rule, when I'm doing a presentation on physical activity, is that if you feel the urge, if you just got to get up and move, then by all means get up and do your share of physical activity while I am speaking. Not only will I not be offended and think that you're bored with what I'm saying, I will convince myself that I have inspired you to be more physically active—so feel free to get up, and don't block anyone's view, but get active.

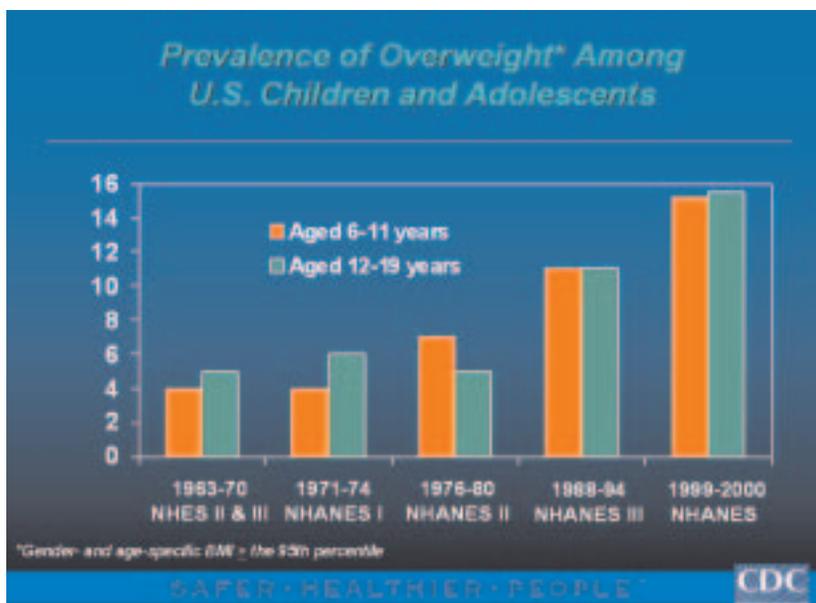
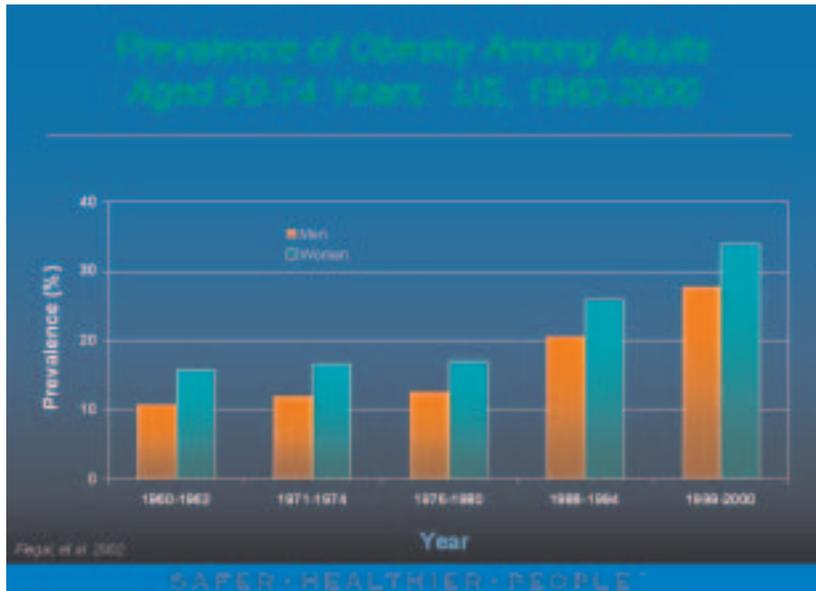
The second ground rule, as I was told by the conference planners, is that "you have got to make this session interactive." So, I am going to be calling on you to speak and because the time is short, if you have something to say, just shout it out real loud in your best schoolteacher's voice. All right, well let's get physical then.

Here I am, a CDC scientist in a room filled with nutrition people ready to talk about physical activity. I have to share some very important data with you so that we can all be on the same page about physical activity. Then, I will share with you what I think CDC does best—that is, to identify what the very rigorous reviews of scientific evidence have found as the strategies shown to be effective in getting people to move more.



## The Facts about Obesity and Physical Activity

Let's begin with facts that you are familiar with—that we are in the midst of an obesity epidemic and that physical activity or lack thereof is a key ingredient to that epidemic. From the slide, you can see how dramatically the prevalence of obesity among adults has increased since 1980 in particular.



When we look at children on the graph, the red line is for children and the green line is for adolescents, you can see that it is almost the same. Since the 1980's, there has been a very profound increase in obesity, and, of course, physical inactivity plays a role. Because of that role and the many health benefits of physical activity, physical activity is viewed by the public health community as one of the urgent crisis issues that our nation has to deal with.

The Surgeon General and the Public Health Service identified the ten leading health indicators on which our nation needs to focus its attention in order to move towards being a healthier nation. There are many important issues on this list, but at the very top of the list of leading health indicators are physical activity, overweight, and obesity. Thus, from the public health perspective, physical activity is a very important issue that we need to deal with.

### Health Benefits of Physical Activity

Physical activity has many health benefits, which have been clearly documented in the "Surgeon General's Report on Physical Activity and Health." The health benefits include:

- Reduces the risk of:
  - Dying prematurely
  - Dying from heart disease
  - Developing diabetes
  - Developing high blood pressure
  - Developing colon cancer
- Helps reduce blood pressure in people who already have high blood pressure.
- Helps control weight.
- Helps build and maintain healthy bones, muscles, and joints.
- Helps older adults become stronger and better able to move about without falling.
- Reduces feelings of depression and anxiety.
- Promotes psychological well-being.

You won't be surprised to know that we are not doing all that well. Some of the most recent data we have show that 39 percent of adults get absolutely no leisure time physical activity, and more than two thirds are getting generally an insufficient amount of physical activity. When we look at high school students, ten percent are getting no physical activity, and about a third are not meeting the recommendation. So, we have a long way to go.

### How Are We Doing?

I could present reams and reams of data but sometimes a picture can really capture what's going on in society better than hundreds of numbers. There is a great picture from an Atlanta newspaper of someone who is walking their dog while driving a car; the person is holding the dog's leash out of the window of the car while the dog walks. What is funniest about

this, besides the picture, is the newspaper caption—which assumes that it is normal to take your dog for a brisk walk while driving your car.

### What Works to Promote Physical Activity

Now, I want to identify what CDC has found to be what works to promote physical activity. We have turned the issue over to an independent panel of scientists, a task force that is working on developing something called the "Community Guide to Preventive Services." This CDC project involves many independent public health scientists who do systematic reviews of all the published studies of evaluations of completed projects. Then, they look at different strategies used to deal with different health issues—in this case, physical activity. They will identify four categories:

- Strategies that, based on the evidence, are strongly recommended;
- Strategies that are merely recommended and seem very good, but the evidence is not as strong;
- Strategies that we recommend against, either because they don't work or they have negative effects; and
- Strategies for which there is an insufficient amount of evidence to come to a conclusion. That is, there are either too few studies done, the studies have too many evaluation flaws, or the results are inconsistent.

### Effective Interventions to Promote Physical Activity

Let's look at the six areas that have been defined as effective interventions to promote physical activity. The following effective types of interventions to promote physical activity have been identified:

- Informational
  - Community-wide education
  - Point of decision prompts
- Behavioral and social
  - School-based physical education
  - Non-family social support
  - Individually adapted behavior change
- Environmental and policy
  - Enhance access with outreach

Under the informational grouping, you have community-wide education campaigns and "point of decision" prompts. Under behavioral and social approaches, there is school-based physical education and non-family social support. They looked at family projects to generate family-based social support and also strongly recommended individually adapted behavior change. Finally, there was one environmental and policy change that was suggested: providing enhanced access to physical activity facilities with added outreach components.

I will explain these and call on you to identify some ways that people who work in nutrition programs can reinforce these efforts. We recognize that your primary focus is and has to remain nutrition, but we also recognize how interconnected the issues are. As a behavioral scientist, I strongly believe that if we can get as many components of our society as possible reinforcing and supporting behavior change efforts, in this case for physical activity, then people are more likely to see a physically active lifestyle as the normal way of life, aspire to that lifestyle, and actually live that lifestyle. We need all segments of society, and in particular the nutrition education community, reinforcing this. My challenge to you is to come up with a couple of ideas on how, whatever your nutrition program is, you can work to reinforce these kinds of efforts.

### **Recommended Type of Community-Wide Campaign**

What type of community-wide campaign was strongly recommended? Something that is big, large scale, and with a lot of intensity. It is very visible in the community largely because it centers on a multimedia campaign involving television, radio, newspapers, advertisements in movie theaters, billboards, and direct mailings to people. These are also complemented by other components such as the development of support groups, risk factor screening, counseling and referrals, community events like health fairs, and environmental changes like building a walking trail. These were evaluated as a combined package—we do not know if you could do one without the other. In places where they have implemented this kind of package, it has had a substantial and significant effect on increasing physical activity.

My first challenge question to you: How does a nutrition educator fit in? CDC is sponsoring one of the largest media campaigns ever organized for young people, the VERB Campaign, which is a major effort to promote physical activity among young people. How do you support those efforts working in the nutrition education field? I need an idea.

Audience responses:

- Mother's walking clubs—You can recommend those and help get those started.
- Sneaker clubs—walking clubs where the kids or whoever is involved count up the miles that they walk and set goals for themselves. In a nutrition program, you can reinforce, recommend, and advise people to do this.

You can post materials about these campaigns, promote the events that are going on in your communities, and support them.

### "Point of Decision" Prompts

Let's move on to the second one: "Point of decision" prompts. These are motivational signs placed by elevators and escalators that encourage people to use stairs for their health or to control their weight. It was shown that such prompts increased the use of stairs substantially. We have a poster in front of our stairwells that says, "In one minute you can burn ten calories walking up stairs, but only 1.5 calories riding the elevator." Motivations like that are at the "point of decision-making," just like they have signs in stores. As an experiment, we turned our "really ugly" stairways into absolutely "beautiful" stairways—this led to a substantial increase in the number of people who used the stairs.

What is one quick idea on how you can support this kind of activity? You can post up the sign yourself, design your own signs, hear ideas from other people on signs that they put up, and you can take the stairs yourself which sets an example. There are ways you can support this kind of initiative, and this is about as cheap of an initiative as you are going to find.

### School-Based Physical Education

Regarding behavioral and social interventions, we will start with school-based physical education. First, modify curriculum policies to make physical education classes longer or have students be more active during class, or modify game rules so that children are more active (e.g., they are running around instead of standing still and watching the game).

How does a nutrition educator support that kind of thing? Let me ask you a question. When you are counseling people, let's say a parent or child, do you ever ask them whether they eat in a school meal program? What do they do at lunchtime? Do you ask them what decisions they make in the school cafeteria? Well, why don't you ask them what they do in terms of physical education? You can let them know that a person that they trust

and have faith in also cares about their level of physical education. In the same way that you encourage parents to get involved in the school nutrition program, you should encourage the parents to get involved in the school physical education program. Children will not improve their physical activity until parents and community people start insisting that they get better in this area and start asking questions about it.

### Physical Activity in Community Settings

Regarding social support in community settings: This means to build, strengthen, and maintain social networks that support behavior change. Community settings include places like the general community center, community-based organizations, churches, work sites, and university programs. An example of social support is developing walking buddies so that you are paired up with someone to walk with. Other examples—writing up contracts so that you promise to walk a certain amount by a certain time, or establishing walking groups so that people socialize together and go walking.

How can nutrition educators plug into and support those kinds of things? You advertise the activity by putting up posters indicating that there is a walking group being formed. You can try to hook people up. As you are counseling people, you could ask, "Would you be interested in being paired up with a buddy to do more walking?" Then, you find someone who lives in the same area and can pair people up. These are some of the things that have been found to work.

The most powerfully documented, individually adapted, health behavior changes found are things that are typically delivered in group settings or by mail or phone. Today e-mail is being used a lot. Through these avenues, people set goals, monitor their behavior, and build social support for themselves through their friends and family. They are taught ways to reinforce their own behaviors, solve problems, and strategize on how to prevent their own behavior relapse.

How can nutrition educators plug into that? We do this thing all the time with nutrition. Why not add physical activity objectives? Some people might feel that this will scatter attention, but it will probably give people more things that they can be successful in. Perhaps, someone just can't make some of the nutrition changes you recommend, but they are more likely to have success with a change in physical activity. Once they experience some success, it starts snowballing and they start having more success.

## Enhanced Access to Places for Physical Activity

Finally, regarding environmental and policy interventions, enhanced access to places for physical activity focuses on things like creating new walking trails, exercise facilities, increasing access to existing facilities by making them safer, making them more affordable, and training people on how to use equipment.

These were measured as a combined package. We can't separate out the effects of each component. But, the interventions have succeeded in increasing physical activity.

How do we plug into that as nutrition educators? As nutrition educators you have a lot of credibility on obesity prevention issues. We are not expecting that you necessarily need to be the lead in arguing for the creation of a walking trail, but you can support those who are working to get a fitness trail. Guess who's going to show up to back you up when you are promoting something related to nutrition? You need to scratch their back if you want your back scratched. You can remind clients that these things are available.

## Physical Activity Advice

Here are some types of advice and very basic messages to share to increase physical activity—I have culled these from many experts over time. If you are in a one-on-one counseling session or a class, you can share some of these messages.

- DON'T obsess over weight,
  - Focus on incorporating physical activity and healthy eating into your family life
- Loved ones will more likely do what you do than what you say,
- Set limits on TV time and stick to them,
  - No TV in children's bedrooms
- Schedule a regular time for family physical activity,
- Include physical activity as part of family events and vacations,
- Help loved ones find physical activities that they like and help them participate,
- Emphasize fun and learning, not winning,
- Reward with fun physical activity,
- Find out about physical activity opportunities in your community,
- Find a place for indoor fun,
- Take the parking spot far from the store,
- Carry a "traveling locker room" in your car, and
- Give gifts that encourage activity.

I leave you with a heart-felt message: we have heard so much about how integrated the issues of physical activity and nutrition are. I know that we are giving physical activity people the same message: "You have to support the nutrition community, you have to support the nutrition messages."

" The best way to get them on our side is for you to get on their side as well because we are all on the same side, and that is to improve the health of our population."

Thank you very much.

## Measuring and Monitoring Activity Levels

**Sarah Levin Martin, PhD, Epidemiologist, Morehead State University, Morehead, Kentucky**

Welcome—it is always a challenge to follow Howell Wechsler and all his enthusiasm. I am an epidemiologist and deal with numbers, but I will do my best to keep this light. So, "measuring" and "monitoring," what are we talking about? Is it evaluation or research? Actually, we could be talking about either, but today I am going to focus on program evaluation.

Program evaluation is different from research, they are ends of a continuum, where research is controlled by an investigator, and evaluation is controlled by those who care and those that want to use the information that is gained from the evaluation—the stakeholders. Evaluation is flexible in its design, so as the program is unfolding, if changes need to be made, they can be made. Regarding research, on the other hand, you don't want to be changing the program while you're researching it, so it is very tightly controlled. Program evaluation is ongoing, and we will be talking about that today, as we describe the phases of evaluation. Research, on the other hand, uses a specific timeframe. But, probably the most important difference is that the purpose of doing evaluation is to improve our programs, and for research it is theoretical in nature and its purpose is to further knowledge.

Why evaluate? It is your responsibility to evaluate; we have to evaluate these days. We are all held accountable for what we do. As I mentioned, it can be used to improve existing programs, measure effectiveness, demonstrate accountability, and this is an important one: for sharing effective strategies and lessons learned.

I will go over the six steps of program evaluation, and the sixth step is sharing effective strategies and lessons learned. Sharing is very important so that we duplicate what works and do not duplicate mistakes. The slide says "ensure funding and sustainability."

I think it should say "help to" or "maybe ensure." It's tough to say what will really ensure funding and sustainability, but certainly evaluation will help. In the end, evaluation is two fold; it can both measure and contribute to the success of your program.

### Phases of Evaluation

Regarding some of the phases that I mentioned: there's before, during, immediately after, and after a while, or formative, process, impact, and outcome. These are best defined with a stopwatch; it is just easier to explain if you think of it this way. Formative is something you do before you can get your program going. Process is during your program, to see how it's working; impact is immediately after; and outcome is after a while. Other people may term these differently. Some people group together formative and process and call that "formative," and group together impact and outcome and call that "summative." Roughly speaking, the first two are formative, the last two are summative, but I like to break them out this way by time, into 4 categories or phases.

### Formative Assessment

How do we do formative assessment? Formative assessment is sometimes called the needs assessment, but we don't want to stop there and just determine the needs. We also want to do some asset mapping to find out what the community already has going for it, and build on those assets. We can do this through a variety of methods, direct observation, interviews, focus groups, and secondary data collection. I have a disclaimer that this is just a sampling of the techniques that you can use; certainly there are others.

Regarding the method of direct observation, there are unobtrusive and obtrusive ways of observing physical activity. Certainly putting a video camera on someone is a little bit obtrusive, and you might not get their natural behavior. On the other hand, using a hidden camera or looking through a two-way mirror or a one-way mirror, however you say that, would be an unobtrusive way.

## Process Evaluation Measures

Let's move on to process evaluation measures. These can include attendance sheets, site visits, open-ended interviews, and an infrared light trail counter—for example. The purpose of process evaluation is to understand the context of the program, the reach of the program, the dose delivered, the dose received, and the fidelity of the implementation of the program. For example, an attendance sheet will get you the reach of the program. A site visit is a nice way to see with what fidelity the program is being implemented. Open-ended interviews, for example, can get at that context, what's really going on, in addition to or behind your program. One of the strategies recommended to increase physical activity is to create places for people to walk, such as trails. An infrared light trail counter attached to a tree is a nice unobtrusive measure and it can just count passers by. The only bad news is that it doesn't know who is walking by, so it could be the same person over and over.

Regarding impact measures, there are many activity monitors out there; as technology keeps improving they keep coming out with new ones. A simpler one is the pedometer, which counts steps. Heart rate monitors are sometimes used. Others include indirect calorimetry and doubly labeled water, so we can measure energy expenditure.

Regarding dietary measures, there is plenty of self-report out there. For physical activity, we can do a previous day recall, such as a 24-hour recall. We can do a four-week history similar to a food frequency questionnaire. There are global questionnaires, short questionnaires, or keeping a diary or a log. As you know, these self-reported measures have their limitations in terms of maybe some biases, but they get us a lot more detail than the more objective measures, like the activity monitors or pedometers. Thus, we get activity counts or steps but we don't know under what context those activities took place. The best advice probably is just to combine measures and get some self-report along with the objective measure.

A pedometer is a simple little device that counts steps taken. How many of you have a pedometer? Oh, my goodness, wow. If I had asked that question five years ago maybe a couple hands would have gone up, I almost fell off my seat. I guess you know what they are and I guess you know that they can be motivating, so that's great.

## Outcome Measures

Regarding outcome measures, they do take longer just by their nature. Remember, I said that these are "after a while" measures. You need to decide in advance what measures you want to assess so that you can get baseline measures before you run out of time and need to collect follow-up measures. So, it is important to consider what measures you are going to take right up front. For secondary data, you can get morbidity or mortality statistics depending on how long your study is. Or just reassess at the behavioral level, that is, see if people's behavior has sustained change. If the behavior has changed immediately after, see if it has still changed a while after.

## CDC's Framework For Program Evaluation

Now, I'm going to switch over to talk about the CDC's framework for program evaluation. CDC developed a publication, "Framework for Program Evaluation in Public Health" (September 17, 1999 / 48(RR11);1-40). It is free and available on the CDC Division of Nutrition and Physical Activity (DNPA) web page. It talks about the six generalized steps for program evaluation. These steps are the same no matter what the topic area.

The six steps are:

1. Engage stakeholders,
2. Describe the program,
3. Focus on the evaluation design,
4. Gather credible evidence,
5. Justify conclusions, and
6. Ensure use and lessons learned.

I will talk a little bit about each.

## Engage Stakeholders

The first step is to engage stakeholders. These come in four types:

- Implementers—they put on the program,
- Partners—they are actively engaged in supporting the program,
- Participants—hopefully, they are going to take part in the program, and
- The all important decision makers—those with the power or the money to keep the program going.

You want to find people from each of those four areas to become your stakeholders. And why do you want to find them? In order to:

- Increase the relevance and usefulness of evaluation,
- Improve stakeholders' evaluation skills,

- Access existing resources and skills,
- Increase the likelihood that findings will be used, and
- Gain support for the program.

In the past, you may have seen evaluation reports sitting on a desk somewhere, no one ever using them. But, by engaging the stakeholders up front, you can increase the chance for their use.

### **Describe the Program**

The second step is to describe the program. I want to emphasize that in program planning you need to be thinking about evaluation from the very "get go." You want to plan your program and your evaluation all at once. You don't want to evaluate the program after it has started, especially since you will need those baseline measures.

When you are describing the program you want to think about what stage the program is at. Is it just in its early phases, what we call its "planning stage" ? Or is it in its "implementation stage" or "maintenance stage"? Depending on how far along, it will help to shape your evaluation.

Next, you want to describe the nature, magnitude, consequences, and causes of the problem, and what trends are occurring. Here you will probably use some secondary data to describe the problem. The more specifically you can describe your locality the better, so local data is better than State data which is better than national data if you are dealing with a local problem.

Finally, you want to develop a logic model. How many of you are familiar with the logic models? In general, there are at least four columns: inputs, activities, outputs, and outcomes. I want to remind you, though, that with the outcomes—you may add more than one column. You can make logic models, left to right or right to left. You can start at the end and say, "This is where I want to get; how am I going to get there?" Or, you can start at the beginning and say, "This is what I have going in; where can that get me?" You have to start somewhere and I want to encourage you to think about outcomes as short-term, medium-term, and long-term. If you only assess some broad goal, you might not ever get there. So, think about some more achievable objectives that you can accomplish early on. Some short-term objectives might be related to knowledge or attitudinal. Some medium-term objectives might be behavioral, like doing more physical activity. Long-range objectives might be societal or environmental. Depending on how long your evaluation is, think about some reasonable outcomes to measure.

## Focus on the Evaluation Design

At last, we are going to focus on the evaluation. The first thing that you want to think about is why you are doing this evaluation, what is its purpose? Is it to gain insight, improve the program, or assess program effects? Likely it's more than one of these. Also, what are you going to do with the data and what are the uses of the evaluation? There are four standards with evaluation. Usefulness is probably the most important—don't do an evaluation if you are not going to use it. The other standards are feasibility, accuracy, and fairness. I will try to highlight where those standards come into play but usefulness is a big one here.

And, think about which evaluation questions you want to ask. For evaluation questions, you need to think about who needs to know what, and your stakeholders can help decide which questions to ask. After you have picked the questions that you want to ask, you have to decide how to gather the credible evidence to answer those questions. Here you think about the accuracy standard. What data can you get that will be accurate? Which and how many indicators are you going to measure? You may have heard of triangulating on a measure, that is, collecting from more than one data source to answer your question. You can get data from people, secondary sources, and community members.

As I mentioned with triangulation, try to get the answer to your question from more than one place. Ask the people involved in the program, and those who are putting on the program. Get some observational measures, but try to come close to getting the truth and getting accurate data. There are a myriad of ways of collecting data. Then, who will collect this data? I think that often we are short staffed and don't have the staff to collect the data. I suggest engaging college students. They always need projects to do, and this could be a great opportunity for them.

## Justifying Conclusions

The fifth step is justifying conclusions. This is very different than research. This is where we impose our own value on our findings. We do not do that in research; researchers should be value-free and objective, not subjective. But with program evaluation, you are working with your stakeholders, and deciding what is important and what you expect and want to achieve. Then, you work with your stakeholders to decide whether you achieved what you were hoping. So, in this case, there is some value placed and some judgments made. The steps here are to analyze the data, interpret the results to make decisions about the program, and then, making judgments and placing value.

I have an example: imagine that you are running a "kids walk to school" program, and you had engaged your stakeholders: parents, school staff, kids, recreation centers, and principals. Then, one child gets hurt walking to school—what are you going to do? Are you going to then evaluate the program and say, "Look, somebody got hurt; we will never do it again?" Or, are you going to apply some other value and look at other program outcomes? So, judgments become very important.

### **Ensuring Use and Lessons Learned**

Finally, step six: ensuring use and lessons learned. Since the late 1980's, sharing has become much more common with web sites and e-mails, etc. It used to be that everything was so secretive, so there was duplication and reinvention of the wheel, so to speak. We do not have to do that anymore, it is very important and helpful to share. Make sure that you make some recommendations from your findings and, again, don't let them sit on a shelf. Make recommendations that are action-oriented, relevant, and useful; and tailor your recommendations to whatever group that wants to use your data. There is a lot of work to do in step six.

And notice, from step six, we are back around the circle—back to step one and on we go!

Thank you.

### **Promoting Active Lifestyles in FNS Programs: Policies and Practicalities**

**Ronald J. Vogel, Associate Deputy Administrator for Special Nutrition Programs, Food and Nutrition Service, USDA, Alexandria, VA**

Okay, all those who have said that you had pedometers, take them out and show us. Well, there are a couple of them out there. The other thing is that I decided not to use my slides—all of my slides are visible if you go into the FNS display in the Exhibit hall where you will see the "Eat Smart. Play Hard.™" posters and Team Nutrition posters that emphasize the connection between nutrition and physical activity. If you do that, and your basal metabolism is about 70, 80 calories an hour, if you walk a mile that's another 50 calories, between here and there is 300 yards; you can burn up ten calories! Walk from here to there and walk around and that will reinforce the message of the conference today. Is that fair enough?

## History of the Food and Nutrition Service Programs

I think that it is important to first reflect back a little bit about the history of the Food and Nutrition Service and its programs. I think that you will agree with me that there have been some remarkable changes in the way these programs have been administered, the way they are perceived by the public, and the way they are operated by you at the State and local levels. It wasn't too long ago that these programs as a group were viewed simply as welfare programs or cash transfer programs. As a matter of fact, they are still located in the part of the Office of Management and Budget (OMB) that deals with cash assistance. Our goal was food security, but basically any old food would do, we just wanted to feed people.

Not too long ago we shifted a little bit and, although food security is still very important to us, we also worried about the quality of the benefits we provided. We started to worry about the nutritional integrity of our programs. Soon after that we took another step, and it wasn't just about food security and providing a good nutritional benefit, we wanted to influence the way people made dietary choices. We wanted to be involved very strongly in nutrition education, because we finally recognized that our programs have a major public health role in this country.

Now take a look at this conference. We have moved even further. We recognize that we have a major role in dealing with the issue of chronic obesity in this country. We have moved into the area where it's not only about food security, a quality nutrition benefit, and nutrition education. It has become a full-blown commitment to the principles of the Dietary Guidelines. Aim for Fitness—we are there 100 percent, and this conference is a testament to that. That is a remarkable transformation of these programs over the last ten years.

## FNS's Future Role in the Promotion of Physical Activity

Having said that, the issue becomes, "Are we going to put our money where our mouth is?" How much are we willing to invest in getting our programs engaged in physical activity? It is very important for us to keep in mind that we need to do physical education and promotion of physical activity in the context of nutrition education and nutrition promotion. Anybody disagree with that? I hope not—so far, so good.

We have run into some fairly interesting issues, and I like people who think outside the box and who push the envelope. We have had some interesting questions about how far we are willing to invest in physical education activity. Is it appropriate for us to be buying sneakers to promote physical activity? Is it appropriate to reimburse line dancing classes? How about a treadmill during which somebody is watching a video on how to choose proper foods for their family? Anybody want to spend some money on that? How about pedometers? If so, then who needs a treadmill?

The point here is that we are going to have to apply a standard of what's necessary and reasonable for the administration of the Food and Nutrition Service programs, and that is not a clean line in the sand. It's not. As you engage the participants in our programs in a nutrition education environment, and engage us about just what is a reasonable and allowable cost for physical activity and related materials, sometimes we will give you answers we like and sometimes you are not going to be happy with the answer we give you. But trust us, we will try to move with you as best we can to make sure that our programs play a meaningful role in the promotion of physical activity in the context of nutrition education. That is our commitment to you. We might not always agree, but bear with us as we learn with you the best way to position our programs in these emerging policy-related issues. Sometimes, we will be pretty clear with you that that's not an appropriate expenditure of available FNS nutrition education resources. Challenges make us think and make us think outside the box—we will do that for you; that is our commitment.

I am reminded of a cartoon that I saw not too long ago, I think it was Dennis the Menace. His mother is standing there with her arms on her hips and Dennis is standing in front of his toy box with his stuff all over his bedroom—it's a disaster. You know what his mother is thinking, "Dennis, you've got to clean up your room, put your toys in the box." And Dennis, anticipating what his mother was going to say; I think the caption was something like "But Mom, my teacher said we should think outside the box." That is true, but sometimes thinking outside the box creates a mess that does not get at what we are trying to accomplish. So, there will be some limits as to how far we can move.

I would also say this: As much as we are committed to the "A" part of the Dietary Guidelines, we have a long way to go with the "B" and "C" parts, "Build a Healthy Base" and "Choose Sensibly." That is a very critical part of our approach to nutrition education. We still have folks who think that a balanced diet is a doughnut in each hand. So, as we "Aim for Fitness," let's

not also forget that we have a very important commitment to make to the "Build a Healthy Base" and "Choose Sensibly" parts of the Dietary Guidelines. We need to make sure that our resources are directed in that way as well.

Thank you very much for listening.

## **Fun, Fit & Free: Making Fitness Work in Resistant Populations**

**Gwen Foster, MPH, CHES, Health and Fitness Czar,  
Mayor's Office of Health and Fitness, City of Philadelphia,  
Philadelphia, PA**

Thank you so much, and I think this panel has just been incredible. I certainly hope that you listened carefully because what each of them had to share were the kinds of things that we have been utilizing in Philadelphia. I read about all of them, and my philosophy is that all of us are stronger, smarter, richer, and more effective than any one of us alone. So, you need to take seriously all that you have heard because I will just be sharing how we have utilized the information that you have already received.

I think that I have the greatest challenge of all four of us in that my time is gone before I even get up here. Also, someone asked me, "Shouldn't you be called czarina instead of czar?" And I said, "I really don't care what people call me, only if they call me late for dinner." Having said that to a group of nutritionists, I know that your minds are set on lunch. I hope that you can stave it off just a little bit because I want to share with you some things that might be helpful to you.

### **Get Physical**

Now, I am going to do exactly what this title "Let's Get Physical" suggests. I hadn't planned on doing it, but do me a favor, stand up, real quick, some of you move out in the aisle, I want you to be three feet from everybody and three feet from the wall, don't be near the wall or each other.

I want to dispel a myth in 60 seconds or less. The myth that "you are already doing the best that you can do." This is especially true when working with people who want to begin a physical fitness program. They say: "I can't do that," "I can't walk," "I can't lose weight," "I can't do it." Nonsense!

You are going to improve by 100 percent if you follow my directions. Now, you can't see all of me up here, but spread your feet shoulder width apart, so that each leg is about on line with your shoulders. Nail them in, don't move them for the next 60 seconds, nail those feet, and don't move them.

Now, extend your right arm and when I give you the signal, I'm going to ask you to turn around, without moving your feet. You'll turn around to the right and your head will follow, so that you can identify a spot on the wall. Let's do that, go around to the right, and don't force it, identify a spot somewhere in the room that you can remember, which will represent your best first effort without forcing it. Okay, remember that spot. Slowly turn back around, now you can put your arm down. This time, listen carefully, don't move those feet, I'm going to ask you to turn your body around to the right as much as you possibly can go, come on, turn the bodies around, but turn your head to the left. Come on, stretch the body around to the right, head goes left, body goes right, hold, stretch it, and hold, slowly turn back around.

This time, send the body to the right, but send the head with it, body and head both go to the right as far as you can stretch them without moving those feet. Come on, stretch, stretch, stretch, hold, hold, hold, and hold. Slowly turn back around. This time send the body to the right again, without moving those feet, come on stretch it to the right, all the way around to the right, keep going and hold it, head goes left, eyes go right. You're mangled up little creatures, but trust me, body right, head left, eyes right, hold, slowly turn back to the front. Now, so that you won't boo me out of town before I've even gotten started, let's just test. If you followed my directions, you should have improved by 100 percent one aspect, one level of physical fitness, which would be flexibility. Let's see now, let's test. Go back to step one, there you go, extend that right arm, and keep going around to the right and see how far past that initial spot that you identified as your best first effort. I'm looking at you; give yourselves a hand. Thank you. You may be seated.

Another reason I did that was to wake you up. How did you happen to improve that much, was it magic? No, it wasn't magic, this is one of the factors that happens to be a principle that governs our physiology. When you warm up and you move slowly and surely you are warming up those ligaments and tendons, and you can do your work more effortlessly. I know you feel "one-sided," so you need to do it on the other side, too. So, we got physical already.

## How the Health and Fitness Czar Got Started

This is how I got started. The Mayor had appointed me to the Office of Health and Fitness as czar; I thought he was kidding when he said that, but he was serious. Two days after I took the job, I heard on national television and the radio, that Philadelphia was the fattest and most unfit city in the nation. I panicked and asked him what in the world he expected me to do, and I had no budget. Why no budget? Not because he didn't believe in it, but because he knew that those who were not politically aligned would say, "We have a health department, you don't need anything else." So he said, "Fend for yourself, you can make it happen." And he was right. We could only go up from there with the publicity of the Mayor mandating health for his city and also creating an office. With this lady called the "health and fitness czar"; this got us attention all over the world and served us well. It even got Oprah's attention.

That publicity served us well because I didn't have any money, nothing, zero from zero gives you zero. I had no money for PR, but it went clear around the world, the New York Times, every newspaper, every television show there is imaginable in the country. We have been on TV a number of times, including the Today Show several times and Good Morning America.

Then, we got involved in using health promotion. What is it that we are really selling? When you are selling a product, from the social marketing perspective, chances are that people are buying an experience. I learned that. Just to tell people "get out and exercise, eat fruits and vegetables, and blah, blah, blah" doesn't mean anything except that people have become a part of it—you have developed a coalition. On a monthly basis, we met in the Mayor's reception hall with the community, with all of the health organizations, the Heart Association, the Diabetes Association, Arthritis Foundation, and anybody interested in health, and we put this thing together. We are still meeting although we don't meet every month now. This year, we are meeting every quarter. So again, all of us had to be involved.

## Developing Success Stories

People want inclusion; they want fun. These are the elements of an effective program, and research bears us out. There has to be inclusion, there has to be fun, and we need a feeling of involvement. People have to have hope so we developed success stories.

The Mayor said, "Gwen, you have got to answer this group." There were 100 morbidly obese adults who needed to lose weight. When I talk about morbid obesity, you have never seen the likes of the group of these 100 individuals that we had to work with. They all needed to lose at least 100 pounds, then 200, and 300, then 400 pounds, and I didn't want to start with a weight control thing. But that's scratching where it itches, that's what people wanted. And the media had the needed attention, so we worked with them. We had so many success stories out of most of those 100 adults—this gave Philadelphians the motivation that there was hope for them, so we had positive results. And that gave us the dirt under our fingernails to develop the confidence.

We organized various activities, including three pages in People magazine! They even came to my house, and that got us a lot of publicity. Philadelphians learned about it from the national and international media, so that I didn't have to pay for it. Social marketing principles also suggest that you need to hook up with those who are valued and respected among the people in Philadelphia. One of them was the owner of our very famous 76er's—he met with me and said "Gwen, let's do "76 Tons of Fun," let's do "76 Tons of Fat in 76 Days," I said here we go again with this weight thing. I didn't want to do it, but had to do it, and we actually did not lose it in 76 days. As a public health professional, I didn't even want to do that. But, we wanted to share simple principles such as losing fat if needed, that when included in a person's lifestyle, would be a byproduct of these lifestyle habits.

The Mayor and I kicked off the "76 Tons of Fun" during halftime at the 76er's game where we were playing Houston. Houston followed us the next year as being the "fattest" city. Last summer their Mayor, Mayor Lee Brown, lost 20 pounds before he had a press conference and invited me, and hired a health and fitness czar. Detroit has done it, and other cities are doing it now as well. Even the German Prime Minister had me there. They are doing it, and Taipei, they followed the program to the "T" and had better results than we had. I want you to hear what really works when others do it, even when we haven't been able to do it in Philadelphia, as well as we know that we should. Those who have done it are doing extremely well.

We now have seven state-of-the-art fitness centers in our middle schools where we are showing youngsters how to develop a business. They are running this for their communities, and they love the idea of having state-of-the-art fitness equipment.

We did a Today Show program where we got about 250 of our famous chefs in Philadelphia to shed about a ton themselves, and then share with their students how to prepare heart healthy menus.

Now, this is how we really did it in the community. We went block by block by block. Philadelphia probably has the tightest of all of the block captains, or block associations, in the nation. So far, we have worked with about 300, we have about 6,000 in the city. You have 300 blocks doing this and walking clubs all over the city. In Center City, we partnered with the Arthritis Foundation. I had to identify the assets of a community, what already exists. I didn't have any money to create anything; everything that we have done has been built on what already exists. That is the beauty of networking.

The Arthritis Foundation has a program called "Walk With Ease," check the program out in your area. They had the materials and everything needed and we used lay people whom they certified. It is a certificate program, where you have people who can lead walks in their community. We had them work in pairs for every block or some of the blocks work together. So, we see increases every day in Philadelphia now.

Philadelphia has underground concourses throughout the city where people walk even on snowy days like today. We have our cooking schools where we even go into the homes, block by block. We have "Fun, Fit & Free Cooks"—the programs became so popular.

I have a real big staff, no, I take that back. The staff thinks big. There are just two of us, there's me and I raised funds to get the best associate in the world. There are just two of us; so I said, "How can I get this to the average person in the city, to those who can't come out to the public programs? How can we provide materials for those who want to have support groups?" I belong to the Wellness Counsels of America. Years ago, I think that CDC gave us some funding to create a work site program.

The Mayor and I grew up together so I shared this concept with him about ten years ago, and he said: "If I ever decide to run for Mayor, we will want to do this." So, now here's our chance. I took that off the shelf, but we recreated it totally.

### **The "Health Trip"**

Last year, we piloted two trips with our city employees, and in the schools, and the after school program. We called it "Health Trip," and the Mayor wanted to use the number 76 because 76 is a number that means a lot to Philadelphians. You know—"1776," so, every 76 days Philadelphians take a new trip. The first was to "Aerobiquerque," New Mexico, and everybody got their own travel kit. Inside the kit, is the cornerstone of what's most effective. It is a passport—my assistant developed this on her laptop and now we have finally obtained some funding to print it professionally.

Everybody gets their own passport. We use all the jargon of the travel industry, and they even get their picture in it. The Mayor has his. Everybody gets their picture for their passport. When you personalize things, it makes all the difference in the world. Then, they get to "log" their frequent mover miles. These are redeemable for things like pedometers.

The second trip we took was to "Las Veggies." In fact, we're traveling to "Las Veggies" right now. Some city employees are traveling to "Las Veggies," Nevada. We have discovered that 43 percent of those who have traveled so far, over 1,000 of them, are now eating breakfast regularly. Also, almost all of them are walking every day because we have scheduled activities so that they can earn their frequent mover miles.

Some of the other trips were to "Pressureburg, Pennsylvania"; "Cholesterol Springs, Colorado"; "Weightville, West Virginia"; and on and on. Everybody gets a personal exam—we check under the hood for "road travel" before, because we want to be able to measure and know whether or not we did anything positive. We have all of the gyms, health clubs, and Bally's, and on and on where people can come for an hour for those who will do it. We look at their BMI, blood pressure, the four levels of physical fitness, etc. Then, we run this through the computer and they come out with a printed profile. We do that at the end of the ten weeks, and they can see their results. The results are absolutely astounding and dramatic, and we feel that that is because of the camaraderie, support, and accountability. They are accountable to their tour guides and their travel agents. They sign up all over the city for these at travel agencies.

There is one lady, 82 years old, who came through, and she's our cheerleader. Some of our people walk during the lunch hour, participate in scheduled line dancing, and cooking schools every Monday night. We even have children involved in these activities. We have brown bag lunches almost every day. There are a smorgasbord of activities.

### Partnering

We have now partnered with the Food and Nutrition Service. For example, the Mid-Atlantic Region has partnered with us in Philadelphia; along with the U.S. Department of Health and Human Services, Region III; and the President's Council on Physical Fitness and Sports. Using the health trip concept, we have decided to have a "Tri-City Challenge" to see if it works as well in Baltimore and D.C. as it does in Philadelphia.

## Ten Things that We Promote

What are the ten things that we are promoting? The program has to be concise, creative, consistent, doable, and affordable; and for the reasons that you already know, they are effective. Get a buddy, and drink more water; increase your physical activity, and I've shown you how we've done that; enjoy more fruits and veggies; choose foods high in fiber and vegetable protein; breath more deeply; schedule time for rest and play; scheduling and planning your meals, that includes eating a big breakfast and showing people how they can do that. Getting adequate sunlight, many people think that's debatable, but that is still very important, especially for bone development.

We celebrate positive outcomes; every quarter we have a big celebration, and the newspapers print them up. And you know how we celebrated? Climbing rocks. Before that, they were dragging oxygen tanks and couldn't walk from one side of the room to the other. One lady has already lost over 100 pounds. Her children, who were obese at the ages of 8 and 11, are within normal ranges a year and a half later because of positive lifestyle choices, not just following diets.

One lady, a diabetic who had smoked three packs of cigarettes a day, is free of all of that now because of lifestyle changes. Another lady in her late 70s, a great-grandmother, came through our programs and now she is off of her diabetic medication, Type II of course, and she sets up support groups for me all over the city. Another lady had to sneak into our diabetes program. She was a Type I diabetic and didn't know it. We did not know that she was scheduled for amputation below the knee because of gangrene; she came through our two-week intensive living program with Jefferson Hospital Health Systems, the hospital we partner with. Today, a year later, she still has both of her limbs and works as a school nurse. These are the things we are excited about.

We have a lot of people, resistant populations, blacks, those who have faulty genes—they load the gun. But guess what, it's lifestyle that pulls the trigger, and this is what we are trying to share with people.

There is so much more that I want to share. I have learned what I've learned from all that has been mentioned on this stage today. Come to our web site at [www.phila.gov/fitandfun](http://www.phila.gov/fitandfun) or give me a buzz at (215) 686-2128. We will tell you how we did these things, because I think it is a principle of life that we get more when we share more. I am happy to share. Safe traveling to you.

## Topic: Body Walk

**Joyce T. Kemnitz, MS, Team Nutrition Coordinator, Nutrition Services, Kansas Department of Education, Topeka, Kansas**

### What is Body Walk?

Body Walk is an innovative unique way to teach good nutrition and physical activity to students in grades K-5. The Kansas Body Walk exhibit was developed based on Missouri's "Show Me Body Walk." They have had a Body Walk exhibit in Missouri for nine years and although we used a lot of their basic concepts, there were also a lot of substantial changes and things we did differently. Many things were completely new for Kansas, we developed a different script, a new take-home book, and a school manual that was completely different.

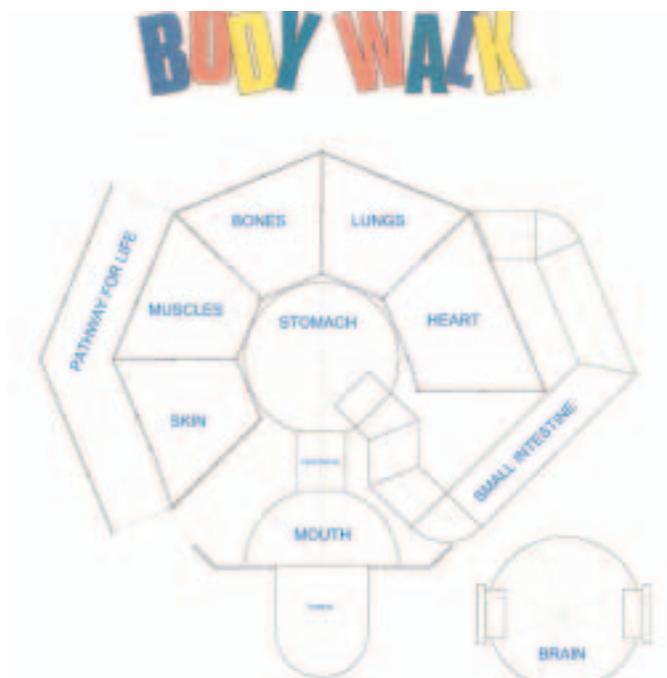
Body Walk consists of a 35' x 40' walk-through exhibit that represents the human body. We also have classroom activities that are provided before and after Body Walk, and resources for teachers. A student activity book and media and publicity information are provided to the schools. Schools use the Body Walk exhibit and its materials to give children repeated opportunities to practice healthy behaviors. Children learn about the digestive system by actually walking through the exhibit. We hope that children will remember the exhibit because it's an active learning experience. They are participating instead of just sitting and listening, so we think that it will be something they remember.

Linking nutrition, health, and physical activity will help reinforce positive health behaviors and raise the value placed on health. Children's eating and health behaviors will improve through learning skills, and there will be a greater awareness among parents, school personnel and community members of the importance of teaching children about practicing healthy behaviors.



## What Does Body Walk Really Look Like?

The brain dome is the first station that students go through, and you can see the diagram here that shows the overall format.



Students go in one ear and out the other. And after they come out of this brain dome they get a food tag that they wear around their neck, and then they are a "food" as they travel through the body. Then they go into the mouth. From the mouth station, students go to the stomach through the esophagus, and then the small intestine. After they leave the small intestine, they're absorbed and then can go to the heart, lungs, bones, muscles, and skin. They leave the skin station through a cut in the skin on the inside of the body and there's a Band-Aid on the outside, so we tell them to turn around and look at the Band-Aid. Then around on the left hand side is the "Pathway for Life," a summary station that recaps everything. Once students are inside the brain dome, they experience brain waves that are provided by battery-powered strobe lights that hook into the ceiling. They also sit on the gray matter, which is the squishy floor of the brain. This exhibit operates completely without electricity. It has no cords and it is also handicap accessible.

Students go through Body Walk in groups of eight to ten. After they leave the brain they're going to get their food tag, and they might be a hamburger, a carrot, or a piece of cheese, or something else. Their food tag also has a nutrient symbol on the back. The tags and the nutrient symbols are used in

various activities as they travel throughout the body. We strongly encourage an adult to go through with each group of eight to ten students to make it go a little more smoothly.

In each station the students are engaged in a five-minute activity presented by a volunteer. The activities help the students learn to make healthy choices. The presenter uses a "flip book." It has a picture on the front for the students to look at and a script on the back of the page. After the presenter has read several sentences he or she flips the page so that there is a new picture. Each station has a flip book with about six to eight pictures on different pages. One of the activities that the students do when they are in the lungs, is to put the straw in their mouth, hold their nose, and breathe through the straw. This is how it would be if you had emphysema or a serious case of asthma, or were not able to breathe well. This helps the students learn why healthy lungs are important. We ask them if they think they would be able to run and play if they had to breathe through this straw, and, of course, they know that that's not the case. But, they are having fun learning this.

### Power Panther and the Body Walk

When we were developing our Body Walk exhibit, Power Panther was the new kid on the block, and we really liked his motto "Eat Smart. Play Hard.™" That was the exact message that we wanted to convey to students. So, the Power Panther became our mascot for Kansas Body Walk. We thought that the theme would help hold together the entire exhibit because we are using either the "Eat Smart" or the "Play Hard" concept or both in every one of the body stations. The original panther did not do all of the things we needed for him to do for this project. If he was going to be part of Body Walk he had to do some other things other than just have his breakfast tray. We approached USDA with the idea of having images of Power Panther performing a variety of actions. Here you can see Power Panther showing his healthy lungs, that's from the lung station. In the middle, he's feeling his healthy smooth skin. On the right side, he's showing you how he flexes his muscles.



We used the image of Power Panther on his roller blades or in-line skates, but we added all of his appropriate safety equipment, i.e., a helmet and pads. We added an image in which he is breathing through his straw and checking his watch to make sure he's getting one hour of physical activity every day. We show an adaptation of the Power Panther eating grapes, in which he is eating strawberries.

### **Timeframe for the Development of the Body Walk**

Early in 2001, like any major project, we started by brainstorming and trying to think what we could do. We visited the "Show Me Body Walk" exhibit in Missouri more than one time to see how their exhibit operated. By the summer of 2001, we were ready to develop the specifications to go out for bid on our exhibit. We also developed what we call a core team. This core team consisted of seven people who provided essential input and served as our review team. We also formed a task force that had its first meeting in September. The task force is a much larger group than the core team, and it represented people with much broader interests. We awarded the contract for the exhibit in September and started working on the development of the exhibit materials. In the spring of 2002, we went out to bid on the truck that would transport the Body Walk exhibit. In March, exactly a year since we announced the exhibit, we started scheduling it for schools to use in this current school year. During the summer of 2002, we hired staff and piloted the exhibit in a local school district in Topeka, where our offices are located. On September 3, 2002, Body Walk officially hit the road.

### **Body Walk Core Team and Task Force**

Our core team consisted of our State director, two school food service consultants on our staff, both of whom were dietitians (a part-time and a full-time person), our staff development specialist that works with all of our trainings, a second grade teacher, and myself. We reviewed all the concepts, materials, and scripts for clarity. One of the school food service consultants had small children and she tried everything at home with them. In September, our task force met and reacted to many of the ideas that the core team had developed. We were able to incorporate many of the task force's suggestions into Body Walk. Additional members represented on the Task Force include:

### Body Walk Task Force...

- School Administrator
- School Nurse
- Classroom Teachers
- PE Teacher
- American Lung Association
- American Heart Association
- American Cancer Society



### Task Force, continued...

- Kansas Dental Association
- Kansas Council on Fitness
- Midwest Dairy Council
- Blue Cross Blue Shield
- KSFSA
- K-State Research & Extension
- Kansas Dept of Health & Environment

## Scheduling the Body Walk

We received many questions when we got ready to schedule Body Walk. We wondered where, when, and how far we would travel and what we were going to do if we received too few or too many requests. We decided to go to as many different communities as we could in the first year. We also decided to stay in the Topeka area during the first month so that we would be a little bit closer if some of us needed to help out. We decided to go to certain areas of Kansas during times when the weather was less severe and they are less likely to cancel school. This way our truck would not be on the road when the weather was bad.

After we mailed the announcement about scheduling Body Walk, we received 200 requests by the deadline date, but we only had 140 available days. So we had to turn away requests in the first year. Some schools were very disappointed. We entered all these requests into an Access database in our Topeka office; it generated all the letters, bills, etc. Body Walk is scheduled to visit schools Tuesday through Friday. We have 303 unified school districts in Kansas, about 185,000 K through five students and about 850 elementary schools. We estimated that during our first year we would reach 30,000 students through Body Walk, but as of 2/21/03 we had reached over 25,000.

## Body Walk Materials Development

We developed the following materials: scripts for each body station, flip books for presenters, station activities, props, Body Walk school manual,

and a student activity book. Here is more detail on the process:

- **Scripts for each body station:**  
For the scripts, we developed initial key concepts and then more detailed concepts, key outcomes and then a framework. In the framework, revisions were made throughout the process. For example, for the script for the mouth station, we talked about what this body part does, how we can eat smart to make this body part healthy, how we can play hard to make this body part healthy, and what else we can do to make this body part healthy. We had answered these questions for each of the body stations.
- **School manual:**  
We developed a Body Walk school manual in the format of a full color notebook. It is sent to each school about six weeks prior to the time Body Walk visits. It includes general information, policies and procedures, suggested classroom activities, and instructions and scripts for presenters. The scripts are the same as those in the flip books. There are also web sites for teachers, resource lists, and information on working with the media. The appendix has all the forms that a school should need, different letters, a newsletter to go home, and news media releases. Everything is on a diskette in the back of the notebook, so the school can just plug it in for an electronic copy of the information. Kansas was one of the four States that participated in the Team Nutrition Demonstration Project, and as a result of this project, we were accustomed to working with materials using the six Team Nutrition channels (classroom, home, cafeteria, school-wide, community, and media). This fit perfectly with Body Walk, so the information in our school manual is organized using the communication channels.
- **Student activity book:**  
This is a 24-page full color book. We used Power Panther throughout the book. It has all kinds of activities that kids can do, and we have had a very good response to these books.

### **The Body Walk Truck**

Arrangements were made with the State Central Motor Pool for the Body Walk truck to be purchased, and then we lease the truck on a monthly basis. We had to write the specifications for the truck and had a local car

dealer help us write those specifications. One of the things we learned was that you didn't just buy a complete truck. You bought the frame and the cab, and then the box was put on separately. Then, the artwork was added separately. Getting all these steps completed involved coordination.

### **Search for a Body Walk Manager**

We began the search for a Body Walk manager in about June 2002. We received 75 applicants for this job. During the interviews, it became apparent that people didn't realize the extent of the travel with this position. But, we were successful in hiring our Body Walk manager and three substitutes.

### **Training the Body Walk Staff**

In August 2002, we had a week of training for all of the staff. We talked about everything, from "What is Body Walk?" to "truck training." Our transportation unit that works with school bus safety did the training on driving the truck.

### **Tami Meiners, Body Walk Manager, Nutrition Services, Kansas Department of Education, Topeka, Kansas**

### **Setting Up Body Walk**

The substitutes and I had two major tasks when we first started this job, first to get familiar with all the scripts and materials, find out what Body Walk was, and be able to present that to the schools. The other major part is to learn how to set up the exhibit, take it down, and deal with any problems.

The Body Walk exhibit is made up of a metal frame with a vinyl cover placed over the top of it, and then each of the stations is connected with Velcro. This exhibit wouldn't exist without Velcro. Eight to ten volunteers are needed to set up and take down the exhibit. There are 11 stations so we need 12 to 24 presenters. So this is a community-wide activity and requires a lot of coordination from the school coordinator.

The first time we set up Body Walk—what an experience! It took us over seven hours to set it up the first time, and that's when I was starting to rethink my job. Within a week we had the set-up down to three hours, which

I thought was pretty good, but the volunteers didn't agree as we were setting up. To help us remember how the exhibit was put together, we created set-up books with pictures to show what we were building. At that point we did not have the website up so everybody thought this was a blow-up exhibit. The set-up time still varies according to the abilities of the volunteers. The volunteers need to be physically capable and have the mentality of "you came here to work." With eight to ten willing volunteers, the current set-up time is consistently between two and two and half hours.

Each week, I stop into the office and pick up my traveling information, which includes my hotel reservations, school contact information, and information from the schools from the program coordinator. The coordinator obtains the set-up time, the start time, and the take-down time, and I call the Monday before and verify this information (which usually changes). If I don't make that call, I could show up two hours late and the volunteers have already left or I could show up early and have to wait. It is very important to communicate with the schools before you show up.

We usually set up the night before at a school. My traveling day is Monday, we get to school Monday night and set up. However, it depends on the school, we can set up at 3:00 in the afternoon or we can set up at 10:00 at night. Then, we are at the school during the day, and we take down after the last student is all the way through. Once I arrive at the school gym, I make sure that there is space available. Even though we specify our space requirements, not all schools measure their gyms. This can be a problem because this exhibit can't be shrunk down. It's definitely 35' x 40'.

During set-up, after all the framework and vinyl pieces are put together, panels get put up on poles, then the ceiling mesh is placed on top, and curtains are put up. The set-up process has to be clearly explained to the volunteers. After the Body Walk exhibit is set up, (an extremely fast paced and tiresome process), the volunteers enjoy being part of the Body Walk experience. They look back and say, "We just built that!"

### **The Day of Body Walk**

The school coordinator (the school contact person) is responsible for finding the 12 to 24 presenters in each of the 11 stations and for assigning the volunteers a script at least a few days in advance. The volunteers do not always get the script much in advance, and then they feel

a little rushed. Ideally, the school should provide the scripts ahead of time to the presenters so they can practice. The presenters come in about 15 minutes before the kids and I answer all of their questions. Usually, if they read through their script, they know when to use their props.

Prop boxes (storage containers) hold all of the presenters' props, station scripts, the flip books that I previously mentioned, and a folding chair to sit on in each of the stations. The prop box lid has a list of what should be in that box. I use the list to determine when I need to replace things, if they've been taken or broken—it seems to be a good system so far. Some of the most enjoyable props are the tooth stools for the kids to sit on. Another thing that kids enjoy is learning to floss and brush their teeth properly.

The strobe lights in the brain previously mentioned are there to show that each flash simulates a thought from your brain to your body. There is also a pulse stick in the heart station, and it measures your pulse. The kids jump up and down ten times and then they put their hands on the pulse stick again; this shows why it is important to exercise and to get your heart strong. There is a replica of a smoker's lung that is a real pig lung that is colored black; this seems to be the most memorable thing for the kids. This is by far one of the best props.

We also have fake "germs;" it is an orange kind of glow germ I think they call it which can be sprayed on hands and illuminated with a black light—some people may have used it in training. We use this product in the skin station to represent how germs are transferred from one student to the next. We say, "Can you see germs?," put the black light on, and then have them shake another child's hand and show the transfer. In the small intestine, with the villi hanging down, the kids get to walk through that and it goes through their hair and they say, "Ooh, this is gross," but they really enjoy this station.

Each station presenter is encouraged to wear a costume to play the part. For example, presenters in the brain have worn a cape with lighting bolts on it. One man used a gray stuffed cloth with brain creases drawn in it. In the mouth, a common costume is a lab coat with rubber gloves. Volunteers in the stomach have made necklaces with plastic food models or have pinned pictures of food on their clothes or stuffed their sleeves with socks to make muscles for the muscle station. We have provided a hard hat for those in the bone station, and they can dress it up with a tool belt or any other thing. Presenters can personalize each of their stations but still keep

carrying that message through. In the skin station, we supply a hat because we talk about protective covering from the sun or they bring beach towels or bottles of sunscreen to show the kids.

Some schools reinforce Power Panther's "Eat Smart. Play Hard.™" message by serving a healthy snack at the end of the Body Walk tour. Those snacks have included bottled water, and fruits and vegetables like carrots or sliced apples in bags. Others have prepared goody bags, which include things like toothbrushes, Band-Aids, or Power Panther stickers. Each student also receives the Body Walk student activity book to share with his or her parents. It includes a letter addressed to the parents that explains why it's important to have good nutrition.

### **Taking Down the Exhibit**

The take down takes about one hour to one hour and 15 minutes. This means that the exhibit is loaded and ready to go—the time depends on the number of volunteers and how fast they get started. Each piece of vinyl must be folded in its assigned bag and the metal framework pieces are wrapped in a flat canvas bag. Then, the remaining pieces are stacked in order to ensure an easy set-up for the next school. There are lists to make sure that they all come out in order, and all go back in order. The heaviest item would be about 30 pounds, but most items are fairly light stuff for the volunteers to work with.

Before I leave the school, the school coordinator fills out a participation report, which is a record of the number of students that went through and the number of volunteers and teachers that helped out in the day (including for set-up, take down, and presenting). I turn the participation reports into the program consultant at the Kansas State Department of Education and a billing statement is generated from the numbers.

There is an evaluation that the school sends in after I leave. This asks if they are using the student activity books, and requests information about the activities, different suggestions for other years, and reactions from the students, the volunteers, and the teachers.

### **Community Partnerships**

Many community members are involved in this project—with the volunteers alone helping with set-up, take down, and presenting—that is about 20 to 40 people. A variety of community members have been involved in all

aspects of Body Walk. In some communities, the Extension Service has taken care of the bill, as far as paying for the students, and they have also worked as the school coordinators in schools. Other coordinators have been food service directors, physical education teachers, principals, school nurses, or other community members.

For volunteers, the schools have used a variety of people such as nursing students, community groups, PTA members, or high school students. We charge one dollar per student with a minimum of a \$100 and a maximum of \$300 for the exhibit; a maximum of 500 students can go through Body Walk. To help defray some of the cost of Body Walk, local businesses have donated money and the Extension office has also put money towards this. Students have been asked to bring a dollar to school; some communities can't do this, others can. Grants have also been written to help defray some of those costs.

Rural communities tend to express a little more enthusiasm than urban communities for Body Walk. If you can imagine western Kansas, you can drive for about an hour and literally not see anything. Usually when I show up they are so excited about it, everybody knows each other, they have the whole community there, and so it's really nice. The volunteers at the rural areas seem to form a more cohesive group and work together a little bit better. Since September, over 2,200 volunteers have taken part in Body Walk.

### Interesting Occurrences

We talked about the possibility of kids getting sick in this exhibit. We had a third grader get sick in the stomach, he vomited, and I didn't know it was happening until about 25 students came running out screaming, crying, plugging their noses—it was interesting. We found out later that he came to school sick but wanted to go through Body Walk so bad that he wouldn't tell the school nurse, so I guess I could excuse that.

It is a common occurrence for volunteers to not show up, so it's very important for the school coordinator to have back-ups. In smaller communities, it is hard to have back-ups, but you just kind of deal with it. It also may take more time to set up or take down, but we get it done.

In one school, I arrived at 8:30 p.m. to set up and there was a basketball game that was at half time. So, I spent the next hour watching the rest of the basketball game, and had to wait for the students and parents to clear

out, and for them to sweep the floor. Then, we got started about 10:00 at night, so that makes for an early morning that next day. The volunteers had been waiting around for that long, too, so you have to expect things like that to happen.

The overall reaction from all involved has been extremely positive. Volunteers have fun interacting with the kids, the teachers praise the unique hands-on approach to learning, and the kids can't stop talking about the activities they were involved in. One student even said that Body Walk is better than recess, and I think that that says a lot about how much fun they have in there and how educational it is, and they don't even realize it.

### **Body Walk – The Idea**

Body Walk originated from the Missouri Nutrition Education and Training (NET) Program's "Show Me Body Walk." In 1999, when we were writing our Team Nutrition Demonstration Project (TNDP) grant application, Body Walk seemed to fit into these goals. We contracted with Missouri Body Walk to come and visit our schools participating in the Team Nutrition Demonstration Project.

### **The Bid Process**

Our RFP called for a negotiated bid but not necessarily a low bid. Our initial RFP was for design and construction of the exhibit only. The intent was to go out to bid later for the graphics. It became apparent very early that the graphics were an integral part of the exhibit. We were permitted to amend our contract with the group that won the contract and this took care of that potential problem.

### **Challenges:**

#### **Excessive work hours**

One challenge was that soon after starting work, Tami, the Body Walk manager was working 70 hours a week—this was not too good. The excessive hours probably were related to the distance that has to be traveled between schools in Kansas. So, we now have another staff member, Kathy, who works at least one week a month on the truck instead of the manager to reduce the manager's hours. Also, the substitutes work with the manager as their schedule permits. It is good to stay familiar with setting the exhibit up. So, we try to schedule the substitutes to go to the

school on days when she has 500 students rather than 80, and assist with that—this keeps the substitutes fresh.

### **Insurance**

Another challenge is that Kansas has self-insurance, and we were told that we were not going to be allowed to insure the truck or the exhibit. Thus, if anything happened to either, we were responsible for replacing them. We now have a bid out for insurance on the truck and the exhibit, but it has been operating all this time with no insurance—a scary thought.

### **Storage of materials**

After we had 60,000 student activity books delivered, we rented space across the street from our office in Topeka. This worked well because Tami can pick up the books every Monday. Another problem that we had with the books was that they are colorful and were being picked up in handfuls. Now they are counted out and labeled by school so that we are not distributing more books than intended.

### **The Sock/Shoe Issue**

We started Body Walk in August and did not anticipate kids coming to school barefoot or in sandals. We discussed whether it was sanitary for kids to go through the exhibit in their bare feet. They could not go through in their shoes because shoes eventually wear on the vinyl floor. We now have "loaner socks," for kids to wear in the exhibit. Next year we may ask schools to consider having a "crazy sock day" on the day Body Walk comes; this would encourage kids to wear socks. The teachers have done a good job of making sure that kids have socks. But, they really panic if a child does not have a pair of socks and thus will not get to go through Body Walk.

### **Funding for development**

The actual exhibit cost was about \$132,000, largely funded by State Administrative Expense (SAE) funds.

### **Body Walk Web Site**

We have a web site, [www.bodywalk.org](http://www.bodywalk.org), which is maintained by one of the programmer analysts in our Nutrition Services Section. The home page has tabs across the top. If you click on the Power Panther tab, you can automatically link to the USDA web site and order materials. You can see the stations, and the travel schedule in terms of where the truck is during the week, the schedule for the entire school year, many pictures, and the school manual.

## What We Have Learned

Some of the things we are thinking about changing for the next school year:

- Add pictures of Body Walk in our announcement flier—many schools did not know what this exhibit looked like.
- Add suggestions for how Body Walk might be funded.
- Emphasize how many volunteers are needed.
- Discuss adequate space requirements for Body Walk.
- On staffing pattern: we have three wonderful substitutes that work on Body Walk—we are considering the possibility of sending people out one week at a time.

Big complex projects like this are rewarding to the people who worked on the development and beneficial to thousands of students. We have met thousands of new people and established positive relationships within the communities across the State. We receive calls and e-mails on a regular basis; people want to know how they can get Body Walk and when it is going to be in their area. The reaction from teachers has been overwhelmingly positive. You need to hire the right people to do the job that you want done, such as detail-oriented people that can do more than one type of thing at a time. For example, at the same time we were trying to work with the contractor, we were buying a truck, and writing materials, including scripts, a school manual, and a student activity book.

The person that travels with the truck has to be flexible and have no home life at all, because they are gone so much. They have to be able to work well with others and deal with the situations that come up on a daily basis. The person working on a daily basis with this exhibit has to be extremely patient. You have to have somebody that is willing to take that responsibility and work with it daily.

Was it worth it? Yes, it was worth it. We have had the opportunity to reach thousands of students with this "Eat Smart. Play Hard.™" message. We want to stress that that message has helped the exhibit hang together. That has probably been part of the success of it. Would we do it again? Yes, we would do it again. It was lots of work but it is definitely a worthwhile project, and we're scheduling now for the next school year.

## Visions for the Future: Building Partnerships and Collaborations that Work

**Moderator: Kate Coler, Deputy Administrator, Food Stamp Program, Food and Nutrition Service, US Department of Agriculture, Alexandria, Virginia**

### Putting the Vision into Action

**Roberto Salazar, Administrator, Food and Nutrition Service, US Department of Agriculture, Alexandria, Virginia**

Good afternoon! What an exciting three days we have spent together! I know that I am ready to get back to work *reenergized* and *renewed*, thanks to the wonderful exchange of ideas and solutions that we've all shared.

We have already seen what this diverse group of committed professionals can do together. The State plans that were just presented are more than just impressive—they're awesome! This just goes to show that, working together we can have a positive effect on the people we serve.

Our nutrition assistance programs play a crucial role in supporting the President's HealthierUS Initiative. We each have a responsibility for teaching and motivating people to make those simple changes in nutrition and other physical activity that will improve the quality of their lives...to Eat Smart and Play Hard! Working together, as individuals and as programs, we can draw from each other's strengths, expertise, and experience.

We started this conference with the idea that we had a historic opportunity to make a real difference. As you prepare to go home, it's clear to me that each of you is committed to following through on that opportunity. You have ideas for cross-program efforts and collaborations, and you have been able to make new contacts with those who share your interests as well as your challenges.

I also urge you to go home and arrange meetings with colleagues and partners who were not able to attend the conference. Let them know about the State plans and about all that you have learned and shared during these three days.



We all know that we can't reach our goals alone, so waste no time in inviting others to share in the process. We have to move forward and see concrete results—millions of people across America are counting on us to fulfill our promise of improving their lives. Getting America to Eat Smart and Play Hard!

Haven't you seen eyes go glassy when the word "nutrition" is mentioned? For most people, nutrition is as mystifying as "economics," but *you* have an opportunity to make "nutrition" more than just the name for a dry scientific discipline.

Show them that eating the right foods and getting enough exercise is not only achievable, but it is also the key to a better and happier life. Help America Eat Smart and Play Hard! As Secretary Veneman said, improving your health through better nutrition and exercise is not only a simple course of action, it may be one of the few things that we can control in our lives!

Most importantly, stay connected to each other and to our shared goals. This will not be an easy journey, but it is one that we must make. I know that the creative and dedicated people in this room are the ones who will make the vision of a healthier America a reality.

On behalf of the entire team at USDA's Food and Nutrition Service, thank you again for sharing your time with us, and have a safe trip home.

### **American School Food Service Association Viewpoint**

#### **Gaye Lynn MacDonald, SFNS, President, American School Food Service Association, Alexandria, Virginia**

Founded in 1946, the American School Food Service Association (ASFSA) focuses on professional development, legislative advocacy, and communicating information to 55,000 members through ASFSA's award winning website, publications, and educational conferences. ASFSA's sister organization, the Child Nutrition Foundation, works to raise funds for professional development and outreach programs, as well as providing members with scholarship opportunities.

There is no one cause, or solution, to the problem of childhood overweight and obesity. ASFSA reinforces the priorities of good nutrition for children and providing safe, healthful meals by collaborations with like-minded organizations:

- CDC (Centers for Disease Control and Prevention): food safety initiatives, including collaboration on a Food-Safe Schools Action Guide.
- USDA (United States Department of Agriculture): fruit and vegetable pilots, summer food service program, school breakfast, school community kitchens, child nutrition legislation reauthorization.
- SNE (Society for Nutrition Education) and ADA (American Dietetic Association): joint position statement with ASFSA on Healthy Childhood Weight.
- NFSMI (National Food Service Management Institute): a variety of training tools and resources relating to nutrition, food preparation and child nutrition program management.
- PBHF (Produce for Better Health Foundation): fruit and vegetable pilots.

ASFSA's 52 State affiliates pursue professional development, State legislative advocacy, and networking. The Healthy Schools Summit in the fall of 2002 generated Alliance for Healthy Kids teams in each State that are pursuing nutrition-related agendas. Over 20 States have pending legislation relating to foods sold in competition with school meals or soft drinks sold in schools.

Teamwork at the local level that includes all stakeholders is crucial to making meaningful change to create healthy school nutrition environments:

- Nutrition Advisory Councils: school site-based student groups who work on nutrition awareness and act as peer mentors on nutrition related issues.
- Local school districts have partnered with hospital nutrition centers and various fruit and vegetable commissions on a variety of nutrition awareness activities.

Teamwork is the key: TEAM - Together Everyone Achieves More.

## American Public Human Services Association Viewpoint

### Jerry Friedman, Executive Director, American Public Human Services Association, Washington, DC

Thank you for the opportunity to participate in this wonderful conference.

The American Public Human Services Association (APHSA) is a 73-year old bi-partisan organization representing all States and territories. This includes:

- State commissioners and secretaries,
- Several hundred local jurisdictions,
- Several thousand individual members.

APHSA also serves as an umbrella organization for ten affiliated associations—including Food Stamp Directors. APHSA is unique among associations for its holistic perspective and a constituency that includes chief State policy makers and managers, local implementers, and individual practitioners that collectively reach more than 1 in 5 Americans yearly.

In terms of nutrition education, I would contend that this initiative presents a wonderful window of opportunity for collaboration between USDA and APHSA. APHSA supports your efforts to improve this country's dietary habits and behaviors.

We would like to extend our vast network to you in this effort. Some possibilities include:

- Access to web site with links,
- Participation in national and affiliate meetings,
- Contributing to our publications and member communications,
- Showcasing best practices,
- Incorporate nutrition education into our orientation and training curriculum for human service professionals,
- Working with our members to get nutrition education on their radar screen and incorporated into their practice.

These are just several ways that we can partner with USDA and the caring community.

From our perspective, the challenge is indeed profound. All of us, at whatever income level, are bombarded daily with a vast array of unhealthy foods that are made even more appealing through advertising, speed and packaging. We believe that what is needed is a multi-pronged approach and constant reinforcement.

First however, in order to concentrate on sensible choices and healthy diets, low-income families must first have the means to purchase healthy foods and have access to adequate shopping choices. The Food Stamp Program and WIC are the primary and best means to this end.

APHSA was thrilled with USDA's leadership and our partnership role in the passage of last year's Farm Bill. Good public policy planning and collaboration resulted in simplification, strengthened benefits, and improved access to the Food Stamp Program. APHSA's focus now is on working with our members on Farm Bill implementation and embracing best practices to insure that nutrition education is fully integrated into these efforts.

I believe that there is one other important consideration and reason for APHSA to be involved and support this effort.

After 33 years in public administration, I have lived through the ups and downs of human services resource allocation. It is my observation that during tough budget times we have a tendency to do two stupid things:

- Cut education and training
- Eliminate or reduce prevention programs.

This occurs in spite of independent research that estimates savings of \$6 to \$12 in treatment for every \$1 spent on prevention. It's public policy that is indeed "penny wise—pound foolish."

Nutrition education provides a low cost way in tough times to reverse that trend—potential exists to do the right thing and to do it right. The nutrition education initiative is especially timely given new research on the state of the nation's health and obesity. Better education and understanding of the importance of good nutrition is even more essential today.

Thanks for including APHSA as a partner.

We look forward to working with you.

## National WIC Association Viewpoint

**Jill Leppert, LRD, President, National WIC Association, Washington, DC**

Good afternoon. It is a pleasure for me to speak on behalf of the National WIC Association (NWA). The theme of the conference is collaboration and I have been asked to talk about collaborative efforts in the WIC Program.

I would like to discuss this from the national, State, and local perspective.

Nationally, NWA works closely with the national WIC Program at the Food and Nutrition Service (FNS). We have a great relationship with FNS and have worked on several projects together.

NWA and FNS have collaborated on projects such as developing aspects of WIC funding formulas, establishing standardized nutrition risk criteria, revising the WIC food package, developing strategies for immunizations, and various legislative agenda items. NWA has sought many regulatory changes through FNS that have improved the WIC Program. As a result of the work we do together, we have a better WIC Program that has improved services to the most important people in our program — the moms, infants, and children on WIC.

NWA also works at the national level as members of the USDA Breastfeeding Promotion Consortium, the National Alliance for Nutrition and Activity, the United States Breastfeeding Committee, the National Council on Folic Acid, the National Healthy Mothers, Healthy Babies Coalition, the Society for Nutrition Education, and the CDC Nutrition and Physical Activity Work Group. In addition, NWA works with the other hunger advocacy groups, and the American Dietetic Association (ADA) to promote advancement of our legislative agenda. Some of the recent collaborative efforts included providing input to the ADA and American Academy of Pediatrics on the development of policy statements, and testifying for the Produce for Better Health Foundation in the promotion of the 5-A-Day Program.

Much of what you see on the national level is duplicated on the State and local agency levels. For example, WIC is actively involved across the breastfeeding spectrum at all levels. In fact, most of the State and local breastfeeding coalitions are initiated by the WIC Program. Other State and local WIC Programs are involved in 5-A-Day promotion, folic acid promotion, immunization awareness, ready to learn initiatives, and many others that encourage healthy eating and physical activity.

WIC is a premier public health nutrition program. It is through the collaborative spirits of its staff and our partners that the program enjoys its' success. Thanks to all of you for your support.

## Closing Remarks

### **Suzanne Biermann, Deputy Under Secretary, Food, Nutrition, and Consumer Services, US Department of Agriculture, Washington, DC**

Good afternoon! Well...we are finally winding down on this historic conference. Over the past 3 days, Under Secretary Bost and myself have mingled amongst you. We have been so impressed by the wonderful and diverse participation from almost all 50 States, our fellow Federal agencies, and our partners from the advocacy and academic communities. The enthusiasm you have is infectious. The passion for your work is evident.

I know that you have heard this several times, but this conference is unique in many respects. Not only is it the first agency-wide National Nutrition Education Conference, but it's also the first time that we have come together to work *in* and *across* our programs *with* each other. Representatives from FNS, our State partners, association members and staff from our sister Federal agencies have worked tirelessly to produce presentations and exhibits, review abstracts, served on planning committees, and moderated panels. I hope you will all agree that the result of all those efforts has been an event that we can be proud of. From start to finish, this conference has been a model of what true partnerships can and should be.

Secretary Veneman said in her remarks yesterday morning that the President has a clear vision for a nation where we all work together to create environments that support healthier lifestyles. The strengthening of relationships done here will lead the way in making that vision a reality.

For example, in Monday's "Connecting for Success Networking Session," you were able to work with your State and local counterparts to establish goals, objectives, and tactics to link nutrition education across food assistance programs in your respective State. Now, at the close of this conference, we hope you will continue working together, and with us, to keep the momentum going in making tangible, meaningful progress.

As most of you know, USDA's nutrition assistance programs serve millions of needy people in this country. In fact, 1 out of every 6 people in America participates in an FNS program. This gives us the opportunity to affect a significant number of people in improving their nutritional well-being. Most of our clients suffer from a disproportionate share of diet-related problems and risk factors, especially those related to overweight and obesity. Together we have the tools and the know-how to help them make lifestyle changes. But, we need to mobilize our communities to join us in the effort.

This conference has helped us identify where we need to continue to focus our energies—especially in promoting healthy eating and active lifestyles, healthy community and school nutrition environments, breastfeeding, and the increased consumption of fruits and vegetables. But, the conference has also emphasized that we must all also seek out opportunities to leverage our collective resources and to learn from each other and to share what works.

We *know* what the priorities are...now we need to unify our vision on *how* we achieve them. I would like to spend a few moments sharing the vision of Under Secretary Bost and myself on the future of nutrition education within our programs and how we can—together—reach our shared goals.

First, we must work across programs to implement more comprehensive, integrated, and sustainable nutrition education at the community level. Secretary Veneman pointed out yesterday that the President's FY 2004 budget request included a record \$528 million earmarked for nutrition education. An example of recent efforts to make nutrition education a *truly* integral part of our programs comes from our Southeast Region where six of their eight States have developed integrated strategic plans for nutrition education.

Second, our vision also includes creating a clear linkage between food assistance benefits, nutrition education, and promoting active lifestyles for better health. The President's FY 2004 budget supports this by establishing a cross-program framework for nutrition education to make sure that our approach and our message are coordinated, comprehensive, and family-oriented in *all* our programs. Even so, we have been making great strides in this direction already. For instance, our Midwest Region has worked on a sustainable nutrition intervention that is the result of an integrated partnership with the Food Distribution Program on Indian Reservations in Wisconsin, the National School Lunch Program, the University of Wisconsin, and the National Institutes of Health. A regional Nutrition Advisory Council has been established and a curriculum has been developed for Native-Americans that assist teachers in incorporating nutrition education and physical activity in the classroom. It's this type of collaboration and partnership that is needed at all levels.

A third part of our vision focuses on working closely with our community action partners who support and help deliver our messages about nutrition and health. You have heard both Secretary Veneman and Under Secretary Bost say that Government can't do this alone...it takes all of us rolling up our shirt sleeves together. A good example of this is the work that Catholic Charities does by operating 18 WIC Food Centers in under-served Chicago neighborhoods. These unique WIC Food Centers serve 75,000 women and their children each month. Some of the centers provide one-stop shopping in WIC services, Head Start, family case management, health services, and day care. This approach provides us with a wonderful, integrated way to promote our nutritional messages.

And lastly, we must focus and harness our efforts in a common direction so that the public does not get lost in the current maze of nutrition information. We need to clearly define the role that our individual agencies, programs, and projects play in reaching our goals. For instance, our Southeast Region just completed a nutrition publication entitled, "Promoting Partnerships—A Bridge Between Nutrition and Health" which focuses on an integrated partnership approach with its States. The publication covers chronic diseases, obesity trends, the working coalitions in each State, and a challenge for the future.

Another example is our Team Nutrition materials that are offered to all schools. These materials provide information to administrators, teachers, parents, and the community on how to establish and improve lifelong eating and physical activity behaviors among our children. As you have seen in sessions at this conference, the "Eat Smart. Play Hard.™" campaign can be adapted to best serve the needs of your communities. You can also check out many other materials that are available on our website. You'll find model programs, best practices, and information on other efforts from across the country.

These are the 4 items that comprise our vision:

- 1) Establishing an integrated nutrition education framework;
- 2) Delivering consistent, comprehensive, family-oriented nutrition messages;
- 3) Fostering greater partnership and collaboration with States and local and private community organizations; and
- 4) Harnessing our collective communication tools in a manner that focuses the information rather than overloads the public.

As with any vision, we need to give life to it by making it real, by making it achievable. You can help us in this effort by contacting your Regional Office or our office here in Washington, D.C. to let us know about your ideas and tell us about the wonderful projects and activities that you have already undertaken. We want to hear about these efforts and to connect these efforts nationally.

But perhaps most important of all, I want to challenge each of you to join the President in his HealthierUS vision by being role models for healthy, active lifestyles. As Roberto said...*Show* people how to make healthy choices wherever you are – in WIC clinics, in classrooms, in food stamp offices, at your *own* worksite. *You* can be a positive influence and motivate those around you to make healthy choices if you show them the way.

I know that despite our best efforts and intentions, we are still going to face huge challenges and barriers in pursuing our vision. However, I also know that if we continue the dialogue begun here, build on the ideas that have surfaced through the synergy of this conference, and harness and leverage the resources available to us, we *will* overcome those challenges.

Thanks to all of you for your commitment and your dedication to those whose needs are greater than they can handle alone.

And thank you again for taking the time to attend this historic conference. I wish everyone a safe trip back home...wherever that may be.

## Connecting for Success State Nutrition Action Plans

A major focus of the conference was promoting collaboration and the use of integrated nutrition education approaches across FNS programs. FNS organized facilitated networking sessions and invited States to designate staff to represent their program in sessions.

Over 300 individuals, representing State agencies that administer the FNS programs in 49 States, the District of Columbia and the Virgin Islands, met in State groups during networking sessions. The purpose was to identify common goals and formulate State Nutrition Action Plans for working together across programs to achieve the selected goals and objectives.

### What did the States decide? Here are the results:

- 21 States will work to foster partnerships and collaboration among FNS and other programs to promote healthy weight,
- 20 States agreed to promote healthy eating and physical activity per the Dietary Guidelines for Americans,
- 5 States will promote and encourage collaborative interventions to increase consumption of fruits and vegetables,
- 3 States plan to educate parents, teachers, and other adults about the importance of being good role models of healthy eating and physically active lifestyles,
- 1 State will focus on promoting healthy nutrition environments in schools including physical activity and related policies, and
- 1 State plans to conduct a campaign to promote increase intake of fruits and vegetables.

These State plans are the "State Nutrition Action Plans" (SNAPs). The SNAPs focus on a single goal and promote collaboration and joint planning to establish common objectives and tactics for achieving the selected goal. State teams, consisting of key staff representing USDA nutrition assistance programs, are working to refine the SNAP for their State. FNS is facilitating and supporting this process by providing technical assistance and support to States.

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