Barriers to a Good Nutrition Environment in the Middle Grades:

Views from School Administrators, Teachers, and Foodservice Administrators

HEALTHY EATING is an important life skill for people of all ages. It is especially important for children to help them grow, develop, and do well in school. Healthy eating has been shown to prevent childhood and adolescent health problems such as obesity, eating disorders, dental caries, and iron deficiency anemia. It can also lower the risk of future chronic diseases such as heart disease, stroke, diabetes, and cancer, and reduce potential health care costs (USDA, 2000). Nutrition is important for children at all ages; however, it is extremely important for children in middle grades who are experiencing great changes in their physical and psychological devel

changes in their physical and psychological development. Students spend up to one-third of their day in the school environment, and many consume two of their main meals within this time. During a school day, students may experience many conflicting factors that compete with creating a good nutrition environment that encourages healthy eating behaviors. To determine the status of the nutrition environment for middle grades nationwide, the Applied Research Division of the National Food Service Management Institute conducted a focus-group study with school administrators (principals and superintendents), educators (teachers and coaches), and foodservice administrators (directors and managers). These three groups were selected because they represented the types of individuals who are able to keenly observe the school nutrition environment and serve in influential roles for making changes relating to the school nutrition environment. The main goal of the focus groups was to identify the nature of the nutrition environment in the middle grades. Overall, participants did not think that middle schools' environments were conducive to good eating behaviors. Recommendations included the development of an advertising campaign using a national spokesperson, such as a nationally recognized sports figure or a popular musician, to promote good nutrition.

The Answer Is...

MORNING FOCUS GROUP SESSIONS

The following is a summary of all of the focus group responses for the key question, "What are the barriers to promoting healthy eating behaviors in your school?" Quotations are identified according to the group providing the information.

MONEY

Money was the most commonly mentioned barrier at all three of the focus group sessions. The issue appeared to be divided into two areas. The first area was the revenue generated from nonnutritious food sales. For the foodservice program, the a la carte items, often chips and cookies, were a necessity to be able to operate "in the black." "To make money we have to sell a la carte (junk) food. I think we are part of the problem." (FOODSERVICE ADMINISTRATOR) The club's sponsors saw candy, etc. sales revenue as an easy addition to their budgets. Administrators saw concession stands and vending machine monies as supplements to local funding allocations. The second area was the money students possess to make purchases. Even students eligible for free and reduced priced meals have money to purchase the less healthful food items from vending and a la carte offerings. In some locations, there is a social stigma associated with qualifying for free and reduced priced meals. Not all schools have been able to overcome the difficulties of differentiating

The Answer Is...

MORNING FOCUS GROUP SESSIONS (cont'd)

between those students on free and reduced priced meals and those who are not. Therefore, students who qualify for free and reduced meals often do not eat those meals.

CAFETERIA ATMOSPHERE

The cafeteria or dining atmosphere was the second most mentioned barrier by the participants. Participants noted long lines, outdated facilities, and overcrowded conditions as not being conducive to students making good eating decisions. Frequently, students skipped meals or ate foods from vending machines. Some focus group participants shared that changes in furniture and long-term upgrades in the cafeteria itself have made significant differences. "You may have adequate money to cover preparation costs, labor costs, food supplies ... but if you need to update environment, you need better equipment, the kind the kids see in the fast food restaurants instead of the long lines of the stereotypical school foodservice serving line. To get that type of setting it takes dollars, and there is nobody who is going to give it to you." (FOODSER-VICE ADMINISTRATOR)

SCHOOL POLICY

Since most school systems did not have a policy on nutrition, except as it related to the health and physical education curriculum, teachers did not see a need to make it a priority. Emphasis was being placed on standardized testing. "We are starting to publish test scores in the newspaper and that is putting a squeeze on anything that is not going to be published. Electives are being eliminated, and we do not have a health class and will not get one." (SCHOOL ADMINISTRATOR) Only one participant stated his/her district had a policy that affected the curriculum that impact developing healthy eating habits. "We have the New York State Assessments, the kids have tutorials and all kinds of study sessions that take place during lunch, so kids don't eat; they just don't eat." (TEACHER)

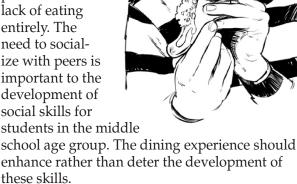
FOOD CHOICES

Limited cafeteria choices were a concern. Participants frequently characterized the food as poor quality, greasy, tasting artificial, and lacking visual appeal.

PEER PRESSURE

Participants mentioned that peer pressure and the need to socialize were overlooked. Participants

believed that body image for female students dictated poor choices or lack of eating entirely. The need to socialsocial skills for



MEDIA

Participants saw television media as negatively influencing eating behavior. Television advertising is full of advertising for fast foods, soft drinks, and high-sugar items. "We have Channel 1 News every morning and between the news segments, soda and the fast food hypes are on." (SCHOOL ADMINIS-TRATOR) The only nutritious food advertised is milk. Participants thought the "got milk" promotion was effective.

FAMILY/PARENTAL ATTITUDES

Attitudes and behaviors of parents have a direct impact on students' decisions. Participants thought parents were frequently too busy with a career or trying to make ends meet that they did not pay attention to the quality of the food consumed by their children. With the social pressures of today, the main goal often is to have just some type of food on the table. "They don't care what they are eating as long as the kid says, 'yes, I ate lunch'." (TEACHER) "Parents expect us to feed them good choices, but at home they give them fast foods for rewards. But we are supposed to be the bad guys and enforce nutrition." (FOODSERVICE ADMINISTRATOR)

CURRICULUM

The last barrier is that of the curriculum. Only a few participants, generally health and physical education teachers, touched on nutrition. "Advertising may raise awareness, but knowledge is what will produce the best choices in the long run." (SCHOOL ADMINISTRATOR)

The Answer Is...

AFTERNOON FOCUS GROUP SESSIONS

Participants were in mixed groups during the afternoon sessions. Therefore, it was not possible to identify the participant group contributing the quotes. During the lunch break, the moderators and assistant moderators analyzed all the barriers from the three groups and identified duplication among groups. They then identified the five major barriers discussed in the three groups. These five became the barriers used for the afternoon discussion among the groups of mixed participants. The major barriers for all focus groups at all locations were: time, funding, physical environment, menu and menu choices, competitive foods, lack of commitment, and



outside influences. Participants were asked, "Based on the major barriers we identified this morning, what steps do we need to take to overcome them?"

TIME, PHYSICAL ENVIRONMENT, AND FUNDING

Much of the discussion surrounding time and the physical environment dealt with funding. With adequate funding, the groups thought the time and physical environment issues could be solved. Time could be improved with the funding for more serving lines and staff to serve the students. If more funding were available to pay teachers for longer days, meal periods could be longer. Suggestions for funding included increasing taxes at all levels and seeking corporate sponsors.

MENU/MENU CHOICES

Under menu and menu choices, the stigma of free meals was discussed as a barrier. One solution recommended was having universal free meals. Another was the use of the ID card that could be scanned. Other issues under this heading concerned the availability of healthful foods and the type of foods students are choosing. One comment made was, "If you put roast beef and mashed potatoes on the menu, the teachers eat it and the kids don't. If you put the roast beef on bread, kids will eat it." Participants recognize the need to keep a positive cash balance, but to do so the foodservice administrators stated they must sell additional items that are less healthful to keep school boards from contracting with outside companies to run the foodservice operation. Additional funding was again one recommended solution.

COMPETITIVE FOODS

The major solution for competitive foods also was

funding. Participants stated with adequate funding, the foodservice programs could serve healthful foods and not have to depend on sales from a la carte items to stay in a positive cash balance.

OUTSIDE INFLUENCES AND LACK OF COMMITMENT

Outside influences from peers, parents, media, community, and policy or lack thereof were themes within this barrier. Recommendations for lessening the impact of these influences included having public service announcements. The comparison was made to the ones that ran several years ago, "Do you know where your children are?" A similar ad could state, "Do you know what your children ate today?" Also, coordination between the education arm and the foodservice arm in the school was recommended. "We need to figure out a way to consolidate so we are all really working toward the same goal."

Policies were suggested. Participants thought that policies from the local level would be more effective in developing a healthful nutrition environment in the schools. "We need to make a public commitment to the fact that students should have physical exercise every day. We need to be teaching nutrition and modeling it." Another recommendation was to tie nutrition to outcomes. "If we tie nutrition to report cards, parents would be interested. We are conducting studies to find out if breakfast makes a difference in test scores; we should do this for lunch."

Education of parents was discussed in each group. Participants thought parents were not educated in nutrition and, therefore, students had little knowledge. The eating patterns of the home are translated into what the student chooses at school. "Parents send students to school and expect them (schools) to be fixers. Parents have to realize nutrition is a pattern that starts in the home. If kids are accustomed to fried foods at home, they will not change their selection at school."

Peer pressure was a large concern of participants. Several participants suggested using local athletes as role models. Educational programs on nutrition conducted through the World Wide Web also were suggested as a solution for parents and students.

The media was discussed as a large influence on society as a whole. Few nutritious foods are advertised on television as compared to high-fat foods. More advertising about nutrition and campaigns such as the "milk mustache" and "drink more milk" should be broadcast. Suggestions were also included that the associations of vegetable growers should advertise the benefits of eating vegetables.

Lack of commitment from the community was a major barrier to the participants from the West. They saw this as separate from the outside influences. They recommended open houses and open communications to assist with this concern.

TABLE 2POPULAR SALES IN VENDING MACHINES AND SCHOOL-SPONSORED STORES (N=77)

| Items | Number of Schools |
|-----------------|-------------------|
| soda | 56 |
| sports drinks | 44 |
| candy | 41 |
| chips | 37 |
| water | 30 |
| cookies | 30 |
| flavored water | 19 |
| low-fat chips | 14 |
| ice cream | 13 |
| low-fat cookies | 13 |
| fruit products | 12 |
| sweet rolls | 9 |
| milk | 6 |
| fresh fruit | 3 |

This study used focus groups to explore the framework for promoting healthy eating behaviors of students within the school environments of the middle grades. Three focus groups were held with school administrators (principals and superintendents), educators (teachers and coaches), and foodservice administrators (directors and managers). Three moderators, each having field

experience as either a school administrator, educator, or foodservice manager, conducted the focus groups. The three assistant moderators/recorders were advanced graduate students in the Department of Educational Leadership and Research at the University of Southern Mississippi. The team, along with Dr. Richard Krueger, consultant, worked together prior to the focus groups to develop standard protocol for introducing and moderating the focus groups. The focus-group sessions occurred at three sites throughout the United States.

Two rounds of focus groups were held with each group at each site. The first round was held at each site during the morning with homogeneous groups of school administrators, teachers, and foodservice administrators. A series of questions was asked leading to the identification of the barriers to having a good nutrition environment in middle grades. A second round of focus groups was held at each site in the afternoon. In each of the three sessions, participants consisted of a mixture of categories of attendees. The afternoon groups were asked to address strategies for improving the school nutrition environment.

WHO WERE THE PARTICIPANTS?

The focus groups involved 77 participants including 26 school administrators, 24 teachers, and 25 foodservice administrators, one nurse, and one school coordinator. The participants represented 28 states. The majority of the participants were from suburban areas (25). However, rural and small towns (13), and urban areas (10) also were well represented. The size of the school systems represented in this study ranged from 168 to 218,000 students.

FACT FINDER

The following facts summarize the characteristics of the participants' school districts in the NFSMI research study, "School Nutrition Environment in Middle Grades and the Promotion of Healthy Eating Behaviors."

77

What percentage of participating schools sold a la carte items? The most popular items were:

pizza, french fries, chips, cookies.

pizza, french fries, chips, cookies, and chicken tenders/nuggets.

13

What percentage of the participating school districts had no vending machines in their middle schools?

40

What percentage of participating schools had foodservice personnel involved in nutrition education in the middle grades?

95

What percentage of participating schools included nutrition in the middle grades curriculum?

80

What percentage of participating schools had a comprehensive health curriculum?

48

What percentage of school boards had a policy dealing with contracts for food/drink items with vendors?

Practical Use of This

INFORMATION

The school environment plays a powerful role in influencing students' eating behaviors. The school environment can help ensure that daily eating behaviors being formed by adolescents will evolve into lifelong good health. Choices the students make in what to eat today can lead to the eating habits they will take into early adulthood. Eating habits students develop early in life will lead to a lifestyle that could affect their health and wellbeing for the rest of their life. School administrators and local school boards can:

- Provide nutrition education to equip students with the knowledge and skills to make healthful food choices and set a foundation for lifelong healthy eating.
- Support foodservice and nutrition programs that offer opportunities for students to practice healthy eating on a daily basis.
- Encourage healthy eating behaviors in the way students manage other food choices available at school outside of the foodservice program such as vending, snack bars, school stores, concession stands, club sales, and rewards.
- Form interdisciplinary teams and partner with the community to assess their school nutrition environment and develop plans for enhancement.

Having a good nutrition environment in our schools will take a team effort. One of the school administrators participating in the focus group research said,

"When it becomes a priority, it will get done."

THE HEALTH AND WELL-BEING OF FUTURE GENERATIONS ARE IN OUR HANDS.

Additional Resources

Center for Disease Control and Prevention (2000). *School health index: A self-assessment and planning guide*. Atlanta Ga.: Department of Health and Human Services.

Food and Nutrition Services, U.S. Department of Agriculture (2000) Changing the scene: improving the school nutrition environment. Alexandria, Va.: author. National Association of State Boards of Education (2000). Fit healthy, and ready to learn: A school health policy guide. Alexandria, Va.: author.

Morgan, D.L. & Krueger, R. A. (1998). *The focus group kit*. Thousand Oaks, CA: Sage Publications.

National Association of State Boards of Education (2000). Comprehensive and coordinated school health. Alexandria, Va.: author.

National Association of State Boards of Education (2000). *Healthy eating 101*. Alexandria, Va.: author.



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