

**Meeting Summary:
Meeting of the Institute of Medicine's Committee on Nutrition Standards for
National School Lunch and Breakfast Programs**

January 28, 2009 – Washington DC

Yesterday the Committee on Nutrition Standards for National School Lunch and Breakfast Programs (the Committee) held an Open Public Forum to receive comment on its Phase I Report regarding Nutrition Standards for National School Lunch and Breakfast Programs. The Institute of Medicine established this Committee to recommend updates and revisions to the school lunch and breakfast programs at the request of U.S. Department of Agriculture (USDA).

The first part of the committee's work is reflected in the December 2008 IOM report *Nutrition Standards and Meal Requirements for National School Lunch and Breakfast Programs: Phase I. Proposed Approach for Recommending Revisions*. This first report provides information about the committee's approach as it reviews the school lunch and breakfast programs. In the Phase II Report, which is due by the end of this calendar year, the committee expects to present its findings and recommendations to bring school meals more in line with current dietary guidelines.

Overview:

Presenters today generally complimented the Committee for its work, for the most part agreeing with the recommendations contained in the Phase I Report. Several common points were made throughout the course of the meeting. Presenters generally felt that the Committee needs to recognize that additional resources will need to be provided to school food service operators if they are to meet the anticipated higher nutrition standards. It would be prudent to anticipate a phase-in of revised standards so that student acceptability of menu items can be maintained if not improved.

Following is a summary of the various presentations and the question and answer sessions involving Committee members and the presenters. Dr. Virginia Stallings, the Chair of the Committee, cautioned that questions from Committee members should not be construed as a finding or position of the Committee. Those findings and positions will be included in the final report, which will be subject to anonymous peer review and subsequent revisions before publication.

Copies of the presentation are expected to be put on the IOM website within the next week. These presentations and further information about the project and past meetings can be found at <http://www.iom.edu/?ID=54064>.

SESSION 1: PERSPECTIVES ON PROPOSED APPROACH

Jay Hirschman, MPH, CNS, Director, Special Nutrition Staff, Office of Analysis, Nutrition and Evaluation, Food and Nutrition Service (FNS), USDA

Mr. Hirschman said that USDA is committed to moving forward with regulations to implement recommendations after they are made. At the same time, this process will take

time. The foodservice community is both free to and encouraged to move ahead on its own in advance of these revisions.

- The cost of revised school meals will be a concern. The charge presented to the Committee by USDA was to develop recommendations that would be “cost neutral”.
- The Committee’s report will ultimately include a section on further research needs. What the Committee includes could effect future USDA actions.
- FNS would like to add “school administrative issues” to its program cost considerations, recognizing that the different methods of operating school food programs in different states is likely to have an impact on the implementation of recommendations.
- Be cautious regarding any assumption regarding that improvement in foods offered equates with improvements in foods consumed. There is no scientific basis to support such an assumption.
- Specific comments also offered regarding planning models for food (matching foods to MyPyramid food groups needs to be discussed since, for example, MyPyramid is based on Vitamin A levels of whole milk rather than the fortified milk served in schools); the use of Daily Recommended Intakes (DRIs) in place of Recommended Daily Allowances (RDAs); iron; sodium; and, use of Cost of Food Away from Home v. Thrifty Food Plan numbers.

PANEL PRESENTATIONS

Margo G. Wootan, DSc, Director, Nutrition Policy, Center for Science in the Public Interest

- School constraints are important but the Committee should make dual recommendations: what is nutritionally ideal, and what is nutritionally practical. While USDA has said that the recommendations should be made on a cost neutral basis, policy makers (Congress) should know what is really needed to serve a healthy meal.
- The Committee should look at the statutory and regulatory barriers to providing healthy meals. There should be a review of the expectation that breakfasts provide one-fourth of nutrient requirements and lunches one-third. Given changes in eating patterns and increased snacking in particular, these meals may offer more calories than is necessary.
- Repeal the requirement that milk be served in multiple forms.
- There is a lack of nutrient information regarding food service and commodity products.
- The market place availability of products needs to be considered. What should companies do to make a wider variety of healthy products?
- The acceptability of healthier foods in schools needs to be considered. To improve the food served, consider using nutrition education programs, student taste testing, and student involvement in menu planning.
- The Committee should prioritize nutritional excesses and inadequacies. Particular attention should be paid to salt, fruits and vegetables, and fats. Clear quantitative recommendations should be provided.
- Discretionary calories should also be considered. The use of nutrient dense foods that are low fat and low sugar provide opportunities regarding discretionary calories.

Jessica Donze Black, RD, MPH, National Director of the Healthy Schools Program, Alliance for a Healthier Generation

- Consider the impact of revised standards on competitive foods and a la carte items. Foods are realistically interrelated. Standards for a la carte foods are the most difficult to achieve because they are not available at reasonable price points. There needs to be concern about improving the quality of individual foods because even though the standards are averaged over meals, actual foods consumed may not meet the average goal.
- The marketplace doesn't yet support what was recommended in the 2005 Dietary Guidelines for Americans. For example, consider meats. While FDA has a definition of "lean", some schools find it impossible to meet the standard based on what is available to them in their market.
- Need a narrative of how to achieve these higher goals. There should be a discussion of what local, state and national support is needed, including improvements in reimbursement rates, training, and additional staff.

Katie Wilson, PhD, SNS, School Nutrition Director, Onalaska School District, Wisconsin,

President, School Nutrition Association

- People need to be educated regarding the differences between Daily Recommended Intakes (DRIs) and Recommended Daily Allowances (RDAs) if DRIs now become the standard of choice.
- There should be a plan in place that recognizes the 2010 Dietary Guidelines for Americans will be coming soon.
- Cost and administrative impact issues are important. While the Committee may use a representative menu to determine costs, there are still regional issues that result in the use of different menus and different costs. Indirect costs, food costs, labor costs and a growing demand for the programs without the provision of additional resources all need to be considered.
- There is great discussion of whole grains, but what is the definition of "whole grains"? It needs to be a simple definition that all program operators will understand, and needs to recognize the availability of product in different markets. Whole grain breads right now are frequently viewed as a specialty item and are often provided only if retail or restaurant customers in the region are ordering the same product.
- Fresh produce is promoted but there are availability and storage issues. There is a need for recognition of all forms, including canned and frozen. Do not make people feel paranoid about "just fresh".
- Commodities are essential to the school lunch program. Having a national commodity program with the same specifications makes sense. People would know what they are getting.
- Acceptability of food items is important. It may be necessary to phase in any new requirements to ensure acceptability.
- There is a need for simplicity in standards so that it can actually be implemented.

Matt Sharp, Senior Advocate, California Food Policy Advocates

- Working in Los Angeles with cutting edge policies. The Los Angeles Unified School District in 2005 updated its own requirements to reflect the updated Dietary Guidelines for Americans. They have experienced an 11% increase in school program participation

at a time of declining school enrollment, which to LAUSD means that the updated requirements were a success.

- Legislative and cost constraints should be noted when they inhibit the application of improved standards.
- The availability of competitive foods and the school environment need to be considered as factors impacting improved nutrition.
- The Committee should support enhanced monitoring and enforcement activities to ensure the application of improved standards.
- Consider the messages that school meals may send. The chicken nuggets and fries served in schools may be of good nutritional quality, but does it teach correct food choices outside of schools?
- This should be considered an opportunity to improve the image and appeal of nutritional foods.
- Menu planning should change to look more at foods selected rather than foods served.
- Cost considerations should incorporate the cost of inaction. What are the long-term health costs associated with poor nutrition?
- Consider positive market effects of increased standards. More quality products will become available.

Question and Answers of Committee members and presenters:

- Did any panel members have experience showing decreasing snack foods in schools improves the selection of healthier foods? Some suggestions of literature on the subject were offered and will be submitted to the Committee.
- Is there any cost impact data for changes already made to improve nutritional quality? Jessica Donze Black of Alliance for a Healthier Generation has information they have developed, but not yet published, showing that there has been an increase in costs, or that the change was accepted because of a revised expectation of the performance of the school food program regarding earning a profit or breaking even. Katie Wilson of the School Nutrition Association pointed to the example of school food directors in Connecticut not taking advantage of a ten cent supplement for certain foods because the supplement was insufficient to cover the cost. She also pointed to North Carolina where its program was discontinued after five months because they ran out of money. Matt Sharp of California Food Policy Advocates said that in California when schools were allowed to swap juice for an additional serving of fruit, there was not a cost problem. But when schools wanted to add a serving of fruit without the swap, then cost problems were experienced.
- Flexibility is needed in rules for the program to recognize differences in age, gender, and regions.
- How do you look at meals with the increased availability of snacks? Saying that lunch should meet one-third of daily requirements is probably too much. Keep in mind that foods are being replaced, not eliminated. Different nutrient values of the new foods need to be considered.

SESSION 2: UPDATES ON SPECIAL TOPICS

Commodities Program and the School Lunch and Breakfast Programs

Catherine E. McCullough, Director, Food Distribution Program, Food and Nutrition Service, USDA

- The goal of the Food Distribution Division is how can we help schools meet nutrient targets with commodities.
- Changes have been made in commodity availability based on school surveys and complaints received from schools. Changes have also been made at the urging of industry with the provision of new products. Industry is being proactive and the smart players are making more products that comply with the Dietary Guidelines.
- Efforts are being made to provide more fruits and vegetables and whole grains.
- The Food Distribution Division has requested new products, including low sodium canned vegetables, whole grain pasta, low fat soy bean oil, unsweetened applesauce, reduced fat baking mixes, low fat meats and poultry, and reduced fat cheese.
- Industry has suggested and provided fat free potato wedges, 95% fat free beef patties, “combo” beef for processing, and bulk potatoes and sweet potatoes for processing.
- USDA currently has more than 180 foods available for selection by state and local school food authorities.
- More than 50% of USDA foods are sent to processors. The action provides quality control with food safety. The same manufacturer of USDA and commercial foods provides a product and menu consistency.
- There was some discussion of the Department of Defense (DoD) Fresh Program, which is used for the purchase of additional fruits and vegetables.

Questions and Answers:

- Why are states making bad decisions and not taking full advantage of these programs? Selection is a determination left to states, and sometimes local school food authorities do complain to FNS. Efforts are made by FNS to help resolve differences between the two levels.
- Costs of commodity products? FNS has to contract for the whole year in order to get the best price. There are times when costs are higher due to specifications. For example, they expected a 10% cost increase due to the requirement for low sodium canned vegetables.
- There have been some difficulties with the operation of the DoD Fresh program. Some schools preferred the program when DoD did all of the operations, but has now changed to prime vendor contracts. FNS understands that there have been start-up issues associated with these changes.

PANEL DISCUSSION: Research Perspective on School Children’s Acceptance of Food as It Relates to Nutrition Standards

Fruits and Vegetables

Tom Baranowski, Ph.D., Children’s Nutrition Research Center, Baylor College of Medicine

- We are failing at solving obesity and dietary interventions.
- There is a need to conduct random clinical trials to provide best practices for increasing fruit and vegetable consumption. We really do not know much about how to promote dietary changes.
- There is a need to offer more fruits and vegetables. Availability influences intake. And we need to offer what children like to encourage consumption.

- A marketing program to encourage consumption is probably needed, and will require some thought.
- Some may suggest restricting food availability on the theory that more good foods will be consumed if they are the only ones available. Research shows that such efforts may boomerang, actually creating a dislike for the available foods.
- Also need to recognize the unintended consequences of introducing change. For example, when some schools restricted soft drinks students sought them out elsewhere – from local fast food vendors and even from some school bus drivers who decided to sell what the students wanted.
- Need to look at when physical activity occurs. It probably should be before the meal time rather than after. Students are more likely to eat more afterwards, including fruits and vegetables.
- Literature shows that school foods are better than foods brought from home, so students need to be encouraged to participate in the program. There still is a stigma in some areas with school lunch, and need to make who is participating in the program less evident with the use of devices like prepaid cards.
- Nutrition education – no one has put together a comprehensive K-12 plan, and one is needed. What is age/grade appropriate education?

Whole Grains

Leonard Marquart, Ph.D., R.D., Department of Food Science and Nutrition, University of Minnesota

- Efforts should be made with familiar foods that are available, and allow for a natural transition to healthier versions. Recall how long it took to transition to low fat milk but it is now readily accepted and sought out.
- Consumption of whole grains is low, constituting only 11% of total grain product consumption.
- Conducted several studies in Minnesota –
 - Project 1 – Study of refined wheat pizza v. whole grain pizza with a measurement of plate waste – No differences found at 50-50 blends.
 - Project 2 – Feasibility of higher levels of whole grains – Incremental increases from low to high percentages found a drop-off in consumption levels when whole grains were in higher proportions in excess of 50%.
 - Project 3 – After school snacking – Remade products with escalating formulations of whole grains. In graham crackers found no differences in acceptability in ranges of 5 to 16 grams whole grain over time.

Plate Waste

Joanne F. Guthrie, PhD, MPH, RD, Assistant Deputy Director, Food Assistance & Nutrition

Research Program, Economic Research Service, USDA

- Some plate waste is inevitable, but excessive waste is increasing cost and indicates a lack of consumer satisfaction.
- Plate waste should be considered as part of the meal planning process

- Most recent data on plate waste comes from Assessment Study I done in 1991-92. Younger children waste more. The highest level of waste is found in free lunch and not full price lunch.
- Offer v. serve reduces waste.
- Portion sizes may also contribute – portions perhaps too large for younger children.
- Meal scheduling is an issue – time meal served affects waste levels.
- Fruits and vegetables are crowded out by competitive foods.
- Prompting (Would you like carrots today) results in increased consumption.
- Cook Shop programs – pairing cooking and tasting experiences in the classroom with what is being served in the cafeteria – improved consumption.

Question and Answers of Committee members and presenters:

- Are you suggesting that we could move up to 51% whole grain content today without loss of acceptability and then continue to work up from there? Yes. 50% works with most items. Pizza crust and hamburger buns may go higher because the flavor is masked by the other components of the item.
- Are there stability concerns regarding whole grains? Yes. Storage and movement of stock is a major issue.
- How can we deal with the lack of a clear definition of “whole grain”? CN labeling of product and specifications in the ordering process are the best guarantees of getting the desired product.
- What is a reasonable goal for plate waste in a complex system? FNS struggled in its report to Congress because there is no good recent data. Marketers are interested purely in sales so they have no reason to track it. SFAs are different. Moderating portion sizes is a good strategy, but the training of servers, time it takes, slotting of products and customer satisfaction (why do 2nd graders get less than 4th graders) are all issues. Mixed customer base is another concern, e.g. athletic active boys v. girls concerned about weight.
- Can vending be used as a strategy to provide a more appropriate mix of products? Interesting approach. Prepackaged grab-and-go meals offer flexibility to students who may want to eat at different times. It might also involve a marketing strategy to shift choices.
- Reinforcing food choices – do baked fries in school suggest that French fries are ok outside of school? Each school needs to do its own education program regarding food choices.
- Working more with industry? Need to bring people together. The School Nutrition Association has done this. More information up front results in better product output and availability. There have been several times where industry has been working on a product that schools have wanted, but neither party has known of the other’s efforts or interest.
- How can we change behavior? USDA researchers have developed and tested a video game that reinforces the desirability and benefits of fruit and vegetable consumption, which was well received by students. It gets their attention. It assists in setting goals and provides motivational messages.
- Strategies for reducing sodium levels? Some evidence that progressive reductions over time works well as students do not notice sharp flavor changes.

- Is there any research on racial and ethnic disparities on acceptability of food changes?
No.

SESSION 3: PUBLIC COMMENTS on PHASE I REPORT

Rob Bisceglie, Executive Director, Action for Healthy Kids

- A grassroots organization networking with local partners.
- Concerned about under consumption of nutrients and over consumption of calories relative to levels of activity.
- Believe that using weekly average intake values is appropriate and should be continued. Individual food standards are impractical and unnecessary.
- Assumption of no cost-neutral program changes should not stop valid recommendations. The report should say that more money is needed, and demonstrate what might be achieved with modest funding increases.

Ceci Snyder, National Pork Board

- Not currently meeting meat and bean dietary requirements. B-12 requirements, for example, can be met with meat consumption.
- Industry is “leaning” the meat supply providing reduced fat product.
- Pork prices have seen lower levels of increase than other foods. It should be recognized as a nutritious value for schools.

Karyl Thomas Rattay, Nemours Health & Prevention Services

- Working with school wellness policies.
- Obesity drives considerations of food energy requirements.
- Support specific food standards, not averaging.

Ann Marie Krautheim, National Dairy Council

- Interested in the continued availability of nutrient dense foods in school food programs, like cheese.
- Milk consumption has changed. Low fat consumption is now prevalent and is increasingly available.
- Support the continued use of weekly dietary requirements. Day to day variations in consumption are normal.
- The Council has produced a White Paper entitled: “*Safeguarding the Health of America’s Children: The Importance of Dairy Foods in Child Nutrition Programs*”. Copies were provided to members of the Committee.

Julie Obbagy, Soyfoods Association of North America

- Any revisions to dietary patterns need to be sensitive to cultural diversity.

Lorelei DiSogra, United Fresh Produce Association

- Kids have learned to like vegetables as part of the snacks program and are taking this message home.
- Costs – Everyone knows it will cost more to add more fruits and vegetables and whole grains. Urge the Committee to acknowledge this point and that it is impossible to do more without additional resources.
- There is a new Administration and a new USDA with new priorities. Secretary of Agriculture Vilsack has already talked about the importance of nutrition as a preventive health practice. Ask the new Administration to meet with the Committee to see if the new

Administration continues to believe the Committee should assume cost neutrality with the Committee's recommendations.

- New leadership is needed. The Committee should get above the constraints and provide leadership to take nutrition matters to a new level. People have been working for thirteen years to get to the levels recommended in the Dietary Guidelines, and it has not happened yet.

Michelle Matto, International Dairy Foods Association

- Acceptability of product, preparation resources, and costs are limits that must be recognized in the recommendations.
- Nutrient rich foods should be included. There are greater nutrient values in milk, yogurt and cheese.
- New products have been developed that are lower in fat, sugar and sodium content.
- IDFA has urged USDA to include only reduced fat cheese in its offerings.
- Higher funding levels or additional grants will be needed to implement revised standards.

Tazima Davis, Wellness in American Schools

- School foods offer an opportunity to address health challenges. Appropriate foods and inadequate physical activity also affect academic achievement and behavior.
- Need cooperation among stakeholders and programs that raise the bar on wellness.
- Education concerns – Connect the cafeteria to the curriculum. Engage children in tasting, menu preparation, and school gardens. Support sustainable food systems in the local economy and farmers markets.

Robert Earl, Grocery Manufacturers Association

- GMA members have developed new and reformulated products and have worked with interested groups.
- Suggest the need to carefully examine calorie cutoffs. Fats, sugar and sodium levels are needed to encourage the consumption of food items.
- Age and gender distinctions – Daily Recommended Intakes – Note that elementary, middle and high school grade cutoffs do not always match with age distinctions. Gender differences also need to be considered.
- Recommendations must work in the real world. Cost must be a concern.
- All forms of food – fresh, canned, frozen and dried – should be included in meal plans.

Geraldine Henchy, Food Research and Action Center

- Working principles and criteria included in the draft report are excellent.
- Cost concerns – Recommendations should prevent the facts of what is really needed. People are counting on the IOM because it has science behind its recommendations. Agree that two sets of recommendations could be made to meet the cost-neutral charge to the Committee and what is truly needed. It is also important that quality of food be considered in order to maintain participation in the program. Higher participation builds economies of scale.
- Recommends the use of Daily Recommended Intakes, and food consumption levels included in MyPyramid.
- Urge keeping standards of 25% of food intakes from breakfast and 33% from lunch. It is a statutory requirement that was intended to avoid any reductions in the amount of foods offered.

○ Suggestions that these levels should be changed due to snack consumption are wrong. There is a need to consider when snacks are consumed – often later in the day. For many children school breakfast is their only meal before lunch, so changing the standards for either meal risks harming their well-being.