

KPI

Mini-Series

for School Nutrition Programs

Meal Equivalents (MEQ)

Objective: Calculate meal equivalents and apply the information to measure the performance of school nutrition program.

Preparation Checklist

Instructions: The following tasks are necessary for presenting the trainings. Keep track of the progress by checking off tasks as they are completed. (Items may vary according to needs of particular lessons.)

Task	Person Responsible	Completion Date	✓
<p>Reserve equipment and gather supplies as needed for use on the day of class (6 weeks prior).</p> <p>Roster of participants attending for instructor Participants' sign-in sheets</p> <p>Task to do before the training Print handouts and activities for each participant Print activity answer keys for each participant to pass out at the end of the lesson</p> <p>List of equipment and supplies needed Microphone (preferably wireless) Calculators Pens, pencils, note paper, self-adhesive notes, (each table) Chart paper and markers</p>	Instructor		

Objective: Calculate meal equivalents and apply the information to measure the performance of the school nutrition program.

SAY: Hello, everyone. Welcome to the Key Performance Indicators (KPI) lesson on meal equivalents (MEQ). Our training will cover calculating meal equivalents (MEQ) and how to apply the information to measure the performance of your school nutrition (SN) program.

ASK: What are meal equivalents?

DO: Wait for participants to respond.

FEEDBACK: Meal equivalents (MEQ) are the conversion of different meal services (i.e., breakfast, supper, and snacks) and nonprogram food sales to the equivalent of one federally reimbursable student lunch for comparison purposes.

ASK: Can anyone tell me why you would want to calculate meal equivalents (MEQ) for your school?

DO: Wait for participants to respond.

FEEDBACK: Meal equivalents are used to measure how well the program is operating.

ASK: How often would you calculate meal equivalents (MEQ)?

DO: Wait for participants to respond.

FEEDBACK: It can be calculated weekly, monthly, and annually.

SAY: To calculate meal equivalents, you will need specific data. Look at the handout **Meal Equivalents** as we discuss where to find the information and how to calculate meal equivalents (MEQ).

DO: Distribute copies of the **Meal Equivalents** handout.

Meal Equivalents

Meal Service	Conversion Factor	Rationale
1 Lunch or 1 Supper (Student or Adult)	1.00	All student reimbursable lunches, student reimbursable suppers, and full-paid adult lunches are counted as one Meal Equivalent (MEQ). If a student purchases more than one lunch on a given day, the second lunch is considered non-reimbursable and is reported as a nonprogram food sale. The category for reporting is determined by State agency requirements. Lunches eaten by school nutrition (SN) employees at no charge are considered “in-kind” meals and should not be counted as a meal equivalent.
1 Breakfast	0.67	The most common calculation for determining breakfast MEQs specifies that three breakfast meals count as two MEQs ($\frac{2}{3}=0.67$). However, it is important to note that the MEQ ratio used for calculating breakfast MEQs varies from state to state, and SN administrators should check with their State agencies for guidance. Once a ratio is selected, it should remain consistent for the entire reporting period (year) for comparison and benchmarking purposes.
1 Snack	0.33	National School Lunch Program (NSLP) snacks are served to children and youth in after-school care programs that are eligible for United States Department of Agriculture (USDA) reimbursement. While there are no current research studies to support the meal equivalency ratio, a survey of selected State agencies indicated most states use a 3-to-1 ratio of snacks to MEQs ($\frac{1}{3} = 0.33$). Using this equivalency, snacks can be converted to MEQs as follows: MEQ = Number of snacks served x conversion factor.
Nonprogram Food Sales	Dollar amount of nonprogram food sales / (current free lunch reimbursement rate + current USDA Foods value [which changes annually])	The MEQ calculations for all other SN program categories are based on the annual Federal reimbursement rate for a free lunch plus the USDA Foods value. <div style="text-align: center;"> $\frac{\text{Nonprogram Food Sales}^1}{(\text{Free lunch reimbursement rate}^2 + \text{USDA Foods value}^3)}$ </div> The same formula would apply for other school nutrition program events, such as catered meals or special school functions.

¹ Nonprogram Food Sales: Food other than a reimbursable meal sold in an SN program participating in a USDA Child Nutrition Program (i.e., NSLP, School Breakfast Program [SBP], etc.). This food is purchased using funds from the school food authority of the school, including food that is sold in competition with the SN program.

² Free Lunch Reimbursement Rate: This rate changes annually. This rate can be found on the USDA Food and Nutrition Service (FNS) website at the following link: <https://www.fns.usda.gov/school-meals/rates-reimbursement>.

³ Value of USDA Foods: This value changes annually. The value can be found on the USDA FNS website at the following link: <https://www.fns.usda.gov/fdd/value-donated-foods-notices>. For states such as Kansas that receive cash in lieu of USDA Foods, please contact your State agency to determine what figure to use.

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SAY: Some states may use different conversion factors to figure meal equivalents. If you are not sure what your state uses, please contact your State agency. The formula is the same, the numbers may be different.

ASK: Are there any questions?

DO: Answer questions to the best of your ability. If there are questions you cannot answer, tell the participants you will find out the answer and get back with them.

ASK: Where do you find the data or numbers needed to calculate meal equivalents (MEQ)?

DO: Wait for participants to respond.

FEEDBACK: The meal count and sales data are electronically or manually entered at the point-of-sale system used by the school nutrition program. This data can be found in reports such as end of day sales reports, edit check worksheets, and/or deposit reports.

SAY: The conversion of all school nutrition program food sales to meal equivalents (MEQ) allows the calculation of three Key Performance Indicators: revenue per meal equivalent, cost per meal equivalent, and Meals Per Labor Hour (MPLH).

DO: Distribute copies of the worksheet **Calculating Meal Equivalents**. Ask the participants to complete the worksheet.

SAY: Let's complete an activity to see what you have learned. Look at the **Calculating Meal Equivalents** activity worksheet.

DO: Read the instructions. Give participants about five (5) minutes to complete the activity. Walk around to help anyone that may have questions or needs help. When everyone has completed the activity, go over the answers. Explain how to calculate the answers if anyone does not understand.

Calculating Meal Equivalents

Instructions: The school nutrition director at ABC School District has gathered end of the month data from each school in the district. One of the reports submitted to the superintendent asks for meal equivalents each month.

Using the following data and the information learned, determine what the meal equivalents are for ABC School District.

Do the calculations based on reimbursement rates (3.43) and the USDA Foods value (0.2375) effective July 1, 2019 – June 30, 2020. Reimbursement rates should be updated annually because these amounts will change every July.

Meal Categories	Conversion Factors			Meal Equivalents
11,000 student reimbursable breakfasts	X		=	
400 adult non-reimbursable breakfasts	X		=	
24,000 student reimbursable lunches	X		=	
700 adult lunches	X		=	
8,000 student reimbursable suppers	X		=	
20,000 afterschool snacks	X		=	
\$9,000 dollars in nonprogram food sales	÷	(\$3.43 + 0.2375) 3.6675	=	
Total Meal Equivalents				

Calculating Meal Equivalents Answer Key

Given data:

Meal Categories	Conversion Factors			Meal Equivalents
11,000 student reimbursable breakfasts	X	.67	=	7370
400 adult non-reimbursable breakfasts	X	.67	=	268
24,000 student reimbursable lunches	X	1.00	=	24,000
700 adult lunches	X	1.00	=	700
8,000 student reimbursable suppers	X	1.00	=	8,000
20,000 afterschool snacks	X	.33	=	6,600
\$9,000 dollars in nonprogram food sales	÷	$(\$3.43 + 0.2375)$ 3.6675	=	2,452
Total Meal Equivalents				49,390

DO: When everyone has completed the activity, review the answers.

ASK: Do you have any questions about meal equivalents (MEQ) and how to calculate them?

DO: Answer questions to the best of your ability. If there are questions you cannot answer, tell the participants you will find out the answer, and get back with them.

SAY: Thank you for participating in today's training. I hope you will take this information back to your school and begin to use it to calculate meal equivalents.

References

- Institute of Child Nutrition. (2018). *Essential KPIs for school nutrition success*. University, Mississippi: Author.
- U.S. Department of Agriculture. (2015). *Professional standards for school nutrition professionals*. <https://www.fns.usda.gov/school-meals-professional-standards>
- U.S. Department of Agriculture, Food and Nutrition Service. (2019). *Food distribution program: Value of donated foods* (July 1, 2019 - June 30, 2020). <https://www.fns.usda.gov/usda-fis/fr-081219>
- U.S. Department of Agriculture, Food and Nutrition Service. (2019). *National school lunch, special milk, and school breakfast programs, national average payments/maximum reimbursement rates*. <https://www.federalregister.gov/documents/2019/08/07/2019-16903/national-school-lunch-special-milk-and-school-breakfast-programs-national-average-paymentsmaximum#p-31>



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