

Places Where Foods Are Served: Steps to Conducting Your Long-Term Outcome Evaluation

You can potentially use **production, procurement** and **menu** data to obtain long-term outcomes to evaluate your food service guidelines initiative in places where foods are served. Use the following steps as a guide for your evaluation.



- 1. Determine the availability of procurement, production (if foods are prepared on-site), or menu data in facilities or for programs where food service guidelines are being implemented.**
 - Meet with facility or program managers to determine how each type of data is currently captured. Is it available electronically or only in paper records? How far back in time can procurement, production, or menu records be obtained to allow for baseline (pre-intervention) measurement? How easily can procurement records from each food distributor source be obtained? Is there a repeating menu cycle? Are recipes and/or nutrition information available for prepared foods that are served? How is production data recorded and how precise are these records? How much work on behalf of the facility or program manager is required to obtain these records?
 - If food service guidelines are being implemented in multiple facilities, determine which facilities can more feasibly provide relevant data that will be useful for long-term evaluation. Focus your long-term evaluation efforts on these facilities.
- 2. Obtain convenience samples of available procurement, production, or menu data from the facility manager.**
 - These can be the most recent records or whatever is easily obtained. They are only for assessing the potential utility of available data sources and do not need to cover the entire intervention period.
 - Prioritize data sources that facility managers can obtain without an excessive work burden.
- 3. Establish a set of potential measures of healthy and less healthy food and beverage categories or nutrients that correspond with specific nutrition standards being implemented.**
 - Examine actual procurement or production records to determine foods and beverages that can be easily differentiated as healthy or less healthy. For example, if you wish to measure the impact of nutrition standards for healthy beverages, do beverage procurement records clearly differentiate purchases of bottled/canned sugar sweetened beverages from bottled/canned zero calorie beverages such as diet drinks or bottled water? If you wish to measure the impact of nutrition standards for whole grains, do bread procurement records clearly differentiate whole grain from refined grain bread products?





- b. If using menu data, diet quality of menu items due to food service guidelines may also be a feasible long-term evaluation measure using an indicator such as the [Healthy Eating Index](#). Before choosing this indicator, determine if your team has the required data analysis expertise. Note that food group and nutrient databases for prepared foods used to calculate diet quality scores are usually based on standard recipes which cannot be easily altered to meet your facility's specific recipe. Therefore, actual prepared foods from the facility may differ from standard recipes in terms of food groups or nutrients, especially if the recipe has been modified to make it healthier. For example, a facility may have modified a recipe to contain less sodium than that of a typical recipe. Despite this, the Healthy Eating Index can capture many improvements of your food service guidelines initiative, such as whether more fruits and vegetables, whole grains, or lean meats are served, and whether desserts have been removed.

4. Select a limited set of measures for healthy and less healthy foods (for procurement, production data, or menu data) or an indicator of diet quality (for menu data).

- a. Measures that are selected should correspond well with specific nutrition standards.
- b. Measures selected should be based on records that can be obtained relatively easily for the time period of interest.

5. Obtain relevant records from the facility manager for the pre-intervention and post-intervention time periods. If using procurement or production data, ensure long enough time periods are selected to ensure that repeating menu cycles and/or lags in procurement due to food storage are accounted for.

6. Abstract data for relevant food and nutrition information from data. Transcribe relevant data of selected measures into a database.

7. Analyze changes in selected food, beverage, nutrient, or diet quality outcomes.

- a. Assess whether selected healthy foods, beverages, or nutrients increased from pre- to post-intervention.
- b. Assess whether selected unhealthy foods, beverages, or nutrients decreased from pre- to post-intervention.
- c. Assess whether diet quality of the set menu cycle improved from pre- to post-intervention.

8. Use evaluation results to inform future adjustments to food service guidelines implementation such as finding new healthy products or recipes.