## How to Credit Variable Sizes of Produce

Produce comes in a wide variety of shapes, form and sizes. Some adhere to industry standards regarding both size of product and how they are packed while others do not. Apples, pears, melons, potatoes, carrots and cucumbers are examples of fresh produce that comes in a wide range of both standardized and non-standardized sizes and packages.

This document is designed to provide resources to credit the meal contribution for a wide variety of produce sizes. These resources will assist with:

- Determining edible portion yields for whole fruit and vegetables
- Estimating purchase amount to fulfill forecasted needs
- Determining the contribution each food makes toward the meal pattern requirements
- Writing produce specifications for procurement purposes

Two resources are highlighted in this document

- USDA Fresh Fruit and Vegetables Galore
- USDA Food Buying Guide


## USDA Fresh Fruit and Vegetables Galore

This archived resource contains Fruit and Vegetable Product Sheets that cover a wide variety of the fruits and vegetables most commonly served in Child Nutrition Programs. The Product Sheets include information such as form, size, grades, packing and purchasing tips. One of the highlights of Fruit and Vegetable Galore is scaled drawings and tables of different sizes of produce that are helpful when determining produce size. See the apple example below:

| Count Size <br> (Number in standard 40-lb box) | Diameter <br> (in inches) |
| :---: | :---: |
| 72 | $3^{1 / 1 / 2}$ |
| 88 | $3^{1 / 4}$ |
| 100 | $3^{1 / 18}$ |
| 113 | 3 |
| 125 | $2^{7 / 1}$ |
| 138 | $2^{3 / 4}$ |
| 150 | $2^{5 / 8}$ |
| 163 | $2^{1 / 2}$ |



## The USDA Food Buying Guide

- The USDA Food Buying Guide is available as an Interactive Web Based Tool, a mobile app and a downloadable PDF version. The USDA Food Buying Guide contains yield information for over 2,000 different foods. Yield information will help estimate the amount of food to purchase and the specific contribution each food makes to the meal pattern. See the apple example below:

| APPLES |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Apples, fresh 125-138 count Whole, Includes USDA Foods | Pound | 14.80 | 1/4 cup raw, unpeeled fruit | 6.80 | 1 lb AP $=0.91 \mathrm{lb}$ (3-2/3 cups) ready-to-serve or -cook raw, cored, unpeeled apples; $1 / 4$ cup raw, unpeeled fruit = about 1/4 apple |
|  | Pound | 3.00 | 1 baked apple (about 1/2 cup cooked fruit) | 33.40 |  |
|  | Pound | 11.40 | 1/4 cup raw, cored, peeled fruit | 8.80 | $1 \mathrm{lb} \mathrm{AP}=0.78 \mathrm{lb}$ (about 2-3/4 cups) ready-to-serve or -cook raw, cored, peeled apples |
|  | Pound | 6.80 | 1/4 cup cored, peeled, cooked, unsweetened fruit | 14.80 | 1 lb AP $=0.78 \mathrm{lb}$ (about 1-3/4 cups) cored, peeled, cooked apples; 1 lb AP $=0.78 \mathrm{lb}$ (about 2-3/4 cups) ready-toserve or -cook raw, cored, peeled apples |
|  | Pound | 5.80 | 1/4 cup cooked, sieved, unsweetened fruit | 17.30 |  |
| Apples, fresh Whole, Includes USDA Foods | Pound | 14.56 | 1/4 cup raw, unpeeled, cored, sliced fruit | 6.90 | $1 \mathrm{lb} \mathrm{AP}=0.91 \mathrm{lb}$ raw, unpeeled, cored apple |

## Record Keeping

Program Operators should maintain records detailing how yields were determined both for consistency and record keeping (this documentation may be requested by Oregon's Child Nutrition Programs). CNP may also request other forms of documentation, such as photographs of the actual measurements.

If your food service operation is consistently getting a higher or lower yield from a product than the yield specified in this FBG, you may want to conduct an in-house yield study or research and document the yield or number of portions of a specified size that the product provides.

Using the example of \#10 cans of pears that are not consistently producing amounts referenced by the Food Buying Guide, there is a bit more work that needs to be done:

- A minimum of at least six samples six (6) 1 pound groups of fresh produce) are required to determine the yield
- The program operator must carefully portion the food, using the appropriate scoop/disher or measuring spoon
- The food item should be filled to the top level of the measuring utensil that is being used
- Carefully count the number of the specified serving size obtained from each sample and document the number count
- To determine the average number of portions per sample, add the number of servings from each sample and then divide the total number of servings by six (sample size).
- To get a better yield estimate, it is recommended that at least two people do the portioning and counting of six samples independently


## Sample In House Yield Documentation Form

| Name of School District: |  |
| :--- | :--- |
| Type of Product: |  |
| Manufacturer Name: |  |
| Product Net Weight: |  |
| Specified Portion Size: |  |
| Person/Persons conduction In House <br> Yields: |  |
| Date of In House Yield Documentation: |  |

## Documentation of Sample Yields

| \# Samples | Number of servings (yield) per sample |
| :--- | :---: |
| Sample 1 |  |
| Sample 2 |  |
| Sample 3 |  |
| Sample 4 |  |
| Sample 5 |  |
| Sample 6 |  |
| Total Number of Samples | Total Number of servings: |
| Calculate the Yield by dividing the Total Number of Servings by the number of samples |  |
| Total Number of Servings $\quad=$ |  |
| Total Number of Samples |  |

Reference: https://foodbuyingguide.fns.usda.gov/Home/About

