## Sengamala Thayaar Educational Trust Women’s College

## (Affiliated to Bharathidasan University)

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**FOOD SERVICE MANAGEMENT-II**

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**STANDARDIZED RECIPES**

All recipes are not created equal. Some recipes have missing ingredients, faulty seasonings, insufficient or poor instructions causing more work, and some are simply not tested.

A **standardized recipe** is a set of written instructions used to consistently prepare a known quantity and quality of food for a *specific location*. A standardized recipe will produce a product that is close to identical in taste and yield every time it is made, no matter who follows the directions.

A good standardized recipe will include:

* Menu item name – the name of the given recipe that should be consistent with the name on the menu
* Total Yield – number of servings, or portions that a recipe produces, and often the total weight or volume of the recipe
* Portion size – amount or size of the individual portion
* Ingredient list/quantity – exact quantities of each ingredient (with the exception of spices that may be added to taste)
* Preparation procedures – Specific directions for the order of operations and types of operations (e.g., blend, fold, mix, sauté)
* Cooking temperatures and times, including HACCP critical control points and limits to ensure the dish is cooked properly and safely
* Special instructions, according to the standard format used in an operation
* Mise en place – a list of small equipment and individual ingredient preparation
* Service instructions, including hot/cold storage
* Plating/garnishing

In addition to the list above, standardized recipes may also include recipe cost, nutritional analysis, variations, garnishing and presentation tips, work simplification tips, suggested accompaniments or companion recipes, and photos.

Standardize recipes can help with work simplification and incorporate HACCP into procedures. Many facilities preparing food in large quantities also batch cook, so the standardized recipes will incorporate those procedures into the instructions. The skill level of employees should also be taken into account when writing recipe procedures or directions. Terminology within the standardized recipes should be at the skill level of employees, for example, instruct an employee to melt butter and whisk with flour instead of saying “make a roux”, if more appropriate for a specific operation. Finally, cooking equipment, temperatures, time, etc. are adjusted for the facility.

A short side note on **mise en place** – a key component to efficiently producing menu items from recipes is to have “everything in its place.” Many kitchens will have work stations with a standard mise en place set up, which might include a cutting board, salt and pepper, tasting spoons, composting containers, etc. Standardized recipes can help employees produce menu items most efficiently if they also list mise en place for small equipment needed for the recipe, such as measuring tools, preparation tools (knives, peeler), holding pans, cooking utensils, etc. Employees can gather everything they need before starting recipe preparation thus reducing traveling around the kitchen during preparation, kitchen congestion, loss of focus from frequent starting and stopping, and errors from interruptions to their work. Detailing the mise en place for individual ingredients, such as peeling and cutting, with each ingredient can also improve the clarity and efficiency of recipe preparation. Example: Raw white potato, peeled, ½ in. dice

Some things to remember when writing a standardized recipe:

* If you are starting with a home/internet recipe – make it first!
* Standardized recipes are a training tool for employees
* A good recipe is like a well-crafted formula – it has been tested and works every time
* S.A.M.E. – Standardization Always Meets Expectations

**Recipes as a Control Tool**

Standardized recipes are an important control tool for food service managers and operations. A standardized recipe assures not only that consistent quality and quantity, but also a reliable cost range. In order for an operation to set a menu selling price that allows the operation to make a profit, it’s vital that the cost of each recipe and portion is calculated and relatively consistent.

Benefits of using a standardized recipe include:

* a consistent quality and quantity
* standard portion size/cost
* assuring nutritional content and addressing dietary concerns, such as special diets or food allergies
* helping ensure compliance with “Truth in Menu” requirements
* aiding in forecasting and purchasing
* fewer errors in food orders
* incorporating work simplification principles and aids in cross-training
* assisting in training new employees
* incorporating HACCP principles
* reducing waste
* more easily meeting customer expectations

Arguments often used against standardized recipes can include:

* take too long to use
* employees don’t need them, they know how to do things in establishment
* chef doesn’t want to reveal their secrets
* take too long to write/develop

An effective foodservice manager knows that these arguments against using standardized recipes, even if true in some cases, cannot deter an operation from developing and consistently using standardized recipes. Our profits depend on this very important practice. Our customers must be able to rely on a consistent nutritional quality and allergen content at a minimum, but our customers also deserve to receive the SAME product every time they order a menu item they like and appreciate.

**STANDARD YIELDS**

The **yield**of a recipe is the number of portions it will produce. Yields can also be expressed as a total volume or total weight the recipe produces. An example would be a soup recipe that yields 24, 8 oz. portions which could also be stated as a yield of six quarts or a 1 ½ gallon. A weight example would be a recipe that yields 20, 4 oz. portions of taco meat or a total yield of 5 pounds.

Standard yields for the main, often higher cost, ingredients such as meat, may also take into consideration portion cost and be determined in part by calculating the cost per cooked portion.

For example, an 11 pound roast might be purchased for $17 a pound. The cooked roast is to be served in 8 ounce portions as part of a roast beef dinner. After trimming and cooking, the roast will not weigh 11 pounds, but significantly less and will thus yield fewer than 22 portions (11 pounds multiplied by 2 – figuring that a pound (16 ounces) would yield two 8 oz portions.) By running a yield test, the number of portions, cost per portion and unit weight, and the standard yield and yield percentage, can be determined. Yield testing will be discussed later in this book.

**STANDARD PORTIONS**

A standard recipe includes the size of the portions that will make up a serving of the recipe. Controlling portion size has two advantages in food management:

* portion costs for the item will be consistent until ingredient or labor costs change, and
* customers receive consistent quantities each time they order a given plate or drink.

Standard portions mean that every plate of a given dish that leaves the kitchen will be almost identical in weight, count, or volume. Only by controlling portions is it possible to control food costs. If one order of bacon and eggs goes out with six strips of bacon and another goes out with three strips, it is impossible to determine the actual cost of the menu item.

Adhering to the principles of standard portions is crucial to keeping food costs in line. Without portion control, there is no consistency. This not only could have drastic effects on your food costs (having no real constant costs to budget for) but also on your customers. Customers appreciate consistency. They expect that the food you prepare will taste good, be presented properly, and be the same portion size every time they order it. Consider how the customer would feel if the portion size fluctuated with the cook’s mood. A cook’s bad mood might mean a smaller portion or, if the cook was in a good mood because the workweek was over, the portion might be very large.

It may be hard to grasp the importance of consistency with one single portion, but consider if fast-food outlets did not have portion control. Their costs, as well as their ordering and inventory systems, would be incredibly inaccurate, all of which would impact negatively on their **profit**margin.

Strict portion control has several side benefits beyond keeping costs under control. First, customers are more satisfied when they can see that the portion they have is very similar to the portions of the same dish they can see around them. Second, servers are quite happy because they know that if they pick up a dish from the kitchen, it will contain the same portions as another server’s plate of the same order.

Simple methods to control portion include weighing meat before it is served, using the same size juice glasses when juice is served, counting items such as shrimp, and portioning with scoops and ladles that hold a known volume. Another method is using convenience products. These products are received usually frozen and are ready to cook. Portions are consistent in size and presentation and are easily costed out on a per unit basis. This can be helpful when determining the standard portion costs.

**Note**: Using convenience products is usually more costly than preparing the item in-house. However, some chefs and managers feel that using premade convenience products is easier than hiring and training qualified staff. But always keep in mind that if the quality of the convenience item is not comparable to an in-house made product, the reputation of the restaurant may suffer.

Standard portions are assured if the food operation provides and requires staff to use such tools as scales, measured ladles or spoodles, and standard size scoops. Many operations use a management portion control record for menu items. The control record is posted in the kitchen so cooks and those who plate the dishes know what constitutes standard portions. Some operations also have photographs of each item posted in the kitchen area to remind workers what the final product should look like.

**TYPES OF MEASUREMENTS USED IN THE KITCHEN**

There are three types of measurements used to measure ingredients and to serve portions in the restaurant trade.

Measurement can be by volume, by weight, or by count**.**

Recipes may have all three types of measurement. A recipe may call for 3 eggs (measurement by count), 8 ounces of milk (measurement by volume), and 1 pound of cheese (measurement by weight).

There are formal and informal rules governing which type of measurement should be used. There are also specific procedures to ensure that the measuring is done accurately and consistently.

**Number or Count**

Number measurement is only used when accurate measurement is not critical and the items to be used are understood to be close in size.

For example, “3 eggs” is a common measurement called for in recipes, not just because 3 is easy to count but also because eggs are graded to specific sizes. Most recipes call for large eggs unless stated otherwise.

Numbers are also used if the final product is countable. For example, 24 pre-made tart shells would be called for if the final product is to be 24 filled tart shells.

**Volume**

Volume measurement is usually used with liquids or fluids because such items are awkward to weigh. It is also used for dry ingredients in home cooking, but it is less often used for dry measurement in the industry.

Volume is often the measure used when portioning sizes of finished product. For example, portion scoops are used to dole out vegetables, potato salad, and sandwich fillings to keep serving size consistent. Ladles of an exact size are used to portion out soups and sauces. Often scoops and ladles used for portioning are sized by number. On a scoop, such a number refers to the number of full scoops needed to fill a volume of one quart. Ladles and spoodles are sized in ounces.

**Weight**

Weight is the most accurate way to measure ingredients or portions. When proportions of ingredients are critical, their measurements are always given in weights. This is particularly true in baking where it is common to list all ingredients by weight, including eggs (which, as mentioned earlier, in almost all other applications are called for by count). Whether measuring solids or liquids, measuring by weight is more reliable and consistent.

Weighing is a bit more time consuming and requires the use of scales, but it pays off in accuracy. Digital portion scales are most commonly used in industry and come in various sizes to measure weights up to 11 lbs. This is adequate for most recipes, although larger operations may require scales with a larger capacity.

The reason weight is more accurate than volume is because it takes into account factors such as density, moisture, and temperature that can have an effect on the volume of ingredients. For example, 1 cup of brown sugar (measured by volume) could change drastically depending on whether it is loosely or tightly packed in the vessel. On the other hand, 10 oz of brown sugar, will always be 10 oz. Even flour, which one might think is very consistent, will vary from location to location, and the result will mean an adjustment in the amount of liquid needed to get the same consistency when mixed with a given volume.

Another common mistake is interchanging between volume and weight. The only ingredient that will have the same volume and weight consistently is water: 1 cup water = 8 ounces water.

There is no other ingredient that can be measured interchangeably because of gravity and the density of an item. Every ingredient has a different density and different gravitational weight, which will also change according to location. This is called **specific gravity.**Water has a specific gravity of 1.0. Liquids that are lighter than water (such as oils that float on water) have a specific gravity of less than 1.0. Those that are heavier than water and will sink, such as molasses, have a specific gravity greater than 1.0. Unless you are measuring water, remember not to use a volume measure for a weight measure, and vice versa.

**CONVERTING AND ADJUSTING RECIPES AND FORMULAS**

Recipes often need to be adjusted to meet the needs of different situations. The most common reason to adjust recipes is to change the number of individual portions that the recipe produces. For example, a standard recipe might be written to prepare 25 portions. If a situation arises where 60 portions of the item are needed, the recipe must be properly adjusted.

Other reasons to adjust recipes include changing portion sizes (which may mean changing the batch size of the recipe) and better utilizing available preparation equipment (for example, you need to divide a recipe to make two half batches due to a lack of oven space).

**Conversion Factor Method**

The most common way to adjust recipes is to use the conversion factor method. This requires only two steps:

1. Finding a conversion factor
2. Multiplying the ingredients in the original recipe by that factor.

**Finding Conversion Factors**

To find the appropriate conversion factor to adjust a recipe, follow these steps:

1. Note the yield of the recipe that is to be adjusted. The number of portions is usually included at the top of the recipe (or formulation) or at the bottom of the recipe. This is the information that you HAVE.
2. Decide what yield is required. This is the information you NEED.
3. Obtain the conversion factor by dividing the required yield (from Step 2) by the old yield (from Step 1). That is, conversion factor = (required yield)/(recipe yield), conversion factor = what you NEED ÷ what you HAVE

If the number of portions and the size of each portion change, you will have to find a conversion factor using a similar approach:

1. Determine the total yield of the recipe by multiplying the number of portions and the size of each portion.
2. Determine the required yield of the recipe by multiplying the new number of portions and the new size of each portion.
3. Find the conversion factor by dividing the required yield (Step 2) by the recipe yield (Step 1). That is, conversion factor = (required yield)/(recipe yield)

**ADJUSTING RECIPES USING CONVERSION FACTORS**

Now that you have the conversion factor, you can use it to adjust all the ingredients in the recipe. The procedure is to multiply the amount of each ingredient in the original recipe by the conversion factor. Before you begin, there is an important first step:

* **Before converting a recipe, express the original ingredients by weight whenever possible.**

Converting to weight is particularly important for dry ingredients. Most recipes in commercial kitchens express the ingredients by weight, while most recipes intended for home cooks express the ingredients by volume. If the amounts of some ingredients are too small to weigh (such as spices and seasonings), they may be left as volume measures. Liquid ingredients also are sometimes left as volume measures because it is easier to measure a quart of liquid than it is to weigh it. However, a major exception is measuring liquids with a high sugar content, such as honey and syrup; these should always be measured by weight, not volume.

**CAUTIONS WHEN CONVERTING RECIPES**

When converting recipes, conversion calculations do not take into account certain factors:

* Equipment
* Mixing and cooking times – this can be affected if the equipment used to cook or mix is different from the equipment used in the original recipe
* Cooking temperatures
* Shrinkage – the percentage of food lost during its storage and preparation
* Recipe errors

Some other problems that can occur with recipe conversions are:

* Substantially increasing the yield of small home cook recipes can be problematic as all the ingredients are usually given in volume measure, which can be inaccurate, and increasing the amounts dramatically magnifies this problem.
* Spices and seasonings must be increased with caution as doubling or tripling the amount to satisfy a conversion factor can have negative consequences. If possible, it is best to under-season and then adjust just before serving.

The fine adjustments that have to be made when converting a recipe can only be learned from experience, as there are no hard and fast rules. Generally, if you have recipes that you use often, convert them, test them, and then keep copies of the recipes adjusted for different yields.