1.5 Conversion Charts

Ways of Measuring

Accurate measurement of ingredients is key for consistency. There are 2 ways to measure:

1. **By weight:** This is the most accurate and common way to measure ingredients. It can be used for both dry and liquid ingredients. I recommend using electronic digital scales because they are the most precise. Remember to always use a *tare* or *zero function* to allow you to ignore the weight of the container used to hold the ingredients.
2. **By volume:** This method is mostly used to measure liquids. For small quantities we use measuring cups and spoons, which must always filled to the top to avoid inconsistencies produced by over-filling or under-filling.

   * Measuring cups and spoons can also be used to measure dry ingredients, but remember that every dry ingredient has a different weight (flour, sugar, walnuts...), so it is always recommended to weigh them.

   ** Volume and weight of water, oils and other liquid ingredients are nearly identical, so when measuring small quantities of these ingredients you can choose the most convenient way of measurement.

When a recipe calls for cups, tablespoons or teaspoons, make you sure you always fill them and then level off the top with a spatula, to ensure an accurate measurement.

Measuring Systems

There are two main systems, a fact that can cause confusion when you are following a recipe that uses a system with which you are unfamiliar.

1. **Metric system:** The most common system worldwide. It is a decimal system in which the basic units of weight, volume, and length are *grams*, *liters*, and *meters* respectively.
   → Units of weight: *grams (g)*
   → Units of volume: *liters (l)*
   → Units of length: *meters (m)*
2. **U.S. customary system**
   → Units of weight: ounces (oz.) and *pounds (lb.)*
   → Units of volume: *cups (c)*, *fluid ounces (fl. oz.)*, *tablespoons (Tbsp)* and *teaspoons (tsp)*
   → Units of length: *inches (in.)*

Most common abbreviations

→ Tablespoon = Tbsp
→ Teaspoon = tsp
→ Ounce = oz.
→ Fluid ounce = fl. oz.
→ Pound = lb.
→ Milliliter = ml
→ Liter = l
→ Gram = g
→ Kilogram = kg

Most common equivalents

→ 1 Tbsp = 3 tsp
→ ¼ cup = 4 Tbsp
→ ⅓ cup = ¼ cup + 1 Tbsp + 1 tsp
→ Pinch = ⅛ tsp

How to convert units from one system to the other?

The most accurate way of converting ounces to grams is multiplying the number of ounces by 28.35. To convert grams to ounces, just divide the number grams by 28.35.

In the case of volume, multiply fluid ounces by 29.57 to convert them to milliliters, or divide milliliters by 29.57 to convert them to fluid ounces. Some books round both to 30 to simplify the math.

1 gram	0.035 ounces (1/30 ounces)
1 ounce	28.35 grams (usually rounded to 30)
1 fluid ounce	29.57 milliliters (usually rounded to 30)

This chart shows the most common equivalents:

1 lb	16 oz.	454 g
¼ cup	2 fl. oz.	60 ml
1 cup	8 fl. oz.	240 ml
1 tsp	⅙ fl. oz.	5 ml
1 Tbsp	½ fl. oz.	15 ml