Liquid medications include products such as solutions, suspensions, syrups, and elixirs. These prescription and nonprescription products are mostly used for children, but may also be taken by adults who have difficulty swallowing tablets or capsules. Some medications are only available as liquids.

**Measurement of liquid medications**

Be sure you know the exact dose and amount of liquid you are to use for each dose. For nonprescription products, it is best to use a child’s weight to determine the dose, rather than a child’s age, especially for young children.

Liquid medications are usually measured in milliliters (mL), teaspoons (tsp), or tablespoons (Tbsp). Read the abbreviations used in dosage directions carefully. Note that abbreviations for **teaspoons** and **tablespoons** are similar.

<table>
<thead>
<tr>
<th>Liquid Measurement</th>
<th>Abbreviation commonly used</th>
</tr>
</thead>
<tbody>
<tr>
<td>teaspoon</td>
<td>tsp</td>
</tr>
<tr>
<td>tablespoon</td>
<td>Tbsp or TBSP</td>
</tr>
<tr>
<td>milliliter</td>
<td>mL, mL, mLs</td>
</tr>
</tbody>
</table>

This comparison shows how to convert a measurement from teaspoon or tablespoon to milliliters.

<table>
<thead>
<tr>
<th>Liquid Measurement</th>
<th>Abbreviation commonly used</th>
</tr>
</thead>
<tbody>
<tr>
<td>1/2 teaspoon</td>
<td>2.5 mL</td>
</tr>
<tr>
<td>1 teaspoon</td>
<td>5 mL</td>
</tr>
<tr>
<td>1/2 tablespoon</td>
<td>7.5 mL</td>
</tr>
<tr>
<td>1 tablespoon</td>
<td>15 mL</td>
</tr>
</tbody>
</table>

Do not confuse dosage instructions for teaspoons and tablespoons. A tablespoon contains 3 times the amount of liquid as a teaspoon and could result in an overdose if used by mistake.
Liquid Measuring Devices

Always use a proper measuring device. Use the device that comes with the medication. If one is not provided, ask your pharmacist for advice to pick the best measuring tool. Measuring devices which come with a product should not be used to measure other medications unless your doctor or pharmacist tells you to do so. If you lost the measuring device that came with your medication, call your doctor or pharmacist for advice.

Cup

- Best for children (or adults) who can drink from a cup without spilling. Check for markings on the cup that match the amount you need for your dose. Be careful when using cups that have a combination of milliliter (mL), teaspoon (tsp), or tablespoon (Tbsp) markings so that you use the correct fill line.

Dosing spoon

- Best for children who can drink from a cup, but often spill some liquid. This measuring device may be good for children who use sippy cups to drink liquid.
- Check for markings on the spoon that match the amount you need for your dose.

Droppers or oral syringes

- Best for very young children who cannot drink from a cup
- Best devices for measuring liquids because they make it easy to get the correct dose. However, they may not be available for your medication. Ask your pharmacist.
- Check for markings on the dropper or oral syringe that match the amount you need for your dose.
- NEVER use hypodermic syringes that are intended to give shots. Only use syringes made especially for oral use.
- Special adapters that fit on the top of the bottle allow the liquid to be more easily withdrawn from the container with an oral syringe. These adaptors also improve safety by limiting a child’s access to the liquid medication.
Important Facts

**Never measure liquid medications with household utensils. They are not uniformly sized and this will cause either too much or too little medication to be given. Household measuring or baking spoons also should not be used as the liquid may spill or it may be difficult for you to get the whole dose.**

**If you are told to take millileters (mL), teaspoons (tsp), or tablespoons (Tbsp), always make sure you use a measuring device that is marked clearly with your dose.**

**Some oral measuring devices come with a combination of millileters (mL), teaspoons (tsp), or tablespoons (Tbsp) markings. Make sure you ask your doctor or pharmacist which marking you should to use to measure your dose. You may find it easier to ask them for a device that only includes the marking you need.**

**Ask your pharmacist if an adapter for prescription oral liquid medications is available that can slow or limit medication access. These adapters can reduce the risk of poisoning in children.**

**Never allow a child to drink directly from the medicine bottle.**
How to Use Liquid Measuring Devices

Always use a proper measuring device. Use the device that comes with the medication. If one is not provided, ask your pharmacist for advice to pick the best measuring device. Measuring devices which come with a product should not be used to measure other medications unless your doctor or pharmacist tells you to do so. If you lost the measuring device that came with your medication, call your doctor or pharmacist for advice.

Cup

- Be sure to measure at eye level on a flat surface (not held in your hand).
- Fill the cup to the correct line to measure your dose. It may be helpful for you or your pharmacist to mark the correct fill line for your dose.
- Depending on the dose, a couple sips may be necessary to take the full amount of liquid.
- If the liquid is thick or sticky, you may need to add a little water and swirl the cup to get the full dose of medication.
- Wash your hands after you have finished giving the medication and closed the bottle tightly.
How to Use Liquid Measuring Devices (continued)

Dosing spoon

• Be sure to measure at eye level and hold upright (not tipped).

• Fill the dosing spoon to the correct line to measure your dose. It may be helpful for you or your pharmacist to mark the correct fill line for your dose.

• Depending on the dose, a couple sips may be necessary to take the full amount of liquid.

• If the liquid is thick or sticky, you may need to add a little water and swirl the spoon to get the full dose of medication.

• Wash your hands after you have finished giving the medication and closed the bottle tightly.
How to Use Liquid Measuring Devices (continued)

**Droppers or oral syringes**

- Carefully pull up medication into the syringe to the correct marking. It may be helpful for you or your pharmacist to mark the correct fill line for your dose.
- Do not fill the dropper or syringe to the top.
- Be sure to tap out any air bubbles.
- Never squirt the liquid from the dropper or oral syringe directly onto the back of a child’s throat. Carefully and slowly squirt it into the space between the tongue and cheek in small amounts. Be sure to take breaks to allow your child to swallow.
- Wash your hands after you have finished giving the medication and closed the bottle tightly.

**Other Information**

- Do not combine two different liquid medications in a measuring device at the same time.
- Only mix liquid medicines with food or drinks when you have information that it is safe to do so.
- Discard any excess liquid if you overfill the measuring device. Do not return any excess liquid to the original container as it may contaminate the remaining product.
- Always wash the measuring device after use. Be sure to dry it carefully before the next use as any remaining water will cause the next dose to be measured improperly.