

Choosing Wisely[®]

An initiative of the ABIM Foundation



Taking medicines safely

How to measure liquid doses the right way

A dose is the amount of medicine you take each time. You may take several doses in one day. It is very important to take the right dose, especially for children. This “Choosing Wisely” report helps you measure the dose for liquid medicines correctly.

Don't use a kitchen spoon

The teaspoons and tablespoons you use for cooking and eating are not very accurate. Some teaspoons can hold twice as much liquid as others. Also, it is easy to confuse a teaspoon (tsp) with a tablespoon (Tbsp).

It is more precise to measure medicines in milliliters. The American Society of Health-System Pharmacists, along with many other medical societies and safety groups, advise using milliliters to prescribe and take liquid medicine.



Use milliliters for liquid medicines

Milliliters (mL) are a standard unit of measurement in medicine. They are used around the world. Milliliters can accurately measure very small to large amounts.

Avoid an overdose

For adults, getting slightly too much of an over-the-counter medicine probably won't cause much harm. For children, though, it's important to give exactly the amount of medicine recommended or prescribed. Children weigh less than adults, so even a little too much medicine can be harmful. Doses for children are usually based on a child's weight.

An overdose can cause serious problems, even death. One 5-year study found that over 3,000 children under 12 had side effects from cough and cold medicines. The side effects included restlessness, extreme sleepiness, hallucinations, and rapid heartbeat. Twenty of the children, most of them younger than 2 years old, died. One in three children were given the wrong amount of medicine. The rest found and took the medicine by accident.

Use the dosing device that comes with the medicine

Most liquid medicines come with an oral syringe or a small cup. These dosing devices should have milliliter markings.

- Always use the dosing device that comes with the medicine.
- When you pick up a prescription, make sure a dosing device is included. If it isn't, ask the pharmacist for a cup or syringe, so you can measure accurately.
- If a prescription calls for teaspoons or tablespoons, ask your doctor or pharmacist to give you the dosage in milliliters.
- If your doctor prescribes a liquid medicine, make sure you understand how much medicine to give, and how often.
- Ask your doctor or pharmacist to show you how to measure the medicine correctly if you're not sure.
- If you lose the dosing device, ask your doctor or pharmacist for a new one. For over-the-counter medicines, call the help line on the package.

You can call Poison Control

You can call the American Association of Poison Control Centers at 1-800-222-1222 for advice and help. Keep this phone number handy to call immediately in case of an accidental overdose.

This report is for you to use when talking with your healthcare provider. It is not a substitute for medical advice and treatment. Use of this report is at your own risk.

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