HEALTH BASICS

Over-the-counter medications

Over-the-counter medications are medicines you can buy without an individual prescription.

WHAT IT IS
Medicines sold without an individual prescription

WHERE IT COMES UP
Pharmacies, shops, online sales, and home medicine cabinets

WHY IT MATTERS
Active ingredients can help, interact, or cause harm

WHAT IT IS NOT
Not a disease or a guarantee of safety

WHO TO ASK
A pharmacist, primary care clinician, or poison service

HOW IT IS CHECKED
Drug Facts label and a medication review

Overview

Over-the-counter medications, often called OTC medicines, can be bought without an individual prescription. They include many pain relievers, allergy medicines, cough and cold products, antacids, laxatives, skin treatments, and other products.

"Over the counter" describes how a medicine is sold. It does not mean the medicine is weak, suitable for everyone, or free from risk. An OTC medicine still contains one or more active ingredients that affect the body.

Some medicines move from prescription-only to OTC sale after regulators review how safely people can use them without direct clinical supervision. In some cases, the same active ingredient is available in both prescription and nonprescription products, but the strength, form, instructions, or approved uses may differ.

OTC status also differs between countries. A product sold freely in one place may require a prescription or a pharmacist's involvement elsewhere.

Vitamins, herbal products, and dietary supplements are not automatically OTC medications. They may be sold beside medicines, but they can be regulated differently and may not have the same evidence, labeling, or manufacturing requirements.

How it works

Each OTC medicine has an active ingredient . This is the substance intended to produce the medicine's effect. The package may also list inactive ingredients, such as coloring, flavoring, preservatives, or ingredients that help form a tablet or liquid.

In the United States, most OTC medicines have a standardized Drug Facts label. It explains:

Different brands can contain the same active ingredient. A single brand name can also appear on several products with different ingredients. For example, products within one cough-and-cold brand may contain a pain reliever, a decongestant, an antihistamine, or a combination of these.

Combination products can be convenient, but every ingredient has an effect. If you only need treatment for one problem, a product with several ingredients may expose you to medicines you do not need.

The label directions are specific to the product. They may differ by age, formulation, strength, or reason for use. A kitchen spoon is not a reliable way to measure liquid medicine; use the supplied cup, spoon, or oral syringe when one is provided.

- The active ingredient and its purpose
- What the medicine is intended to treat
- Important warnings and situations requiring advice
- Directions for use
- Inactive ingredients and storage information

Why it matters for your health

OTC medicines can help manage suitable minor or short-term problems. Safe use starts with choosing an active ingredient that matches the reason you are taking it and checking whether it fits with your health conditions and other medicines.

Your prescription medicines, OTC products, vitamins, and supplements can interact. An interaction means that one substance changes the effect of another. This may reduce a medicine's benefit, increase side effects, or create a new risk.

Age and health history can also matter. Children are not simply smaller adults, and product directions may limit use by age or weight. Older adults may be more sensitive to effects such as drowsiness, confusion, constipation, or falls. Pregnancy, breastfeeding, liver or kidney disease, high blood pressure, bleeding problems, and other conditions may change which

products are appropriate.

The sales location does not establish quality. Be cautious when buying medicines online, especially if a seller hides its location, does not provide clear product information, or offers prescription medicines without requiring a prescription.

What can go wrong

Problems most often relate to the active ingredient, an interaction, an incorrect amount, or using a medicine longer than intended.

Duplicate ingredients are a common concern. For example, a pain reliever may also be included in a cold or sleep product. Taking both can unintentionally exceed the label directions.

Accidental poisoning or overdose can happen when a child reaches medicine, when doses are repeated too soon, or when someone takes several products containing the same ingredient. Too much acetaminophen can cause serious liver injury. Some anti-inflammatory pain relievers, including ibuprofen and naproxen, can contribute to stomach bleeding, kidney problems, or cardiovascular risks in some people.

Drowsiness and impaired coordination can occur with some antihistamines like cetirizine or loratadine , cough medicines, motion-sickness products, and sleep aids. Alcohol, cannabis, sedatives, and other medicines may worsen these effects. Driving or operating machinery may be unsafe if the label warns about drowsiness.

Medicine interactions can occur with prescription drugs, other OTC medicines, and supplements. Decongestants, for example, can affect blood pressure or heart rate. Antacids and some stomach medicines can change how other drugs are absorbed.

Allergic reactions may involve a rash, swelling, wheezing, or breathing difficulty. Reactions can be caused by an active or inactive ingredient.

Delayed assessment is another risk. Repeatedly treating pain, heartburn, constipation, cough, or another concern may hide a condition that needs evaluation. The label may state how long to use the product before seeking medical advice.

Call emergency services for trouble breathing, collapse, a seizure, severe confusion, or swelling of the face, lips, tongue, or throat.

For a possible overdose or accidental ingestion, contact a poison service promptly rather than waiting for symptoms. In the United States, Poison Help is available at 1-800-222-1222. Emergency symptoms still require emergency services.

Arrange routine medical follow-up if the problem persists beyond the label's stated self-care

period, keeps returning, worsens despite treatment, or requires frequent OTC medicine use.

What you can do

Start with the active ingredient rather than the brand name. Read the Drug Facts label every time, including when buying a familiar brand whose formula may have changed.

Keep an up-to-date list of everything you take. Include prescription drugs, OTC medicines, vitamins, herbal products, and supplements. Record the strength when known. Bring or show this list when speaking with a pharmacist or clinician.

Before using a product, check:

Ask a pharmacist about unclear labels, possible interactions, or choosing between products. This is especially useful for children, pregnancy or breastfeeding, older adults, and people with ongoing medical conditions or several medicines.

Use only the measuring device intended for a liquid medicine. Do not share prescription medicines or use someone else's prescription as an OTC substitute.

Store medicines in their original containers, away from children and pets. Child-resistant packaging reduces access but is not childproof. Store products according to the label, and avoid places where heat or moisture may damage them.

Use a medicine take-back location when available for unwanted or expired products. If one is not available, follow product-specific disposal instructions or advice from the relevant medicines regulator. Do not flush a medicine unless official instructions specifically say to do so.

- Whether its active ingredient appears in another product you take
- The labeled age, amount, timing, and maximum use period
- Warnings related to your conditions or other medicines
- Whether it may cause drowsiness or affect driving
- The expiration date and package seal

Common questions

Are generic OTC medicines as effective as brand-name products?

Products with the same active ingredient, strength, dosage form, and intended use are designed to provide the same clinical effect. Inactive ingredients, shape, flavor, and price may

differ. Check the label rather than relying only on package color or brand name.

Can I take two OTC medicines together?

Sometimes, but first compare their active ingredients and warnings. Two products may duplicate an ingredient or have effects that add together. A pharmacist can check the combination alongside your prescription medicines and supplements.

Does "natural" mean safer?

No. Natural substances can cause side effects, allergic reactions, and medicine interactions. Supplements may also be regulated differently from OTC medicines.

Can I use an adult product for a child if I give less?

Do not estimate a child's amount from adult directions. Use a product labeled for the child's age or weight, and follow its measuring instructions. Ask a pharmacist or pediatric clinician when the label does not clearly cover the child.

Should I keep taking an OTC medicine if it is not helping?

Do not exceed the label directions. Check the label for its advised duration and reasons to seek care. Arrange routine follow-up if the concern continues, returns often, or needs repeated treatment.

Sources

- US Food and Drug Administration. Drug Facts Label
- US Food and Drug Administration. Understanding Over-the-Counter Medicines
- MedlinePlus. Over-the-Counter Medicines
- US Food and Drug Administration. Where and How to Dispose of Unused Medicines
- Health Resources and Services Administration. Poison Help