SECTION 2 HOW MEDICATION WORKS



Being open about medications in your household, and modeling safe storage and use, can guide children to make more informed choices when they are old enough to take medications on their own. Knowing exactly how medications affect the body -- and how our body reacts to medications -- can help explain how important it is to make responsible decisions when introducing any type of medication into your body.

Medications are made in laboratories and created using substances found in nature. Medications are always evolving to help people feel better more quickly and to reduce side effects. Medications are used to make a person feel better when they are sick, help fight disease and infection, replace or block chemicals in the body to control an illness, relieve pain, and relieve symptoms.

Medications can be swallowed as a pill or liquid, injected and absorbed into the bloodstream, breathed into the lungs, or applied topically. If medications are swallowed -- typically the case when taking an opioid pill -- it travels to the stomach. Pills are coated differently depending on where in the body they should be dissolved. Medications are then absorbed into the lining of small intestines, which moves the medicine into the bloodstream. This is how medicine is circulated around the body and delivered to different organs and tissues through the circulatory system. Because medications travel all over the body, they can cause side effects in parts of the body that didn't need the medication.

Our brains are also an organ and some medications can have access to our brains while others will be blocked from it. Some medications, like opioids, are designed to affect chemicals in our brain called neurotransmitters. This can help with pain management by blocking pain and making us feel good. The effects of the medicine will continue to be active until our bodies begin to break it down and remove it from the body altogether.



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KNOW THE DIFFERENCE

In recent years, the U.S. Food and Drug Administration (FDA) has empowered consumers to take a more active role in their health care by offering many over-the-counter options. The FDA determines whether medications are prescription, and require consultation with a doctor, or are nonprescription, and can be readily available at stores.

This helps us know which medications are safe and effective to take with or without a doctor's prescription. You likely have different types of medications and supplements in your household. It is important to understand the differences of each and how to keep them safe from children.

Vitamins/Supplements

Vitamins are found in foods we eat but are sometimes recommended as a mineral supplement. They boost our immune system and support growth and development in young children. Vitamins are made in gummy, chewable, and pill forms and are flavored to be tasty to children so they want to take them.

Safety Tips:

It is important never to leave vitamins out on the counter or easily accessible. This may be difficult because vitamins are typically consumed on a regular basis and it is tempting to keep them in a convenient location. However, vitamins can be toxic when excessive amounts are taken.

Over-The-Counter (OTC) Medication

Over-the-counter medications do not need a doctor's prescription and can be sold directly to a consumer. They prevent diseases, manage recurring conditions, and relieve aches, pains, and itches. The FDA even regulates sunscreen, anti-dandruff shampoos, and anti-fungal products.

Restricted Over-The-Counter Substances

Some medications that were previously sold without limitation, have been moved into locations that require a pharmacist to obtain and identify the purchaser. An example of this are medications

containing pseudoephedrine. Although a prescription is not required, some medications can be used to create illegal substances. Only a certain amount of these medications can be purchased at one time and over a regulated duration. Other medications might require identification for proof of age.

Safety Tips:

- Throw away medications that are past the expiration date. Old medications may not work or can make you sick. It is a good idea to set a time once a year to go through all medications in your household.
- Know the difference between a tablespoon (TBSP) and teaspoon (TSP). This can help keep the dosage exactly as recommended.
- O Follow the age limits on the packaging and do not base the dosage on the size of a child. Children tend to break down and eliminate medications more quickly. Some medicine has to be given frequently because our bodies will break it down quickly. It shouldn't be given in a large dose at once, like with adults.

Prescription Medication

Prescription medication is prescribed for a specific person. Physical factors such as weight, age, fat mass, and muscle mass are considered when factoring how to prescribe medication. We are all genetically and chemically different and may tolerate certain types of medicine more than others.

Safety Tips:

- Confirm prescription medication is stored properly in your household, somewhere that is too high for young children to see or reach.
- Relock the safety cap of medicine bottles each time they are opened.
- Dispose of unused prescription medication to prevent misuse.

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- Follow the instructions, and don't take more than what is prescribed
- Don't mix medications
- Don't give prescription medication to someone else, and don't take other people's medications

Curiosity about pills

Pills look like candy and are flavored to entice children to take them when needed. Never refer to medicine as candy, that may reinforce confusion about medication.

If you are ever unsure about any medications and supplements in your home, reach out to a doctor or pharmacist for clarification.

Check the medicine cabinets in your home and make sure there are no unfinished or outdated prescription medications.

Get rid of any unused prescription medications that are expired or no longer active. Ask your primary care physician for suggestions on how to dispose of these medications. Your local hospital or clinic might also be able to suggest locations for dropping off opioids. Your local police station is another resource. Additional disposal and removal information can be found on the <u>U.S. Department of Health and Human Services</u> website. The Drug Enforcement Administration also hosts two <u>National Prescription Drug Take-Back Days</u> a year that provide safe, convenient, and responsible means of disposing of prescription drugs.

