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Pesticide

WHAT YOU,'SHOULD KNOW ABOUT PESTICIDES



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BRANCHES

Enforcement 916-324-4100

Northern Regional Office 916-376-8960

Central Regional Office 559-243-8111

Southern Regional Office 714-279-7690

Environmental Monitoring 916-324-4039

> Fiscal Operations 916-324-1350

Information Technology 916-445-4110

> Medical Toxicology 916-445-4233

Product Compliance 916-445-4159

Pest Management and Licensing

916-445-3914 *Licensing/Certification* 916-445-4038

> **Personnel** 916-322-4553

Pesticide Registration 916-445-4400

Worker Health and Safety 916-445-4222

Pesticides and food: how we test for safety

Most crops are treated with pesticides at least a few times in a growing season. Pesticides enable farmers to produce some crops in areas that otherwise would not be suitable, increase crop yields, preserve product quality, and extend shelf life. At the same time, pesticides can pose risks if used improperly or too often. All of us want to reduce our exposure to potentially risky chemicals, so we have questions about pesticides and food.

Pesticide levels tend to decline over time as the residues break down and crops are washed and processed before reaching the marketplace. So while we consume small amounts of pesticides regularly, levels are usually well below legal limits by the time food reaches the grocery store.

Pesticides are among the most regulated products in the country. Before a pesticide can be used in California, it must be evaluated and licensed by both the U.S. Environmental **Protection Agency** (U.S. EPA) and the California Department of Pesticide Regulation (DPR). The manufacturer must present test data to show the pesticide will not

pose unacceptable risks to workers, consumers, or the environment.

U.S. EPA sets safety standards to limit the amount of pesticide residues that legally may remain on or in food. U.S. EPA sets these limits with an added margin of safety in mind to protect infants, children, and other sensitive people. These "tolerances" represent the upper limit of pesticide residues and levels detected are typically much lower.

California has the nation's toughest pesticide controls and the country's largest and best-trained pesticide enforcement organiza-

> tion to make sure the rules are obeyed. Agricultural commissioners in all of California's 58 counties, aided by more than 250 county biologists, are responsible for local enforcement.

> > California was the first state to require reporting of all agricultural pesticide use. DPR also monitors air, soil and water to check for possible contamination.

> > > As a final check, California has the largest state program to test fresh produce for pesticide residues.

How does DPR test produce?

DPR staff take samples from wholesale and retail markets, distribution centers, and farmers' markets. Samples are analyzed for more than 200 different pesticides. Quick turnaround means DPR can immediately track produce with illegal residues. ("Illegal" means the produce has a residue that either exceeds the legal limit or is a pesticide not licensed for use on that crop.)

An illegal residue is uncommon but if it occurs, investigators track it to the source. If the crop is still in the field, DPR stops the harvest. If the illegal crop is in the channels of trade, DPR quarantines it and can order it destroyed. Farmers who violate the law may face the loss of a crop that cost them tens of thousands of dollars to grow. They are also subject to civil and criminal prosecution, fines, and other penalties.

How many residues does DPR find?

About 1 percent of samples tested have illegal residues. No residues are detected in about 60 percent. Remaining samples have detectable residues within legal limits. Most are trace residues well below the allowed levels.

What about imported produce?

All food sold in the U.S. must meet the same safety standards. The results of state and federal residue monitoring programs show that imported produce violates residue limits more frequently than domestically grown produce. However, violation rates for both domestic and imported produce are very low.

Should I be concerned about pesticides in my food?

Years of monitoring show that most fresh fruit and vegetables have little or no detectable residue by the time they reach market, and even less by the time they are washed and served.

Since the residue limits are designed with a margin of safety, even an illegal residue does not necessarily equate to a health risk. Food safety experts agree that any small risk from the trace levels of pesticide residues found in produce should not keep you from enjoying the health benefits of a diet rich in fruits and vegetables.

How can I reduce my exposure to pesticides in food?

Because pesticides have many uses, we may be exposed to them in various ways, through food, water and air. You can reduce the amount of pesticides you consume by:

WASHING – Rinse fresh fruit and vegetables thoroughly under running water, which has an abrasive effect that soaking does not. Although some pesticides are absorbed into fruits and vegetables, other residues (when present) are found on the surface. Washing will remove most surface waxes and residues, along with dirt and bacterial contamination.

Don't use household soap to wash produce, as soap can cause stomach upset.

PEELING and TRIMMING - Throw away outer leaves, skins or rinds. Peel produce such as apples, pears, potatoes, and carrots to remove surface residues. (Some nutrients and fiber may be lost in peeling.)

GO FOR VARIETY - Eat a variety of foods, from a number of sources. This will give you a better mix of nutrients and reduce your likelihood of exposure to a single pesticide.

Even though the risk of pesticide exposure in food is extremely low, if you are still concerned, you may choose organically grown fruits and vegetables. Organic produce tends to have lower pesticides residues, and residues of fewer pesticides.

Whether you choose organic or conventionally grown, eat more fruits and vegetables, at least five servings every day along with a variety of other foods. Most fruits and vegetables are naturally low in calories and provide essential nutrients and dietary fiber. They may also play a role in preventing certain chronic diseases. When compared to people who eat only small amounts of fruits and vegetables, those who eat more generous amounts tend to have reduced risk of chronic diseases.



DPR: A Department of the California Environmental Protection Agency

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Single copies of this handout are available by calling your County Agricultural Commissioner's office, from DPR at 916-445-3974, or can be downloaded from DPR's Web site, www.cdpr.ca.gov, "Consumer Fact Sheets."