

The Dirty Dozen

FDA and USDA research shows high levels of pesticide and chemicals in these commonly contaminated foods

(Oct. 2, 2006) -- Eating organically grown food is a clear, intelligent, delicious choice. Finding and affording only organic food is sometimes tough. We do the best we can. Certain foods are worth the extra effort, or worth simply avoiding when organic is not available. The "dirty dozen" are the most commonly and highly contaminated foods with pesticides and chemicals, even after washing and peeling.

The research used to compile this list is from extensive independent tests run by the FDA and the USDA from more than 100,000 samples of food. The chemical pesticides detected in these studies are known to cause cancer, birth defects, nervous system and brain damage, and developmental problems in children. In other words, panic if it isn't organic.

12 Contaminated Foods

1. Beef, Pork and Poultry The EPA reports that meat is contaminated with higher levels of pesticides than any plant food. Many chemical pesticides are fat-soluble and accumulate in the fatty tissue of animals. Animal feed that contains animal products compounds the accumulation, which is directly passed to the human consumer.

Antibiotics, drugs, and hormones are a standard in animal husbandry, all of which accumulate and are passed on to consumers as well. Ocean fish carry a higher risk for heavy metals than pesticides, though many freshwater fish are exposed to high levels of pesticides from contaminated water.

2. Milk, Cheese and Butter For reasons similar to those for meat, the fat in dairy products poses a high risk for contamination by pesticides. Animals concentrate pesticides and chemicals in their milk and meat. Growth hormones and antibiotics are also serious concerns and are invariably found in commercial milk, cheese, and butter.

3. Strawberries, Raspberries and Cherries Strawberries are the crop that is most heavily dosed with pesticides in America. On average, 300 pounds of pesticides are applied to every acre of strawberries (compared to an average of 25 pounds per acre for other foods). Thirty-six different pesticides are commonly used on strawberries, and 90% of strawberries tested register pesticide contamination above safe levels.

Raspberries trump strawberries with the application of 39 chemicals: 58% of the raspberries tested registered positive for contamination.

Cherries are almost as dodgy with 25 pesticides and 91% contamination.

4. Apples and Pears With 36 different chemicals detected in FDA testing, half of which are neurotoxins (meaning they cause brain damage), apples are almost as contaminated as strawberries.

Ninety-one percent of apples tested positive for pesticide residue. Peeling nonorganic apples reduces but does not eliminate the danger of ingesting these chemicals. Pears rank hazardously near apples with 35 pesticides and 94% contamination.

5. Tomatoes It's standard practice for more than 30 pesticides to be sprayed on conventionally grown tomatoes. The thin skin does not stop chemicals from infiltrating the whole tomato, so peeling won't help you here.

6. Potatoes Potatoes are one of the most popular vegetables, but they also rank among the most contaminated with pesticides and fungicides. Twenty-nine pesticides are commonly used, and 79% of potatoes tested exceed safe levels of multiple pesticides.

7. Spinach and Other Greens The FDA found spinach to be the vegetable most frequently contaminated with the most potent pesticides used on food. Eighty-three percent of the conventionally grown spinach tested was found to be contaminated with dangerous levels of at least some of the 36 chemical pesticides commonly used to grow it.

8. Coffee Most coffee is grown in countries where there are little to no standards regulating the use of chemicals and pesticides on food. The United States produces and exports millions of tons of pesticides, some of which are so dangerous that they are illegal to use on American farmland.

Foreign countries import these chemicals to cultivate food, which is sold back to the United States. Coffee is an unfortunate culprit in this vicious cycle of malevolent agriculture. Purchasing "Fair Trade" coffee provides insurance that the premium price paid for this treasured beverage supports farms and workers with more equanimity and reward.

9. Peaches and Nectarines Forty-five different pesticides are regularly applied to succulent, delicious peaches and nectarines in conventional orchards. The thin skin does not protect the fruit from the dangers of these poisons. Ninety-seven percent of [nectarines](#) and 95% of [peaches](#) tested for pesticide residue show contamination from multiple chemicals.

10. Grapes Because grapes are a delicate fruit, they are sprayed multiple times during different stages of growth. The thin skin does not offer much protection from the 35 different pesticides used as a standard in conventional vineyards.

Imported grapes are even more heavily treated than grapes grown in the United States. Several of the most poisonous pesticides banned in the United States are still used on grapes grown abroad. Eighty-six percent of grapes test positive for pesticide contamination; samples from Chile showed the highest concentration of the most poisonous chemicals.

11. Celery Conventionally grown celery is subjected to at least 29 different chemicals, which cannot be washed off because, of course, celery does not have any protective skin. Ninety-four percent of celery tested was found to have pesticide residues in violation of safe levels.

12. Red and Green Bell Peppers Bell peppers are one of the most heavily sprayed foods, with standard use of 39 pesticides. Sixty-eight percent of bell peppers tested had high levels of chemical pesticide residues. The thin skin of peppers does not offer much protection from spraying and is often waxed with harmful substances.