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Use of pesticides and its effects on food

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DESCRIPTION

Pesticides are chemicals that prevent insects, weeds, and fungi from damaging plants. Farmers use them to increase the amount of crops they can produce. Because there are many types of potential pests, there are different types of pesticides. Here are some examples:

- Insecticides: These pesticides reduce the destruction and contamination of growing and harvested plants by insects and their eggs.
- Herbicides: Herbicides, also known as herbicides, improve crop yields.
- Rodenticides: They are important to control the destruction and contamination of plants by pests and diseases transmitted by rodents.
- Fungicides: This type of pesticide is especially important in protecting crops and seeds from fungal rot.

For farmers, pesticides save labor and generally produce a higher yield. They can mean the difference between saving a crop or losing it to disease. Some farmers, especially those who produce on a smaller scale, use pesticides sparingly. For example, fruit trees in northeastern regions are susceptible to disease, especially in the flowering phase. An apple or peach grower can spray their fruit trees with a fungicide once in the spring to make sure the fruit sets, but don't use any additional chemicals for the rest of the season. For many large row crop farmers, on the other hand, regular use of pesticides is as much a part of farming as planting seeds. Spraying Roundup in a corn field that has been genetically engineered to resist the chemical kills weeds without damaging the corn. Compared to the mechanical weeding of hundreds or thousands of hectares, the use of pesticides is a turning point. Some farmers spray their wheat with a herbicide at the end of the season to speed up the drying process and prevent losses from wet weather later in the season. Farmers who grow fruits or vegetables on a large scale, especially sensitive varieties such as strawberries, will cover the field with pesticides to avoid possible diseases.

Pesticides can be toxic to humans, but how they work will determine how harmful they are.

Different types of studies are used to understand what levels of pesticides are harmful. Some examples include measuring levels in people who have accidentally been exposed to too much pesticide, testing animals, and studying the long-term health of people who use pesticides in their work.

For example, the lowest dose of a pesticide that causes even the most subtle symptom is known as the "Lowest Observed Level of Side Effects" or LOAEL. Sometimes the term "No Observed Adverse Effect Level" or NOAEL (3 trusted sources) is used.

Organizations such as the World Health Organization, the European Food Safety Authority, the US Department of Agriculture, and the Food and Drug Administration use this information to establish an exposure limit that is considered safe.

Effects of pesticides on human health

Both synthetic and organic bio-pesticides have harmful health effects in higher doses than those typically found in fruits and vegetables. For example, one review found that exposure to pesticides may be linked to an increased risk of Parkinson's disease and could alter certain genes involved in its development. Similarly, an analysis of seven studies found that pesticide exposure could be linked to an increased risk of Alzheimer's disease. Some research also shows that pesticide use may be linked to certain types of cancer.

According to a study of more than 30,000 4,444 women pesticide applicators, increased exposure to organophosphates was linked to a significantly increased risk of hormone-related cancers, such as breast, thyroid and ovarian cancer, the publicity of the organophosphates in terms of a dramatically better threat to hormone-associated cancers, including breast, thyroid, and ovarian cancer.

Another analysis of research in humans, animals, and test tubes found comparable results, reporting that advertising for organophosphate insecticides such as malathion, terbuphos, and chlorpyrifos may be related to an increased likelihood of developing most breast cancers over time.

Some research has also found that pesticide use may be linked to an increased risk of many different types of most cancers, including cancers of the prostate, lung, and liver