

# POISONOUS MUSHROOMS & TOXINS

Many people take up mushroom hunting in order to find mushrooms to eat. Eating mushrooms is called *Mycophagy*. To learn which mushrooms are safe to eat it will be necessary to study them in some detail. The study of mushrooms is called *Mycology*.

The question beginning mushroom hunters most often ask is whether or not a particular mushroom is edible. The only way mycologists know whether a mushroom is safe to eat or not, is if there is a record of someone having eaten it in the past. Most prospective mushroom hunters know that some mushrooms are deadly poisonous. While that is true, there are many other degrees of poisoning as well. Anyone who plans to pick mushrooms to eat should know the facts of mushroom poisoning.

Very few of the thousands of species of wild mushrooms have been tested for edibility or the presence of toxins. While relatively few species are poisonous, some of the poisonous ones are quite common.

Toxins are compounds which produce abnormal effects on the human body. These abnormal effects take many forms. The toxins in most species are not usually fatal. They cause various levels of discomfort. However, a few species have toxins that are potentially fatal or extremely debilitating.

## >> Mushrooms can cause poisoning in a variety of ways:

**Overindulgence** – Eating too much of any food can cause upsets. We recommend that you cook all wild mushrooms and enjoy them in moderation.

**Allergic Reactions** – Individuals may have an allergy or hypersensitivity to an otherwise edible mushroom. CMS has members who get ill if they eat morels or *Boletus edulis*.

**Food Poisoning** – Proper handling and common sense can prevent this problem. You wouldn't eat a rotten tomato, don't eat rotten mushrooms.

**Contaminated Mushrooms** – Many things such as fungicides and insecticides, can contaminate mushrooms found in or near parks and lawns. In the mountains of Colorado we also need to be aware of the possibility of heavy metal contamination from mining tailings.

**Alcohol Reactions** – Some species of mushrooms produce a toxic reaction only when combined with alcohol.

**Mushrooms toxins** – Some species of mushrooms produce poisonous substances which are contained in the fruiting body itself. There are a number of different kinds of toxins.

**Imagination** – Having doubts about the safety of what a person has eaten can cause real discomfort whether or not there is any physiological basis.