

The Importance of Fungi

Fungi play an important part in the health of our Earth, as well as our own health. They have medicinal values, contribute to nitrogen and phosphorus cycles, recycle nutrients back into the soil, as well as help keep different animals and plants alive.

To begin with, let's talk about the ways mushrooms get their nutrients and how it helps the environment. Mushrooms cannot photosynthesize, so they have to use other means to get nutrients. If we group mushrooms together by how they get their nutrients, there would be three categories- symbiotic mushrooms, saprobic mushrooms, and parasitic mushrooms. The way saprobic mushrooms and symbiotic mushrooms get energy benefits ecosystems greatly.

Firstly, we have symbiotic mushrooms. Symbiotic mushrooms form a bond or partnership with another living organism, and together they provide for each other. Mycorrhizae mushrooms is an example of a symbiotic relationship between plants, or more specifically, their roots. The mushroom feeds important water and minerals to the plant while the plant in return gives the mushroom sugar compounds (carbohydrates). This relationship helps plants thrive and are needed in some cases to keep the plants alive.

Next we have saprobic mushrooms. Saprobic mushrooms get nutrients from a dead host, such as a decaying log. They are decomposers. They are very important for they break down organic material which not only feeds the mushroom, but it also allows the nutrients to go back into the soil. Decomposers are an important part of many different cycles including the nitrogen cycle and the phosphorus cycle. If we didn't have these mushrooms, then organic material wouldn't be broken down and would take a very, very long time to finally decay and the soil would lack important nutrients.

Fungi also are very good for our health, and since they are made of mycelium, they are high in protein and different vitamins. Mushrooms also can hold medicinal properties. Some medicinal mushrooms include lion's mane, reishi, and shiitake. There is lots of research about medicinal mushrooms being conducted, so the ailments that they can cure could be endless.

Left: Lion's mane, Middle: Shiitake,
Right: Reishi



One very common medicinal mushroom that can be found in Victoria is turkey tail. Turkey tail has been used since the Ming Dynasty in the 15th century in China. It is a great immune system booster, and helps reduce inflammation. They also help prevent and treat common colds. Other benefits of turkey tails include:

- Helps with digestion
- Helps treat an oral strain of HPV
- Possibly help fight breast cancer and help chemo patients
- Possibly help people with HIV/AIDS



Turkey tail is often consumed as tea or as powder in capsules. They are pretty easy to find at different health food stores and you can buy some online. But if you decide to get some, make sure you are educated and you get some that have been certified and make sure it's organic. This helps lessen the risk of toxins getting on the mushrooms and inevitably hurting you. Also make sure you buy from a reliable place. If you do decide to go foraging, make sure you go with someone who has experience, and always ask an expert to help with identification. You can never be too sure.

Sources:

<https://draxe.com/turkey-tail-mushroom/>

<https://bernheim.org/the-importance-of-mushrooms/>

<http://m.espacepurlavie.ca/en/role-mushrooms-nature>