

## More to Mushrooms than Morels

By Janet Hackert, Regional Nutrition and Health Education Specialist

Although many in Missouri think about mushrooms when the morels are at their peak in April, those attending the all-day mushroom workshop at the recent 2017 Great Plains Growers Conference know they need to be thinking about mushrooms much of the year, if they want to grow them at home or commercially.

There are many kinds of mushrooms besides our local wild favorite, morels. There are portabella, shiitake and white button mushrooms that are easy to obtain in most grocery stores, but also oyster mushrooms, chanterelle, blewit, lion's mane, wine cap and many more varieties.

As an edible fungus, mushrooms are rather unique. Rather than propagating by seed or root, mushrooms reproduce by single-celled spores. The spores grow tiny filaments called mycelia that spread throughout the dead wood, manure, straw or compost within which they grow. Mushroom fungi decompose dead and decaying plant material and draw their nourishment directly from it. Once a log or other substrate is inoculated, the spawn run, or spreading process, can take from just a few months to up to a year. The fruiting body is the part of the mushroom that is eaten and when it develops depends on the temperature and relative humidity around it. This is determined by the season, if growing wild, or can also be forced by watering at the right time followed by proper storage if being cultivated. So depending on the variety of mushroom, mid- to late winter may be just the time to get started preparing the logs or other substrates needed to grow mushrooms at home or commercially.

Mushrooms are also unique nutritionally. Like many other foods eaten as vegetables, mushrooms are low in calories, sodium and carbohydrates. They are high in potassium, phosphorus, fiber and B-vitamins, such as riboflavin. However, mushrooms also have a small amount, but high-quality, protein not typically found in foods eaten as vegetables.

For more information, the University of Missouri Center for Agroforestry has an in-depth guide to mushroom growing called <u>Growing Shiitake Mushrooms in an Agroforestry Practice</u> that is found online at <a href="http://extension.missouri.edu/">http://extension.missouri.edu/</a>. It focuses on shiitake mushroom cultivation, but gives a good overview of the process in general. The publication includes several recipes and resources on production, supplies, health aspects and cookbooks. Another good resource is the Cooperative Extension search engine at <a href="https://search.extension.org/">https://search.extension.org/</a>.

For information this or on any other topic, your local <u>University of Missouri Extension office</u>. University of Missouri Extension - your one-stop source for practical education on almost anything. (written 1/20/17)

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