SOME EDIBLE FUNGI

BY

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On the Continent there is widespread knowledge of, and interest in, edible fungi. In France pharmacists are trained in mycological chemistry and general practitioners in the treatment of fungus poisoning; both often write their theses for a doctorate on these subjects. Since, formerly, in this country the general public was accustomed to restrict its attentions to the cultivated and field mushrooms, there was no incentive for specialized knowledge. Occasional deaths were usually dismissed as "mushroom poisoning," for the victims had invariably believed that they had eaten mushrooms, being firm in the conviction that all toadstools were deadly poisonous.

During the war, however, many people began to change their attitude towards edible fungi. There were several reasons for this, but the point may be stressed that there were no more than the usual number of accidents, like that described by Dr. Donald Wilson elsewhere in this issue (p. 297), and these were, with one exception, through eating not toadstools but what were thought to be mushrooms. The exception was a Polish Jewess at Hammersmith, who retrieved and consumed some specimens which had been rejected by her daughter. Whether with the likely spread of interest there will be carelessness, with a possible increase in accidents, remains to be seen, but medical practitioners in country towns should have the requisite acquaintance with up-to-date treatment and not rely on the "accumulated mass of clotted bosh" which has passed for knowledge.

The number of poisonous fungi is about a dozen, of which three—*Amanita phalloides*, the Death Cap, and the rare related forms *A. verna* and *A. virosa*—are deadly. Three or four others are strongly poisonous, about the same number slightly poisonous, and two or three are sufficiently indigestible to cause illness in some people. It is possible for a layman to know enough about the well-marked symptoms to be able to give a shrewd guess as to the identity of the fungus causing trouble and the probable prognosis.

There are several hundreds of toadstools that can be eaten with safety, though not all with pleasure or profit, because of unpleasant taste, leathery consistency, or small size. Three or four hundred are, however, sufficiently palatable and safe to have been used as food, and one would have no hesitation in sampling them. I have eaten, I suppose, well over a hundred different kinds with no discomfort whatever, and, apart from one or two cases of allergy, know of nothing untoward happening to any of the very many people who have accepted advice about these or other species.

Puff-balls and Fairy Rings

From the point of view of the general public, it is the sounder plan to recommend only a small number of edible species, and these the best known, the most abundant, and the most characteristic. It must be admitted that toadstools, like negroes and Mongolians, may all be said to look alike until examined closely. However, everyone knows puff-balls, and these are edible while the flesh is still white and cheesy. *Lycoperdon giganteum*, the Giant Puff-ball, can be cut in slices, dipped in egg and bread-crumbs, and fried both sides in fat; all fungi of reasonable consistency can be cooked in this way. The Common Puff-ball, *L. perlatum* (Fig. 7), cannot be confused with any fungus in any way suspect.

The Fairy Ring Champignon, *Marasmius oreades* (Fig. 6), growing in circles in lawns, though differing much in appearance according to the weather, cannot readily be mistaken. It dries easily and can be used for flavouring soups or gravies, or the caps can be cooked à l'anglaise—more prosaically, fried with the bacon.

The parasol mushrooms again are easily recognized. The Parasol Mushroom, *Lepiota procera* (Fig. 5), with its large size, scaly cap, stem scaly below a large ring, and white gills, is delicate in flavour. The Ragged Parasol, *L. rhacodes* (Fig. 3), has a smooth stem, and the flesh turns reddish when cut; change in colour is of no alimentary significance. Both can be cooked in omelettes, or the cap can be fried in butter.

Coprinus comatus, the Shaggy Ink Cap, looks like a feathered egg when young, but becomes somewhat repulsive in appearance as the cap expands and begins to shed spores, and then by autolysis converts itself to a black ink. It should be cooked young; one way is in butter en casserole.

The Horse Mushroom, *Psalliota arvensis*, is avoided by many, presumably because it is not the Field Mushroom. It is perfectly wholesome, and, though perhaps a little coarser than *P. campestris*, is often preferred. It is larger than *P. campestris*, often occurring on the edges of fields rather than in the middle; the ring on the stem is double and the gills do not become fleshy pink but smoky red. It makes a good ketchup.

Oysters and Beef Steak

Pleurotus ostreatus (Fig. 8), the Oyster Mushroom, growing on trees, stumps, and logs, usually at first with a brownish cap which later becomes light blue or cream colour, has the shape indicated by its name.

Fistulina hepatica, the Beef Steak fungus, grows usually on oaks, but its Latin name better describes its appearance.

LEGENDS

- FIG. 1.—*Craterellus cornucopioides*—Horn of Plenty.
FIG. 2.—*Boletus edulis*—Cep.
FIG. 3.—*Lepiota rhacodes*—Ragged Parasol Mushroom.
FIG. 4.—*Morchella esculenta*—Morel.
FIG. 5.—*Lepiota procera*—Parasol Mushroom.
FIG. 6.—*Marasmius oreades*—Fairy Ring Champignon.
FIG. 7.—*Lycoperdon perlatum*—Common Puff-ball.
FIG. 8.—*Pleurotus ostreatus*—Oyster Mushroom.

These illustrations are from the A. E. Peck collection in the British Museum (Natural History).

Chopped up with shallots and fried it provides a dish which Canadian soldiers on war service here thought most excellent.

Boletus edulis (Fig. 2), the French *cèpe*, is one of the most highly praised species. It figures largely in restaurants in France as *Cèpes à la Bordelaise*, *Cèpes frits*, *Cèpes aux tomates*. A brownish cap and a white network on the stem, together with the tubes, which are white at first, then yellow, and finally greenish, serve as distinguishing marks for this species.

The blackish-grey *Craterellus cornucopioides* (Fig. 1), Horn of Plenty, again has only to be seen to be recognized. It dries easily.

The Morel, *Morchella esculenta* (Fig. 4), has been prized since classical times. The fawn or dark-coloured honeycomb-like cap and white stem characterize this spring species. It is used dried for flavouring, or the hollow stem may be filled with a mince made of anything palatable.

Other common edible species are the egg-yellow *Cantharellus cibarius*, the Chanterelle, with vein-like gills; St. George's Mushroom, *Tricholoma gambosum*, growing in rings in spring, wholly cream-coloured; Blewits, *Tricholoma personatum*, with cream-coloured cap and gills and a purplish blue stem; Wood Blewits, *Tricholoma nudum*, wholly lilac-purplish; *Hydnum repandum*, cream-coloured and with spines in place of gills; *Sparassis crispa*, looking like a large sponge, at the base of pine trees; and *Lactarius deliciosus*, the Saffron Milk Cap, with orange-coloured milk.

From one point of view the safety of these species lies in the fact that except for the Horse Mushroom none is like the Common Mushroom, and hence is not liable to be confused with *Amanita phalloides*, though it would be well for all unable to recognize a mushroom to be content with purchase. The amount of nutriment in these fungi need not be considered here. Cooked fungi are probably more nutritious than most cooked vegetables. But whether this is accepted or not, their principal value is that they add a spice of variety to present-day diets, making them more palatable and presumably more beneficial.