

# Mushroom production: Self-employment indoors

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A glance and then a look away! Externally it appears like a fungus but not everyone knows about the nutritious qualities of mushrooms.

"Every 100 grams (g) of mushrooms contain around 25 to 35 percent protein, 57 to 60 percent minerals, four to six percent fat and five to six percent carbohydrates," said Md Abdul Wahed, project director of

Srotodhara Foundation (SF), an NGO that specialises in providing training in mushroom cultivation and also selling mushrooms and its seeds.

Japan International Cooperation Agency (Jica) had provided expertise on mushroom cultivation to the Bangladeshi government whereas Wahed gathered the expertise from a mushroom cultivation project located at Savar. He took training in mushroom

cultivation in India.

Based on research conducted by Jica and local nutritionists at Birdem and Dhaka University (DU), mushrooms have been found to be helpful in curing several diseases including constipation, blood pressure, anaemia, jaundice, heart disease, obesity and diabetes.

SF started operating in 2000 but was granted a licence from Ministry of Social Affairs in 2004

as ministry officials ask for work experience before granting a licence. A three-day training programme costs Tk 1,050, a packet of seeds costs Tk 9 while mushrooms in raw, dried and powdered form cost between Tk 150-1,500.

Responding to a question about the origins of mushrooms, Wahed said its use went far back to ancient Egypt where it was referred to as the "food of the gods" as it was produced naturally.

Wahed has his own factory at

**The conveniences of mushroom cultivation are that they can be cultivated indoors without much space as they can be kept on shelves and are thus a source of income for unemployed youths**

Rupganj where mother seeds are produced. A solution of dextrose, potato juice, agar and water are kept in test tubes and placed in an air-conditioned room for 15 to 20 days after which the sprouts appear.

The sprouts are then put in a mixture of wheat and lentil husks, wood dust, leaves, calcium carbonate and sugarcane residue. "The most important thing is to sterilise the mixture by means of a steriliser at a heat of 120 degrees Celsius before mixing the sprouts. Sprouts produced out of non-sterilised elements could be poisonous," said Wahed.

Acut is made on the side of the seed packs and kept within a temperature below 30 degree Celsius. Humidity must be maintained through continuous spraying of water. Mushrooms would appear within a week.

"A single packet can produce mushrooms between 10 to 12 times within a duration of three months," said Wahed. After that the ingredients could be used for fish feed or compost. However if the mushrooms turn green or yellow, then the packet along with its ingredients must be thrown away, he added.

SF sells seed packets of four other breeds of mushrooms apart from the oyster breed, namely milk white, straw, shiitake, rishi and button. However trainees are given the oyster breed, as they are easier to cultivate.

The conveniences of mushroom cultivation for unemployed youths. Moreover they are not affected by natural disasters, Wahed added.



Mushrooms of various breeds left to cultivate under certain temperatures.



A cleaner of Dhaka City Corporation (DCC) brings out empty bottles of phenisidyl from a manhole in Kamalapur, where the DCC cleans sewerage lines.

STAR PHOTO

# Plastic surgeons sans burn treatment training

MAHBUBA ZANNAT

Four plastic surgeons from the July 2003 MS course of Dhaka University (DU) have just passed out without the minimum of six months' training 'burn treatment', a policy not even adopted by developed countries.

A large portion of plastic surgeries is performed on burn patients and such training is compulsory for practicing surgeons, experts said.

DU has similarly introduced a three-year FCPS course 18 months back where plastic

surgeons are in the making. Retired British Surgeon Ronald William Hills who voluntarily performs critical plastic surgery at the burn unit of Dhaka Medical College and Hospital, said the burn patients need intensive care as skin is a vital organ and when it is burnt it affects other parts of the body

training.

"Training is not must for the MS curriculum as it is more theoretical and contains some clinical aspects. Training is important for FCPS," he added.

He further added that a three-month training on burn management is enough, and although the course curriculum does not specify where to place the training, it is the duty of the course coordinator to include it according to student requirement.

Answering the complaint of his unwillingness to send the students to burn unit for training Dr Shafquat said: "In my opinion, it [the service provided by the DMCH burn unit] is far short of the desired level."

"If we had enough manpower, we could run the five operation theatres, but we are capable of running only two at the moment," said AZM Salek, the head of DMCH burn unit.

"There are some wards that can be run by a few doctors, but it is not possible in the case of the burn unit as the patients need more care," he said adding that the burn unit should be considered as intensive care unit with increased number of doctors.

"Only 10 to 12 doctors are not enough to treat 80 patients at a time," said Project Director of burn unit Dr Samantalal Sen. "The present doctors cannot work round the clock, and shortage of manpower hampers better patient care," he added.

"More plastic surgeons with burn training can help provide better treatment," he said adding that sometimes they release the patients before they are sufficiently cured as the rush of new patients could not be avoided.

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vital organ and when it is burnt it affects other parts of the body.

"More patients will survive if they receive proper treatment and to treat the burn patients properly the surgeons must have training on treating burns. Besides, dedicated doctors and trained nurses make treatment easier," he said.

"Burn is a very sensitive issue and needs lots of care. No plastic surgeon should start work without having burn training. Experts should carry out even the dressing and all over the world nurses are trained for the exercise," he added.

But Bangladesh College of Physicians and Surgeons (BCPS) Course Coordinator, Prof Shafquat Hussain Khundker said the students having their MS course are already full-fledged surgeons and even ready to train other doctors.

"The four passing the MS course are experienced hands and taking the course only for further posting. They have five years' experience in plastic surgery," he said adding that since they have the experience of burn management, the burn training is not essential for them. But those who will enter the course after completing the MBBS degree would need the

5x3

10x3