

# BREAKFAST SNACKS



10 • Taste of India's biodiversity

# More than religious

Vaidya Balendu Prakash

akhana (Euryale ferox), or foxnut, is a common fixture in religious ceremonies in north India. It grows in the wetlands of Bihar, largely in Mithila, and in the ponds of West Bengal. The *makhana* plant is almost covered in thorns. The fruits, ready by May-June, are about the size of a small orange. They carry eight to 20 black seeds which are roasted and cracked open. The seed's outer black part falls off to reveal the puffed *makhana* seeds. (Read about *makhana* cultivation on *page 12*)





Breakfast cereal

Makhana snacks

Makhana's medicinal properties are well-documented in Ayurveda. It is effective in curing cardiovascular diseases, leucorrhoea and circulatory problems and is used in post-delivery care. Makhana is also believed to increase hormone secretion. According to an Indian Council of Scientific Research publication, Nutritive Value of Indian Foods, 100 grammes of makhana contain 9.7 per cent protein, 76.9 per cent carbohydrate, 0.1 per cent fat, 1.3 per cent minerals and 12 per cent water. The makhana plant, though, finds itself prey to a variety of pests and pathogens. Indiscriminate pesticide use, silting of wetlands and weeds, like water hyacinth, threaten it. But makhana is still prominent as a major cash crop in parts of Bihar. Known as the poor man's manna, makhana is easy to digest and affordable. Cultivation is an inexpensive affair. Seeds left over from the previous year's harvest germinate to make up the next season's crop. The only labour required is in prising the seeds open. But if the wetlands disappear so will the nutritious makhana.

### MAKHANE KA PARANTHA

Makhana (roasted and powdered) - 1 cup
Potato (boiled) - 1

Green chilli - to taste

Salt - to taste

Mash potato and knead with makhana powder. Mix salt and chopped chillies to taste. Make balls from the dough. Roll out as for chapatis and cook on griddle till sufficiently brown

### **MORNING CEREAL**

Makhana (roasted and crushed) - 1/2 cup

Milk - 1 glass

Almonds - 4-5

Raisins - 15

Banana - 1/2

Add *makhana* to a cup of hot milk. Add banana slices, chopped almonds and raisins

### **MAKHANA SNACK**

Makhana - 100 gm Muskmelon seeds - 50 gm

Roast *makhana* and melon seeds. Add salt and pepper, and store in an airtight jar

see recipe for raita & sabzi on page 70 & 71. Recipe for kheer on page 156

akhana is the seed of a member of the water-lily family and grows wild in ponds in the eastern part of the country. It grows in the Indo-Gangetic flood plain, the country's largest wetland system. It is commercially cultivated in northern Bihar, lower Assam and a few districts of West Bengal. Food experts believe that makhana has the potential to become a multi-crore enterprise just as a household snack. They believe it could become an important cottage industry for fishing communities. Makhana cultivation is based on traditionally acquired skills of fisherpeople. The fact that fish such as the black catfish (singhi, magur and kawai) breed in the makhana ponds means the seed could be a source of additional income for fisherpeople of the area.

Bihar alone accounts for over 270,000 hectares of the ecosystem in which *makhana* grows. Unfortunately, these wetlands are fast disappearing. Some studies say a hectare of the world's wetlands disappears every minute. In India, more than half of the wetlands have been wiped out due to bad management and lack of legal protection.

Siltation is one bane. Excess deposition of silt brought in by rivers and streams decreases the level of water in the pond or lake. Agricultural activities in and around the wetlands encroach on the home of the native flora and fauna. Run-off from fields carries chemical fertilisers, pesticides and other chemical compounds which pollute the water, making it unfit to support life.

Disturbing the balance of nutrition of the water accelerates the process of eutrophication, the lake's ageing process. Weeds grow all over the surface of the water body and cut off the pond's air supply. Weeds compete for the available nutrients with other plants.

All this does not bode well for the fisherpeople whose livelihood depends on both the *makhana* and the fish that grow in those wetlands.



# Makhana: Euryale ferox

## Marathi food for Bong palate

APARNA PALLAVI took 20 years to understand Vidarbha's culinary character: it lies in its bread diversity

o my Bengali-cosmopolitan taste, cuisine of the Maharashtra region lacked both variety and subtlety. There are two types of vegetable dishes—mokli bhaji or fried vegetables and rassa bhaji or vegetable curry. Both are fiery spicy, oily and prepared in a similar way. Non-vegetarian recipes are no different.

It took me five years to coin my first adage about Vidarbha's cooking: one can't add too much chilly to curries. It took me another five years to notice the flavours of chutney powders made from oilseeds and lentils. But chutneys are just fringe foods. It was after 20 years of wandering in the hinterlands that I grasped the charm of Vidarbha's food—its bread.

I had come across Maharashtra's festive bread—pooran poli—but promptly learnt to hate it. After my marriage, my mother-in-law wanted me to learn how to make pooran poli, but I put my foot down. The sweet delicacy is a fried chapati made from refined wheat flour, chickpea paste and sugar. That was the biggest blow to her; after all, a Marathi bahu must know how to make pooran poli.

We found common ground by accident. During a visit to the Melghat region in 2006, I got stuck in a tribal hamlet for 36 hours. The residents were drying and preserving *mahua* flowers for the rainy season to make *mahua bhakhar*—sweet bread of *mahua* flowers and sorghum flour. They believe that it protects from chills and aches during rains. An elderly lady prepared *bhakhars* for me and offered me a bagful of dried flowers.

I tried making *mahua bhakhar*. But instead of moulding it with hands, as the elderly lady had shown, I rolled it out with a rolling pin and proudly showed it to my mother-in-law. Soon we were deep into our first food conversation.

She explained how my shortcut technique had changed the flavour. My mother-in-law holds that moulding *bhakhar* between two palms is the best way to bring out the flavour. It took years for my palate to develop the refinement to realise that she was right.

My trips to villages in the meanwhile led to the discovery

of bhakhars made from other millets, such as finger millet, little millet and buckwheat—each with its own distinct taste. My mother-in-law did not match my enthusiasm for these. For her Kunbi community, the powerful landed class, these are inferior, tribal foods. Then, I inadvertently struck a deep chord with her. After interactions with tribal women in Yavatmal, I asked my mother-in-law about wild vegetables like tarota, kundar and latari. She joined me eagerly in scouting around for these in the small pockets of roadside greenery.

With repeated *bhakhar* meals, the hot, oily *rassa*; thin *kadhi*, and cloying *kheer* began to make sense. Though crisp and delicious, the *bhakhar* is nevertheless coarser than rice or wheat *chapatis*. It is difficult to gulp down without the strongly flavoured liquid accompaniments. It is best when made into a mush with dal or curry.



14 • Taste of India's biodiversity

### **AMBADI CHI BHAKHAR**

Fresh, young Deccan hemp leaves - 8-10 Sorghum flour - 200 gm Salt - to taste Oil - 2 teaspoons

Wash the leaves, dry them and tear into small pieces. Add salt and oil to the flour, mix it and knead with warm water. Form a heap and leave it covered for 15 minutes. Add the leaves to the moistened flour and cover it. After 15 minutes, take enough dough for one bhakhar and knead with warm water till it is smooth. Pat or handmould into a thick bhakhar of required size and bake it the wav mahua bhakhar is cooked (see next recipe). It is usually served hot with ambadi chi bhaji

### **MAHUA BHAKHAR**

Dry mahua flowers
- 100 gm
Sorghum flour - 200 gm
Oil - 2 teaspoons
Salt - to taste
Jaggery (optional)- to taste
Carom seeds - a pinch
(optional)

Clean mahua flowers by removing their stamens and pistils. Soak them in water for one hour and grind to a coarse paste. Add the paste, crushed jaggery, salt and carom seeds to sorghum flour and knead to a medium-soft dough. Add a little oil to make it smooth. Divide the dough into balls, pat or handmould them into thick bhakhars and put on a hot skillet. Roast on a medium flame, applying a thin coat of water on the upper surface to prevent it from cracking. Turn the sides to roast the bhakhar thoroughly. Serve hot with spicy curries

### **AMBADI CHI BHAJI**

Ambadi leaves - 200 gm

Sorghum flour - as desired

Salt - to taste

Green chillies - 3-4

Red chilies - 1-2

Oil - for seasoning

Mustard seeds - a pinch

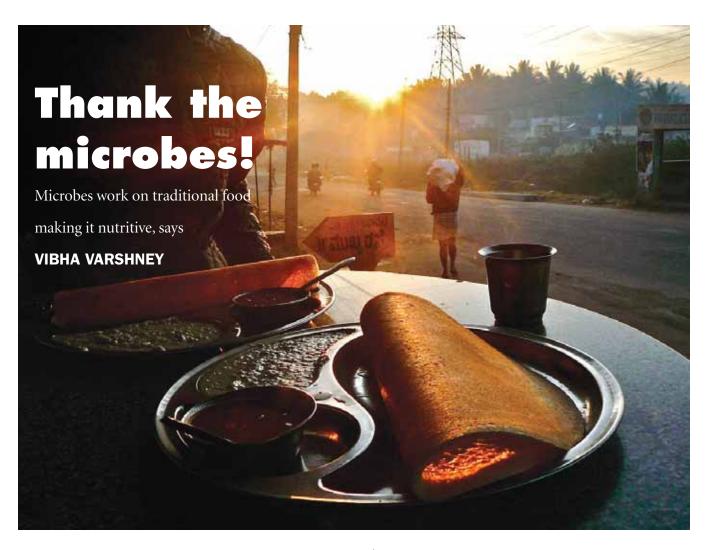
Cumin seeds - a pinch

Ginger-garlic paste
- 1 teaspoon

Turmeric - a pinch

Fenugreek powder
- 1 teaspoon

Wash and dry the leaves. Tear into pieces and put in a pan with salt and water for boiling. Once boiled, cover and simmer on slow flame. A few minutes later stir the leaves into a pulp. Add more water if needed. When the pulp starts to thicken, add sorghum flour, stir to avoid lumps. Stir till flour and leaf pulp are mixed and the flour is cooked. The paste can be stored in a refrigerator for days. Before serving, heat oil in a pan and add mustard and cumin seeds. When they start sputtering, add red chillies. Then put green chilies and ginger garlic paste and saute for a minute. Add turmeric and fenugreek powder, and ladle the required amount of ambadi paste into the pan. Mix and cook on a slow flame for two minutes. Serve hot



Remember the last time you ate a crisp dosa. As the morsels disappeared into your mouth, you probably would have said a word or two in praise of the cook for getting the rice-black lentil batter in perfect proportion. But would you credit a few anonymous little creatures for this culinary dexterity? The microbes, bacteria and yeast, that worked tirelessly on the batter for about a day-and-a quarter giving the dosa lots of nitrogen, soluble proteins, reducing sugar and enzymes. It is they who made your snack fluffy and tangy. The English language terms their labour as fermentation.

Today, probiotics take inspiration from traditional fermented foods. But even at its best, the industry cannot offer either the variety or the taste created by traditional cooks. Most times, as in the case of *dosa* batter, raw materials provide microbes. Yeast granules easily available in the market are also good fermenting agents.

Jyoti Prakash Tamang, food microbiologist at Sikkim Central University in Gangtok, says, "Some microbes help in bio-preservation of perishable vegetables, fish and meat products." But he warns that synthetic compounds in food affects fermentation.

### **Filling**

The actual values of proteins, carbohydrates and minerals are rarely measured in finished products. But a breakfast consisting of a mixture of fermented cereal and pulses was found more filling than other foods like white bread, rice flakes and semolina preparations by researchers from Shreemati Nathibai Damodar Thackersey Women's University in Mumbai. The researchers attributed this to the high-protein, high-fibre content and greater water-to-volume ratio of fermented food. Shikha Sharma, a dietician in Delhi, points out that foods worked on by microbes are easy to digest.

Her favourite is *khandvi*, a nutritious gram flour cake, which she says is good for people on a weight-loss diet.

### **Heat busters**

In Haryana during the harvest season, a fermented form of *bajra* called *rabadi* is used to provide protection from the sun. It consists of crushed *bajra* seeds soaked in buttermilk (*seet*). The mixture is cooked well and left overnight. This does not change the food's fat, protein and mineral content but makes it less acidic.

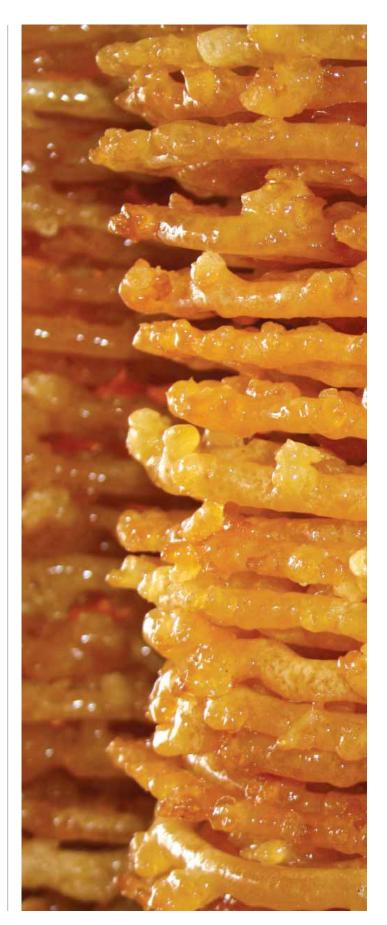
Other fermented foods also have medicinal uses. Curd or *dahi* is said to check diarrhoea. Nutritionists say it regenerates damaged gut epithelium. "Fermentation converts lactose into glucose and galactose, easily digestible by even the lactose-intolerant. Also, milk does not have essential vitamins like B<sub>1</sub>, provided by bacteria in the curd," says P R Sinha, scientist at National Dairy Research Institute in Karnal.

The fermentation process is also used to prepare high calorie sweets like *jalebis*. In Uttar Pradesh, *jalebi* with milk is considered a perfect start for the day.

### 274 microbes

Why do fermented foods from different kitchens taste different? Scientists say this is because of the specific combination of microbes. K Jeyaram and his colleagues from the Microbial Resources Division, Institute of Bioresources and Sustainable Development in Imphal, cite the example of *hawaijar*, a popular fermented soybean dish of Manipur. They tested 41 hawaijar preparations and found that the distinctive taste of each dish was imparted by a specific combination of 274 microbes. Hawaijar was already known to have species of the bacteria Bacillus. The researchers also found species of bacteria Staphylococcus, Alcaligenes and Providencia. "Industry can use information about microbes associated with traditional fermented foods to develop production technology for quality fermented foods," says Jeyaram.

But fermenting is time-consuming and is slowly losing its place in homes. Food companies have come up with packaged versions of *idlis* and *dhokla*. The friendly microbes do not work on these versions.



# Leaves you well-fed

Prabhanjan Verma

eople in southern Bihar often jokingly refer to their counterparts in northern parts of the state as 'sattukhor', one who gorges on sattu. It says something about the humble powder made by grinding a mixture of roasted pulses and cereals. Sattu made from chickpea is the most common. Sattu is a strict no-no in religious ceremonies—the origins of this bar are unclear but it is believed this could be because members of 'lower' castes used to do the toasting. But such strictures fall by the wayside during festivities: for many upper caste Biharis, Holi bonhomie is incomplete without sattu kachoris.

In everyday life, *sattu* is the lifeline of the poor. Rich in protein, it leaves one satiated for a long time. Small wonder then, doctors advise longer hours of physical work after eating *sattu*. Did they learn that from farmers who do exactly that? The elderly in Bihar say *sattu* is the buffer between people dying of malnutrition and the apathy of the state's political class.

Workers eat *sattu* unprocessed. It can also be kneaded into a dough and eaten with onions and green chillies. The poor in Bihar also use this versatile powder to make a refreshing summer drink. A couple of glasses a day of this drink not only makes high temperatures bearable, but also keeps the stomach in order. This apart, *sattu* is ideal for people suffering from peptic ulcer, a common ailment in India. *Sattu* can fight diabetes, one of the most widespread lifestyle diseases, as it has a low glycemic index.

Today *sattu* has shed its image of the poor man's staple. With popular recipes like *litti*, Bihar's best-known delicacy, and *sattu ka parantha*, *sattu* is finding itself part of the fashionable dinner spreads and fireside gatherings.

### **SATTU PARANTHA**

Take some wheat dough and fill with *sattu* and spice mixture.
Roll and make the *parantha* on the griddle





### LITTI

Sattu - 250 gm

Onion seed - 1 teaspoon

Coriander powder - 1 teaspoon

Cumin powder - 1 teaspoon

Carom seeds - 1 teaspoon

Mango powder - 2 teaspoons

Garlic - 4-5 cloves

Ginger - 1 inch piece

Red chilli - 2-3

Mustard oil - 2 tablespoons

Wheat flour - 1 kg

Salt - to taste

Mix onion seeds, cumin powder, coriander powder, carom seeds, mango powder, chopped garlic cloves, ginger and roasted red chillies. In this preparation, add mustard oil and *sattu*. Knead a kg of wheat flour and salt to form a elastic and pliable dough. Make balls out of the dough and flatten them. Fill in these with the *sattu* mixture. Roast until the balls are crisp. One can eat *litti* with potatoes and brinjal vegetable, savoury pickles and a generous topping of ghee

### SATTU DOUGH

Take powdered roasted gram. Add salt and knead into a dough with water. Eat with onion and green chillies

see recipe for beverage on page 134 & laddoo on page 157

# Well slept rice

Ena Desai

here was a time when 60 varieties of rice were cultivated in West Bengal. Rice is the staple food of Bengal and is grown in abundance all across the state. Cooked rice is soaked overnight in water (which was probably a way of preserving rice as 'smoking' was in Europe) to make a dish called *pantabhat*. This rice is eaten the following morning with the fermented water called *amani* (*kanjika* in Sanskrit). The dish sustains many poor farmers in Bengal and is equally popular in Bihar, Odisha and Assam. *Amani*, with a tinge of salt and chillies, is a favourite morning beverage in many parts of south India.

Pantabhat is supposed to have a cooling effect and thus is ideal for summers. It is nutritionally-rich due to slight fermentation. It is usually eaten with salt, onions and green chillies. Those who can afford to, accompany this with some sour items like green mango, lemon or tamarind, and a dry vegetable. On some occasions, dry fish is also eaten with this. The sweet-toothed Bengalis sometimes have it with jaggery or a ripe banana and, if available, crushed leaves of fragrant lemon. A variation of the dish is found in villages: water and cooked rice is placed in a pot (usually a clay handi) and covered with a piece of cloth. The pot is then kept in the sun and a handful of newly cooked rice is added to it everyday. In three to four days, the water is removed for consumption and some more fresh water is added. Sometimes this drink is seasoned with mustard, cumin and red chillies. The sour water can also be used for preserving mango and lemon. According to Maurique, a 17th century French traveler, holes are dug in the mud floor of the kitchen to store this drink.

The Bengali genius has come up with several innovations that make the dish tastier and appealing to a wider class of people. They mix freshly cooked rice with this water, and then season it with ginger and raw mango paste, chillies and some other spices including crushed leaves of fragrant lemon trees. These are then eaten with *kasundi* (a mustard sauce), onion, *dal vada* (dry pulse preparation), roasted fish and *ambol* (a sweet and sour mango dish).

There is an even fancier version of *pantabhat*. The cooked rice is topped with some sugar syrup and rosewater. This can be relished with lemon juice after about six to seven hours. Interestingly, the last day rituals of *Durga Puja* are incomplete without *pantabhat*. An offering of *pantabhat* is made to the *devi* along with a dish of lotus stems. (Read more about rice varieties on *page 88*)

