



Beware! Veggies in Nagpur are lethal

A research conducted by city teachers brings out some startling facts that the quantity of heavy metals in vegetables, water and soil were found to be much more than the permissible limit. The vegetables that we are consuming can actually be harmful for us...

■ By Ajay Mardikar

BEWARE Nagpurians! Vegetables you are consuming for healthy body may actually cause health problems. This has been indicated by research conducted by teachers from Laxminarayan Institute of Technology, Sevadal Mahila Mahavidyalaya, Mohota Science College and Government Institute of Science.

The issue of excessive heavy metal content in water, soil and food items in the city has remained neglected, although several studies world-wide and even in Nagpur have been made on the issue in the recent past.

The quantity of heavy metals in vegetables, water and soil were found to be much more than the permissible limit.

Nagpur river which is the main source

of water for vegetable growers in and around Nagpur, is highly polluted with poisonous heavy metals. The other water bodies in the city like Ambazari and Futala Lakes, Gandhi Sagar are also polluted with heavy metals like Chromium, Cobalt, Copper, Manganese, Zinc, iron, nickel, mercury and lead etc. Some of them are essential micronutrients, but their high concentration may cause severe health problems. High concentration of these pollutants are dangerous for animal health and may cause gastrointestinal disorders, affect kidney, liver, bones, brain and may even cause cancers of skin and other body organs.

Heavy metal contents in vegetables Brinjal, Cauliflower, Spinach, Bathua, Chawli, which are consumed very frequently by Nagpurians, were tested in the laboratory by Dr A S Mahakalkar and Dr S N Nandeshwar from Sevadal Mahila Mahavidyalaya and Dr R G

Source of pollutants

IMMERSION of idols, garbage containing electronic goods and used batteries, CFL bulbs are major pollutants of water bodies in the city. Nag river is polluted because of dumping of garbage and release of industrial waste.

The pollutants enter human body through vegetables grown using this water, consumption of fish from these water, water used for domestic purpose by residents near these water bodies etc. Garbage collectors are at high risk as proper method of disposal of used batteries, fused bulbs containing mercury vapour etc is never followed. The garbage collectors are not trained to handle these hazardous wastes.

Children are more prone to getting affected by these pollutants. Using crayons, living in houses and school or even playing with toys painted with lead based paints cause serious health hazards among children. Early detection of the ill-effect is not possible because of lack of adequate facilities. The symptoms also are not easily understood at early stage.

Gupta from Mathuradas Mohota Science College. The samples were drawn from Mahalgaon village in Kamptee taluka of Nagpur district. Based on the parameters set by Food and Agriculture Organisation of United States and World Health Organisations, toxicity in the vegetables were tested. The concentration of iron and zinc was very high, followed by copper, nickel and lead.

Water samples from Nag river and soil samples from five vegetable farms were also tested and it was found that heavy metal content in water and soil is also higher than the permissible limit. These pollutants from water and soil are absorbed in the vegetables.

A research on pollutants like cadmium, iron, zinc, arsenic, mercury, lead and chromium was conducted by researchers from Laxminarayan Institute of Technology. The study was

Lead testing lab proposal gathering dust

UNDER Project Lead Free, several testing stations were started in India. National Referral Centre for Lead projects in India took initiative in opening the testing centres, as 22,000 persons, mostly children in seven major cities were found to have been affected by lead poisoning (1998-99). The cities under the study were Mumbai, Delhi, Kolkata, Chennai, Bengaluru, Hyderabad and Vellore. In Nagpur, a centre was proposed to be started. However, the proposal is still gathering dust with NRCLPI and Government authorities. Unfortunately, facilities for testing lead or mercury content in blood are not available even at Government Medical College and Hospital or Indira Gandhi Government Medical College and Hospital in Nagpur.

focused on pollution of water in major water bodies in Nagpur. P J Puri and MKN Yenkie of LIT; S P Sangam and NV Gandhare of Nabira Mahavidyalaya, Katol and G B Sarode of Regional Forensic Science Laboratory, Nagpur conducted the research. Water samples from Ambazari, Futala, Gandhi Sagar and Gorewada Lake were drawn. Ambazari, Futala and Gandhi Sagar were found to be highly polluted with zinc, chromium and iron

in high quantity, followed by cadmium, lead, mercury and arsenic.

Another study of lead content in spinach (Palak leaves) was conducted by Shital Kharwade and Sunil Ganatra of Government Institute of Science, in the year 2014.

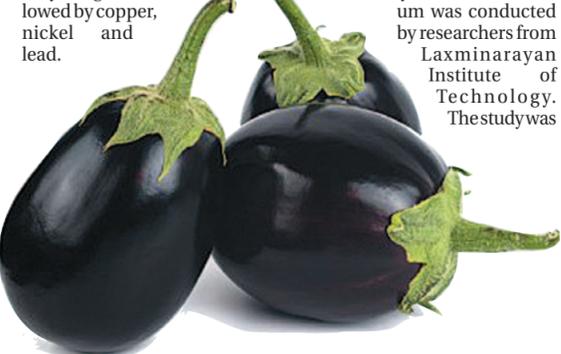
The study was focused on the contamination of lead concentration through vehicular emission in vegetables particularly Spinach. Lead contamination in Spinach was reported in all

areas and even persist after washing. Khmla and Cotton market areas having high concentration of lead, whereas Gokulpeth area shows less contamination.

The health hazards caused by these heavy metals are carried to next generations. Lead and mercury are known to have caused great damage to brain, which, unfortunately is not detected at early stage.

Besides water, air and soil, gasoline additives, food can soldering, lead based paints, ceramic glazers, drinking water system (pipe and tank coatings), cosmetics, industrial emission like in lead smelters and battery recycling industry, are the major source of pollution. It may be caused due to consumption of contaminated food, through air or water.

Impairing oxygen carrying molecules in blood, anemia, kidney diseases, impaired fertility, blood pressure, permanent brain damage are common impact of these pollutants on animal bodies. Children are more susceptible to these pollutants.



Musical Chair: Take it seriously IT'S A SPORT NOW

Gone are the days when Musical Chair was just a pastime in parties, picnics or get togethers. With Maharashtra Government's latest decision, this musical game is now officially a sport...

■ By Pallavi Patil (Borkar)

THE bygone era of playing musical chair brings alive some fond nostalgic memories. Gone are the days when musical chair was just a pastime in parties, picnics or get togethers. With Maharashtra Government's latest decision, this musical game is now officially a sport.

The officials of Maharashtra Musical Chair Association have been persuading and convincing officers from Directorate of Sports to gain recognition for the game. The efforts finally bore fruits. However, the decision came with a prerequisite that officials of Musical Chair Federation of India would popularise the game enough in the next three years so as to get grants and facilities like other sports.

Talking to 'The Hitavada' Tukaram Thombare, Secretary, Maharashtra Musical Chair Association (MMCA) who has formed the Federation said, "Finally, our efforts are bearing fruits and Government has taken cognisance of our hard work.

Though it's on trial basis, but we will ensure to promote the game in these three years and get the grants." Recollecting how the Federation and MMCA came into existence, Thombare said it was more than a decade ago when he and his friends from different sports circles decided to promote Musical Chair and formed Musical Chair Federation of India in 2002 which was registered in 2009. Maharashtra Musical Chair Association also was registered in the same year. His friends include Shivaji



Tukaram Thombare



Mohd Shoeb



Chavan from Akola, Vijay Singh Rajput from Pune, and Rahul Waghmare from Mumbai.

"Earlier, people made fun of us for promoting a 'not so happening' game. However, we never let criticism affect us and focussed on our goal. And the results are for everyone to see," he continues with a smile. "Our aim to promote this game was to provide an alternate to rich games that were far from the reach of poor and middle-class children," he explains. "We give training for free. This excludes reasons to complaint for the parents," he added.

Informing about the game, he said, "Though we introduced five types of Musical Chair games, Government has recognised Speed Musical Chair and Skating Musical Chair in under-19 category."

Mohd Shoeb, originally a businessman and an active coach added, "Students are then divided into weight categories wherein they play in their own weight groups. And only one student is selected from every weight group." Skating Musical Chair, he said, however attracts more students with the thrill that surrounds it. A Fencing coach, Mohd Shoeb informed, "At present, there are around nine schools participating actively. Schools like Qidwai High School, Mahatma Gandhi School, Sindh Hindi School, KTR School, VTC, etc. are showing great interest and encouraging their students to participate," he added.

"It's a sport for every kid that doesn't involve any money neither it is risky," said the coach. Upset over delay in State-level

competition, Shoeb said, "Students were charged-up for the first State-level competition (after Government's recognition) to be scheduled in Solapur.

But the dates are being postponed dampening the spirit of students. Though Nagpur Sport Office is very supportive but other Sports Departments seem unwilling to promote the game," he added.

"The Federation will bear all the expenses of the tournament for the next three years," informed Tukaram Thombare, who is also a Skating and Marshal Arts coach. He further added, "We will get the grants only when we show improvement in promotion of the game. For now, students will only get Government certificate of participation."

"A World Cup is on the cards though," confirms an excited Thombare. Explaining he said, "We are planning to organise the World Cup of Musical Chair this year or early next year." Thombare cleared that only State Government has added this game in State Board curriculum.

It is to be mentioned that the Association organises free training camps and if required a minimal entry fees is charged for the camps. The officials make frequent visits to schools and encourage the students. Trained coaches provide professional training with a minimal training fee while it is provided for free in the schools.

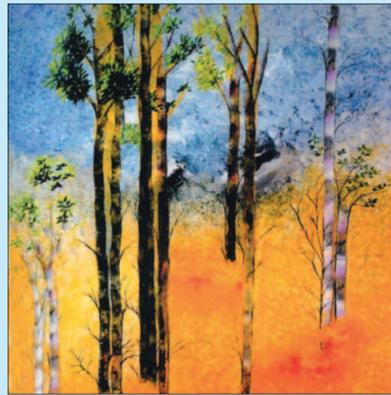
Also, keen students who cannot afford skates are given skates by the organisation during practice and tournaments.

Nishant Gaikwad, who had participated in the recently held district-level competition, has a positive approach towards the game. "You cannot cheat in this game. And it requires stamina for running and presence of mind to stay in the game. It demands regular practice like any other game," said Nishant. "Also, we don't have to buy expensive kits for it," says Nishant who is a Std XI student of Mahatma Gandhi Junior College. Nishant plays both Speed and Skating Musical Chair and loves Skating.

Another student, Bhim Valhe of Sindh Hindi Junior College explains, "People mistook it as a child's play but it requires proper strategy to win the game. It's a serious game." Both the students, however, are upset with the delay in state-level competition. "We are a little upset with this delay. It discourages us," said Bhim who prefers Speed Musical Chair over Skating.

While concluding, Thombare quoted lines by Frank L. Gaines that has been his inspiration "Only he who can see the invisible can do the impossible."

Her canvas blooms with Nature's inspiration



City painter Pradnya Rahane Besekar finds her true calling in nature. Her canvas comes alive with Mother Earth. She has organised a painting expo at Jehangir Art Gallery in Mumbai...

■ By Iffat A Sheikh

PAINTING is the best stress buster for Pradnya Rahane Besekar. It is the best way to unwind. She is channelising her emotions through paint and brush. The canvas bears her thoughts in colour. And Nature is her inspiration. She finds immense joy and satisfaction in painting the serene voice. Pradnya is giving voice to her creativity from the past 35 years. She is a known figure in the art circle in the city.

Recently, she has organised a painting expo in acrylic colour on canvas at the famous Hirjee Jehangir Art Gallery in Mumbai. The exhibition was inaugurated by Padmashree Kalpana Saroj, CEO Kamani Tubes. It highlighted her unique visual perception about grandeur of Nature through 'Symphony With Serenity'. "The response to my painting expo was good, but unfortunately we registered no sale in the expo", she says. "People are not contacting the artist directly, it is now a table work, where people approach the studio and specify their requirements. This whole process is taking a heavy toll on the sale of paintings", remarks Pradnya.

She has displayed 62 paintings with 6x6 biggest painting and 3x3 smallest painting in the expo. "The good comments that I received was not translated in the form of sale of paintings. People



The paintings that were on display at the Hirjee Jehangir Art Gallery in Mumbai.

have become more cautious now", remarks Pradnya. The interior designers have also changed the game on the art circuit. They are catering to the whims and fancies of the customers. Catering to the demands of matching paintings with the interior of a house is a cumbersome task for a painter and Pradnya too finds this task a bit difficult. "When my inspiration is Nature, it becomes very difficult as an artist for me to give the specified colours to my paintings. I find this ridiculous", fumes Pradnya. People are slowly waking up in Vidarbha and are giving art its due significance. "The State Bank of India in Nagpur has my big painting. The response is encouraging in the Orange City", she says.

In the world of propaganda, the genuine buyers are constantly in the hunt for good work and TV, newspapers are the right medium to find the work of your choice, feels Pradnya. She is further contemplating to hold an expo in Delhi this year. With Nature, her canvas comes alive and she paints her emotion in the soulful lap of Mother Earth. This is how strokes of her brush and vivid colours come alive!



Pradnya Rahane Besekar

