

What's On My Organic Rice: Pesticides & Heavy Metals



Don't buy organic rice

Why not? Read on

Do you pick up organic products at the supermarket thinking that they are safe and better for health? If so, you are in for a shock. Our tests of seven brands of organic rice revealed that 6 brands had pesticide residues and all 7 contained heavy metals! Ironic, isn't it? The very rationale for buying an organic product is to buy a pesticide-free product.



No standards

Since there are no specific standards for organic rice at present, why is the product being allowed to be sold in the country?

Why a variety of logos?

The brands carried a variety of logos and certifications from different national and international agencies. This is confusing for consumers. Why should a product meant for the domestic market carry so many international logos?

Alarming findings

The 3 heavy metals tested were – lead, copper and arsenic. CERC tested the products for 16 pesticides. The four detected belonged to the Organophosphate group.

Pesticide residues: Six of the 7 brands of organic rice contained pesticide residues. **Fabindia Organics** did not have pesticide residues. Two brands had Chlorpyrifos levels above the prescribed limit – **Organic on Call** and **Sanjeevani Organics**. Two of the four non-organic rice brands had pesticide residues.

Over a long duration even microscopic quantities of pesticides can harm. The pesticides detected by our tests are not in the US list of pesticides permitted in organic products. Chlorpyrifos, detected in three brands, has been linked with delays in learning, reduced physical coordination and behavioural problems in children.

Heavy metals:All the organic rice brands showed presence of all three heavy metals though they were within the limits. None of the non-organic rice brands had arsenic. Copper levels were higher than in organic rice brands, though within limits. Lead levels were within limits and slightly lower than that in the organic rice brands.

Lead is a neurotoxin and even low levels of exposure can be hazardous, especially for children. Very large single or long-term intakes of copper may cause liver disease and male infertility. Long-term exposure to arsenic from food can cause cancer and cardiovascular disease.

Highly priced

Organic rice brands were much costlier. Comparing the extremes, you would be paying more than five times the price for the costliest organic rice brand – **Fabindia Organics** – than you would pay for the cheapest non-organic rice brand – **Hypercity**. Why should the organic version of a staple product like rice be so expensive? It is unaffordable for the common man.

False label claims

Most organic rice brands claimed to be free of pesticides. Illustratively, **Morarka Organic Down to Earth**, which contained both pesticide residues and toxic heavy metals, claimed to be: “...free from chemicals, fertilizers, pesticides, toxic substances, synthetic hormones...” Non-organic rice brands did not mention the absence of pesticides or toxic substances on the packaging. Two organic rice brands – **Vikalp** and **Organic on Call** – did not have any organic certification.

Manufacturers’ response

As a policy, we convey the test results to all the manufacturers and await their response. We received the following responses:

Sanjeevani Organics said that organic certification was done for the practices and processes and not for the products. Our response: “Consumers are concerned not with processes and practices but with the end product. Certification for processes must reflect in quality of final product.”

24 Mantra Organic said that the pesticide detected by our tests - Chlorfenvinphos – was not used even in conventional paddy cultivation and not available in their project area. Our response: “The presence of Chlorfenvinphos could be due to cross contamination during harvesting. Also, some pesticides can persist in the environment even after use is discontinued.”

Organic Tattva said that as per APEDA (Agricultural and Processed Food Products Export Development Authority) guidelines there is no requirement for testing of heavy metals for organic products. Our response: “True. However, we have tested for them as consumers should

be concerned about their presence in foods. Heavy metals accumulate in the human body over a period of time and cause harm.”

Urgent action needed

- The Bureau of Indian Standards (BIS) should set specific mandatory standards for organic foods. *In response to our earlier appeal, we received a letter from Food Safety and Standards Authority of India (FSSAI) saying that BIS has constituted a committee to formulate standards for organic foods. However, no concrete action has been taken as yet.*
- Different organic certification labels of different countries confuse consumers. NPOP (National Programme for Organic Production) certification should be made mandatory. NPOP should also extend to product certification. Development of domestic standards in India will reduce the need for multiple certification/logos. Also, India needs to follow labelling norms as per global best practices.
- Regular monitoring of organic food quality, including that sold online, is necessary.
- Advertising claims made by organic product manufacturers should be closely monitored.

CERC’s conclusion

Tests proved that organic brands of rice are not safer than non-organic ones. There is no concrete evidence that organic food has higher nutritional value than regular food. Also, organic rice brands are much more expensive. CERC advice is not to buy organic rice.

However, we are still giving you a comparison of the 7 organic rice brands. ***Fabindia Organics*** obtained the highest overall score as it had no pesticides and heavy metals within limits. However, it is more than twice as expensive as the brand that scored the next highest – ***Organic Tattva***.

People want to make healthier choices and the Government must support them in this matter. It should ensure that consumers do not get exploited in the name of organic foods. It is vital that the regulatory authorities set standards and closely monitor the quality of organic food products.

Test Results: Organic Rice

BRANDS	Overall Score ¹	PRICE/ 1 kg	PESTICIDES (mg/kg) ²				HEAVY METALS (mg/kg) ³		
			Chlorpyrifos NMT ⁴ 0.05	Dichlorvos NMT ¹	Malathion NMT ⁴	Chlorfenvinphos NMT 0.025	Lead NMT 2.5	Copper NMT 30	Arsenic NMT 1.1
ORGANIC									
<i>Fabindia Organics</i>	97	235	ND ⁵	ND	ND	ND	0.1	2.97	0.21
<i>Organic Tattva</i>	90	105	ND	ND	ND	0.011	0.08	1.81	0.14
<i>24 Mantra Organic</i>	87	85	ND	ND	ND	0.013	0.16	2.18	0.28
<i>Morarka Organic Down to Earth</i>	86	145	ND	ND	ND	0.011	0.38	2.02	0.43
<i>Vikalp Organic Product</i>	84	140	0.011	ND	ND	0.012	0.1	2.77	0.24
<i>Sanjeevani Organics</i>	78	104	0.054	ND	ND	ND	0.12	2.22	0.25
<i>Organic on Call</i>	73	180	0.068	0.017	0.026	ND	0.09	1.59	0.21
NON-ORGANIC									
<i>Hypercity Everyday</i>	98	45	ND	ND	ND	ND	0.052	5.27	ND
<i>Reliance Good Life</i>	98	75	ND	ND	ND	ND	0.085	5.17	ND
<i>Best Fine Indian Rice Special</i>	97	160	ND	0.015	ND	ND	0.14	5.28	ND
<i>Kohinoor Everyday Basmati</i>	88	89	0.025	ND	ND	ND	0.31	6.54	ND
Weightage (%)			70				30		

NOTES

¹ Overall scores were calculated by giving weightages as shown in the table

² and ³ Limits set as per the Food Safety and Standards (Contaminants, Toxins & Residues) Regulations, 2011, for conventional rice. Less was considered better in both pesticide residues and heavy metals

⁴ NMT= Not more than

⁵ ND=Not Detected