

Cultivated Meat in India: From Science Lab to the Dinner Plate

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For centuries, meat in India has meant poultry curries at family feasts, kebabs sizzling at roadside stalls, or buffalo meat quietly leaving the country in vast export shipments. But now, something entirely new is stirring in the kitchens of the future: cultivated meat—real animal meat, grown not on farms, but in laboratories.

What Exactly is Cultivated Meat?

Cultivated meat, also called lab-grown or cell-based meat, is made by taking a few animal cells and allowing them to multiply in a controlled environment. Scientists feed these cells nutrients, encourage them to form muscle tissue, and eventually shape them into edible products. Unlike plant-based meat substitutes (made from soy, peas, or jackfruit), cultivated meat is biologically identical to conventional meat—just without slaughter.

India's First Public Tasting

In early 2025, Bengaluru-based Biokraft Foods created a stir when it hosted India's first public tasting of cultivated chicken. Guests sampled grilled and fried nuggets made from chicken cells, and the reaction was largely positive. Surveys conducted alongside the event revealed something striking: 60% of Indian consumers are open to trying cultivated meat, and nearly 46% are willing to pay extra for it. This enthusiasm is highest among young, urban consumers who are already used to

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experimenting with plant-based diets, imported foods, and global culinary trends. Why India Matters for Cultivated Meat Globally, cultivated meat is being pitched as a solution to climate change, animal welfare, and food security. India adds another unique layer:

- **Population and Protein Demand:** With over 1.4 billion people and a rising middle class, India's appetite for meat—especially chicken—is growing steadily.
- **Cultural Complexity:** While beef is restricted and vegetarianism is common, poultry consumption has soared, making chicken the most logical entry point for cultivated products.
- **Sustainability Concerns:** India faces water shortages, environmental stress from livestock farming, and rising pressure to reduce methane emissions. Cultivated meat offers an attractive alternative.

The Roadblocks Ahead Despite the excitement, cultivated meat in India faces hurdles:

1. **Regulatory Approval:** The Food Safety and Standards Authority of India (FSSAI) is reviewing regulatory dossiers but has not yet given full clearance for commercial sales.
2. **Cost:** Although prices are falling globally, cultivated meat is still significantly more expensive than conventional chicken. Scaling

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up production will be key.

3. Public Trust: Many Indians remain skeptical of “lab-grown” food, associating it with being artificial or unsafe. Building awareness will be as crucial as building the product.

A Future on the Plate?

If approvals go as planned, India may see its first cultivated chicken products in restaurants and premium grocery chains by the end of 2025. Initially, they may appear as gourmet items for urban consumers. Over time, as production costs fall, cultivated meat could make its way into everyday meals—from biryanis to butter chicken. This shift won’t replace traditional farming overnight, but it may open a new parallel path where Indians can enjoy meat without the environmental or ethical costs.

Conclusion

Cultivated meat in India is more than a futuristic curiosity—it’s a potential revolution in how the country eats. If successful, it could redefine food security, help India meet climate goals, and give consumers a guilt-free way to

1. *science*, 86, E52-E77.

enjoy their favorite dishes. From the lab to the thali, the journey of cultivated chicken could mark the beginning of a new chapter in India’s long and diverse food story.

References

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