





# Rayat Shikshan Sanstha's Yashavantrao Chavan Institute of Science, Satara (Autonomous)

(Lead College of Karmaveer Bhaurao Patil University)

## Department of Food Technology Best Practices NEW FOOD PRODUCT DEVELOPMENT

**Report 2023-24** 

#### TITLE: - NEW FOOD PRODUCT DEVELOPMENT

Vision: These best practices established with vision to provide entrepreneur and excellent food professionals in food processing industries.

#### Mission:-

- To generate and apply scientific knowledge of food technology through various food processing techniques for optimal conservation and utilization of nations food resources.
- To provide a Common platform and vital link between agriculture and industry on global basis through relevant trainee.
- To improve food quality standards from farm to fork.
- To exploit novel techniques and technology to maximize the use of food resources and minimizing the food wastages and utilization.
- To provide highly skilled, competent, motivated, technical man power for food processing and packaging industries.

#### About Best Practices-

Best practices reflect the credibility and cheerful life of a college. These practices are able to instill the scientific approach to issues or problems of society. Best practices are the agents of change for a particular educational institution and society as well. If you take a walk in any market you will be surprised with a wide variety of food products on the shelf. These came about as a result of a careful process to designing and developing product with the goal of meeting specific consuming need. The process is called food product development. This is one of the important job that food scientist do and this food product development is best practices of department of Food Processing and packaging.

Since the establishment department have developed variety of healthiest and instant food products. The process of food product development is the complex of different steps right from the idea generation to marketing. Development of food products start from the first year after entering in the department, where the students learned basics of food science processing and packaging. Knowledgeable teachers push student towards the idea generation by continuously saying that think openly and let your imagination ruin yourself for that department organizes creative thinking sessions.

The department coordinator Asst. Prof. Mrs V. S. Patil encourage the department to organize different activity related to student centric development from which we run Best Practices. Best Practices starts from IDEA GENERATION TO NEW PRODUCT DEVELOPMENT. For this Departmental Incharge Asst. Prof. Mr. P.R. Dure Sir and Incharge of Best Practices Asst. Prof. Ms. M. H. Jadhav and all the faculty members of Department guide the students to develop new food products.

#### PLANNING FOR BEST PRACTICES

Sr. No.	Activity	Month
1	Making groups and submitting of ideas from students	September
2	Idea Presentation and Screening of Ideas and checking feasibility of idea	October
3	Concept testing and allotment of mentor	November
4	Product development and testing	January

5	Exhibitions of product / organizing competition	February
6	Submission of product report	March – April

## **Idea generation**

Idea generation is knowledgeable creative and the systematic step. It is developed from knowledge of consumer need, the market needs and the general environment in which the food products travel from farm to fork. To generate idea department has organized different guest lecture, competition to motivate the students to develop new product, to understand the importance of development of new product.





## **❖** Idea collection and Screening of Idea (Idea Presentation)

After attending guest lecture students have tremendous ideas in their mind. All the ideas cannot be converted into products so the idea screening is done to evaluate innovative product ideas and the marketing trends. The objective to eliminate unsound concept prior to devoting resources to them. To select best idea, students present their different ideas in front of teachers and the classmates. While screening of the best idea and its conversion into product concept the considerations are People must want it, it should be technically feasible to manufacture and make a profit and must be qualified plan for sustainability.

#### **Idea Presentation:**





### **❖** Selected Innovative Idea

Sr. No	Name of Product Idea	Name of The Student	Class
1	Amarnath Chikki	Adhav Pooja Jadhav	
2	Nachni Chikii	Bhosale Namrata Nitin	
3	Spinach Oats Dosa	Bhosale Pragati Ravindra	
4	Lush Green Burfi	Bhosale Sakshi Shivaji	

5	Pulses Samosa, Jawar Noodles	Chavan Saniya Santosh	
7	Multinuri seed burfi	Deshmukh Priya Sanjay	
8	Shabu Dessert	Gaikwad Samiksha Vasant	B. Sc I
9	Urad Dal Pedhe	Ambardar Suhani	
10	Cocoo Bark	Pisal Shreya Krishnath	
11	Mug Rasvada	Shinde Akanksha Vishwas	
12	Pulses Dhokla	Shirke Anjali Jitendra	
13	Banana Oats smoothie	Sapkal Anuja	
14	Protein Balls	Yadav Yogita	
15	Choclate Peanut Butter	Jadhav Janvi	
16	Pop Cad	Gaikwad Akash	
17	Fasting Pickle	Patil Mahesh	B. Sc II
18	Sorghum Flour Noodles	Kanse Prajwal Vilas	
19	Oats and Banana Biscuits	Kadam Siddhi Jagtap	
20	High Protein Sugar Free Laddu	Shaik Tasmiya	
21	Mix Flour Pudina Sev	Gaikwad Priti Nitin	
22	Mix Chocolate Pack	Akash Gaikwad	
23	Apple Burfi	Harchunde Gayatri	
24	Muttar Paratha	Balwan Sanika	
25	Bengal Gram Burfi	Siddhi Kengar	
26	Mung Appe	Tate Anushka	B.Sc III
27	Madga Premix	Kumbhar Prasana	
28	Moringa burfi	Shinde sanika	
29	BajaraCreackers	Salunkhe Sanket	
30	Sugar free fasting modak	1.Anushka Karande	
		2.Tejas Sapkal	
31	Siddhi's Chocolates	Siddhi Phalke	
32	Flakes seed soup	Mansai Pawar	M. Sc. I
32	Moringa Hajmola	Sweta Kadam	

## Product development and testing

After the selection of best idea students move towards the converting product concept into the product formulation. The main task of product formulation is to produce stable, elegant and functional product. This is a multi-step process that takes a food idea from conception to the grocery aisle. While simple in theory, it involves a lot of innovation, technique, and trial and error. The process is the same whether you call it food formulation, product formulation, or food product design.

The step is to do an initial test recipe and see if it creates a good product. This is done so as to see how the final product will look and taste. Often this is done in small batches so it becomes inexpensive and is quick to make any revision. Students follow the guidelines given by FSSAI during product formulation, teachers also guide us. Then the prototype is sent for sensory evaluation. Sensory panellist member judge every aspect of the food product from taste and texture to the overall acceptability. They suggest any change if required.



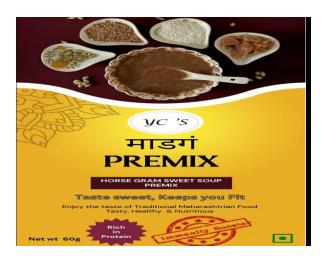


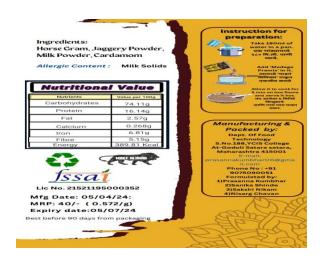
## **Packaging and Labelling**

After getting the final required formulation products students go for proximate analysis. This is done to ensure that consumers are well aware of the nutritional composition of food, so that they can make informed and knowledgeable decision about their diet. Students then display analysis in the form of nutritional facts on the label of our developed food product.











## **Sexumple :** Exhibitions and Selling of Food Products in YC Science Exhibition Cum Fair

In the product development another important steps are packaging, labelling and shelf life study. This is done according to FSSAI guidelines. To check how the market will react to their newly developed product, students go for test marketing. In that students collect and understand the customer feedback. After getting the positive response in the test marketing students get ready to commercialize their products. Yashavantrao Chavan Institute of Science, (Autonomous) provides a good platform for the selling of the product, which is the Yc Science Exhibition cum fair.

#### **Achievements**

• Total sell of the department is approximately 14,000 while student get 6,500 net profit.





#### **❖ Product Commercialization**

In the entire department has developed much more products till date. As the outcome of best practice. These practices help the students to increase their entrepreneurship skill. The students will able to develop new food products. This activity also encourage the student to start their own business

#### • List of commercialized Products:

Sr. No	Name of Student	Name of Product	Date of
			Commercialization
1.	1.Anushka Karande	Sugar free fasting	21/09/2023

	2.Tejas Sapkal	modak	
2.	Akash Gaikwad	Mix Chocolate Pack	08/11/2023
3.	Siddhi Phalke	Siddhi's Chocolates	09/01/2024
4.	<ul><li>1.Prasanna Kumbhar</li><li>2.Nisarg Chavan.</li><li>3.Sanika Shinde.</li></ul>	Instant Horsegram soup Premix(Madaga)	05/04/2024
	4.Sakshi Nikam.		

## **Commercialization Photos of Sugar Free Modak**



## **Commercialization Photos of Mix Chocolate Pack**



Commercialization Photos of Siddhi's Chocolates.



## **Commercialization Photos of Madag Premix.**

