

CASE STUDY

FOOD RESEARCH LAB

OUR EXPERIENCE ON WIDE
RANGE OF PRODUCTS



Food Research Lab
Your Innovation Starts Here!

CASE STUDY

PRODUCTS

CURRY AND MARINADES

A client from the USA approached us to formulate ready to cook products based on the principle of reverse engineering. The products that need to be mimicked was shipped from the US and our FRL team with years of experience could able to identify the ingredients that went inside the product. Identifying the right supplier for the product was challenging as many of the ingredients needs to be shipped from the USA or the UK. But with our preliminary research by our research team who works on the ingredients research could able to identify the right ingredient and supplier. Since this product is specifically for Indians in the US and Canada, we had challenges with the consistency and taste with our in-house panel. As Indians in India had different sensory characteristics compared to our US based Indian panels. Although In-house sensory panel helped to enhance the formulation but its both client and our US based panels in fact gave wonderful suggestions for the right formulation. At last, we could able to ship the product on time and client was happy.



VEGAN CHEESE DIP

One of our client consulted us for innovating vegan-based cheese dip, and the client was very specific related to the rheology of the product and wanted to recreate a product which looks similar to dairy product . Our expertise team has worked on this product using all possible permutations for identifying the prior ingredient of vegan cheese. Maintaining the correct viscosity was a bit challenging as this type of product are new and have fewer competitors in the market. In-house testing and suggestions from the sensory panellists assisted in rectifying issues and successfully helped us to come up with a new product. We have dispatched the product within the timeline, and the client was satisfied with the outcome of the product.



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PRODUCTS

NON-DAIRY VEGAN DRINKS

We have assisted one of our clients from the US for processing of non-dairy based drinks. Our researchers have come with a wide range of vegan drinks from oats, almonds, yellow peas, and cashew, rice. Vegan related product development is challenging as each ingredient will have its property of melting, freezing, gelatinization, which was challenging to overcome. With expert knowledge and research works, we were able to accomplish a wide array of beverages fortified with required nutrients, and the products have been shipped to the client successfully



CAKE MIX

A client from the UK requested to prepare a cake mix and specifically asked to mimic one of the products available in the market. Our team of food technologists applied the reverse engineering Process to prepare the same. The challenge that our FRL experts faced was to increase the shelf life at the same time maintaining its organic nature. However, with our microbiology & research team, we were able to identify the right preservatives and enhanced the shelf life as expected. A wet cake mix was successfully shipped to the client after three consecutive revisions. Although the total time duration for preparation of the product extended up to 1 month than the planned duration but still the product we delivered was appreciated by the client.



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PRODUCTS

PROTEIN ISOLATES AND CONCENTRATES

We have been approached by a client for a beverage product development made of Protein Isolates and concentrate from pea, quinoa, and flax. With emerging demand in the market for protein isolates, our client desired for a product which has a protein percentage of more than 90%. The major challenging task was the extraction of protein from seeds as protein percentage will be nearly 30-40%, and extraction with increasing protein percentage from these is jiff tough and time-consuming. Our food researchers have worked on these seeds to know the extraction process using different principle and were able to get protein isolate powder. Acknowledging the suggestions from the client as well as sensory panellist and formulating the product to the desired specification helped to recreate and come up with the powder with all the nutrients factors acts like energy boosters when mixed with a solvent. The product was successfully delivered to the client on time



SHELF LIFE

A client from Australia approached us to work on extending the shelf life for their existing food products from weeks to months. Our Food Research Lab team with their years of experience and knowledge assisted them with natural methods of preservation. The products that we worked on are beverage and smoothies, and we used the principle of thermal treatment to extend shelf life. After successful completion, we could be able to deliver the product on time, and the client was happy



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PRODUCTS

LOW OR ZERO CARB RICE

With an emerging consciousness related to carbohydrates, we have been requested by a client to extrude a product which will have the appearance of rice by zero or low carb. Our food formulation team have successfully come with rice that has been formulated from root vegetables, and flour-like chickpea, quinoa, and wheat. The challenging part was to make a dough consistency which will extrude the correct shape to the product. Many trials were conducted, and sensory testing was performed using the hedonic scale, which helps to work on the missing attributes. As we were stringent towards shape, it took time, and after five revisions, we delivered a product similar to rice.





ABOUT FOOD RESEARCH LAB

Food Research Lab R&D, food innovation company, is the unit of Guires. With years of experience in research especially in medical device and pharmaceutical regulations, food product development, scientific publications and clinical trials, the company has now ventured into food research and formed a separate unit, under the brand name of 'Food Research Lab' that will drive food forward. Food Research Lab brings together the latest in food processing equipment, expert food scientists, chefs, nutritionists and partners from across the globe to help food companies and entrepreneurs get their products to market quickly and effectively.

Food Research Lab makes your dream concept into a commercial product as we have strong knowledge of ingredients, processing techniques, and we can bring them all together to help you make the right decisions.

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