



GLOBAL FOOD,  
BEVERAGE,  
NUTRACEUTICALS  
CONTRACT RESEARCH  
& DEVELOPMENT  
**READY TO DRINK**



## Organic Blueberry Smoothie



**Shelf Life**  
**1 month**

Food Research Lab formulated a smoothie powder that had fine particles sizes that contributed to the free-flowing rheology of the product. The smoothie powder can be mixed with water or any suitable beverage making it a good ready-to-drink RTD beverage product.

Our client wanted to include organic blueberry as the predominant ingredient in the smoothie powder since they owned and cultivated acres of organic blueberries.

We freeze-dried blueberries so that they could be frozen in sealed containers or freezer bags. Freeze-dried blueberries will keep their finest quality for about 12 to 18 months if stored properly but safe for longer.

Rinse your fresh or frozen blueberries and arrange them on a baking pan lined with parchment paper. There is no specific recipe for this; bake your berries at a low temperature until they reach the desired dryness level. The longer it takes to dry things, the lower the temperature you use.

The blueberries took 5 hours to dry to a chewy consistency using convection at 170 degrees Fahrenheit. At that low of a temperature, it takes around 8 hours to dry completely. We removed the smaller berries as they dried since they were firm.

The Blueberries dried entirely in 1 to 2 hours as we increased the temperature to 300 degrees Fahrenheit. We then pulverized the blueberries to a fine powder.

On its own, the dried blueberry powder doesn't have much of a blueberry flavour. To get the authentic blueberry flavour, it needs a little sweetener, just like fresh blueberries. The dried blueberry powder has a tangy flavour that is akin to citrus zest on its own. So we added sweeteners, natural preservatives and permitted food-grade colours to meet our client specifications. The organic blueberry powder can be made into a smoothie, consumed as a cold drink, or add toppings.





## 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.

## CONTACT

**Guires Ltd, MIIC Unit 52-56, Greenheys Business Centre,  
Pencroft Way, Manchester, England, M15 6JJ, UK.**

**Call: +44- 161 818 4656, +91 9566299022  
info@foodresearchlab.com**