



Before Hiring a Food Science Consultant

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Food scientists are not a one-stop-shop but can certainly be a means to many solutions in your food and beverage company.

Before you hire one, here are 5 things to do first.

It's really hard to know when to outsource, especially because outsourcing costs money – and in every case of any successful business, spending has a limit. The other reason is that in navigating an area where you're not an expert, you can't help but wonder about the returns on the time spent. What may take you hours (which turns into weeks of dedicated weekends), can really be a couple of hours of dedicated work by an expert.

This article will walk you through 5 things you can do and should have ready before you hire a food scientist. In addition to being simple, having this work done showcases a high level of intention that will make you a more desirable client.



1. Know what you want

In as few words as possible, know how to explain your product and lead with that. Know at least what it is, the purpose(s) it serves, and your non-negotiables. Sometimes, you may not know what you want in an output, but you know what parameters you have and want to work with. List as much as you are certain of, and what a completed project looks like.

I recommend creating a Product Brief. This houses the parameters that serve as guardrails for a food scientist. This exercise will also identify (for you and the consultant you're considering) the specializations required of a food scientist. Specializations can range from ingredients, food applications, and discipline (such as food safety, product development, process engineering, and sensory).

Here's a great example of what a prospect may say to a food science consultant:

I'd like to create a liquid (ready-to-drink) beverage containing 20g of plant protein per serving. It will be available in three flavors: vanilla, chocolate, & strawberry and sold in individual, 12 oz. units. It cannot require refrigeration for storage and transportation, and it must be compliant with USDA organic and vegan standards.

This tells me:

- **Application type:** RTD beverage
- **Protein content:** 20 grams per serving
- **Serving size:** 12 ounces
- **Flavors:** Vanilla, Chocolate, Strawberry
- **Storage conditions:** Ambient
- **Compliance:** USDA Organic, Vegan, protein content (potentially, if reporting a % Daily Value and a marketing claim)

2. Recipe development

Not everyone has a recipe developed, and that could be why you want to work with a food scientist. However, if you already have a finished recipe and perhaps need a food scientist for other reasons (sourcing suppliers, finding a contract manufacturer, preparing for commercial-scale processing, etc.), here's something you can do...

Convert all your volumetric units (cups, teaspoons, tablespoons, gallons, etc.) to weight units (grams, kilograms, pounds). This is an essential step if you're serious about scaling your product. It's also important so that you can double-check your work, ensuring it is indeed the amount needed for a successful recipe.

If you want to take it one step further, convert weight units into a percent-of-total form. If that's too confusing, no worries. It will take a food scientist a few minutes to input into an Excel spreadsheet.



3. Suppliers & Costs

Not everyone has suppliers and costs figured out, and that could also be why you want to work with a food scientist. However, if you do, define some parameters:

1. What is the ideal cost per serving or per container of your finished food product?
2. Are you committed to working with only a certain supplier (or manufacturer)?

If there are suppliers you are already working with, it is important to connect your contact and the consultant. There are inevitable technical questions and document requests, and accessible communication is key to quick project turn-arounds.

4. Shelf-life

Shelf-life is industry terminology for expiration date. How long and under what conditions is your product safe and guaranteed for optimal consumption?

Going into a starting conversation, know what your current product shelf-life is, where you'd like it to be, as well as what processing measures you're comfortable with. For instance, you can significantly increase product shelf-life with ultra-high temperature processing (aka ultra-pasteurization), but is that what you want? It's okay if you don't know.

Generally, the longer the shelf-life, the better. The reason is in large part due to distribution.

Think about this for example:

Your product is produced and sealed. From the point of seal (and proper storage), it is good for a period of 60 days (2 months). That may seem ideal considering nothing in one's fridge normally lasts as long as 60 days. However, your product will be produced in large quantities (likely based on the minimum order of a contract manufacturer, though ultimately based on keeping prices down per unit produced).

Once your product is produced, it's stored for some period of time until a truck (or other means of transport) picks up and delivers your product to its next location – sometimes, a distribution center. Let's say this takes 1 week.

Your product will sit in a distribution center for another period of time, until a truck picks it up and delivers your product to its next location – such as a grocery retailer. Again, let's say this takes 1 week.

Once your product is on store shelves, your consumer has to purchase it. At best, they now have up to 46 days (46 days = 60 days – 2 weeks) from point of purchase. But, what if your product sat for 2 weeks before someone purchased it, and then, they wait another 1 week to open it? That now brings your product's guarantee to a window of 25 days (3–4 weeks) at best. Will this inhibit your customer from stock-piling your product? If your customer consumes an expired product and is dissatisfied, will they ever repeat a purchase?

A part of the problem is that consumer behavior is rather unpredictable, and your new product's likelihood of being selected is low (at least in the very beginning). And so, the higher the shelf-life, the better.



5. Timeline & budget.

I've got a problem swallowing the word "impossible." Perhaps it's because, in my experiences, I've heard that or even said that – and at the end of the day, someone was wrong.

Knowing what you want for project deliverables is important, but further to that, is knowing how quickly and your budget. Asking to do something that isn't yet mainstream does not mean something is impossible, it just asks, are you willing to invest time and resources to explore it? If so, what are your limits?

It's not an easy task establishing either timeline or budget (especially as a start-up). My suggestion is to work backward from a major event in order to establish a deadline for (1) a prototype or Minimum Viable Product, and (2) a launch date. It's not uncommonly the case that the ability to do either depends on one of the following major events: a retailer's review cycle, a major trade show, or a major holiday. Not all food scientists are excellent project managers, but if you give them a deadline to abide by, you'll both be better because of it.

Food scientists can be incredibly creative people. But creativity is often born from limitations and parameters, and understanding the space one has to work with. Understanding your needs, the expected end-result of working with a food scientist, and establishing "deal breakers" are a must for your project to be executed successfully and on time.