

INSTRUCTIONS FOR PRODUCT COST CALCULATORS

Introduction

These calculators allow you to simulate four common food processing scenarios:

- (1) building a small kitchen on your own farm
(NCAT Commercial Kitchen: On Your Farm.xlsx);
- (2) short-term periodic leasing of a commercial kitchen
(NCAT Commercial Kitchen: Hourly Rental);
- (3) long-term continuous leasing of a commercial kitchen
(NCAT Commercial Kitchen: Long-Term Lease); and
- (4) building a new commercial kitchen
(NCAT Commercial Kitchen: Build-Operate).

These scenarios correspond to a typical development process for a value-added operation. You might start small by selling to existing customers, then grow your business by selling to a larger, but still local customer base, mostly direct sales; then you might start selling your products through a distributor to a major retail grocery chain or specialty food store chain that has regional, statewide or even national customer bases.

You'll need basic familiarity with Microsoft Excel and the calculators require detailed input which you will have to compile about your product(s). You can only type in the cells that are shaded green or orange because the rest of the cells are locked. You should feel comfortable using these calculators with as many simulations/scenarios you think are possible. You cannot break these calculators so don't hold back!

If you're using a full version of Microsoft Excel, you'll need to "enable editing" after opening the files. If you're using Excel Online you'll need to not only view the spreadsheet but click the "OPEN" button to be able to enter data.

NCAT Commercial Kitchen: Hourly Rental

This worksheet includes four tabs, three of which require you to enter data. Although you can fill the pages out in any order, you'll probably find it easiest to go through them in the order presented (left to right).

Introduction tab

Please read the Introduction tab before using this spreadsheet.

Kitchen Rental and Labor tab

This tab presents some fixed costs of renting a commercial kitchen, short term and only occasionally, from someone else. The first three green shaded boxes are numbers you must provide and should be self-explanatory. Notice that as you fill in these three boxes, calculated values appear in the yellow cells.

The next green box to fill in is your best estimate of all annual regulatory costs for your operation. These would include licenses, permits, fees, etc. Your state Department of Health Services will most likely require a food manufacturing license and a warehouse license. And you will probably have to pay for annual certifications of several of your employees as food handlers and food managers.

The last two green boxes to be filled, “Average Hourly Rate for Employees” and “Payroll Taxes and/or Benefits Rate”, are self-explanatory and must have data for calculations in other tabs to work. You cannot leave them blank.

The commercial kitchen you select may also have access to experienced workers available to help you manufacture your products; workers who could save you some money as compared to workers you hire yourself. It also might be worthwhile to investigate if the management of the commercial kitchen could save you money in other ways. Maybe they can buy jars cheaper than you can buy them. Maybe they can buy boxes cheaper than you can. It does not hurt to ask.

Production Assumptions tab

On this tab you enter information about the ingredients of your products.

In the orange block on the left called “Product Name”, list the products you want to analyze. Sample product names are provided and you can change or delete them. There is room for up to six products, although you can do as few as one. Your product names will auto-fill into the boxes to the right.

In the green box below “Product Name”, indicate the percentage of a full year’s production capacity that will be taken up by each product. If the total exceeds 100%, you have exceeded the total capacity of the plant and you’ll get a warning. This allocation is used in other calculations, so it must equal 100%.

In the six boxes called “*Ingredients & Other Variable Costs,*” enter the ingredients and other cost items for each product. There is also space at the bottom for recording your assumptions and other notes.

You will need to estimate how many employees are required to make one batch, how many units of the product you can make per batch, how many batches per day you can make and the total packaging costs for one unit of your product. If, for example, you are putting your product into a jar, the costs should include the jar, the label, the lid and that one unit’s share of the cost of the container that might be used to ship one case of the product.

You’ll also need to make your best guess as to the average selling price of your product. **Varying this estimated price may be the principal reason for many of the simulations you will do.**

Pre-tax Returns tab

The first three numbers you see on this tab come from calculations made on other tabs.

The next box, which is part orange and part green, is where you record the estimates of all the other costs you might incur to produce, warehouse and sell the entire year's supply of this value-added product. Use ANNUAL numbers on this tab – your costs for these items for the entire year. This should be costs such as sales staff salaries, other marketing expenses, distribution, set asides for damaged or returned product, machinery maintenance and repair, supplies, insurances, etc. We have allowed space for ten different expenses to be recorded here.

The last number on this tab, "Annual Pre-Tax Returns from Processing," shows you what this value-added product could contribute to your farm's gross income if you had it made at the selected rental kitchen.

PLEASE NOTE: At this point, if you have still not assigned any money to pay yourself for managing this operation, do not consider this number a measure of Net Profit.