

**Cumberland University
Cumberland Culinary Center**

Introduction

All specialty food producers are required to provide the necessary documentation for all formulations produced at the CCC. This document is divided into the following sections:

Raw Material	How ingredients and packaging will be tracked
Prep	How ingredients will be prepared
Cook or Blend	How the formulation is prepared cooked or non cooked
Batch Control	How many units are produced in what size containers What are the Critical Control Points (CCP) that will be recorded What Preventative Controls (PC) that will be used/recorded Insert lines/columns as required
Process Validation	All formulations must be assigned to a product category What tests were utilized to determine the category
Recall	All companies are required to define how a product recall would be conducted in the event of a failure. A template is available which can be modified for your specific product (s) and company information. A template is available.

Instructions/Format

Within each section items identified in *italics* provide examples of what is required to be documented. The required information is available in both PDF and Excel format. Any application can be used to create each product formulation profile. If using Excel format please make sure you change the headers (to your company name), Footer to date created or revised.

Review Process

Please prepare necessary documentation and email to Sue Sykes mrgreen1@bellsouth.net
An evaluation will be performed and comments/questions will be sent to prospective customers.

Company Name

Recipe Name or UPC

Sanitize

Sanitize all equipment and surfaces
In the event that #10 cans are used, surfaces must be sanitized before opening

Ingredients

All lot numbers or best used by dates are recorded.

Identify key process steps which describe the handling of ingredients.

Fruit

Material which is inbound to the CCC will be maintained at a minimum temperature of 40F or less and verified with a thermometer.

Peppers

Wash peppers in 25 ppm bleach solution, allow to air dry

Special Notes for non Cooked products

Containers/Closures

Sanitize in Dish Machine
Record the temperature of the rinse cycle

Dairy Ingredients

All products must be pasteurized

Preservatives if used

It is recommended to extend shelf-life.
Identify the chemical and how it is prepared.

Company Name

Recipe Name or UPC

Describe the filling, mixing and cooking procedures. Listed below is an example of multiple steps for preparing a jam or jelly product. These steps will vary depending on the product

Step 1

*With the kettle off, add fruit, lemon juice
Turn agitator on
Turn kettle on, heat to 125F*

Step 2

*Slowly add pectin using the immersion blender
Heat to 175F*

Step 3

*Slowly add sugar in several batches while maintaining a minimum temperature 175F
Heat to 200F*

Step 4

*Take control sample
Measure pH. pH should be 2.8-3.5*

Step 5

*Connect the fill line from kettle to fill system.
Using a pail, pump several times until color appears, discard*

Step 6

*Continue to pump into the pail, this is heating product and the fill line
The product can be returned to the kettle*

Step 7

*Check the rim of the container for clear no defects
Fill container and cap
Invert jar
Apply tamper band
Code the container*

Note: 1 jar must be labeled and will be retained at the CCC for traceability purposes

Company Name

Date: _____ Cook Supervisor _____

Recipe Name	Batch #	All Ingredients Total Cook Temp	Units Produced 10 oz	Units Produced 4 oz	Units Produced 1 G	pH

*Batch #, incremented each production day
Enter the number of units produced in each batch by container size
For acidified products add 2nd pH 24 hours after production*

Critical Control Points: Temperature greater than x degrees; hold time of y

Critical Control Points: pH is less than x. E.g. less than 4.0

Start Time: _____ Stop Time: _____

Preventative Control Points:

For cooked products while filling x temperature will be checked/verified during the filling process depending on size of kettle, listed below are examples only

40g Temp Check 1 _____ Temp Check 2 _____ Temp Check 3 _____

100g Temp Check 1 _____ Temp Check 2 _____ Temp Check 3 _____ Temp Check 4 _____ Temp Check 5 _____ Temp Check 6 _____

For non-cooked products the required sanitization of the containers and closures must be attached by the Dish Sanitation log sheet

Inspections:

Enter No. Discards

Glass/Clear Lids/Seal

record the total number of units checked for a production day

Exceptions:

<i>identify the handling of discards and why</i>

Performed by Customer Signature: _____

CCC/PCQI Mgmt Approval: _____

Company Name
Recipe Name or UPC

Process Validation

Product Category

Definition

Non hazardous

Examples: jams and jellies, which are cooked to a minimum 180F and have a pH less than 4.0
No further product validation documentation is required

Formulated Acid: an email from UT Process Authority must be included

The base recipe (including standardized food items, e.g. ketchup, Louisiana hot sauce, etc.) **minus** the acid ingredients (e.g. lemon juice, vinegar, etc.)
Calibrate the pH meter and record results
Measure the pH of the above and record results
Combine the remaining ingredients (acid based) and heat if cooking is required
Measure the pH of the final version and compare to the table below
If an ingredient is 10% or greater by mass weight with a pH above 4.6 then it is an acidified product. This would require an FDA 2541e to be filed
If the pH of the finished product is outside the parameters below, then the FDA Form 2541 to register your company along with the 2541e is required to be filed.
Provide copies of the above

Example Test for Formulated Acid

The base recipe tested at 3.81 pH
Finished product 3.45 pH
pH shift 0.36

The main ingredient in this formulation is Louisiana hot sauce - considered as standard food item (fermented).
The shift in the final product was less than .4 and hence does not require the filing of 2541e

Acidified (Requires Form 2541e) Examples: all pickles, relishes, most salsas and sauces.

How can be used to test the final product category:

If the equilibrium pH of the predominant acid or acid food is:

> 4.2	Any shift in pH is present
4.2	The shift in pH is > 0.2
≥ 3.8 and < 4.2	The shift in pH is > 0.3
< 3.8	The shift in pH is > 0.4