Figure 2 - Process Group Flow Charts

I. Not heat treated, not shelf stable

```
<table>
<thead>
<tr>
<th>CCP Raw, grown safe, refrigerated</th>
</tr>
</thead>
<tbody>
<tr>
<td>Raw ingredients, refrigerated and frozen</td>
</tr>
<tr>
<td>CCP Wash fruits and vegetables</td>
</tr>
<tr>
<td>CCP Hold, serve/package for vegetative and spore control</td>
</tr>
<tr>
<td>CCP Refrigerate/freeze for spore control</td>
</tr>
</tbody>
</table>
```

RAW, GROWN SAFE
Meat, fish, shellfish, oysters
Mushrooms
Berries
Sprouts
Sashimi

RAW, WASHED TO MAKE SAFE
Lettuce, cabbage
Vegetables for salad
Fruit for salad

SPOILS SAFE
Raw fish
Soft cheese

II. Not heat treated, with inhibitors to make shelf stable

```
<table>
<thead>
<tr>
<th>CCP Shelf stable and not shelf stable, refrigerated (eggs, milk)</th>
</tr>
</thead>
<tbody>
<tr>
<td>CCP Mix, inject, add inhibitors to get pH &lt;4.1, aw &lt;0.92</td>
</tr>
<tr>
<td>Serve or store Shelf stable because of pH &lt;4.1 or aw &lt;0.92 or combination</td>
</tr>
</tbody>
</table>
```

SHELF STABLE
Flour
Honey butter
Cheese
Nuts
Spices, herbs
Salt
Oil, lard
Sugar
Vinegar, food
Cake
Acids
Icing
Salad dressing

III. Fully cooked, not shelf stable

```
<table>
<thead>
<tr>
<th>Raw ingredients, refrigerated and frozen</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pre-prep</td>
</tr>
<tr>
<td>CCP Cook for 5D Salmonella kill; if low-temp. dry cook, &lt;250ºF, then steam for 1st hr.; spores survive</td>
</tr>
<tr>
<td>CCP Hold, serve/package for spore control</td>
</tr>
<tr>
<td>Serve or store CCP Refrigerate/freeze for spore control</td>
</tr>
</tbody>
</table>
```
Roast beef, ham, poultry, RTE meals
Vegetables, fruit, Soup
Carbohydrates
Eggs

IV. Fully cooked, with inhibitors to make shelf stable

<table>
<thead>
<tr>
<th>Raw ingredients, refrigerated and frozen</th>
<th>Wash fruits and vegetables</th>
<th>CCP Blanch/pasteurize/smoke 5D Salmonella kill</th>
<th>Hold, serve/package</th>
<th>Serve or store Shelf stable</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>CCP Wash; mix, inject, add inhibitors (acid, aw)</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

ACID CONTROL/ADDITIVES/FERMENTATION
Salad dressings, ketchup
Soy, fermented sauces
Sauerkraut, pickles, kimchee
Sushi rice
Pickled meat, dairy, eggs, vegetables
Pepperoni, salami, ham
Salted fish, meat
Beer, wine, soda pop

A_w CONTROL
Jam, jelly
Syrup
Peanut butter
Bread, pretzels
Salt
Spices, herbs

SMOKE AND DRY
Ham
Country
Salted fish

V. Commercially sterile, shelf stable

<table>
<thead>
<tr>
<th>Raw ingredients, refrigerated and frozen</th>
<th>Pre-prep-mix Hermetically package</th>
<th>CCP Sterilize, low-acid pH, 9D proteolytic Clostridium botulinum reduction</th>
<th>Serve or store Shelf stable</th>
</tr>
</thead>
</table>

CANNED
Spaghetti products
Vegetables
Tuna, meat, poultry