Emergency Dining Management Plan

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**Goal Statement**

Develop an Emergency Dining Plan that will feed 10,000 student residents across the University of Washington campus in the case of an emergency.

1. US. Foods reliably delivers all necessary food and water supplies within 24 hours
2. Emergency entails total loss of power, water, and natural gas
3. HFS can provide sufficient staffing for this process

**Simulation Analysis**

**Experiment Setup**

<table>
<thead>
<tr>
<th>Independent Variables</th>
<th>Response Variables</th>
<th>Control Variables</th>
</tr>
</thead>
<tbody>
<tr>
<td>Number of assembly lines</td>
<td>Scheduled utilization</td>
<td>Average processing time for one unit: 1.5 minutes</td>
</tr>
<tr>
<td>Release schedule of students</td>
<td>Average time in system</td>
<td>Assembly line capacity: 9-unit meals</td>
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<tr>
<td></td>
<td>Queuing time</td>
<td>Students released by residence hall</td>
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<tr>
<td></td>
<td></td>
<td>Runtime: 10.0 hours</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Replications per experiment: 11</td>
</tr>
</tbody>
</table>

**Results**

1. Line
2. Lines
3. Lines

**Procedure Flow**

Disaster Strikes ▶ Supplies Procurement ▶ Preparation and Staffing ▶ Student Release Schedule ▶ Adjustment Mechanism

**Resource Allocation**

Important concept definitions and requirements:

- **Unit Meal** = Breakfast, Lunch, & Dinner
- Caloric Requirements per day: **2,000 calories**
- Water Requirements per day: **64 oz**

**Meal Distribution**

- Husky Den
- Local Point

**Impact**

Our project will enhance public health and safety for **10,000** student residents at the University of Washington during emergencies. Our emergency dining plan:

- **Ensures continuous access** to essential food and water
- **Sets a powerful precedent** for emergency preparedness within the University of Washington and beyond
- Demonstrates a commitment to both **immediate safety and long-term values** of responsible and responsive emergency management

We have delivered a comprehensive emergency dining management plan that ensures care for the student residents of the University of Washington. Essential components include:

- Gantt chart that outlines procedure, timeline, and staffing requirements
- A **48 hour buffer period** with an optional 8 hour break before meal distribution
- A recommendation to extend student emergency backpack provisions to 48 hours
- Contingency strategies for unavailable facilities

**Gantt Chart Key**

* Processes can be executed concurrently, contingent upon truck delivery schedule

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