**RESULTS AND DISCUSSION**

### Entrées (Pork Chops, Tuna Noodle Casserole)

- **Grilled Pork Chops**
  - Vitamin B1 levels showed losses at higher storage temperatures.
  - Dryness of the product was cited as a reason for product failure.
  - Shelf life projected to be 37 months at 72°F.

- **Tuna Noodle Casserole**
  - Product failure was attributed to declining scores for hardness of noodles and darkening of color during the 36 month study.
  - Vitamin B1 levels showed losses at higher storage temperatures.
  - Shelf life projected to be 48 months at 72°F.

### Sweets (Bread Pudding)

- **Tableas Pork Chops**
  - High sugar levels tended to have longer shelf lives.
  - Vitamin B1 and B21 demonstrated a linear decline with temperature.
  - Shelf life projected to be 48 months at 72°F.

### Vegetables (Carrot Coins, Sugar Snap Peas)

- **Carrot Coins**
  - Gradual decreases in all related color values at all temperatures.
  - Overall acceptance scores for carrot coins declined gradually over the storage period with the comments as “too mushy”.
  - The 40°F and 72°F samples were still acceptable after three years.
  - Sugar snap peas were unacceptable at all temperatures at 20 months due to bitter aftertaste and darker color.
  - Shelf life projected to be 20 months at 72°F.

- **Sugar Snap Peas**
  - Shelf life projected to be 20 months at 72°F.

### Cheese and Vegetable (Palak Paneer)

- **Overall acceptability of specifically aroma scores decreased over time likely due to oxidation of the spices and lipids (cheese).**
- Color changes indicated a loss of green color in the spinach and a mechanism of the shelf life over time.
- Shelf life projected to be 20 months at 72°F.

### Starch (Homestyle Potatoes)

- **Flavor decreased over time due to acidic aftertaste, off aroma, and overall decrease in flavor.**
- There was a significant decline in taste in all potato products.
- Shelf life projected to be 48 months at 72°F.

**MATERIALS AND METHODS**

- **Products tested at three temperatures, 40°F, 72°F and 95°F were used.**
- **Sensitivity testing includes difference from control testing and overall acceptability testing.**
- **Textural properties include texture, color, moisture, and water activity determination.**

**SHELF LIFE CALCULATIONS**

- Shelf life will be determined by:
  - Activity, shelf-life, and shelf-life test values, which will determine the shelf life.
  - Determine the Q10 for the product based on shelf-life and shelf-life test values.
  - The Q10 provides a prediction of shelf life at different temperatures.

**REFERENCES**