

Practical Applications of Food Science & Nutrition to New Product Development

**Claudio Cardelli Ph.D.
PCAS - Pacific Coast Analytical Services
CSUN
4-28-07**

Objective

- **Case studies on the practical use of Food Science & Nutrition to new product development**
- **Gain a better understanding of how new products are developed**
- **Show how critical is basic knowledge to be effective technical leaders**

Concept

- **Shelf stable ready to eat pizza**
- **Shelf stable single cavity meals**

Feasibility

- **Extended shelf life diced tomatoes**
- **Three months shelf life refrigerated dough**
- **Individual expresso coffee cups**

Development

- Antioxidant claim validation in tomatoes
- Off flavors in canned apple filling
- Botulism control in fresh pasta kit
- And many others...

Commercialization

- Upside down Ketchup bottle
- Stickiness in Popcorn
- Viscosity and salt level in frozen meals
- And many others...

Tracking

- **Consumer Complaints: hard beans**
- **Cost reductions: chicken in soups**
- **Recalls**

Summary

- **Case studies on the practical use of Food Chemistry in new product development**
- **Gained a better understanding of how new products are developed**
- **Showed how critical is basic knowledge to be effective technical leaders**
- **Questions ?**