THE KOHALA CENTER

education. environment. empowerment.

Food Business Basics:

Getting Started and Finding Your Niche in the Specialty Foods Business

March 2013

Lou Cooperhouse

FOOD SPECTRUM™

Presentation Overview

1. The Amazing Food Industry!
2. Food Trends
3. Food Safety
4. Food Technologies
5. Quality Assurance
6. Developing *Your* Product
7. Developing *Your* Business Plan
8. Making it Happen!

1. The Amazing Food Industry!


Kellogg's
Chex
Rice Chex
Corn Chex
Wheat Chex
Honey Nut Chex
Multi-Bran Chex
Cocoa Chex
Frosted Mini-Wheats
Raisin Bran
Special K
Nutri-Grain
Pop-Tarts
Rice Krispies Treats
Cheez-It
Keebler
Famous Amos
Murray
Sunshine
Nabisco
Ritz
Triscuit
Wheat Thins
Oreo
Chips Ahoy!
Nutter Butter
Fig Newtons
Teddy Grahams
Honey Maid
Graham Crackers
Cinnamon Grahams
Barnum's Animal Crackers
Animal Crackers
Goldfish
Pepperidge Farm
Milano
Mint Milano
Chocolate Chip Milano
Double Chocolate Milano
Hazelnut Milano
Orange Milano
Raspberry Milano
Lemon Milano
Coconut Milano
Peanut Butter Milano
Cinnamon Milano
Pumpkin Spice Milano
Gingerbread Milano
Cranberry Orange Milano
Blueberry Milano
Strawberry Milano
Peach Milano
Apple Milano
Pear Milano
Grape Milano
Cherry Milano
Banana Milano
Pineapple Milano
Mango Milano
Kiwi Milano
Watermelon Milano
Cantaloupe Milano
Honeydew Milano
Pomegranate Milano
Blackberry Milano
Raspberry

Definition of *Food*

1. *Primary Definition*
   A. Material consisting essentially of protein, carbohydrate, and fat used in the body of an organism to sustain growth, repair, and vital processes and to furnish energy; also : such food together with supplementary substances (as minerals, vitamins, and condiments)
   B. Inorganic substances absorbed by plants in gaseous form or in water solution

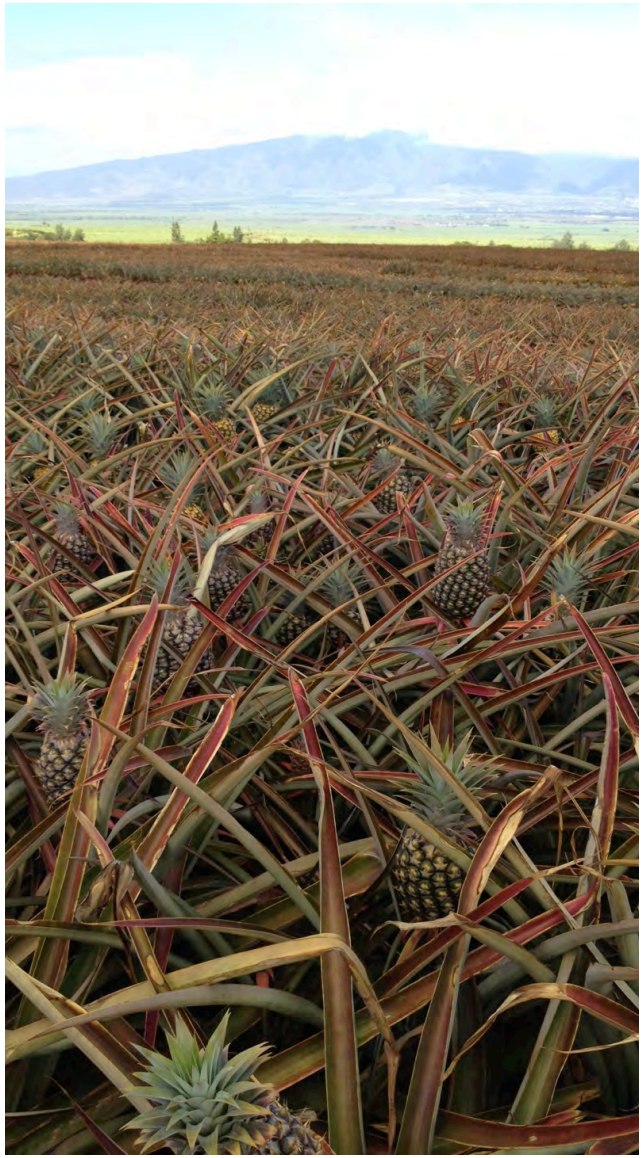
2. Nutriment in solid form

3. Something that nourishes, sustains, or supplies <food for thought>

Merriam-Webster Dictionary Online

Social, Experiential and Lifestyle Functions of Food

- Associated with memories and life experiences
- Used as a focus for social gatherings
  - Family
  - Community
  - “Breaking bread”
- Enriches the psychological aspects of our life
- Can provide for our cultural identify
- Used to provide reward for self, family, loved ones, and others
- Used to initiate and maintain personal relationships
- Used to express love or concern
- Used to support personal beliefs and lifestyle
- So Much More!



Prepared Food Markets

- Retail
  - Supermarkets
  - Club Stores
  - Convenience Stores
  - Farmer's Markets
- Foodservice
  - Finished products or components
  - Restaurants, schools, catering, institutions, businesses or retail establishments with foodservice offerings
- Further Processors/Industrial
  - Selling a value-added product that serves as an ingredient to an upstream food processor
    - E.g., cleaned and diced peppers used by a salsa or soup manufacturer

Focus: Value-Added, *Specialty Foods*

- **Specialty Foods** are foods and beverages that exemplify quality, innovation and/or style in their category.
- Their specialty nature derives from some or all of the following characteristics: their originality, authenticity, ethnic or cultural origin, specific processing, ingredients, limited supply, distinctive use, extraordinary packaging or specific channel of distribution or sale.
- By virtue of their differentiation in their categories, such products maintain a high perceived value and often command a premium price.

Specialty Foods Market

- 2011 Total Sales = $75.14 billion ($59.74 billion of this at retail)
- 13.7% of all food sold at retail is specialty food
- Total U.S. specialty food sales grew by 19.1% between 2009-11
- Fastest growing retail channel (in terms of sales) = natural food stores (sales increase 19.8% between 2009-2011)

TOTAL U.S. SALES OF SPECIALTY FOOD

	2011 $ Million	2011 % Share	2009–2011 % Change
Retail Channels	59,737	79.5	18.7
Foodservice	15,400	20.5	20.8
Total	**75,137**	**100.0**	**19.1**

Retail channels includes PLU, Trader Joe's, Whole Foods, but not Walmart

Source: Mintel/SPINS/Nielsen

MINTEL
Intelligence in time

THE STATE OF THE SPECIALTY FOOD INDUSTRY 2012

Top Ten Specialty Food Sales Categories

1.	Cheese & Cheese Alternatives	$3.44 billion
2.	Meats, Poultry, Seafood	$1.92 billion
3.	Chips, Pretzels & Snacks	$1.84 billion
4.	Coffee, Coffee Substitutes & Cocoa	$1.70 billion
5.	Bread & Baked Goods	$1.63 billion
6.	Yogurt & Kefir	$1.63 billion
7.	Condiments, Dressings & Marinades	$1.44 billion
8.	Frozen Lunch & Dinner Entrees	$1.12 billion
9.	Candy & Individual Snacks	$1.09 billion
10.	Frozen Desserts	$1.05 billion

Note: Based on retail sales of specialty food excluding Whole Foods Market, Trader Joe's, or Wal-Mart, as well as private label and PLU items.

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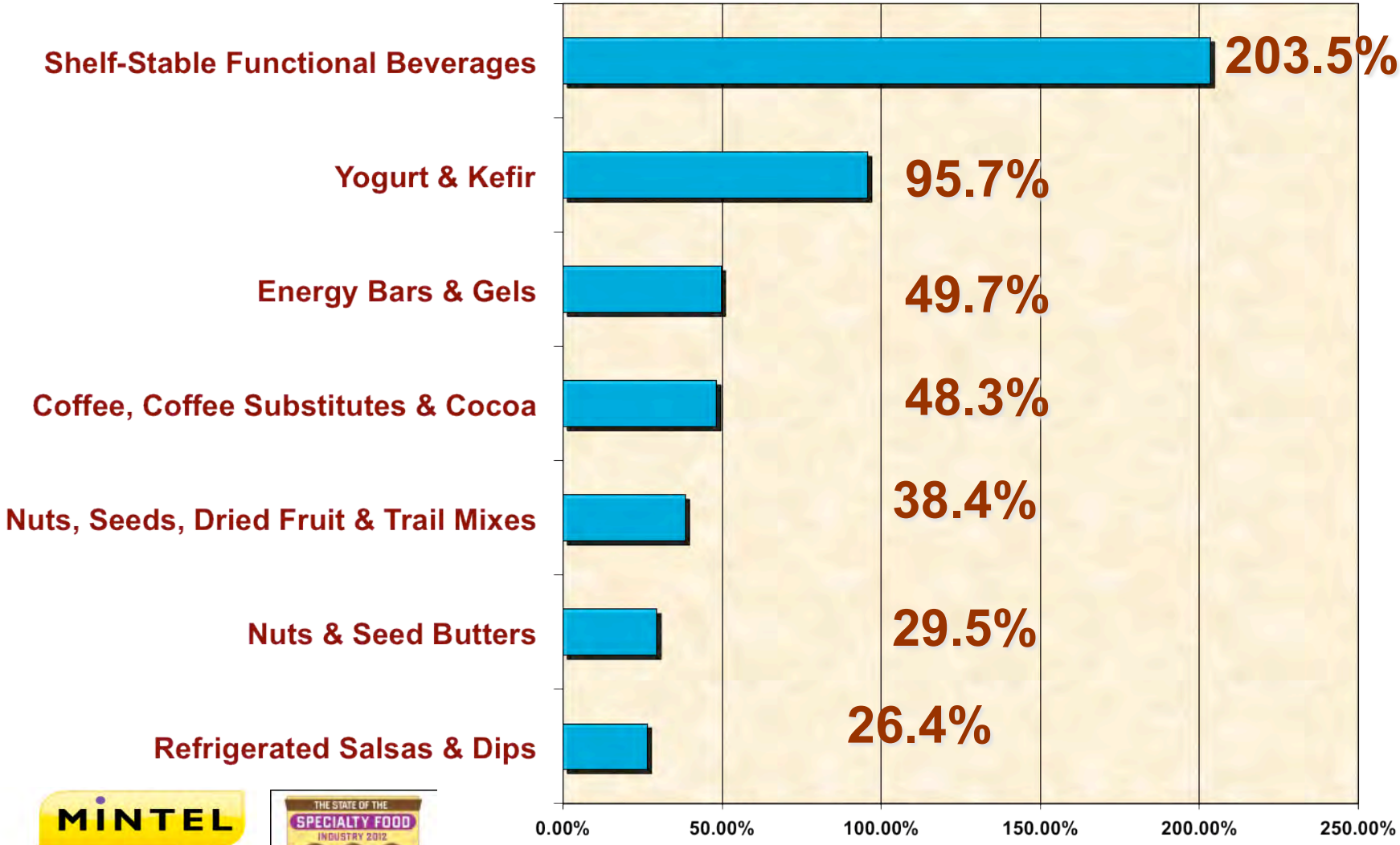
THE STATE OF THE SPECIALTY FOOD INDUSTRY 2012

Greatest Specialty Food Growth

27 Specialty Food Categories Grew by More Than 10% Between 2009 and 2011



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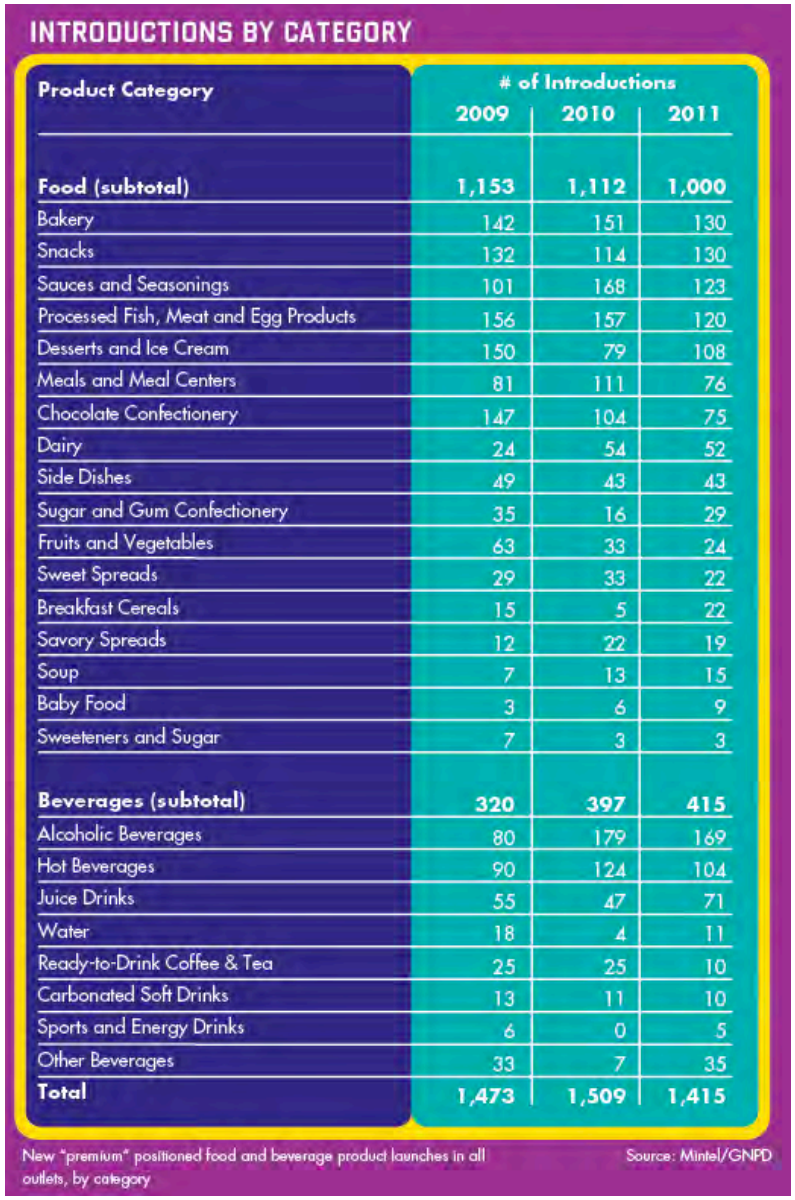
THE STATE OF THE SPECIALTY FOOD INDUSTRY 2012

U.S. New Product Launches in 2011



INTRODUCTIONS BY CATEGORY

Product Category	# of Introductions		
	2009	2010	2011
Food (subtotal)	**1,153**	**1,112**	**1,000**
Bakery	142	151	130
Snacks	132	114	130
Sauces and Seasonings	101	168	123
Processed Fish, Meat and Egg Products	156	157	120
Desserts and Ice Cream	150	79	108
Meals and Meal Centers	81	111	76
Chocolate Confectionery	147	104	75
Dairy	24	54	52
Side Dishes	49	43	43
Sugar and Gum Confectionery	35	16	29
Fruits and Vegetables	63	33	24
Sweet Spreads	29	33	22
Breakfast Cereals	15	5	22
Savory Spreads	12	22	19
Soup	7	13	15
Baby Food	3	6	9
Sweeteners and Sugar	7	3	3
Beverages (subtotal)	**320**	**397**	**415**
Alcoholic Beverages	80	179	169
Hot Beverages	90	124	104
Juice Drinks	55	47	71
Water	18	4	11
Ready-to-Drink Coffee & Tea	25	25	10
Carbonated Soft Drinks	13	11	10
Sports and Energy Drinks	6	0	5
Other Beverages	33	7	35
Total	**1,473**	**1,509**	**1,415**

New "premium" positioned food and beverage product launches in all outlets, by category

Source: Mintel/GNPD

- 1,415 New premium Product Launches in 2011
- Down 6% from 2010

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THE STATE OF THE SPECIALTY FOOD INDUSTRY 2012

U.S. New Product Launches in 2011 – By Claim

INTRODUCTIONS BY CLAIM

Product Category	# of Introductions		
CLAIMS	2009	2010	2011
Kosher	442	462	446
All Natural	237	265	267
No Additives/Preservatives	172	225	228
Ethical—Environmentally Friendly Package	141	244	208
Low/No/Reduced Allergen	73	139	138
Microwaveable	151	150	124
Gluten-Free	65	130	122
Low/No/Reduced Trans Fat	98	89	114
Ease of Use	129	136	105
Convenient Packaging	116	176	93
Low/No/Reduced Fat	122	103	89
Organic	119	90	81
Low/No/Reduced Cholesterol	58	58	73
Ethical—Environmentally Friendly Product	40	53	57
Whole Grain	41	48	56
Low/No/Reduced Sugar	64	54	55
Time/Speed	58	77	54
Seasonal	50	55	44
Antioxidant	45	32	43
Low/No/Reduced Calorie	57	35	33
Total	**1,473**	**1,509**	**1,415**

Data does not equal totals because products may make more than one claim

Source: Mintel/GNPD

- Kosher, All-Natural, Preservative-Free, and Environmentally Friendly Packaging are Leading Claims
- Package convenience and Lower Fat Claims Declining

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THE STATE OF THE SPECIALTY FOOD INDUSTRY 2012

Local, Organic, and Natural Important to Retailers

- The word "local" is not tracked as a "claim" in the traditional sense, but is the most <u>influential claim of all</u>

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THE STATE OF THE SPECIALTY FOOD INDUSTRY 2012

U.S. Sales of Specialty Food by Retail Channel

SPECIALTY FOOD SALES BY RETAIL CHANNEL

	2009		2010		2011		CHANGE
	$ Million	% Share	$ Million	% Share	$ Million	% Share	2009–2011
Mainstream	21,789	72.6	23,292	72.4	25,504	72.5	17.0%
Specialty Food Stores	5,797	19.3	6,205	19.3	6,772	19.3	16.8%
Natural Food Stores	2,416	8.1	2,660	8.3	2,894	8.2	19.8%
Total	**30,002**	**100.0**	**32,157**	**100.0**	**35,169**	**100.0**	**17.2%**

Does not include sales through Walmart, Whole Foods or Trader Joe's
Does not include private-label sales or PLU items
Data may not equal totals due to rounding

Source: Mintel/SPINS/Nielsen

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THE STATE OF THE SPECIALTY FOOD INDUSTRY 2012

Industry Challenges – Retail Feedback

- Increasingly Competitive Marketplace (will lead to more unusual and niche products)
- Local/regional food explosion
- Heavy skew toward natural and eco-friendly
- Higher Freight costs
- Rising Food Costs
- Rising Labor Costs
- Need for Consumer Education
- Need for Continually New, Unique and Interesting Products
- Keeping selection/assortment up-to-date, fresh, of superior quality without sacrificing too much margin

2. Food Trends

Overview

General Observations

- Consumers no longer feel a need to justify premium, they expect it and feel they deserve it.
- Perception drives trial, affects *first* purchase
  - Appearance, Color, Packaging help captivate senses
- Reality…Clearly affects the *repeat* purchase… Has the promise and experience been fulfilled?
  - Taste (with bold flavors) *is* most powerful criterion for repeat purchase
  - Consistency is critical

General Observations

- Time-starved consumers looking for foods that are convenient to locate, convenient to buy, convenient to prepare, and convenient to eat (and convenient to clean up)

- Various preparation & “involvement” alternatives exist for consumer
  - Ready-to-Eat (RTE) – greatest convenience, frequently greatest risk as well
  - Ready-to-Heat (RTH) – “heat and eat”
  - Ready-to-Cook (RTC) – now “scratch” cooking

RTE and RTH Prepared Convenience Foods

- Precut Fruits
- Precut Vegetables
- Produce (cut) salads
- Entrees/Meals
- Entrée salads
- Side dish salads
- Sandwiches
- Dips and Spreads
- Salsas
- Salad Dressings
- Puddings/Gelatins
- Baked desserts
- Beverages/Smoothies
- Cooked Meat, Poultry and Seafood Entrees

General Observations

- Immigrant population, “globalization” of Americans, and increasing world travel are expanding consumers’ food horizons
- Celebrity chefs are encouraging more adventuresome cooking
- Shoppers want, and are getting, bolder flavors, more spices, stronger cheeses, more adventurous and unique entrees, and more crisp and crunchy textures
- Bold flavors are popping up in brand new areas.

The Culinary *Experience*

The Culinary *Experience*

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The Culinary *Experience*

Trends Summary

What Attributes are Consumers Demanding?

1.Differentiated

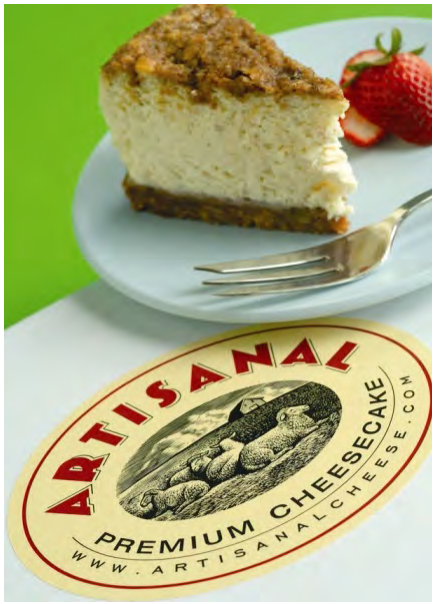
2.Convenience

3.Local

4.Health

5.Causes and Benefits

Consumer Trend #1: Differentiated



- ✓ Great Taste
- ✓ Premium
- ✓ Fresh
- ✓ Specialty
- ✓ Indulgent
- ✓ Artisanal
- ✓ Ethnic
- ✓ Experiential
- ✓ Varietal
- ✓ Adventurous
- ✓ Bold
- ✓ Exotic
- ✓ Decadent
- ✓ “Sensory”

Consumer Trend #2: Convenience

- ✓Ready to Eat
- ✓Ready to Heat
- ✓Ready to Cook

Consumer Trend #3: Local

HAWAI'I SEAL of QUALITY

- ✓Authentic
- ✓Seasonal
- ✓Traditional
- ✓Freshness
- ✓Simpler

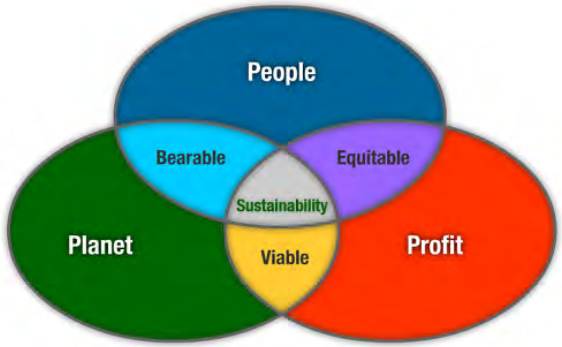
Note: "Local" has become the most important differentiator and product claim for restaurants, retailers, and institutions (per Mintel)

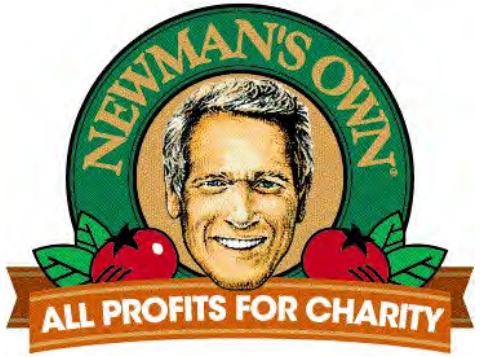
Consumer Trend #4: Health

- ✓ Wellness
- ✓ Nutritious
- ✓ Natural
- ✓ Minimally Processed
- ✓ Raw
- ✓ Gluten-Free
- ✓ Preservative-Free
- ✓ Portion-Controlled
- ✓ Weight Management
- ✓ Filling - Promoting Satiety
- ✓ Functional
- ✓ "Personalized"

Consumer Trend #5: Causes and Benefits

- ✓ Green
- ✓ Organic
- ✓ GMO-free
- ✓ Reduced CO2
- ✓ Sustainable
- ✓ Cause Markets
- ✓ Charitable
- ✓ Fair Trade





Trends - *How many can you incorporate?*

- Differentiated
- Great Taste
- Premium
- Fresh
- Specialty
- Indulgent
- Artisanal
- Ethnic
- Experiential
- Varietal
- Adventurous
- Bold
- Sensory
- Decadent
- Exotic
- Convenient
- Local
- Authentic
- Seasonal
- Traditional
- Simpler
- Health
- Wellness
- Nutritious
- Natural
- Min. Processed
- Preservative-Free
- Raw
- Gluten-Free
- Portion-Controlled
- Functional
- Personalized
- Green
- Organic
- Sustainable
- Charitable
- Cause Markets
- GMO-Free
- Fair Trade

2. Food Trends

Product Examples

The Fancy Food Shows

- North America's premier showcase for specialty-gourmet, natural and organic, foods, snacks and beverages
- Some of the best known global brands were launched at The Fancy Food Shows, including Walker ‘s Shortbread, Ben & Jerry's, Vitamin Water, Mrs. Fields, Perrier, and Carr's Water Biscuits
- Drawing over 35,000 buyers annually

Summer FANCY FOOD SHOW
specialty food
June 30- July 2, 2013
Javits Center, New York City

Trends in U.S. Specialty Foods

2012 Trends in American Specialty Foods

- **Natural & Organic Foods**
- Home Cooking
- Exotic Flavors
- Healthy and Decadent Snacking
- Convenience and Ease

Trends: Natural & Organic Foods

Eden Foods Inc.: ***Eden Organic Concord Grape Juice***

Trends: Natural & Organic Foods

The Tea Room
Green Earl Grey Dark Chocolate

Trends: Natural & Organic Foods

Bove's
Bove's Vodka All-Natural Pasta Sauce

Trends: Natural & Organic Foods

Late July Organic Snacks
Organic Dude Ranch Multigrain Snacks

Trends: Natural & Organic Foods

Theo Chocolate
Theo Jane Goodall
45% Organic + Fair Trade Milk Chocolate

Trends in U.S. Specialty Foods

2012 Trends in American Specialty Foods

- Natural & Organic Foods
- **Home Cooking**
- Exotic Flavors
- Healthy and Decadent Snacking
- Convenience and Ease

Trends: Home Cooking

Hancock Gourmet Lobster Company:

Port Clyde Lobster Mac & Cheese

Trends: Home Cooking

Gagne Foods, Inc.:
Pecan Sticky Buns

Trends: Home Cooking

Uncle Bunk's:
Mustard Relish

Trends: Home Cooking

Rick's Picks:
Handy Corn

Trends: Home Cooking

Callie's Charleston Biscuits:
Callie's Charleston Cocktail Black Pepper Bacon Biscuits

Trends in U.S. Specialty Foods

2012 Trends in American Specialty Foods

- Natural & Organic Foods
- Regional Home Cooking
- **Exotic Flavors**
- Healthy and Decadent Snacking
- Convenience and Ease

Trends: Exotic Flavors

Chuao Chocolatier:
Firecracker
ChocoPod

Trends: Exotic Flavors

Todd's Dirt Seasonings:
Crabby Dirt

Trends: Exotic Flavors

Frontera Foods: ***Chipotle Pumpkin Salsa***

Trends: Exotic Flavors

San Angel Mole Co.:
San Angel Mole
Cascabel Sauce

Trends: Exotic Flavors

Rick's Picks:
Smokra

Trends in U.S. Specialty Foods

2012 Trends in American Specialty Foods

- Natural & Organic Foods
- Home Cooking
- Exotic Flavors
- **Healthy and Decadent Snacking**
- Convenience and Ease

Trends: Healthy and Decadent Snacking

Kitchen Table Bakers:
Aged Parmesan Crisps

Trends: Healthy and Decadent Snacking

Anette's Chocolates:
Chili Lime Tequila Tortilla Brittle

Trends: Healthy and Decadent Snacking

The Sticky Toffee Pudding Company:
Sticky Toffee Pudding

Trends: Healthy and Decadent Snacking

Bissinger's Hand-Crafter Chocolatier: *Chocolate Covered Wine Grapes*

Trends: Healthy and Decadent Snacking

Route 11 Potato Chips:
Dill Pickle

Trends: Healthy and Decadent Snacking

Grafton Village Cheese Co.:
Grafton Duet

Trends: Healthy and Decadent Snacking

Chex Finer Foods
Laurel Hill Tortilla Chips: Olive and Caper

Trends in U.S. Specialty Foods

2012 Trends in American Specialty Foods

- Natural & Organic Foods
- Home Cooking
- Exotic Flavors
- Healthy and Decadent Snacking
- **Convenience and Ease**

Trends: Convenience and Ease of Cooking

Dufour Pastry Kitchen: ***Creamy Mushroom Truffle Risotto***

Trends: Convenience and Ease of Cooking

Sonoma Syrup Company: ***Olive Juice***

Trends: Convenience and Ease of Cooking

Dave's Gourmet, Inc.:
Dave's Gourmet Butternut Squash Pasta Sauce

Trends: Convenience and Ease of Cooking

Fischer & Wieser Specialty Foods:
Mom's Spaghetti Sauce

Trends: Convenience and Ease of Cooking

Bone Doctors BBQ:

BBQ Gift Pack

3. Food Safety

Food Safety Statistics

- The Centers for Disease Control and Prevention (CDC), in their most recent 2011 study, estimate that each year in the US:
  - 48 million food borne illness cases occur (1 in 6 Americans)
  - 128,000 people are hospitalized with a diagnosis of food poisoning,
  - 3,000 people die from a food borne illness.
- Annual dollar costs of food borne illnesses, in terms of medical expenses and lost wages and productivity, are estimated at $77 billion (published in J. of Food Protection, 2012)

Food Industry Recalls

Food Safety and Quality Challenges

Pet food, Peanut butter, Fresh-Cut Produce (tomatoes, peppers, mangoes) … Industry recalls are happening almost every week!

- Enhanced regulatory focus (plus new FSMA legislation)
- Improved detection systems and lower detectable limits
- An aging population that is more susceptible to foodborne illness
- Increased differentiation of foods, resulting in new combinations of ingredients, which have not been marketed before and result in new risks
- Consumer demands for "cleaner" labels and convenient, ready-to-eat food products
- Emergence of new pathogens, pathogens not previously associated with food, and antibiotic-resistant strains
- Inadequate cold chain, caused in part by extensive food distribution systems, and exacerbated by manufacturer's desire for longer shelf life
- Increased urbanization in America, resulting in a blending of rural and urban landscapes, and greater potential for contamination in agricultural supply (from field, runoff, etc.)

USDA and US FDA
Food Industry Oversight

- All foods are inspected by either the USDA or FDA
  - The Food Safety and Inspection Service (FSIS) of the U.S. Department of Agriculture (USDA) inspects and regulates meat and poultry products and processed eggs
  - All other food products are regulated by the Food and Drug Administration (FDA).
- Both agencies have guidelines for companies to follow in recalling defective products
  - Under the guidelines, companies are expected to notify FDA/USDA when recalls are started, to make progress reports to FDA/USDA on recalls, and to undertake recalls when asked to do so by the Agency.
  - The guidelines also call on manufacturers and distributors to develop contingency plans for product recalls that can be put into effect if and when needed. FDA/USDA's role under the guidelines is to monitor company recalls and assess the adequacy of a firm's action. After a recall is completed, FDA/USDA makes sure that the product is destroyed or suitably reconditioned and investigates why the product was defective.

US Government Recall Classifications

- **Class I recall:** involves a health hazard situation where there is a *reasonable* probability that eating the food will cause health problems or death
  - Such as *Listeria monocytogenes, Escherichia coli* O157:H7, or undeclared Class I allergens such as peanuts or eggs
- **Class II recall:** involves a potential health hazard situation where there is a *remote* probability of adverse health consequences from eating the food.
  - Such as presence of a Class II allergen like dry milk as an ingredient, include a food with wood, glass, or metal fragments, or less harmful pathogens
- **Class III recall**: involves a situation when eating the food will not cause adverse health consequences
  - Such as improperly not listed on the label as required by Federal regulations

How Does Food-Borne Illness Happen?

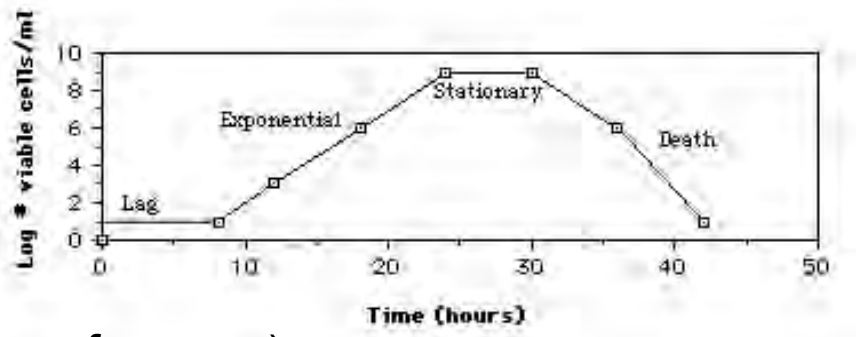
- Most common causes:
  - Improper holding temperature
  - Poor personal hygiene
  - Inadequate cooking
  - Contaminated equipment
  - Food from unsafe sources

- Most common foods:
  - Fresh and minimally processed produce (e.g. lettuce, sprouts, tomatoes, unpastzd. juices)
  - Refrigerated prepared foods (e.g. sandwiches)
  - Refrigerated processed foods (e.g. hot dogs)

Source: Center for Disease Control and Prevention (CDC)

Food Safety Principles

- Bacteria double at regular intervals, varying from about 12 minutes to 24 hours or more.
- The ability of an organism to pose a hazard can be inhibited, and potentially eliminated, by a number of factors, such as:
  - Heat, Pressure
  - Time, Temperature
  - Nutrients
  - Water Activity
  - pH (acidity)
  - Atmospheric conditions (absence of oxygen)
  - Presence of inhibiting substances, such as preservatives, microbial interactions, and competition from other bacteria
  - Stress on the bacteria



- HACCP: Primary Objective of a HACCP (Hazard Analysis and Critical Control Point) program is to establish processes to inhibit or destroy microorganisms capable of causing foodborne illness.

4. Food Technologies

Technology Innovations & Solutions

- **Good news:** Variety of technologies exists to enhance food safety and extend product shelf life

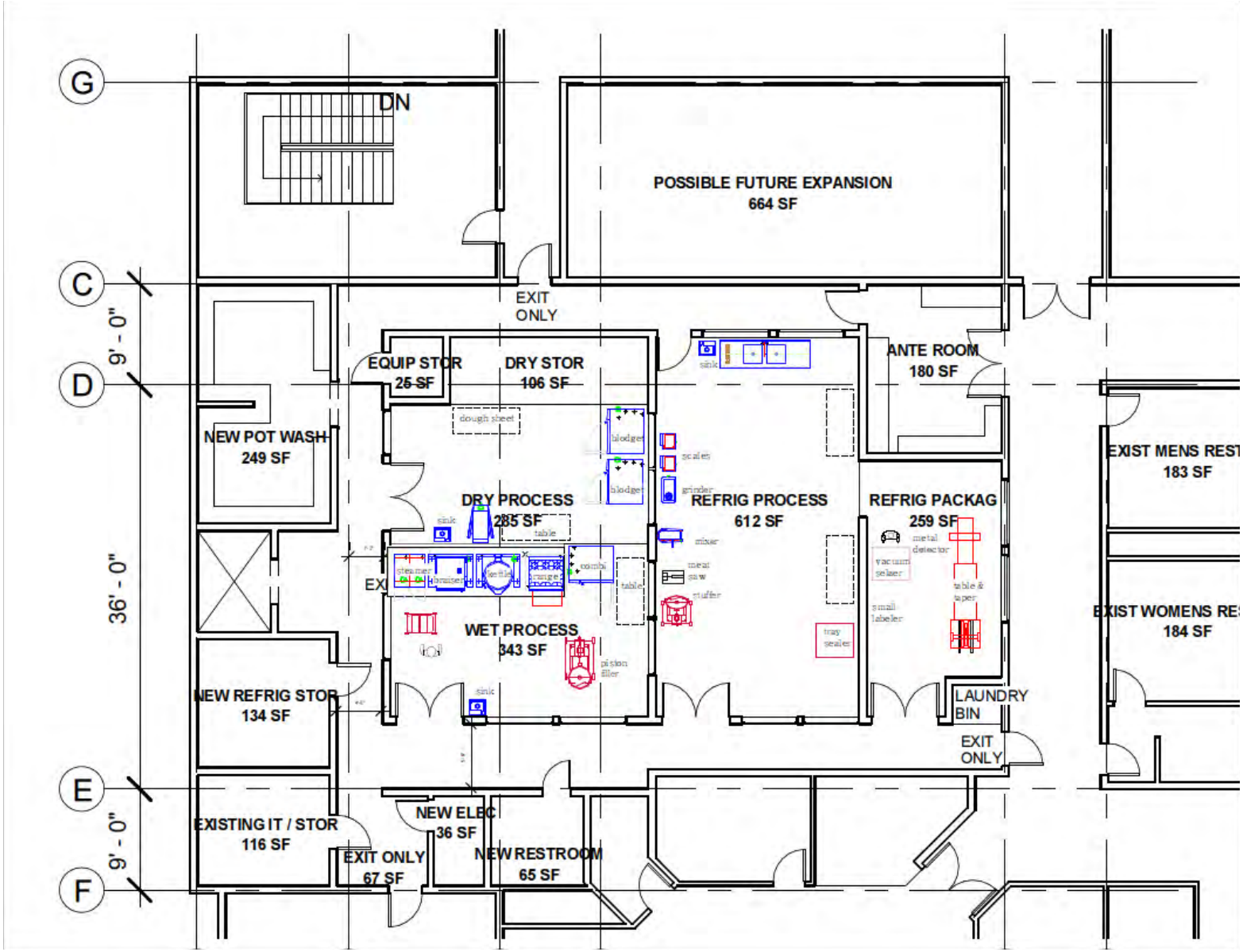
- **Hurdle Technologies are proactive and preventative <u>tools</u> to extend the bacteriological and/or the sensory shelf life of a food product.**

Hurdle Technologies: *From Farm to Fork*

1. **Facility Layout and GMP's**
2. **Superior Agricultural Practices**
3. **Formulation**
4. **Processing**
5. **Packaging**
6. **Distribution/Temperature Control**

Synergistic results are typically achieved when hurdles are used in combination

1. Facility Layout and GMP's That Minimizes Potential for Cross Contamination



2. Superior Agricultural Practices

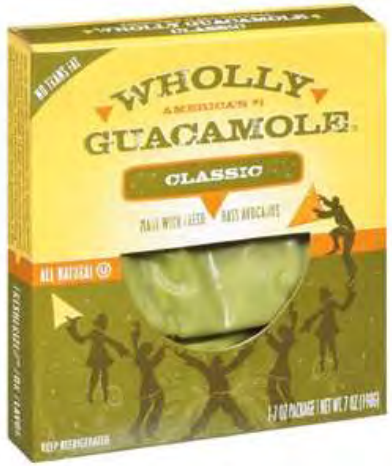
- Optimize Produce Raw Material Specifications
- Segregated area for sanitizing produce with low risk and high risk processing operations
- External surface pasteurization (steam or hot water) of raw materials
- Abrasive scrubbing
- Extreme sanitation of cutting equipment, which can be notorious as source of cross contamination
- Chlorine, Peroxyacetic acid, ozone, UV light and/or other chemical aids in washing solution before and/or after cutting

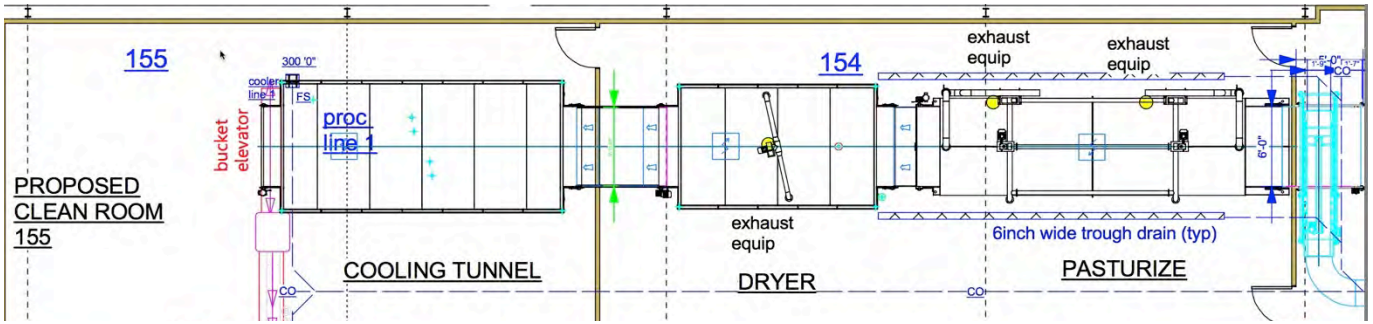
3. Formulation Hurdles

- Acidulants- Natural or Synthetic
- Antimicrobial agents
  - Sodium benzoate, potassium sorbate, sodium nitrite, etc.
  - Sodium lactate, nisin, liquid smoke, sodium propionate
  - Natural spices, e.g. rosemary
- Pre-treatment of components used in process
  - Irradiated spices
  - Blanching of vegetables
  - Chemical/preservative dips
- Water Activity Control
- Antioxidants
- Competitive Microorganisms

4. Processing Technologies

- Thermal
  - Hot Fill, Quick Chill (Cook>Package)
  - Post Pasteurization (Package>Cook to surface or internal temp)
    - Cook in casing, or Sous Vide
    - Microwave pasteurization
  - Sterilization
- Non-Thermal
  - Ultra High Pressure Processing
  - Irradiation
  - Pulsed Light and Pulsed Electric Fields





5. Packaging Hurdles

- Modified Atmosphere Packaging
- Clean Room Environment
- Barrier Packaging Materials
- Active & Intelligent Packaging Systems

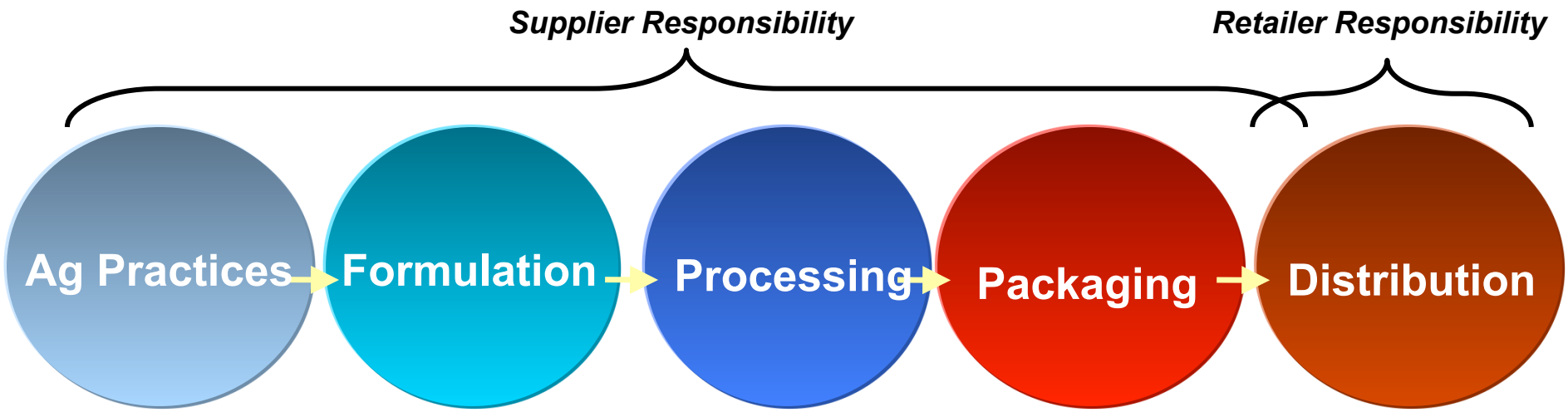
6. Distribution - Temperature Control

- Raw Material harvesting and shipment
- Raw material storage
- Product Processing
- Finished goods packaging
- Manufacturing plant holding coolers
- Loading Docks, Trucks, Loading Docks
- Distribution centers/depots coolers
- Loading Docks, Trucks, Loading Docks
- Retail/Foodservice holding coolers
- Store Merchandisers/display cases
- Between store and home
- Home refrigeration and preparation

"Superchilling", defined as chilling to the temperature just above the freezing point of the product (typically 29ºF-35ºF) will minimize microbiological growth and provide shelf life extension of 50% to over 200% versus conventional storage temps.

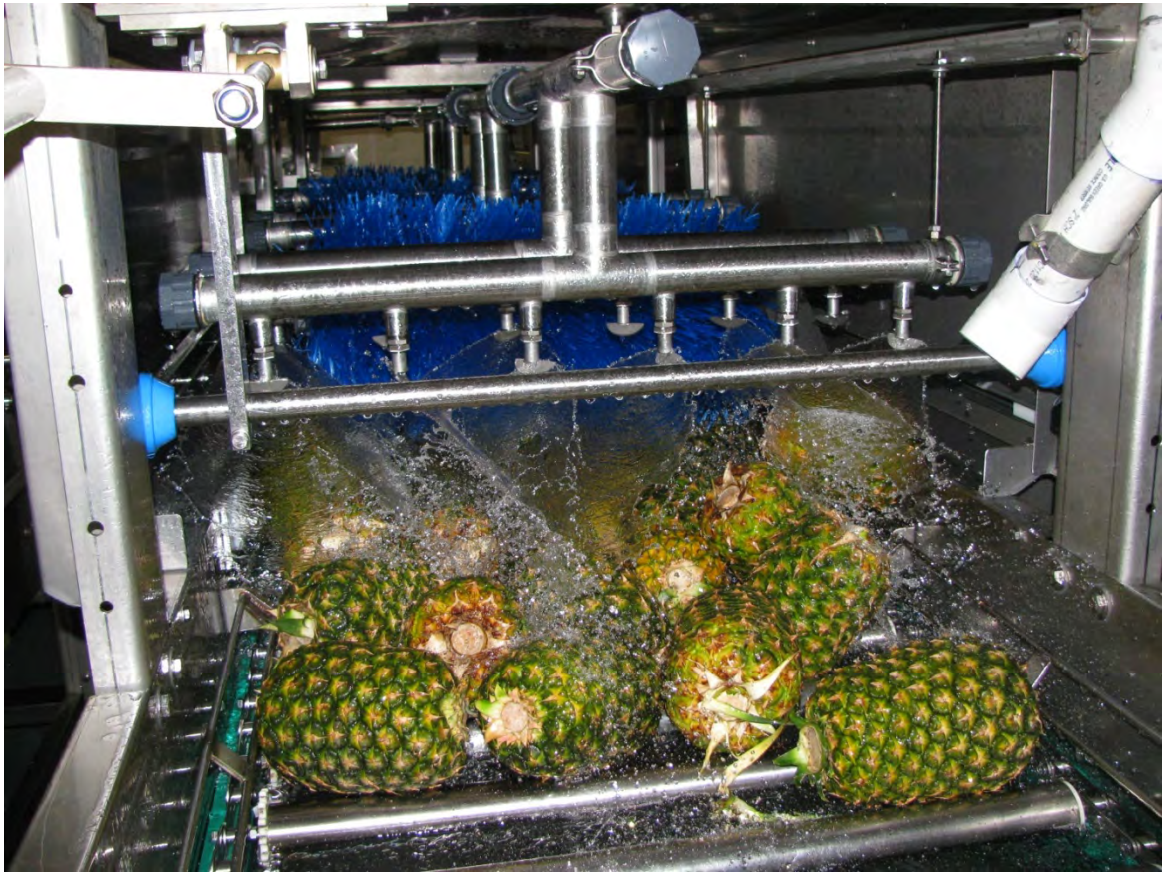
“Field to Fork” Preventative Technologies

- A variety of technologies can extend food products’ shelf life
- However, these preventative technologies may be absent, inadequate, or incapable of withstanding significant abuses in time, and temperature



Case History: Fresh-Cut Pineapple

Case History: Fresh-Cut Pineapple



Case History: Fresh-Cut Pineapple

Case History: Fresh-Cut Pineapple

Case History: Fresh-Cut Pineapple

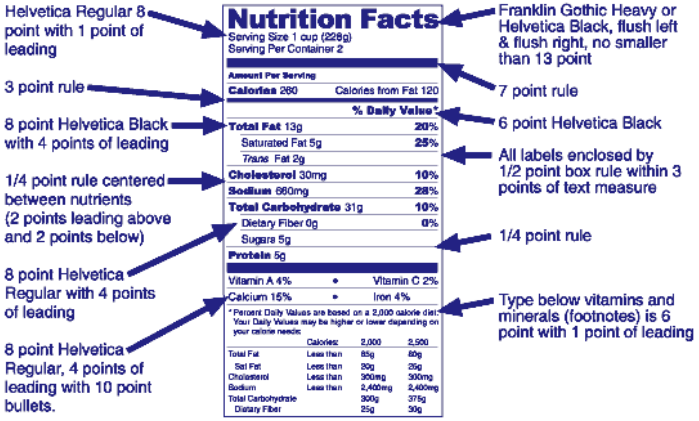
5. Quality Assurance

What is Quality?

Government Regulations

USDA

FDA



Hazard Analysis and Critical Control Point (HACCP) System

HACCP Plan

- The written document which is based upon the principles of HACCP and delineates the procedures to be followed.

Prerequisite Programs

- Procedures including Good Manufacturing Practices, which address operational conditions providing the foundation of the HACCP system.

Control Point (CP)

- Any step at which biological, chemical, or physical factors can be controlled.

Critical Control Point (CCP)

- A step on which control can be applied and is essential to prevent or eliminate a food safety hazard or reduce it to an acceptable level.

Hazard Analysis and Critical Control Point (HACCP) Principles

Principle #1: Conduct a hazard analysis

Principle #2: Identify critical control points (CCPs)

Principle #3: Establish Critical Limits for each CCP

Principle #4: Set monitoring procedures for each CCP

Principle #5: Establish corrective actions

Principle #6: Develop verification & validation procedures

Principle #7: Set documentation & record-keeping procedures

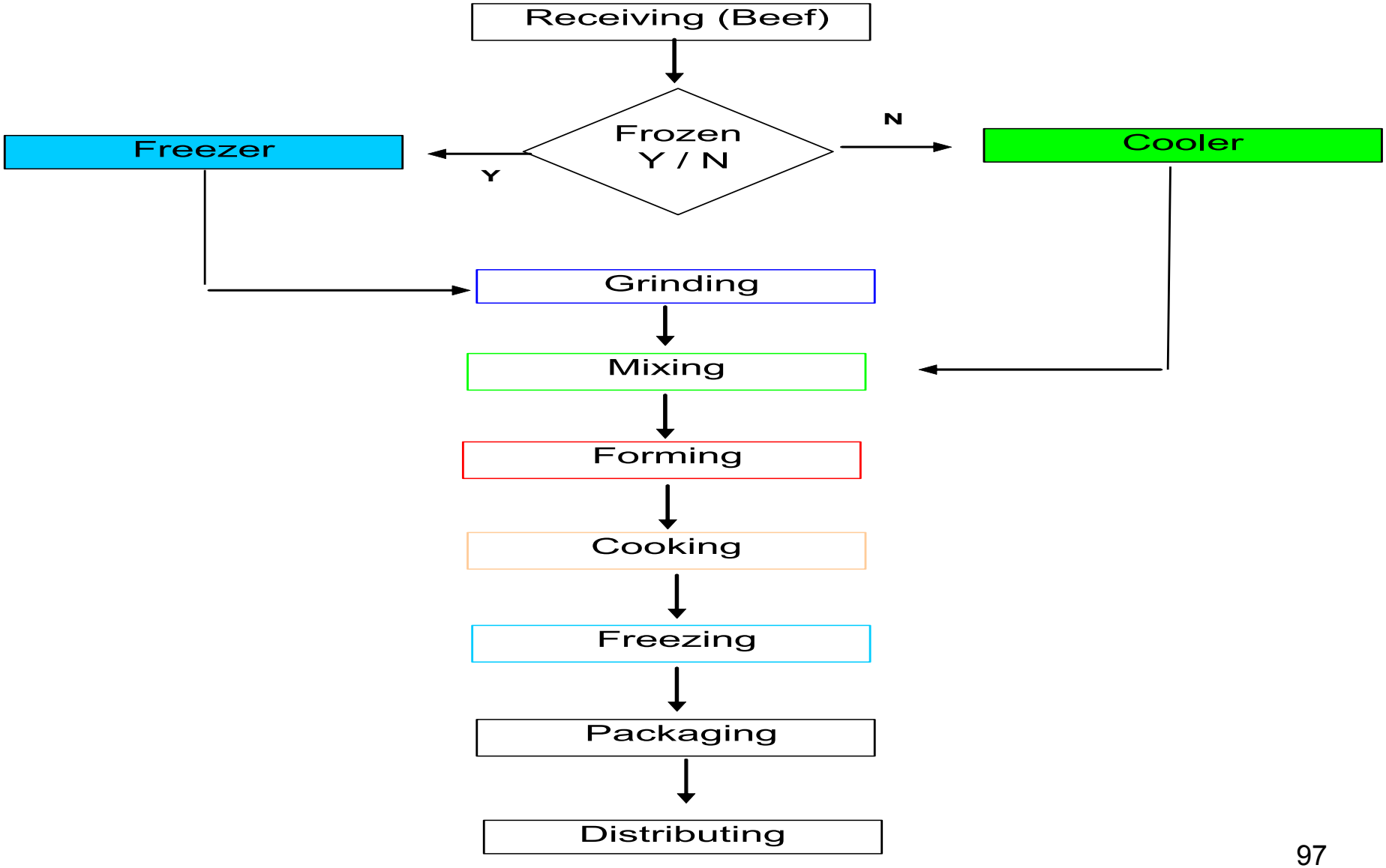
HACCP – Three Categories of Hazards to be Assessed

1. Microbiological Hazards:
   - Pathogenic Bacteria –> Salmonella; E. coli O157:H7; Listeria monocytogenes; Bacillus cereus and others
   - Viruses – Hepatitis A virus; Norwalk virus group, and others
   - Parasitic Protozoa and Worms – Anisakis simplex; Cryptosporidium parvum, and others

2. Chemical Hazards:
   - Allergens – Milk, Eggs, Tree Nuts, Peanuts, Soy, Wheat, Fin Fish, Crustaceans
   - Shellfish toxins – Paralytic shellfish poisoning (PSP)
   - Other - Pesticides, cleaners, Sanitizers, Adhesives

3. Physical Hazards:
   - Anything capable of causing injury or choking of swallowed
   - Examples: Glass or brittle plastic, Wood splinters, Stones, Metal, Bone, personal effects such as jewelry, ink pens and hairpins

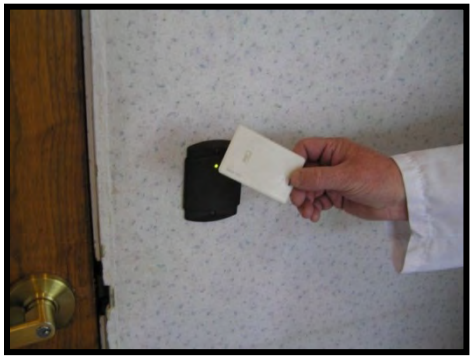
HACCP Flow Diagram Example
Ground Beef Patties

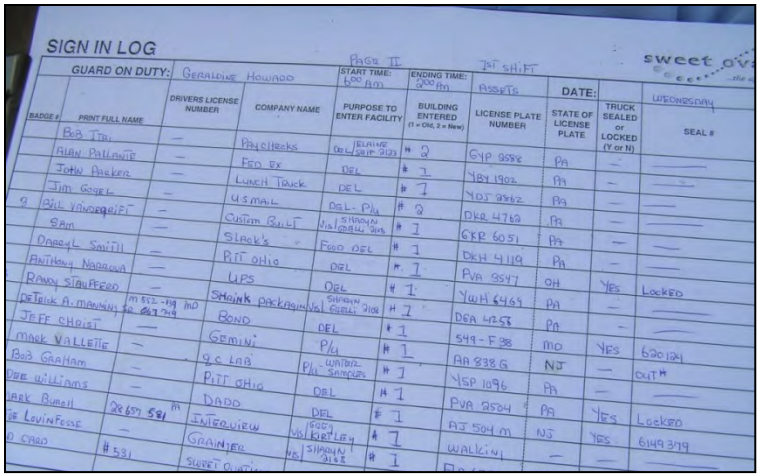


Components of Overall Food Safety and Quality System

- Management Commitment
- Facility Infrastructure
- Sanitation System
- Pest Control
- Chemical Control
- Personnel Practices
- Training & Education
- Handling, Storage & Delivery
- Vendor Approval
- Control of Materials
- Traceability & Crisis Mgmt.
- Calibration & Measuring Eqpt.
- Traffic Control
- **HACCP Program**
- Microbiological Testing
- Environmental Monitoring
- Food Allergen Program
- Foreign Material Control
- Specifications Conformance
- Good Laboratory Practices
- Process Control
- Document Control
- Customer Service
- Labeling Approval
- Regulatory Compliance
- Food Security

Plant Security





Food Security

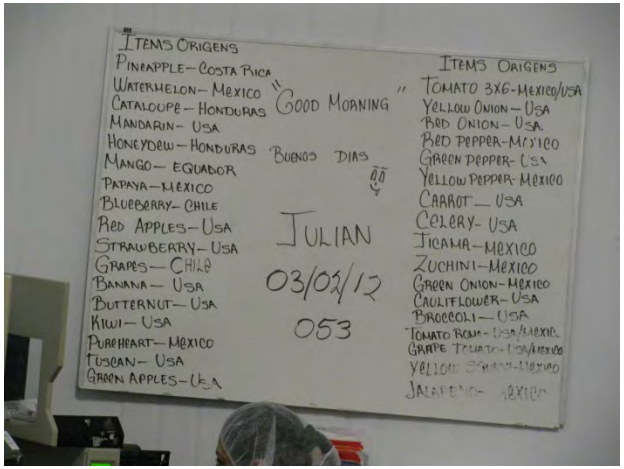
GMP's


EXIT


MUST WEAR GLOVES
BEFORE ENTERING
PRODUCTION AREA
DEBES UTILIZAR GUANTES
ANTES DE ENTRAR AL ÁREA
DE PRODUCCIÓN


Keep Them Clean
Mantengalas limpias

Raw Material Control



Allergen Control

Chemical Control

Sanitary Processes

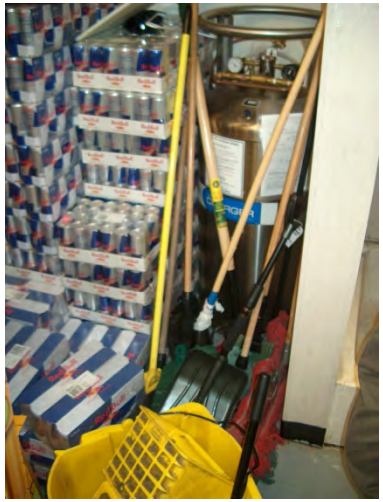
Sanitary Processes

Ongoing Inspection

Finished Product Evaluation

Good Practices

Bad Practices



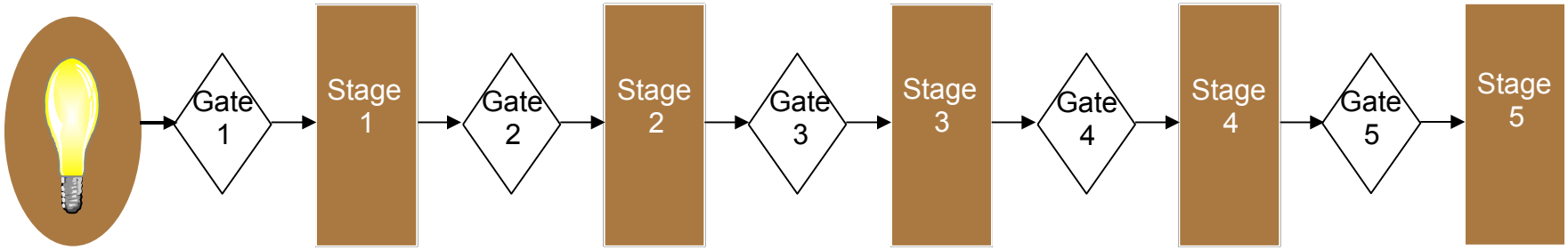
Voluntary Certification Programs

6. Developing *Your* Product

Initial Questions

- What is your product concept?
- Does your product address an unmet consumer need?
- What problem does it solve?
- Who is your competition?
- What is your point of difference?
- Who is your target?
- How will you market?
- Where will you market?
- How will you produce your product?
- What are your costing and pricing considerations?
- Who would you talk to (e.g., experts; customers) to obtain some validation?
- How will you fund your project?
- *Do your homework!* Prepare a business plan, which is a planning, assessment, and financial resource tool.

Stage Gate Process



Ideation

Preliminary Investigation and Market Research

Development

Testing & Validation

Assess Capital and Operational Costs, and Product Pricing

Complete Business Plan

1. Preliminary Investigation & Market Research

- Market Research and Trends Assessment
- Competitive Intelligence

Competitor Analysis Worksheet

This work sheet will help you define your competitors. Competitors are companies that make products or perform services similar to yours (e.g., you deliver complete dinners, and so do they), make products or perform services that can be substituted for yours (e.g., delivery of pizza or Chinese food), and make products or perform services that are analogous to yours (e.g., ready-made deli carryout from supermarkets). Fill in the following table about your competitors. You may need to create additional tables to have enough room for all your major competitors.

	Competitor A	Competitor B	Competitor C
Where is your competitor located?			
What are your competitor's annual sales?			
Who are the major managers and members of the board?			
Is the company owned or in partnership with any other corporations?			
What are the competitor's strengths?			
What are their weaknesses?			
What is the company's product line?			
How do the products compare to yours, in terms of functionality, appearance and any other criteria?			
What is their price structure?			
What are the company's marketing activities?			
What are the company's supply sources for products?			
What are the strengths and weaknesses of their sales literature?			
Is the company expanding or cutting back?			

2. Product Development

- Concept Generation
- Prototype Development
- Ingredient Sourcing and Evaluation
- Formula Optimization
- Packaging Selection for Cups, Trays, Pouches, Jars, etc.
- FDA and USDA Regulations Assessment
- Nutritional Analysis and Labeling Determination
- Product Commercialization Testing

3. Testing and Validation

- Qualitative consumer research – focus groups, one-on one surveys, chef roundtables, etc.
- Quantitative consumer research – home-use testing, product surveys, etc.
- Sensory Analysis
- Test Marketing

4. Assess Capital and Operational Costs

- Organization; Personnel Costs
- Direct Labor
- Product Development
- Legal – Bylaws, Articles, TM, etc.
- Accounting and Professional
- Insurance
- Facility and equipment
- Packaging Labels and Containers

- Rent or Mortgage
- Warehousing
- Taxes
- Repair and Maintenance
- Marketing Expense (Including Sampling and Demos)
- Shipping and Delivery
- Utilities
- Working Capital - Inventory and Raw Materials Costs

4. Assess Product Pricing

- Raw materials – weighted avg.
- Yields
- Packaging & Labels
- Direct & Indirect Labor – current vs. "volume"
- Overhead Contribution

- Gross Profit Objective
- Broker Commission/Markup
- Distributor Markup
- Retailer Markup
- Retail Fees and Sampling Costs
- Returns, Allowances and Shrink

RECIPE: Grandma's Chocolate Chip Cookies

PER UNIT INGREDIENT COSTS

BATCH INGREDIENT COST	$ 9.57
MINUTES REQUIRED FOR PREPARATION (ONE BATCH)	30
PREPARTION LABOR HOURLY RATE	$ 11.00
RECIPE YIELD	60
PER PIECE COST	$ 0.25
TOTAL UNITS/ITEMS IN EACH PACKAGE	6
TOTAL INGREDIENT COST (ONE PACKAGE)	$ 1.51

PER UNIT PACKAGING COSTS

PACKAGING COST	$ 0.254
MINUTES REQUIRED FOR PACKAGING (ONE PACKAGE)	3
PACKAGING LABOR HOURLY RATE	$ 9.00
TOTAL PACKAGING COST	$ 0.70

TOTAL PER UNIT PRODUCT COST	**$ 2.21**

CHANNEL MARGINS

WHOLESALE MARGIN %	60%
DISTRIBUTOR MARGIN %	30%
ESTIMATED RETAILER MARGIN %	50%
BROKER COMMISSION %	5%

PER UNIT PRODUCT PRICING

YOUR WHOLESALE PRICE	$ 5.53
YOUR $ PROFIT FROM WHOLESALE	$ 3.32
YOUR PRICE TO DISTRIBUTORS	$ 3.16
YOUR $ PROFIT FROM DISTRIBUTOR SALES	$ 0.95
BROKER COMMISSION	$ 0.28
YOUR $ PROFIT AFTER BROKER FEES	$ 3.04
SUGGESTED RETAIL PRICE	$ 11.06

END PRICE ANALYSIS

IF YOU WANT A RETAIL PRICE OF	9.99
THEN WHOLESALE PRICE WOULD BE	5.00
THEN PRODUCT COST SHOULD BE	2.00

4. Assess Competitive Pricing

Do your Homework!
Example of Pasta Sauce Category at One Supermarket

- Pasta Sauces all 24-26oz
- More than a third of the category is above the median price point

- ***Price variation: 450%***

Retail Price	Brand
$8.99	Cucina Antica
$7.99	Rao's
$5.99-6.49	Amy's, Coppola's, Mom's, Rostincella, Abruzzo
$4.69	Mario Batali, Bove's
$3.69	Muir Glen, Seeds of Change, Walnut Acres
$2.69-3.19	Newman's Own, Classico
$1.99	Private Label

7. Developing *Your* Business Plan

Business Planning Overview

- Business planning is about taking a meticulous, honest, and thorough look at both:
  - Who you are as an organization – your resources, capabilities, competitive advantage, areas of opportunity, shortcomings, etc.
  - The environment in which you compete – your customers, suppliers, competitors, market trends, government regulations, foreseeable opportunities and threats, etc.

Goals: Where do we have…

- Superiority **of business and/or technical skills** needed
- **Sustained profitability** by product or by customer
- **Growing market demand** from a large client base
- Superior **customer relationships**
- Potentially large **market share** of the product(s) we are providing
- Most **cost effective delivery of service**
- A preferred geographical location and **logistical delivery system**
- Gaining momentum or **growth in relation to competitors**
- Better **quality service** and/or service delivery than competitors

Developing Your “Unique Selling Position”

- **USP definition:** ***The factor or consideration presented by a seller as the reason that one product or service is different from and better than that of the competition (from Entrepreneur.com)***

- Steps for Developing Your USP include:
  - Describe Your Biggest Benefits
  - Be Unique
  - Solve An Industry "Pain Point" Or "Performance Gap
  - Be Specific And Offer Proof
  - Condense Into One Clear And Concise Sentence
  - Integrate Your USP Into All Marketing Materials
  - Deliver On Your USP's Promise

Some Well Known USP's

- **Burger King:** "Have it your way at Burger King."
- **Domino Pizza:** "We deliver hot, fresh pizza in 30 minutes or less or it's free."
- **M&M:** "Melts in your mouth, not in your hands."

- **FedEx:** 'When it absolutely, positively has to be there overnight"

Business Planning Elements

Areas of Focus

- **Executive Summary**
- **Business/Product Strategy**
- **Target Market and Marketing Plan**
- **Management Team/ Organization**
- **Financial Forecast**

1. Executive Summary

- **Answer these questions from potential investor, and answer each succinctly in less than 30 seconds**
  - What is your company's mission? What is your USP?
  - Why is it important? Who is your customer(s)?
  - Why do you think your company can make money pursuing that mission?
  - What is your track record of winning?
  - How much money do you need?
  - What kind of return can I expect if I give you the money? Why?

2. Business/Product Strategy

- Company's mission
- Product Strategy
- Unique Selling Proposition
- Features and Benefits of Product(s)
- Competitive Advantages - Specific product attributes that will make it better than the competition.

3. Target Market and Marketing Plan

- Target Market (understand your customer!)
- Customer need
- Revenue and growth rate of this market
- Key factors driving growth
- Typical net margins in this market
- Sales and distribution strategy
- Plan to gain market share:
  - Key factors, ranked by importance, a potential customer uses to decide among competing suppliers
  - How your product will outperform competitors on the key factors
- Detailed marketing plan to reach customer
  - Direct marketing, collateral, advertising, website, public relations, word-of-mouth, etc.

4. Management Team/Organization

- A “Holistic” Team with expertise in critical challenges of business
- Biographies of members of team, and how they excel in their areas of responsibility
- Detailed staffing requirements, including seasonal and temporary staffing solutions
- Passion!

5. Financial Forecast

- Detailed estimate of how much cash will be needed to achieve goals
- Use of Funds – How money will be spent
- Projections, with realistic assumptions
- Revenues and profits that will ultimately flow from that investment.
- Equity or Debt position
  - Loan Repayment or
  - Exit Strategy

Fast Track, Inc.
Income Statement (000s omitted)

	Year 1	Year 2	Year 3	Year 4	Year 5
Product Sales	$1,197	$3,699	$7,500	$16,685	$37,349
Service Revenue	81	572	1,509	2,499	3,934
Total Revenue	**1,278**	**4,271**	**9,009**	**19,184**	**41,283**
Cost of Sales					
Direct Materials	474	995	2,434	4,532	11,674
Overhead	164	705	900	1,860	2,708
Service Cost	41	286	755	1,250	1,967
Total Cost of Sales	**679**	**1,986**	**4,089**	**7,642**	**16,349**
Gross Margin	**599**	**2,285**	**4,920**	**11,542**	**24,934**

Fast Track, Inc.
Balance Sheet (000s omitted)

	Year 1	Year 2	Year 3	Year 4	Year 5
Assets					
Current Assets					
Cash	$365	$657	$548	$363	$2,332
Accounts Receivable, Net	256	1,452	2,152	5,522	10,991
Inventory	211	909	1,312	2,775	6,753
Total Current Assets	**832**	**3,018**	**4,012**	**8,660**	**20,076**
Property, Plant and Equipment	64	137	248	430	690
Less Accumulated Depreciation	14	50	115	215	366
Net Property, Plant and Equipment	**50**	**87**	**133**	**215**	**324**
Other Long-Term Assets					
Organization Costs	5	5	5	0	0
Less Accumulated Amortization	2	4	5	0	0
Total Other Long-Term Assets	**3**	**1**	**0**	**0**	**0**
Total Assets	**$885**	**$3,106**	**$4,145**	**$8,875**	**$20,400**
Liabilities					
Short-Term Liabilities					
Accounts Payable	114	282	473	999	2,609
Accrued Expense	191	329	503	848	1,398
Salaries Payable	10	20	31	42	83
Taxes Payable	0	0	0	308	1,317
Total Short-Term Liabilities	**315**	**631**	**1,007**	**2,197**	**5,407**
Long-Term Liabilities					
Long-Term Debt	0	0	0	0	0
Reserve for Warranty	24	74	150	333	747
Total Long-Term Liabilities	**24**	**74**	**150**	**333**	**747**
Total Liabilities	**339**	**705**	**1,157**	**2,530**	**6,154**
Equity					
Common Stock	500	500	500	500	500
Preferred Stock	1,500	4,000	4,000	4,000	4,000
Retained Earnings	(1,454)	(2,099)	(1,512)	1,845	9,746
Total Equity	**546**	**2,401**	**2,988**	**6,345**	**14,246**
Liabilities and Equity	**$885**	**$3,106**	**$4,145**	**$8,875**	**$20,400**

Business Plan Pitfalls

- Unrealistic sales forecasts
  - A common mistake is to over-estimate the size of the market and the ability to penetrate this market
- Lack of thoroughness of the financial model
  - Use realistic cost and revenue assumptions.
- Leadership's lack of recognition of the need for business skills
  - *Know what you don't know*, and complement team accordingly
  - Investors want to see strong leadership team, and industry experts that serve in an advisory role if possible
- Failure to identify the risks
  - Point out the risks, and related mitigation tactics
  - Show that you have done your homework and have an excellent understanding of the marketplace, with realistic expectations

Financing Options (beyond self)

GRANTS
Very Early Stage

Advantages
- No interest
- No repayment
- Helps raise matching funds

Disadvantages
- Limited dollar amount
- May be difficult to obtain because of qualifications
- Often not available if don't get match
- Reports required
- Reimburse expenses

EQUITY
High Business Risk

Advantages
- No interest
- No required repayment
- Equity provides security for banks and customers

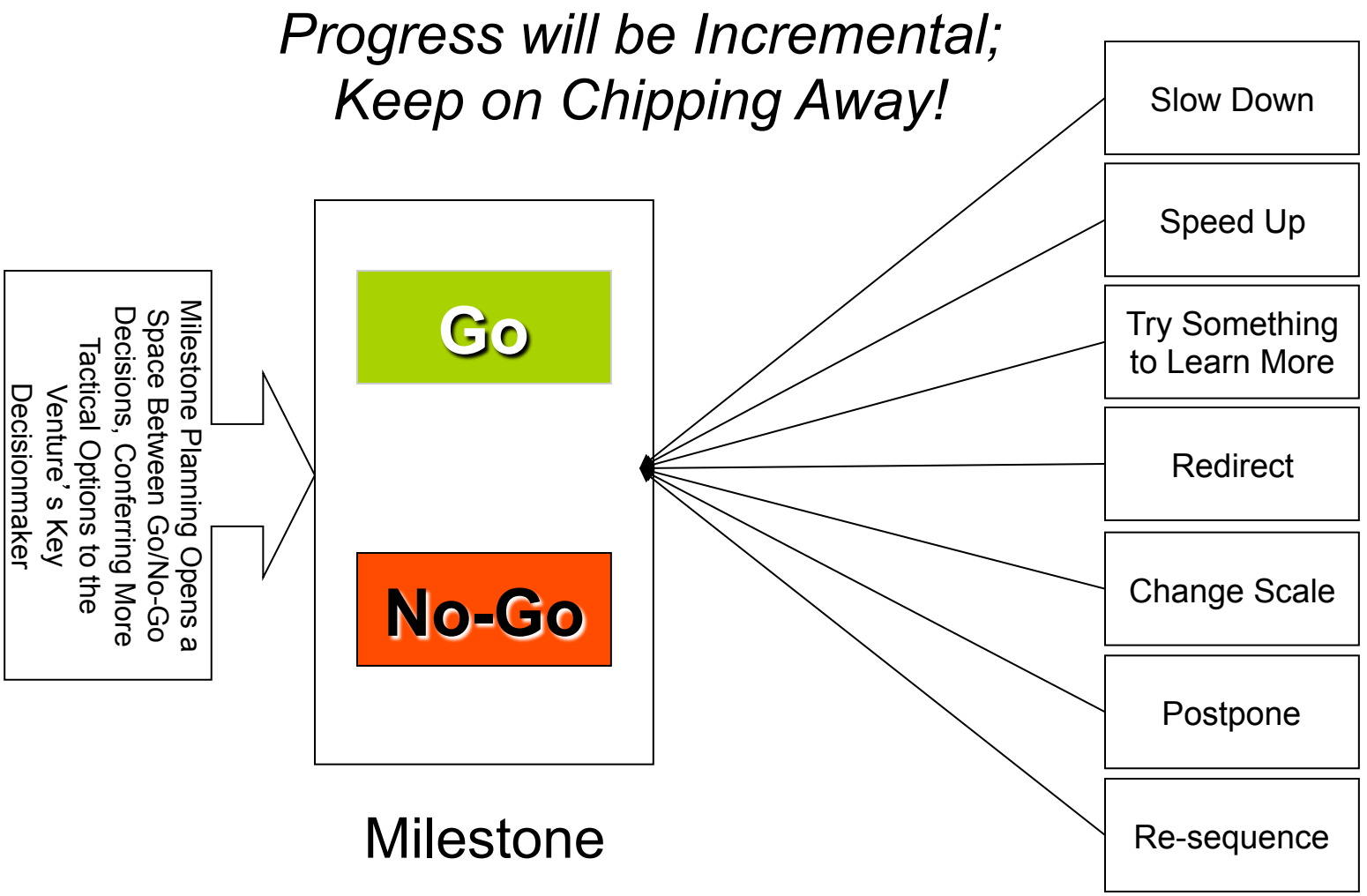
Disadvantages
- Ownership dilution
- Possible transfer of control
- Possible dividends would affect cash flow
- Usually investor has board representation

DEBT
Low Business Risk

Advantages
- No ownership dilution
- Interest cost known
- Interest tax deductible
- No board representation

Disadvantages
- Must be repaid
- Must pay interest
- Covenants may be restrictive
- Rarely available at early stage without collateral
- May require warrants
- Reports required

Options at Each Venture Milestone



Block, Z., & MacMillan, I. C. (1985). Milestones for successful venture planning. *Harvard Business Review, September-October*, 184-196.

8. Making it Happen!

Self Assessment Questions

- Can I accept failure?
- Can I live without a paycheck?
- Am I (already) a hard worker?
- Do I know my capabilities and limitations?
- Do I ask questions about how and why things are the way they are?
- Do I seek solutions to challenges?
- Do I thrive on success?
- Am I an independent thinker?
- Am I action oriented?
- Am I willing to accept advice and assistance from others?

“C’s to Your Success”

1. **Concept** – Have a truly differentiated product concept!
2. **Consumer** – Be driven by the consumer and not your own desires! Understand their wants, needs and motivations
3. **Customer** – Understand who will be marketing your products, and their wants, needs and motivations.
4. **Competition** – Understand what differentiates you from everyone else, and keep continual tabs on your competition
5. **Convenience** – Give your customers products that meet their desires for ease of use
6. **Culinary** – Remember always…Product must taste great

“C’s to Your Success”

7. **Connections** – Be sure to build strong relationships with your customers
8. **Channels** – Identify multiple channels of distribution to maximize your potential, and utilize “guerilla marketing” tactics to penetrate with calls, clicks, and visits
9. **Creativity** - Imperative to attract attention in a world cluttered with thousands of messages
10. **Consistency** – Ensure that your products are of consistent quality, and also ensure that your marketing messages are integrated and reinforce your brand
11. **Controls** -Use metrics to measure your business and to judge the effectiveness of your marketing methods
12. **Critical Mass** – Identify volume opportunities that will reduce your costs

“C’s to Your Success”

13. **Capacity** – Organize your business with the necessary resources
14. **Culture** – With the proper culture, employees feel respected and so give their best
15. **Challenge** – Yourself and your team to excel every day
16. **Consideration** – The people in your organization are your most valuable resource
17. **Community** – Don’t forget to give back to your community
18. **Customer Service –** Exceed the expectations of your customers, every single day!

"C's to Your Success"

19. **Cash** – Remember that cash flow is king in your business!
20. **Costs** – Know every contributor to your costs! Make sure you make money, monitor this, and keep this in line
21. **Continuous Improvement** – Never stop innovating and enhancing your business!
22. **Confidence** – Stay Positive!
23. **Commitment** – Never give up, but…
24. **Change** – Evolve Every Day
    - Anticipate change
    - Monitor change
    - Change and adapt
    - Be ready to change quickly and adapt again

Pau and Mahalo

- Questions?
- Comments?