USDA United States Department of Agriculture | National Institute of Food and Agriculture

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Extended Season Marketing Opportunities for Farm & Food Products

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Extended Season Market & Product Alternatives

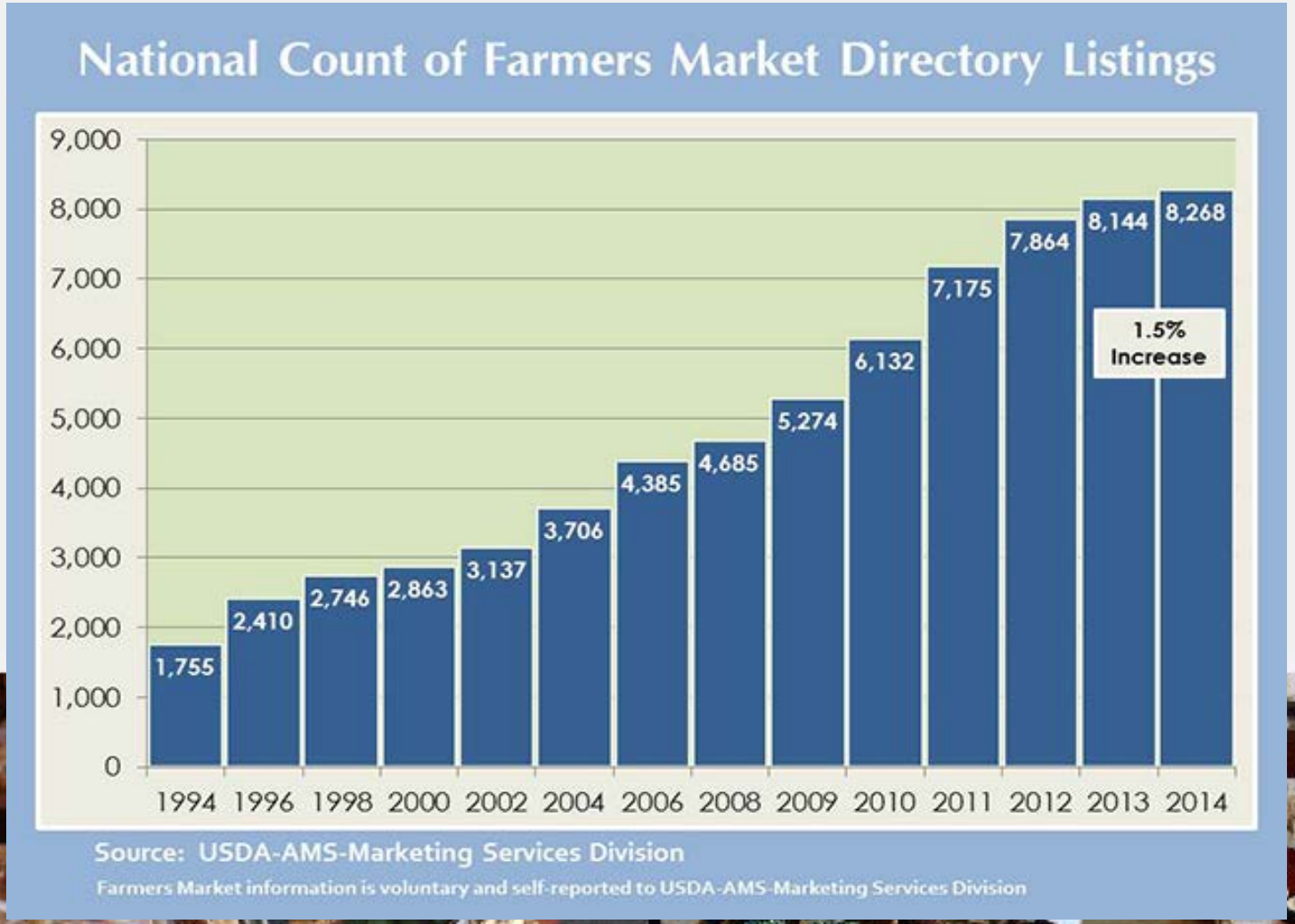
Overview

- Expanding consumer demand for local foods
- Tourism market opportunities
- Extended season benefits
- Out-of-season pricing premiums
- Extended season market choices
- Out-of-season product and service options

Expanding “Buy Local” Movement

- 185% increase in farmers’ markets from 2000 to 2014
- 275% increase in CSA programs from 2004 to 2014 (6,000)
- 288% increase in food hubs from 2007-2014 (302)
- The National Grocery Association 2012 Consumer Panel
  - The availability of local foods was a major influence on grocery shopping decisions as 87.8% of respondents rated local food availability as “very or somewhat important,” with 45.9% indicating “very important”
  - The need for “more locally grown foods” was the second most desired improvement among surveyed grocery shoppers at 36.6%, just under “price/cost savings”
- In 2012, 164K farmers (7.8% of US farms) sold $6.1 billion in local foods

Farmers' Markets in US



Tourist Demand for Local Foods

- The National Restaurant Association's 2013 Restaurant Industry Forecast reported that 7 of 10 consumers were more likely to visit a restaurant offering locally sourced items
- The National Restaurant Association's 2014 "Top Ten Trends across the Nation," included locally sourced meats/seafood and locally grown produce as the top 2 trends

Food Tourism Growth

- The US travel Association reports that 17% of American leisure travelers, engaged in culinary or wine-related activities while traveling within the past three years
  - 2011 Napa Valley wine tourism expenditures of $1.05 billion
  - 2014 Oregon Brewers Festival generated $32.6 million in additional spending
- Food/Drink Tourism
  - Tourism focused on exploratory eating, eating unfamiliar items or participating in new customs to encounter, learn, or understand new places and cultures
  - Tourists seek food/drink experiences based on local identity and culture, authenticity
  - Tourists travel to those destinations that have established a reputation as a place to try/experiment with quality local products

Food Tourism Market

- Eating/drinking is a major component of the tourist experience
  - 30-40% of tourism expenditures are on food/drink
  - Tourists tend to be less sensitive to food/drink prices
  - Food/drink is considered “vital” to the perceived quality of a tourism experience

Tourism Market in Intermountain West

- Popular tourism destination, prime area for tourism development
  - 20+ national and state parks
- Nevada 2014 tourism indicators
  - 53.8 million total visitors
  - 27 million state/national park visits
  - Total travel spending: $62.2 billion
- Utah 2013 tourism indicators
  - 23.5 million total visitors
  - 4.2 million skier visits
  - Total travel spending: $7.5 billion
- Montana 2014 tourism indicators
  - 10.9 million total visitors
  - 53K jobs supported
  - Total travel spending: $3.9 billion
- Wyoming 2014 tourism indicators
  - 10.1 million total visitors
  - 31K jobs supported
  - Total travel spending: $3.38 billion

Extended Season Opportunities

- Increased sales to current residents
  - Demand for local foods year-round
- Growing market opportunity
  - Regional tourism in all seasons
  - Tourists interested in outdoor activities are often food tourists

Extended Season Impacts

- Small growers rely heavily on direct sales outlets
  - Farmers' markets, CSAs, farm stands, etc.
- Extending the sales season (FM Example)
  - $448 additional revenue per week
  - $2,681 additional revenue/month per additional outlet
  - Producer revenue increases three-fold when FMs operate 7 months or longer as compared to 5 months or less
- Current literature finds that the success of small farms may be enhanced by…
  - Expansion of direct market outlets
  - Diversification into agritourism, and
  - Value-added products

Extended Season Impacts

- Diversify into value-added processed products
  - Premiums for local processed products as well
  - Use summer extras, culls, etc. for processing
  - Cottage food production laws now in Western states
- Ability to earn revenues year-round
- Produce prices low in the normal season, especially in the West
  - Premiums likely for local products in the off season




Out-of-Season Pricing Premiums

- Study in which produce prices at farmers' markets were recorded
  - May to November 2011
  - Four markets in Utah, 14 markets in Colorado
  - Eight fresh produce items
    - Tomatoes, cucumbers, summer squash, potatoes, greens, herbs, green peppers, carrots
- Results of predicted product pricing models pre and post season
  - Pre season premiums for tomatoes ($3.50/lb), greens ($1.50/package), and cucumbers ($1.50/each)
  - Post season premiums for potatoes ($.50/lb) and summer squash ($.14/each)
    - Also for carrots and herbs, but product size, bundle size, and variety changed through out the year
- Strawberries
  - $6.00 out-of-season local direct market outlet price per pound (Maughen et al., 2014) vs. $2.36 per pound retail price (ERS, US Average 2013)

Extended Season Market Choices

- Winter farmers' markets and farm stands
- Off-season CSA programs
- Specialty stores and tourist destinations/stores
- Farm stores/shops
- Local-sourcing restaurants
- Farm-to-school programs
- Traditional grocery stores




Winter Farmers' Markets & Farm Stands

- Value-added processed products
  - Honey, cheese, vinegar, salsa, etc.
- Stored products
  - Onions, carrots, garlic, potatoes, etc.
- Frozen meats
- Eggs and dairy
- Baked goods
- Hoop house greens, vegetables, etc.




Off Season CSAs

- Meat, egg, and cheese shares
- Soup and bread shares
- Fall, winter, and spring shares
  - Stored and processed (frozen, canned, etc.) products
  - Hoop house greens and vegetables

Specialty Stores/Tourist Destinations

- Food souvenirs
- High quality lunches and snacks
- Value-added products
  - Honey, jams, salsa, jerky, etc.
- Local bagged nuts and dried fruits
- Specialty local products
  - Coffee, chocolate, cheese, baked goods, etc.




Value-Added

What is a Farm Shop?

- A farm shop/store, also called a roadside farm market, is a permanent or semi-permanent structure where farm products, both fresh and processed are offered for direct sale to consumers
- Shops are normally open to the pubic year-round and often provide snacks or a lunch counter/cafe
- Shops can be located on or near farms or in nearby towns/cities




Farm Shops

Farm Shop Benefits

- Additional market outlet for current products
- Reduced transportation/marketing costs
- Year-round sales (additional sales)
- Outlet for value-added products
- Income/employment for family members

Typical Farm Shop Products & Services

- Value-added products
- Fresh produce
- Frozen foods
- Specialty meats & cheeses
- Ready to eat foods
- Café or restaurant
- Bakery
- Butcher
- Herbs, plants & starts
- Animal petting zoos
- Events (weddings, parties, etc.)




Ready to Eat

Utah Farm Shops/Local Sourcing Specialty Stores

- Off/on-farm shops
  - Liberty Heights Fresh – Salt Lake
  - Urban Farm and Feed – Murray
  - Heber Valley Cheese – Park City
  - Rowley's Red Barn – Santaquin
  - Cox Honeyland – Logan
  - Copper Moose – Park City
  - Rosehill Dairy – Richmond
- Specialty grocery
  - Real Foods – 3 locations (sell all own farm products)
  - Tony Caputo's – 3 locations

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Management: Best Practices & Realities

Overview

- Location
- Products
- Sourcing
- Marketing
- Other

Location

- A location on a busy road or intersection recommended
  - Not a high speed road
  - Near corners, lights, and other small businesses (bakery) is best
- Easy access and parking needed (spaces, disabled, etc.)
- Open building or open air section helpful
- Consistent hours and location
- Signage may be an issue (county or city regulations strict)




Location, Signage, Open Air

Products

- Sell own produce and products if possible
  - Likely more profitable as other farmers pricing may be high
- Sell value-added products
  - Cheese, jellies, honey, juice, salsa, etc.
  - Important to have updated “trendy” labels on products
- Provide a variety of products for customers
- Local labeling most important, organic and other may not be necessary

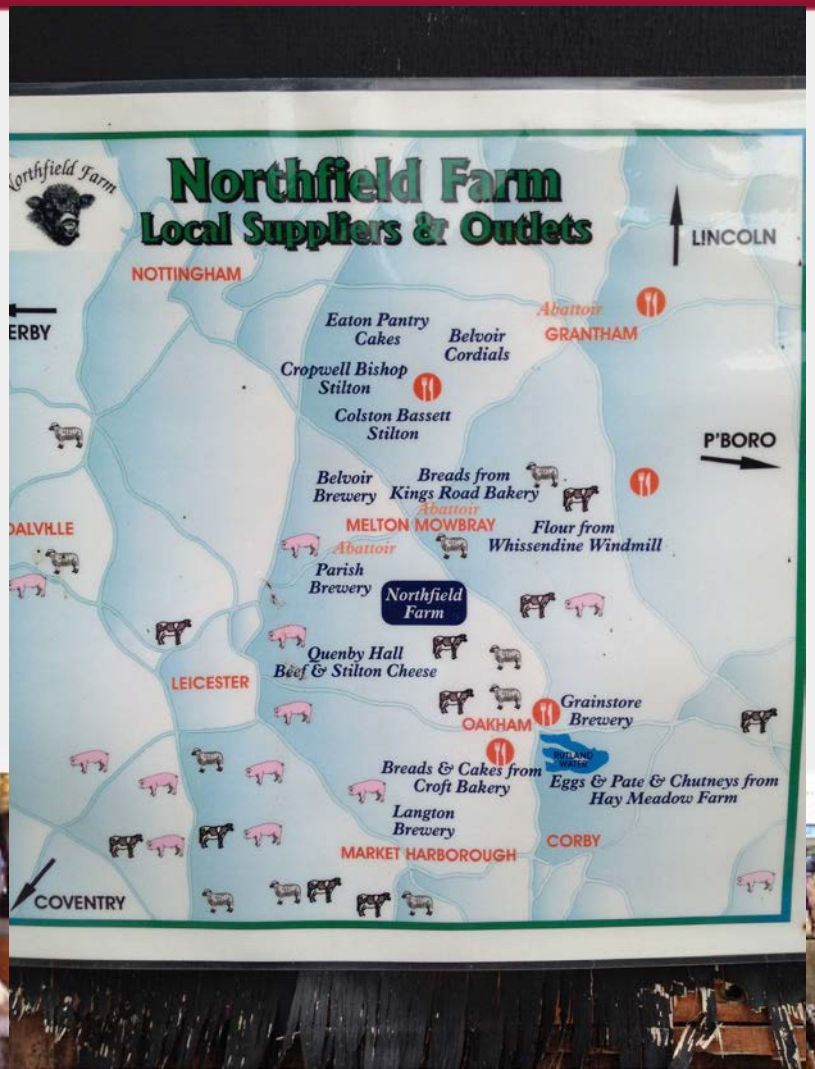



People Want Farm-Fresh & Local

- When people buy locally grown, they are getting the produce at its peak
  - It's ready to eat right now
- People want to…
  - Support YOU!
  - Eat better tasting food!
  - Ensure food safety/health
  - Decrease transportation costs and carbon footprint




Local Source Map



People Want Diverse Products

- Why grow what everyone else has?
- Why grow the same thing that is in the grocery store?
- **Look at what is out there and DO SOMETHING DIFFERENT!**
- Carrots with names like “Purple Haze”, “Yellow sunshine”, “Atomic Red”, and “White Satin” are unique and sell for more per pound

Other Preferences & Popular Requests

- Spray-Free Produce
- Organic Produce
- Raw/Unprocessed
- Grass-Fed
- Pasture-Raised
- Non-GMO

Value Added Products

- Value added products like jams and jellies are a nice addition to your product offering, and help use up any extra produce
- People want “Farm to Jar”
  - Honey
  - Eggs
  - Raw Milk
  - Meat
- All of these items add value to offerings
- Beware of city codes and regulations when adding these items




Value Added

Ready to Eat Foods

Convenience is Key!!

Sourcing Products

- Source products as local as possible
  - Availability may be an issue
  - Define “local” for your business
- Build relationships with local providers
  - Provide ideas on products to grow/process
- Provide quality above all else
  - Product testing, farm visits, and safety inspections

Sourcing local food supports healthy people, a healthy environment, and your LOCAL economy!

Benefits of Sourcing Locally

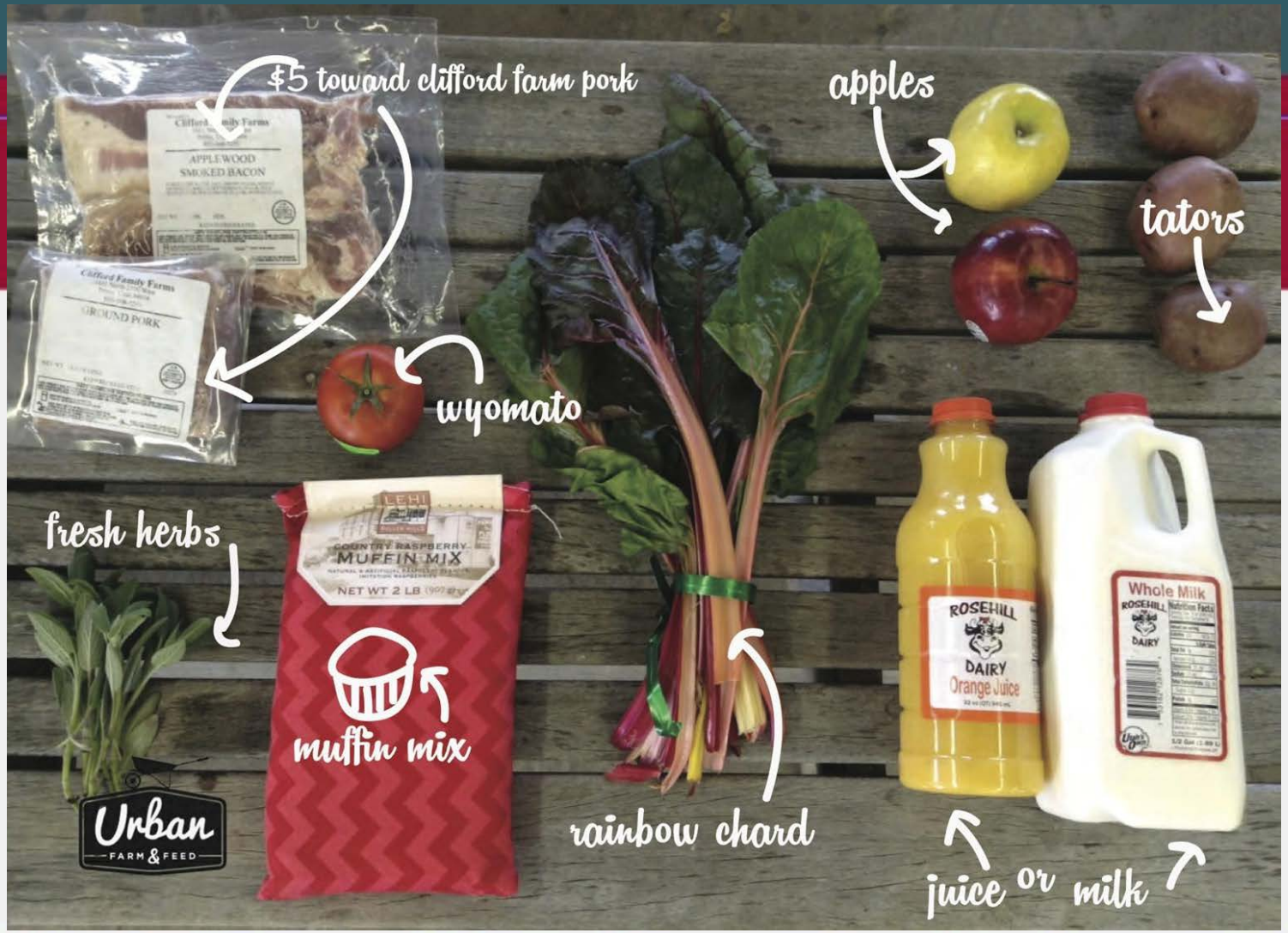
- Local suppliers can be more reactive and innovative in times of high demand, or when unforeseen circumstances strike
- Supply chains are shorter, leading to greater certainty and predictability of delivery times and generally lower delivery costs
- The likelihood of disruptive and costly contamination recalls is also lower
- Since you're connected with the local network, you better understand local variations in preferences and can adjust accordingly, which can lead to higher profits
- Local food tastes and is better for you because it is fresher and typically not bred for long distance travel

More Benefits

- Selling and marketing local produce fosters closer relationships with the community, which generates great public relations and attracts customers
- Local food is good for the environment by reducing economic and environmental impact through reduction of transportation, processing, and packaging
- While pricing may be higher in some cases, the many benefits listed above make local products a superior value for you and your customers
- Your business will be recognized by your customers as a place that positively supports your community

Strategies to Start

- You may have some concerns about how to successfully implement a local food sourcing program that is sustainable and financially successful
- Start small and implement slowly, using scalable techniques and pilot programs
- Educate yourself by visiting farmers' markets, farms, and invite farmers to visit you
  - Will help you learn more about each other, and how to best work together
- Consider sourcing a local item from your nearest farmers' market
  - Establish relationships with food artisans and local growers
- Be a pick-up point for CSA (Community Supported Agriculture) baskets
  - Great way to bring customers to your location who will purchase healthy food
- Ask your existing distributor if they have the capacity to source locally, and, if not encourage them to consider it


$5 toward clifford farm pork
apples
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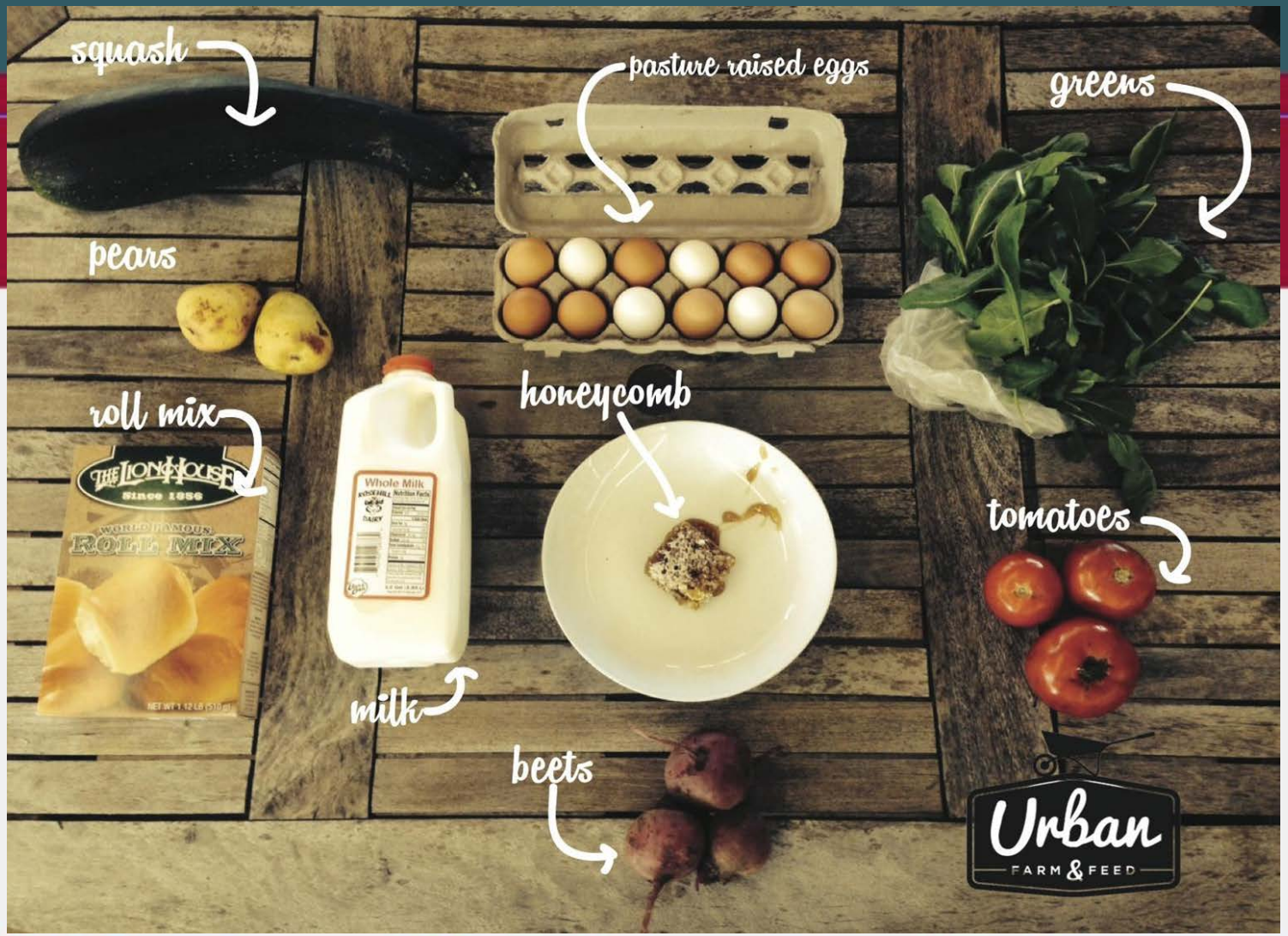
fresh herbs
muffin mix
rainbow chard
juice or milk
Urban
FARM & FEED
APPLEWOOD
SMOKED BACON
GROUND PORK
COUNTRY RASPBERRY
MUFFIN MIX
NET WT 2 LB
ROSEHILL
DAIRY
Orange Juice
Whole Milk




Strategies Cont.

- Buy with the seasons
  - Keeps costs down and your products interesting due to rotating selection
- Promote! Let your customers know what you're doing and why it's important
- People want to be educated about the food they eat
  - If you help inform them, they will have more respect for you
- Changes take time, so be patient with both yourself and your customers
  - Implement your effort slowly, and your customers will understand it too





squash
pasture raised eggs
greens
pears
roll mix
honeycomb
tomatoes
milk
beets
THE LION HOUSE
Since 1858
WORLD FAMOUS
ROLL MIX
Whole Milk
Urban
FARM & FEED

Marketing

- Customers wish to interact with farmers
  - Primary methods include word of mouth, websites, and social media (facebook, twitter, etc.)
- Use local labeling programs (Utah's Own, Nevada Grown, Made in Montana, Made in Wyoming, etc.)
- Work with chamber of commerce and visitors' bureau (promotion of stand, store, activities)
- Consider conducting tasting events, dinners, and tours
- Consider a club rewards program for clients (repeat business, feedback, etc.)
- Diversification important….
  - Sell at many venues, such as farmer's markets, wholesale, websites, stands/stores, CSA programs, etc.

Website

Urban FARM & FEED

Apply for our Winter Farm Share (CSA) Program!
Get a bucket of [illegible]

2015-2016 Winter Farm Shares are opening TONIGHT!

APPLY HERE!

HOME | URBAN FARM | WORKSHOPS & EVENTS | NEWSLETTER | FARM SHARE/CSA | FARM STAND | CONTACT

farmstand
hours & location

farm-fresh. all year long.

NEW LOCATION!!
5027 S. Highland Dr.
SLC, UTAH

Hours: Tuesday-Saturday,
10am-6pm

check it out!

5027 S. Highland Drive, Holladay, UT 84117 P: 801-910-4459 thefarmscaper@gmail.com

Business Page

facebook

Beesley's Best Raw Honey Products Like

Health/Medical/Pharmacy · Ogden, Utah

Wall | Beesley's Best Raw Honey... · Everyone (Most Recent)

Share: Post Photo

Write something...

Wall
Info
Friend Activity
Photos

About

Beesley's Best Raw Honey Products are made from 100% organic honey, beeswax, and pure pollen. Watch for more products available soon!

290 like this

1 talking about this

0 were here

Likes See All

Grounds For Coffee

People's Market

Ogden's Own Distillery

Borrowed Earth Emporium

Visit Ogden

Beesley's Best Raw Honey Products
Hey all you allergy sufferers, July Ogden Raw Honey is here! 12oz jars at $6.00 each. Get them while they last. This batch tastes soooo good!
Like · Comment · Share · August 8 at 10:00pm via mobile ·

3 people like this.

View all 5 comments

Beesley's Best Raw Honey Products Bright Blessings on 25th is the new store I will be selling from. Text me also and I could possibly deliver :)
August 8 at 11:47pm · Like · 2

Brandi Bosworth I would like to order some for my neighbors for christmas -- also -- do you have any interest in having your honey at the Ogden Nature Center? We are having an open house this weekend -- my email is info@ogdennaturecenter.org
November 28 at 4:40pm · Like

Write a comment...

RECENT ACTIVITY

Beesley's Best Raw Honey Products edited their Location and Email.

Beesley's Best Raw Honey Products
Thank you for your support!
Like · Comment · Share · August 6 at 9:51pm ·

3 people like this.

Write a comment...

RECENT ACTIVITY

Beesley's Best Raw Honey Products changed their Website.
3 more similar stories

Beesley's Best Raw Honey Products shared a link.

BeesleysBest.com – Home
www.beesleysbest.com

Welcome to Beesley's Best – Your local Raw Honey sourceBeesleys Best Raw Honey is a small family owned business interested in bringing you the purest form of locally produced honey created by happy, healthy honeybees. Beesleys Best Raw Honey is hand extracted to preserve the natural enzymes that are

"Like" button

Status Update

Status Posted & Fan Comments

Number of Fans

Business Page

facebook

Information Page

Beesley's Best Raw Honey Products Like

Health/Medical/Pharmacy · Ogden, Utah

Wall | Beesley's Best Raw Honey... · Everyone (Most Recent)

Share: Post | Photo

Write something...

- Wall
- Info
- Friend Activity
- Photos

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Beesley's Best Raw Honey Products ▸ **Photos**

Like

Health/Medical/Pharmacy · Ogden, Utah

Beesley's Best Raw Honey Products's Photos — See All: Photos · Videos

Edit


Profile Pictures
2 photos


Meet the Beesley's Best Bees
44 photos


Huntsville raw honey
3 photos


Wall Photos
3 photos


Dino Park rescued bees
5 photos


Beesley's Best Raw Honey Products
5 photos


Springtime 2010
15 photos

Local supporters
2 photos


Other products available through the winter
4 photos


Farmers Market 2009 and Weber County Fair
7 photos

People Seek Experience

- When selecting sales channels, consider giving people the **experience** they are looking for!
  - Participate in farmers' markets
  - Host on-site farm activities
    - Café/tea room, petting zoo, bakery, classes, and events
  - Make "Your Story" known
  - Run a farm stand or store
  - Sample at stores selling your products
  - Provide CSA shares




Tea Rooms/Cafes

Other

- Education is important
  - Attend conferences, Extension programs, DOA workshops, etc.
- Use grants and private farm financing to expand business
- Check out all required permits, regulations, and safety inspections needed ahead of time
  - GAPs, health inspections, etc.
  - USDA and state agriculture regulations
- Purchase liability insurance

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Marketing: Target Customers & Promotional Strategies

Overview

- Target marketing defined
- Customer value proposition
- Three Cs of marketing
  - Customers, costs, and competition
- Four Ps of marketing
  - Product, price, place, and promotion
- Food tourism and tourist types
- Western food tourists
- Tourism promotion options and resources




Marketing Defined

Marketing is anticipating the **needs and wants** of **targeted customers** and **managing the process** through which these needs and wants are satisfied ... profitably

Mass vs. Target Marketing

- Mass Marketing
  - Commodities
  - Low cost due to economies of scale
  - Low contribution → high volume
- Target Marketing
  - Customer segments
  - Increase value for small segment

Commercial or Specialized?

The market place can be crowded …

can you stand out in a crowd?

Types of Marketing

- Strategic Marketing
  - Encompasses the entire firm strategy
  - Deals with the broader issue of determining firm's strategic position in the market and how to create value from that position
- Product Marketing/Pricing
  - Deals with the tactical side of selling a product
  - Similar to a set of standard operating procedures for marketing a particular product

Marketing Overview

- Analyze strengths, weaknesses, opportunities and threats (SWOT)
  - Use internal and external information
- Research customers, costs and competition (3 Cs)
- Develop the marketing mix using product, price, place and promotion (4 Ps)

The 3 Cs of Marketing

1. Customer
2. Costs
3. Competition

1. Customers

- Who are you selling to?
- What is important to targeted customers?
- Make sure you are distinctively different from competition in areas of importance to target customers
  - Competitive analysis
  - Reallocation of resources if necessary
  - Positioning
  - Market intelligence

Customer Segments

- Loyal are return customers … less worried about costs, want a relationship
- Value segment are hardest to keep happy, but do recognize and value quality
- Convenience segment are those you can get to make impulse buys … less price sensitive
- Price segment is not too attractive unless you compete entirely on price

Target Customers

- For each target segment define
  - Demographics
    - Age, location, education, etc.
  - Psychographics
    - Health, food safety, nutrition, environmental, support local growers, etc.
  - Needs/Preferences
    - Product characteristics, variety, delivery location, etc.

Target Customers

- For each target segment estimate
  - Potential number of customers
    - Ex. Number of households within 50 miles
  - Volume of sales per customer
    - Project volume through consumption stats of USDA, local records, own surveys, etc.
  - Potential total sales volume

2. Your Costs (and their $$ Spending)

- Know variable costs of producing your product
- Realize there are fixed costs that must be paid, whether you produce your product or not
- Use variable and fixed costs to calculate the break-even point where costs are covered
  - Covered in more detail in upcoming financial lessons
- Compare break-even with industry standards




Product Benefits and Costs

- Tangible – Product benefits (costs) that are easy to measure, “features”
  - Packaging, taste, size….
- Intangible – Product benefits that are not easily measured
  - Local, organic, humanely raised
  - Benefits and costs harder to determine
    - Promotion will often be used to communicate intangible values

Know Costs to Control Costs

- To survive in a competitive market-based economic system,
  - You must be a low cost producer
  - Or market to a specialized segment
- Always know and control your costs
  - You control only what you can quantify and measure
  - You measure costs through accounting and budgeting

3. The Competition …and Other Challenges

- From SWOT analysis, assess your business' strengths and weaknesses compared to your competitor's
- Competition can be other operations, regions, product or service types
- Responses to risks and barriers in the market

Competitor Analysis & Strategic Value Creation

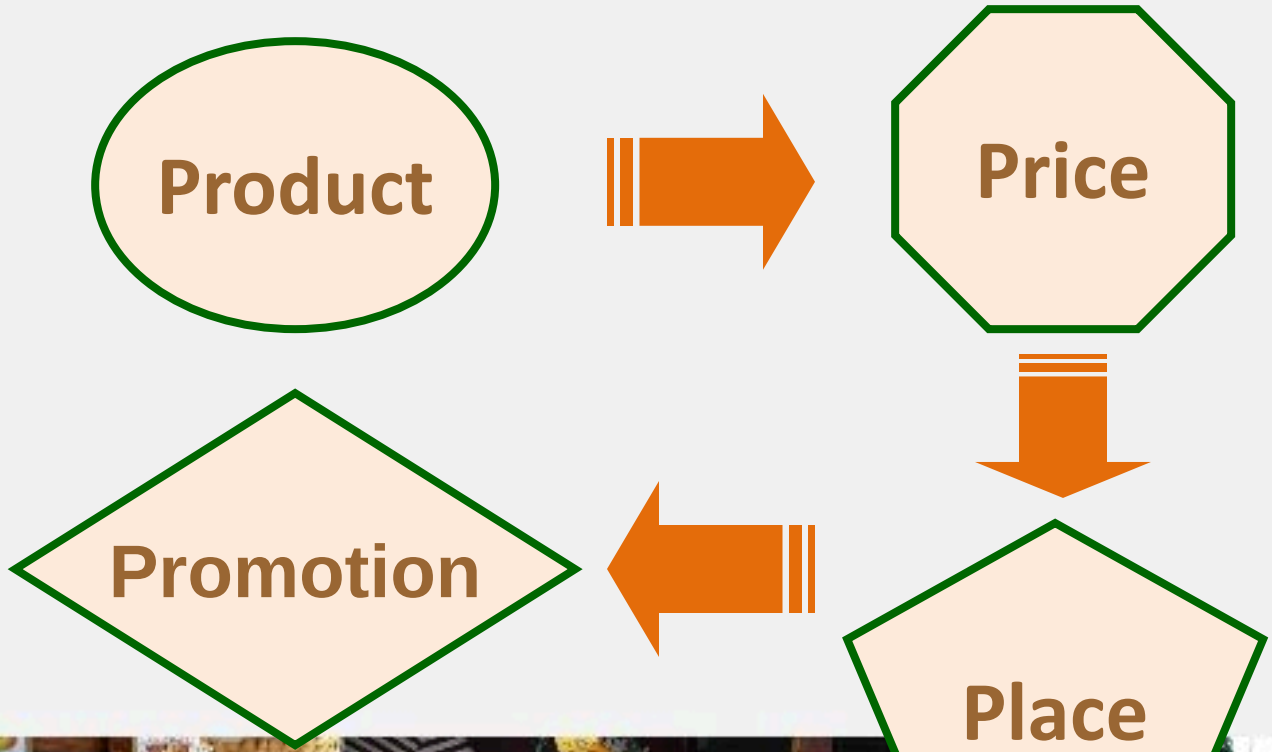
Make sure you are **distinctively different**
from your **competition**
in **areas of importance**
to your **customers**

- Competitive analysis
- Reallocation of resources if necessary
- Positioning

Competitive Analysis

- You are concerned with their product position, brand strength and prices
- Emulating their good ideas may be a key to success…
  - Look online, food-oriented publications
  - Read or watch shows you might not otherwise

The Marketing Mix (4 Ps): Implementation



The Marketing Mix

- The 4 Ps of Marketing
  - Understanding important Product Claims
  - What Place will Consumer Find You?
  - How will you Promote Cost Effectively?
  - What are Effective Pricing Strategies?

1. Product (& Services)

- Goods that satisfy the needs of a target market should have the following characteristics:
- Physical features (design and packaging)
- Branding and image/personality
- Degree of customer service: products and services
- Consistent quality, supply or experience

What Product Are You Marketing?

Grass or Livestock ?

Meat or an Experience?

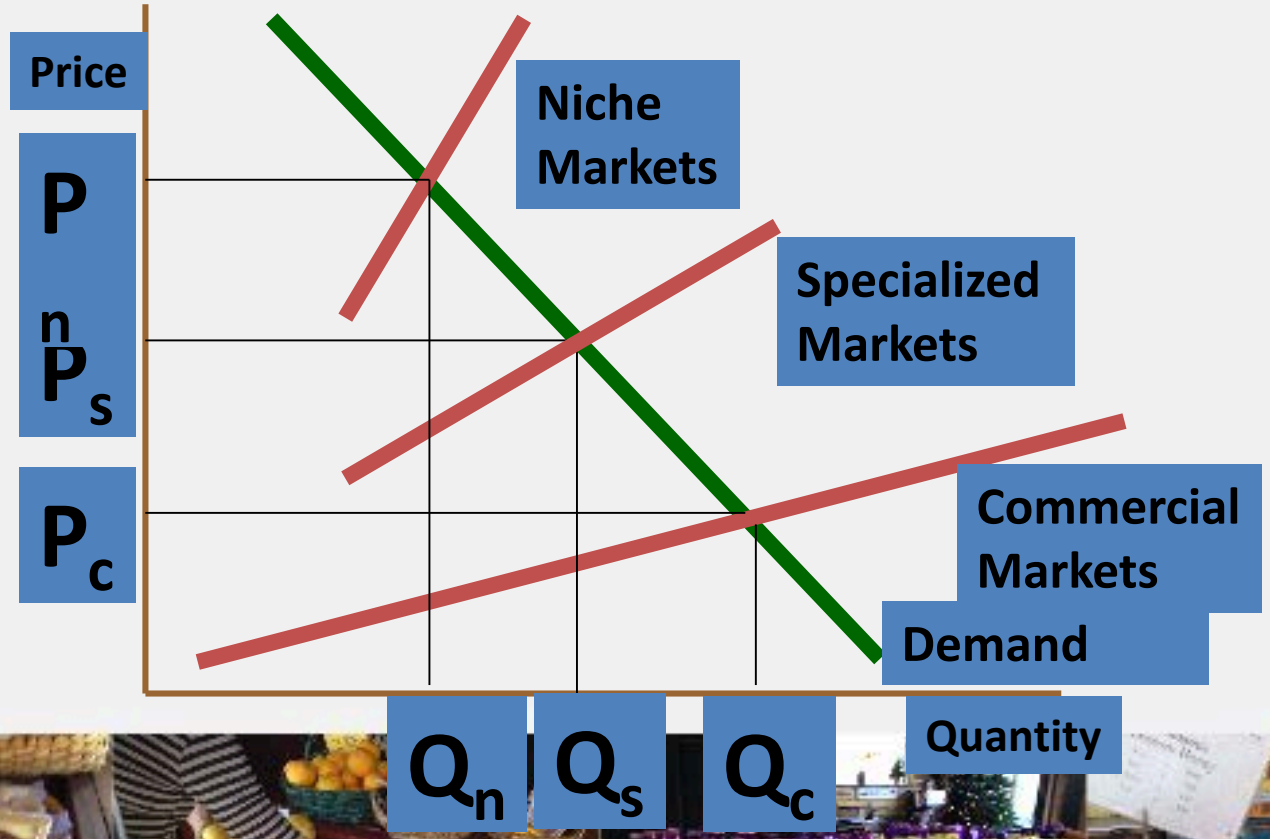
Knowing Your Product

- Begin with the end in mind
  - What attributes are important to your market segment?
- Do your products meet those specifications?
- Value-added characteristics
  - Traceability, treatments, welfare, certification, local”

2. Price

- Set prices based on:
  - Value-based pricing – Match price to perceived value by customer, brand loyalty, customer oriented price
  - Competition-based pricing – Match prices to similar products of your competition)
  - Cost-based pricing – Set price dependent upon production costs)
- Use discounts or incentives to boost sales but with a specific goal in mind

Supply & Demand Set Price



Pricing Strategies by Segments

- Loyal and Convenience consumers can be highest revenue potential…skimming
  - Artisanal, foodies or ready-to-eat products
- First time buyers may be attracted through penetration
  - Sampling in new market with coupons
  - Volume discounts, CSAs
- Good pricing strategies can help increase revenues from those less price sensitive
  - High-end meat cuts, heirloom produce, early season crops

3. Place – Distribution Channel

- Strategic elements of location
  - Do customers translate where you sell into part of your identity?
- Where does your target market shop?
  - Channels include:
    - Direct sales and internet sales
    - Intermediate sales - broker or distributor
    - Restaurants and grocery

4. Promotional Objectives

- Stimulate sales
- Differentiate product offerings in varying markets
- Share information
- Accentuate value of product
- Stabilize seasonal demand

Source: Lou Pelton, David Strutton, & James Lumpkin, 1997, Marketing Channels: A Relationship Management Approach, pp 99-109

Promotional Methods

- Advertising
  - Newspaper, television, magazine, radio, Internet, billboard
  - How does Internet change your strategy?
- Public relations
  - Community service or events
- Sales promotions
  - Point-of-purchase displays, trade shows, and demonstrations (free samples)
- Word of mouth
  - Includes social media (Facebook, Twitter)

Source: Lou Pelton, David Strutton, & James Lumpkin, 1997. Marketing Channels: A Relationship Management Approach. Pages 99-109.

Target Marketing

- 3 Cs allows you to complete an external assessment of where you fit in the market
- 4 Ps are strategic choices about how to gain competitive advantage
  - More on positioning and promotion in the Direct Marketing section

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Food Tourism Market

Food Tourist Types

- Some tourists treat food consumption as part of the travel experience
- Some tourists use food as a basis for their activities
- Some tourists use food to select the destination itself
- Food choices can be motivated by…
  - Cultural experience
  - Interpersonal relations
  - Excitement
  - Sensory appeal
  - Health concerns

Foodies & Food Tourism

- A foodie is a person with “a long-standing passion for eating and learning about food, but are not food professionals”
- May choose to travel specifically to experience new foods
- Well educated on food, but often just an interest and enthusiasm for learning about food
- Often have high standards for food quality, but may not require expensive or gourmet foods
- Frequent food related festivals and events
  - Motivation to visit, stay at accommodations, and eat at local restaurants

Barr & Levy's Foodie Types

Foodie Type	Description
Whole-Foodier Than Thou	Uses only organic methods growing their own produce and flowers, slaughters their own meat, uses simple ingredients in their cooking.
Squalor Scholar Cook	Does their research and knows the history of their favorite foods and recipes, sticks to traditional recipes, has the academic and historical knowledge of food to set them apart from others.
Made in Paris	Starts off learning basic cooking techniques in small restaurants and manages to move themselves up the ranks through their connections to make a living cooking in Paris, a foodie mecca.
Paris C'est un Dump	Ultimate upscale foodie that spends much of their time in expensive restaurants, subscribes to important food magazines, and is extremely picky.
Gorgeous East in Me	Drawn to ethnic and foreign foods, constantly wants to try new things and experience new cultures through food.
Foodies on Ice	Regards food as artistic material, aims to impress by creating ice sculptures, elaborately decorated cakes, or butter statues.
All-American	Small-town foodie that searches out local food and ingredients that deserve attention, constantly attempts to improve their crops and create new dishes.

Western Food Tourism

- Colorado Agritourism Study
  - 895 survey responses 2005-2006
  - Age - 46 years on average
  - Income - 37% earned incomes over $75,000 per year
  - Marital status - 73% of travelers were married
  - Family composition -
    - 28% were young couples, no children
    - 42% were families with children
  - 90% identified themselves as White
- Grouped respondents into five “tourist types”

Colorado Agritourism Study

- Group 1: The Loyal Colorado Enthusiasts - 13% of travelers
  - Parents of older children and couples who return often based on their previous agritourism experiences
  - Largest share of participants in outdoor recreation on farms and ranches during the summer
  - Likely to camp and stay within a few hundred miles of home
  - Participate in a diverse set of agritourism activities
- Group 2: Family Ag Adventurers - 17% of travelers
  - Most promising agritourism visitors
  - Plans their travels around specific agritourism outings and participates in unplanned activities several times per year
  - Middle-income, often traveling with children in bigger parties
  - Willing to visit local enterprises and travel long distances to reach a variety of agritourism destinations
  - Travel primarily in summer and fall

Colorado Agritourism Study

- Group 3: In-State Explorers - 30% of travelers
  - Coloradans who explore the state by car on short jaunts
  - Don't travel with agritourism activities in mind, but participate in unplanned activities
  - Travel frequently and are from upper-middle income households
  - Many planned to travel in the subsequent year and participate in some agritourism
  - The culinary events in which they currently participate may be the best means to extend their visitation and spending into other agritourism experiences
- Group 4: The Out-of-State Activity Seekers - 4% of travelers
  - No plans to visits the following year
  - More likely to spend longer trips in hotels, resorts, second-homes or bed and breakfast accommodations
  - Primarily mid- to upper-middle class individuals, traveling in smaller parties (even though they are parents)
  - More likely to engage in agritourism as a secondary or unplanned activity
  - Enjoy participating in numerous outdoor activities, and report some of the highest interest across all agritourism activity groups
  - Travel is spread more evenly across all four seasons, relative to others

Colorado Agritourism Study

- Group 5: The Accidental Tourists - 36% of travelers
  - Coming for non-recreational business, educational, or convention activities
  - Not seeking agritourism activities

Colorado Study Results

- Larger groups participating in agritourism are more likely to plan their trip itinerary (and include agritourism activities) prior to travel)
- Groups used local and business websites (not national websites) to plan their holiday
- Tourists attracted to an area by its natural amenities tend to participate in agritourism activities in these areas
- Need to link marketing for agritourism enterprises to natural parks, forests and recreation areas, such as representing them in park brochures and at visitor centers
- Private enterprises should describe the natural aspects of their operations in their marketing materials

Western Food Tourism

- Utah Tourism Study
  - In-person survey of tourists in Utah (coming from/going to ID, NV, CO, MT), Summer 2013/Winter 2014
  - Random sampling technique, 700 surveys completed
  - 12 sites at gateways, national parks, airports, ski areas, convention and visitor centers
- Create a profile of tourist types
  - What types of people visit (demographics, attitudes, interests, etc.)
  - What is the reason for their visit and who travels with them?
  - What types of experiences and activities do they seek?
    - How important are food related experiences?
  - How do they research and plan their travel?
  - How long do they stay and where do they stay?

Sample Demographics

- 68% married
- 52% male
- College degree 31%, graduate degree 40%
- 49% full time employed, 29% retired
- 84% White, 5% Asian, 4% Hispanic
- Average income in 2012 $103,000
- Average age 50 years
- Length of stay average of 10.6 days
- Average party size of 2.9 adults and 1.6 children

Travel Specifics

- Travel reason
  - Business travel 14%
  - Visiting family/friends 5%
  - Visiting national parks 8%
  - Outdoor activities 37%
  - Visiting cultural/heritage sites 21%
  - Special events/festivals 2%
  - Agritourism activities 8%
- Research/booking resource
  - Internet/website 41%
  - Brochure/booklet 10%
  - Recommendation from family/friend 3%
  - Tradition 32%
  - Other 14%

Food Interests

- Organization membership (18%)
  - Slow Food = 10%
  - Dining Club = 11%
  - Coop Grocer = 22%
  - Wine/Beer Club = 27%
  - Cooking Club = 8%
  - CSA = 15%
  - Other = 7%
- Dietary restrictions
  - Yes 15%




Activities At Home & While Traveling

At Home

Buy locally sourced food:	3.52(1.16)
Shop at farmer's markets:	3.08(1.14)
Participate in a CSA:	1.73(1.11)
Buy organic certified produce:	2.79(1.19)
Visit local farms:	2.05(1.14)
Cook at home:	4.29(0.80)
Try new food items or recipes:	3.86(0.91)
Buy food you don't recognize:	2.93(1.19)
Eat ethnic foods:	3.57(1.05)
Attend beer/wine festivals:	2.39(1.27)
Food canning:	1.80(1.11)
Beer/wine making:	1.35(0.88)
Home gardening:	2.62(1.50)
Composting:	2.14(1.49)
Recycling:	4.35(1.07)
Other:	3.75(1.89)

While Traveling

Buy locally sourced food:	2.80(1.19)
Shop at farmer's markets:	2.46(1.16)
Visit local farms:	1.77(0.95)
Spend the night at local farms:	1.28(0.65)
Participate in agritourism:	1.60(0.88)
Cook at accommodations:	2.82(1.31)
Try new food items or recipes:	3.48(1.06)
Try local recipes:	3.12(1.19)
Buy food items as souvenirs or gifts:	2.72(1.13) 2.97(1.23)
Seek out local sourcing restaurants:	2.22(1.28) 3.67(1.33)
Attend beer/wine festivals:	2.38(1.77)

Rating scale of 1-5 (Never to Always)




At Home Activities/Interests

Factor 1		Factor 2		Factor 3	
DIY		Food Experiences		Direct Organic	
Variable	**Load**	**Variable**	**Load**	**Variable**	**Load**
Home Garden	0.664	Try New Foods/Recipes	0.653	Shop Farmers' Markets	0.581
Canning/Preserving	0.574	Eat Ethnic Foods	0.571	Visit Farms	0.497
Composting	0.550	Try New Produce	0.524	Buy Organic Produce	0.465
				CSA Member	0.455

Factor 4		Factor 5	
Beer/Wine Enthusiast		Local Cook	
Variable	**Load**	**Variable**	**Load**
Wine/Beer Making	0.475	Recycle	0.418
Wine/Beer Festivals	0.436	Cook at Home	0.401
		Buy Local Foods	0.258

While Traveling Activities/Interests

Factor 1		Factor 2		Factor 3	
All about the farm		All about food experiences		All about local foods	
Variable	Load	Variable	Load	Variable	Load
Farm/Ranch Stays	0.665	Try New Foods	0.734	Shop Farmers' Markets	0.639
Visit Farms	0.650	Try Local Recipes	0.722	Purchase Local Foods	0.632
Agritourism Activities	0.644	Purchase Food Souvenirs	0.337	Local Sourcing Restaurants	0.377
		Attend Beer/Wine Festivals	0.254	Cook Accommodations	0.279

Primary Tourist Groups

- Family Vacation - 50% of sample
  - Younger (mid 40s), less educated (in comparison) adults, with children, less likely married. Spend fewer days on vacation and are primarily involved in outdoor recreation on an annual trip. Use multiple sources for trip information and tend to do more cooking, but seek local foods and spend a lot on food.
- Utah Pilgrimage - 8% of sample
  - Older (mid 50s), married individuals traveling with older child, staying for a month and spending little on food, but seeking some food experiences and involved in food clubs. Visiting heritage sites and family primarily. Information from internet and past experience used in trip planning.

Primary Tourist Groups

- Couples Vacation - 11% of sample
  - Married, highly educated, middle-aged couples (upper 40s), seeking food and drink experiences with high food spending. Traditional annual two week trip, use internet for secondary information, visiting heritage sites and outdoor recreation. More heavily involved in food related activities while traveling and at home.
- Random Vacation - 25% of sample
  - Older (mid 50s), married, more likely male on a 7 day vacation. Traveling with older child in various activities (outdoor recreation, heritage sites, agritourism). Primarily use the internet for trip information. Food spending lower and not all that involved in food related activities while traveling. They just need to eat!

Utah Study Results

- Overall highly educated, married, seeking outdoor recreation, cultural/heritage sites, and agritourism activities
- Good potential (20% of sample)
  - Couples Vacation (Foodies with funds)
  - Utah Pilgrimage (Cultural/local foods)
  - Family Vacation – should not be overlooked
- Internet-based promotional programs most useful
- Quality experience essential – repeat visits
- Link marketing for food tourism to outdoor recreation destinations
  - Promote in park and resort brochures, visitor centers, etc.
  - Describe “proximity” to primary destinations in all materials
  - Heritage trail and food tourism linkages needed

Tourism Promotion Options

- Brochures, flyers, etc.
  - Leave with hotels, visitor centers, parks, resorts
- Business website
- Memberships
  - Chambers of commerce, visitor/convention bureaus, local food organizations, etc.
- Tourist Information Centers (TIC) can help you to reach customers
  - Know how tourists arrive (major hubs/airports) and what activities they seek
- Other publications
  - Websites
    - State/regional tourism, local food, trip/vacation booking
  - Tourism publications
    - Local, national, international
  - Heritage/scenic trail maps
  - Attraction publications
    - Parks, resorts, etc.




Promotional Resources

State	Organization	Type	Contact
Montana	Montana Office of Tourism	Tourism	tourism.mt.gov/
	Made In Montana	Local Food	madeinmontanausa.com/
Wyoming	Wyoming Office of Tourism	Tourism	www.wyomingofficeoftourism.gov/
	Made in Wyoming	Local Food	www.wyomingbusiness.org/wyomingfirst
Nevada	Nevada Grown	Local Food	nevadagrown.com
	Nevada Tourism Department	Tourism	www.travelnevada.com
Utah	Utah's Own	Local Food	utahsown.com
	Local First Utah	Local Food	localfirst.org
	Utah Tourism Department	Tourism	www.utah.com
National	Slow Food	Local Food	slowfoodutah.com
	Brand USA	Tourism	www.thebrandusa.com
	Discover America	Tourism	www.discoveramerica.com

Recommendations

- New customers can’t find you IF they can’t find you
  - Establish a website
  - Create a Facebook profile
  - Register with many related directories
- Let someone else work for you
  - Invest in your local business and/or agriculture alliance
- Collaborate with similar businesses
- Establish and maintain a continual conversation with current customers

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Financing: Federal/Private Loan & Grant Programs

Resources Available

- Western Ag Credit
- Utah Department of Agriculture and Food
- Agriculture Marketing Service (AMS)
- Rural Development (RD)
- Farm Service Agency (FSA)
- Natural Resources Conservation Service (NRCS)

Western Ag Credit

- As an agricultural lender, Western AgCredit can lend money for any ag-related purchase
- Common loan programs
  - Operating Loans
  - Equipment Loans
  - Livestock Loans
  - Agriculture Real Estate Loans
- Special programs
  - Ag Start Program
  - Farm Fresh Marketing Grant
  - Young, Beginning and Small Program

Western Ag Credit

- Ag Start Program
  https://www.westernagcredit.com/products_and_services/agstart
- The purpose of AgStart is to assist small farming and ranching operations in the early stages of development who market, or plan to market, their agricultural products directly to consumers or through local/regional food systems through low interest loans. This includes but is not limited to organic farming, local food farming and small farming operations.
- Up to $25,000 per applicant

Western Ag Credit

- Farm Fresh Marketing Grant https://www.westernagcredit.com/products_and_services/farm_fresh_advertising_grants
- Helps farmer's markets publicize their markets and donates reusable shopping bags

Western Ag Credit

- Young, Beginning and Small Program
  https://www.westernagcredit.com/products_and_services/young_beginning_small
- The special financing programs we offer help young (under 35), beginning (less than 10 years of experience) and small (operators that generate less than $250,000 in annual gross sales of agriculture products) borrowers obtain the agricultural financing necessary for success in their operations.

Utah Department of Agriculture & Food

- Agricultural Resource Development Loans (ARDL)
- Specialty Crop Block Grant Program
- Utah's Own Program
- Ag Land Preservation
- Agriculture Certificate of Environmental Stewardship (ACES)
- Utah Grazing Improvement Program (UGIP)
- http://ag.utah.gov/

Agricultural Marketing Service

- Farmers' Market Promotion Program (FMPP)
- Local Food Promotion Program (LFPP)
- Federal State Marketing Improvement Program (FSMIP)
- http://www.ams.usda.gov/

Agricultural Marketing Service

- Farmers' Market Promotion Program
  - Projects that develop new market opportunities for farm and ranch operations serving local markets by developing, improving, expanding, and providing outreach, training, and technical assistance.
- Projects that assist in the development, improvement, and expansion of…
  - Farmers markets, roadside stands, community-supported agriculture programs, agritourism and food activities
  - Other direct producer-to-consumer market opportunities
- Per grant awards
  - $15,000 - $100,000
  - 24 month grant period

Agricultural Marketing Service

- Local Food Promotion Program
  - Projects supporting the development and expansion of local and regional food business enterprises. Projects for entities that process, distribute, aggregate, or store locally or regionally produced food products.
- Planning grants
  - Activities can include, but are not limited to:
    - Market research, feasibility studies, business planning
  - Per grant awards
    - $5,000 - $25,000, 25% match required
    - 12 month grant period
- Implementation grants
  - Activities can include, but are not limited to:
    - Training & technical assistance, outreach & marketing, non-construction infrastructure improvements, working capital
  - Per grant awards
    - $25,000 - $100,000
    - 24 month grant period

Rural Development

- Value Added Producer Grants
- Rural Business Development Grants
- Rural Microentrepreneur Assistance Program
- Rural Energy for America Program Renewable Energy Systems & Energy Efficiency Improvement Loans & Grants
- Many others at http://www.rd.usda.gov/

Rural Development

- Value Added Producer Grants
  http://www.rd.usda.gov/programs-services/value-added-producer-grants
- The VAPG program helps agricultural producers enter into value-added activities related to the processing and/or marketing of bio-based, value-added products. Generating new products, creating and expanding marketing opportunities, and increasing producer income are the goals of this program. You may receive priority if you are a beginning farmer or rancher, a socially-disadvantaged farmer or rancher, a small or medium-sized farm or ranch structured as a family farm, a farmer or rancher cooperative, or are proposing a mid-tier value chain. Grants are awarded through a national competition.
- Maximum grant amounts
  - $75,000 for planning grants; $250,000 for working capital grants
- Matching funds requirements
  - 50% of total project costs, in-kind or cash

Rural Development

- Rural Business Development Grants http://www.rd.usda.gov/programs-services/rural-business-development-grants
- RBDG is a competitive grant designed to support targeted technical assistance, training and other activities leading to the development or expansion of small and emerging private businesses in rural areas that have fewer than 50 employees and less than $1 million in gross revenues. Programmatic activities are separated into enterprise or opportunity type grant activities.
- Generally, grants range from $10,000 up to $500,000. There is no cost sharing requirement.

Farm Service Agency

- http://www.fsa.usda.gov/
- Microloan Program
  - Minority and Women Farmers and Ranchers Loans
  - Beginning Farmer and Rancher Loans
- Conservation Loan Program
- Direct Farm Ownership Loans
- Direct Operating Loan Program

Farm Service Agency

- Microloan Program
  http://www.fsa.usda.gov/programs-and-services/farm-loan-programs/microloans/index
- The focus of Microloans is on the financing needs of small, beginning farmer, niche and non-traditional farm operations, such as truck farms, farms participating in direct marketing and sales such as farmers' markets, CSA's (Community Supported Agriculture), restaurants and grocery stores, or those using hydroponic, aquaponic, organic and vertical growing methods.
- Portion of funds targeted to small and beginning farmers/ranchers, and minority and women farmers/ranchers.

Natural Resources Conservation Service

- NRCS provides technical and financial assistance to private landowners/ag producers.
- NRCS's natural resources conservation programs help people reduce soil erosion, enhance water supplies, improve water quality, increase wildlife habitat, and reduce damages caused by floods and other natural disasters. Public benefits include enhanced natural resources that help sustain agricultural productivity and environmental quality while supporting continued economic development, recreation, and scenic beauty.
- http://www.nrcs.usda.gov

Natural Resources Conservation Service

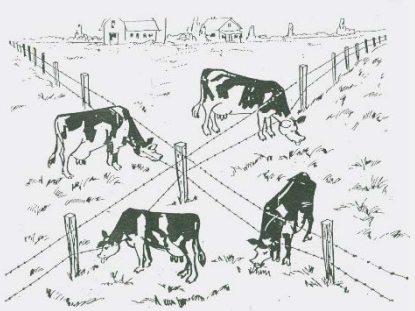
- Conservation Plan Development
- Environmental Quality Incentives Program (EQIP)
  - General (Irr. Cropland, Dry Cropland, Range, Pasture, Forestry, Riparian, AFO/CAFO)
  - Initiatives (High Tunnels, Sage Grouse, Salinity, Wildlife, Drought, Energy, Organics)
- Agricultural Management Assistance Program (AMA)
- Conservation Stewardship Program (CSP)
- Agricultural Conservation Easement Program (ACEP)
  - Agricultural Land Easement (ALE)
  - Agricultural Land Easement Grasslands (ALE-GSS)
  - Wetland Reserve Easement (WRE)

Natural Resources Conservation Service Conservation Plan Components

- Sustainable and Productive Soils
  - Quality: Erosion, Nutrients, Contaminants
- Clean and Abundant Water
  - Quality: Nutrients, Pathogens, Petroleums, Salinity
  - Quantity: Irrigation, Drought, Water Flow
- Air
  - Quality: Odor, Particulate Matter, Reduced Visibility
- Plants
  - Condition: Invasive Weeds, Wildfire, T&E Species
- Animals
  - Wildlife: Habitat, Food, Cover, Shelter
    Domestic: Water, Forage Quality, Grazing, Manure Management
- Adequate Energy Supply
  - Fuel, Alternative, Power
- Human Interaction
  - Economics, Sustainability, Cultural Resources, Traditions

Natural Resources Conservation Service

- Environmental Quality Incentives Program
- Project examples
  - Composting facility
  - Cover crops
  - Fencing
  - Irrigation systems, pipeline, pumping, sprinklers
  - Pasture and hay planting
  - Residue management
  - Season high tunnel systems
  - Watering facilities
  - Crop rotation
  - Nutrient management
  - Prescribed grazing



Natural Resources Conservation Service

- High Tunnel Initiative
- NRCS provides financial assistance for high tunnels up to a maximum of five percent of one acre, or a total of 2,178 square feet. Landowners can purchase and install larger high tunnels, but NRCS will only pay for the first 2,178 square feet. Plants must be planted in the ground or in permanent raised beds, not containerized.
  - Since water runoff from high tunnels can cause erosion, pooling and other environmental concerns, additional conservation practices may be installed as a condition for the installation of a high tunnel.
  - These might include runoff management, filter strips, drain structures for water control, critical area planting

Thank you!

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Value-Added Products: Cottage Foods, Processing and Labeling Requirements

Value-Added Foods

- Local, organic, vine-ripened, or specialty crops
- “Gourmet” foods
  - Jams, jellies, preserves
  - Pickled vegetables
  - Hot sauces, salsas, tapenades
  - Herbed oils and vinegars
- Must consider regulatory, safety and labeling issues

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- Must consider **regulatory**, safety and labeling issues

Unprocessed Produce

- Regulations vary by State
- Utah – State Department of Agriculture
- Nevada – State Department of Agriculture
- Wyoming –
- Montana –




Must Register to Sell Processed Produce

Processed Foods Include: Peeled, Cut, or Washed Produce

Processed Foods Include: Cut Leafy Greens

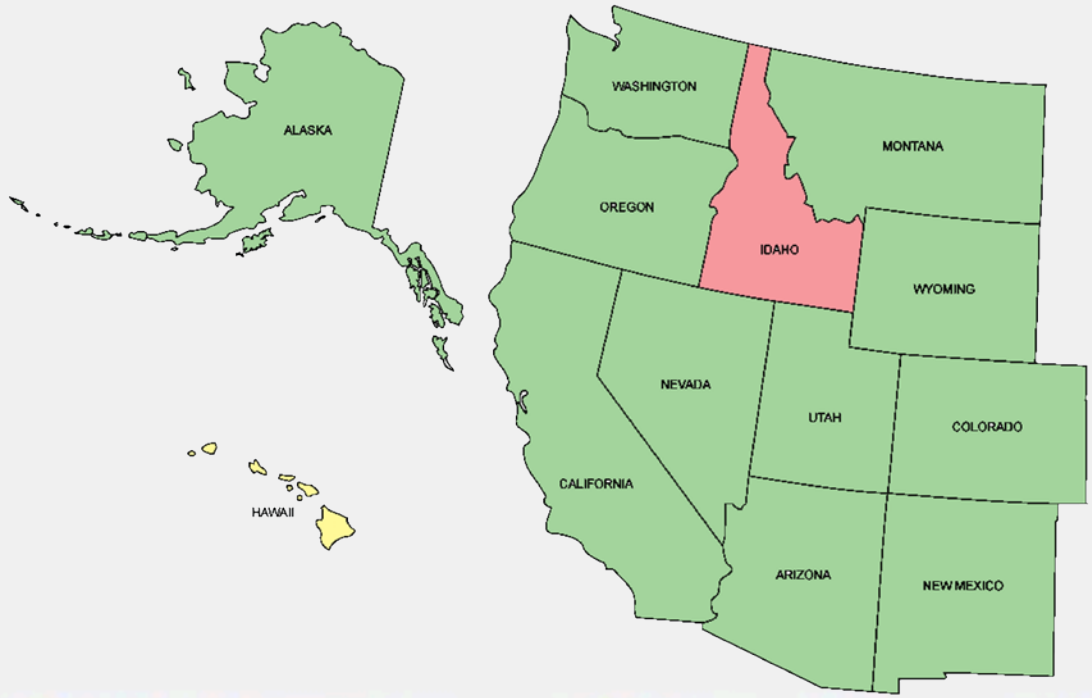
Processed Foods Include: Dried or Dehydrated Produce?

Processed Foods Include: Packaged Fresh Herbs?

Processing Options: Cottage Kitchen

- Home kitchen, certified by state agency
- Program regulations and availability vary by state
- Pro: Less expensive than renting or building commercial kitchen space
- Con: Limited types of food can be prepared

Cottage Production: Western U.S.



All Other Establishments are Regulated by FDA

- Co-Packers
- Certified Food Establishments
- Certain On-Farm Processing facilities

Processing Options: Contract Packaging – “Co-Packers

- Certified food production facilities
  - Will package your product in their down-time
- Each co-packer has different requirements, capabilities & minimum runs
- You must license your business, but do not need to register with the FDA

Processing Options: Certified Food Establishments

- Commercial facility, certified by local health department
  - Incubator kitchens, restaurant kitchens
- Potentially Hazardous Foods can be produced, but must be approved
- On-Farm certified kitchens may be exempt from some FSMA record keeping requirements

FSMA Exemptions: Certain On-Farm Processing

- "Standards for the Growing, Harvesting, Packing, and Holding of Produce for Human Consumption"
- New FDA definition of "Farm"
- Harvesting
  - Includes trimming, sifting, shelling, and washing
- Drying/Dehydrating
- Packaging and Labeling RACs

Value-Added Foods

- Local, organic, vine-ripened, or specialty crops
- “Gourmet” foods
  - Jams, jellies, preserves
  - Pickled vegetables
  - Hot sauces, salsas, tapenades
  - Herbed oils and vinegars
- Must consider regulatory, **safety** and labeling issues

Safety Issues to Consider

- How will you clean & sanitize?
- How will you prepare or cook your product to minimize safety risks?
- How will you package/protect your product?
- How will you store & display your product?

Important Definitions

- Clean: Free of visible dirt or debris
  - Applies to whole, unprocessed foods
- Sanitary: Free of pathogenic bacteria
  - Applies to processed foods & food contact surfaces
- Sterile: Free of all viable bacteria
  - Commercial sterility – 99.99% sterile

Safety Issues Kitchen Sanitation

- Sanitize at start of production
  - 1 tbsp unscented bleach maximum per 1 gallon water (200 ppm)
  - Check sanitizer with test strips

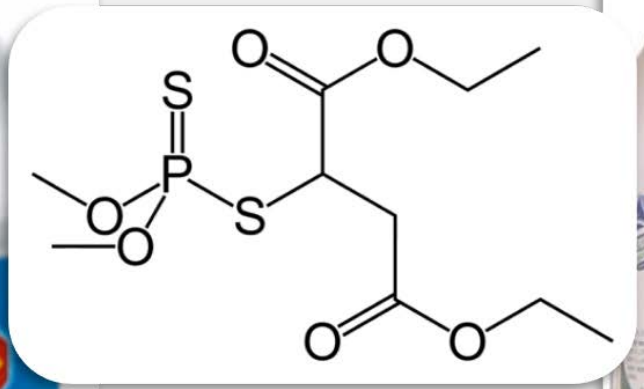
Common Sanitizer Test Strips

Safety Issues Kitchen Sanitation

- Sanitize at start of production
  - 1 tbsp unscented bleach maximum per 1 gallon water (200 ppm)
  - Check sanitizer with test strips
- Wipe up spills, sanitize during production
  - Check / refresh sanitizer every hour
- Clean and sanitize at end of production




Chemical Contaminants

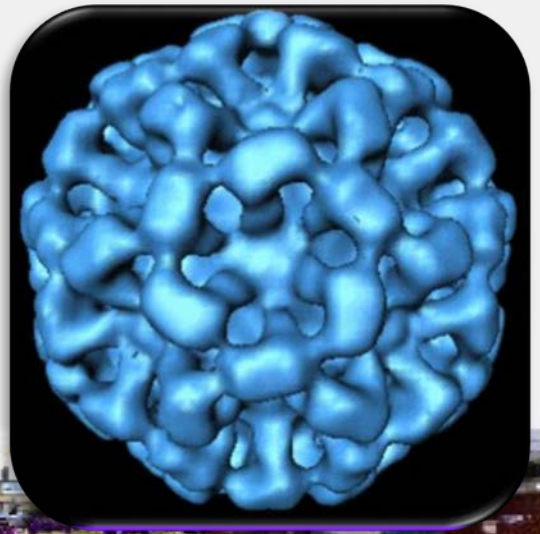


Chemical Contaminants

Physical Contaminants

Biological Contaminants

- Viruses – must infect a living host cell before reproducing, but can survive without a host



Biological Contaminants

- Fungi – multiply and grow without a host



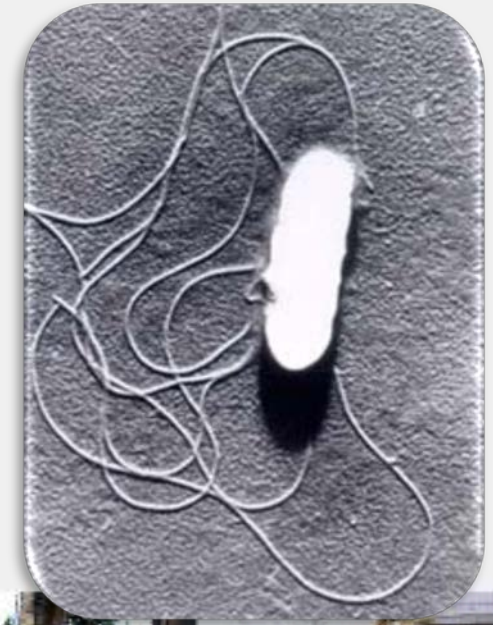




Biological Contaminants

- Bacteria – multiply and grow without a host







Bacterial Growth & Survival

Food

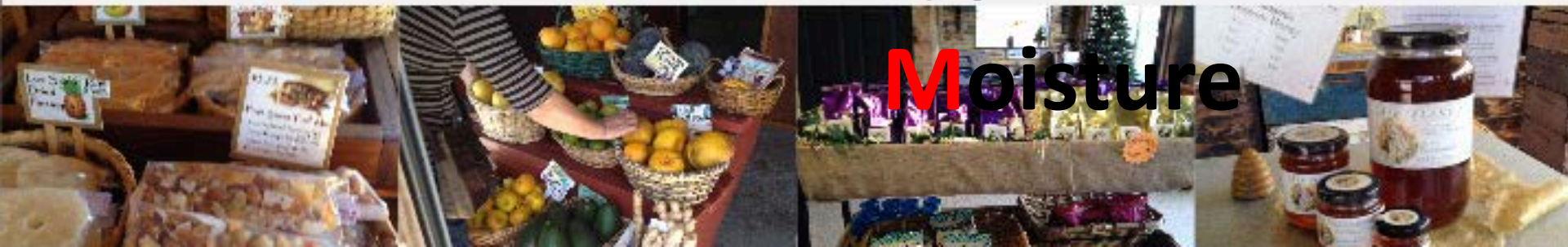
Acid

Temperature

Time

Oxygen

Moisture



Survival: Moisture (Aw)

- Bacteria must have water available
- Aw is a measure of how much water is available, not how much is present
- Add sugar or salt to lower Aw
- Remove water to lower Aw

Water Activity (A_w)	Examples of foods in this range
1.00 – 0.95	Fresh produce & meat; canned produce & meat; milk; juice; bread
0.95 – 0.91	Cured meats (ham); semisoft & some hard cheeses (Swiss, young cheddar, provolone); moist cakes
0.91 – 0.87	Hard or aged cheese; sponge cakes; margarine; most fermented sausage
0.87 – 0.80	Syrup; flour; fruit juice concentrate; high-sugar cakes
0.80 – 0.75	Jam & marmalade; marshmallows; beef jerky
0.75 – 0.65	Soy sauce; molasses; jelly; nuts; oats; peanut butter;
0.65 – 0.60	Honey; caramels; dried fruit; toffee
0.50 or below	Spices; crackers; cookies; pasta; powdered milk

Survival: Food

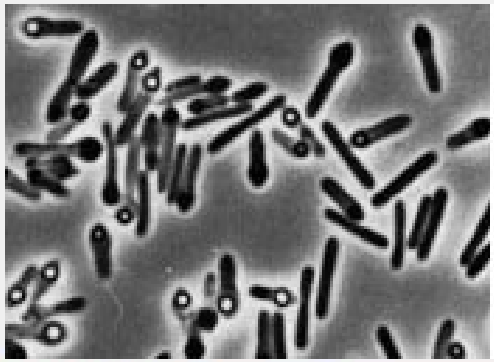
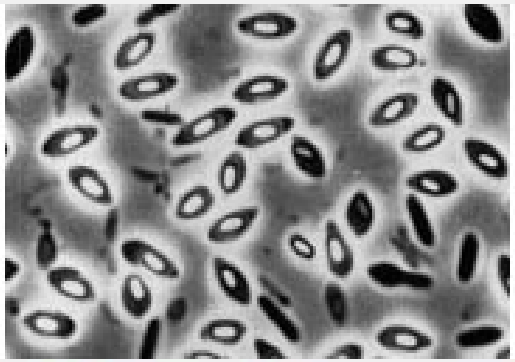
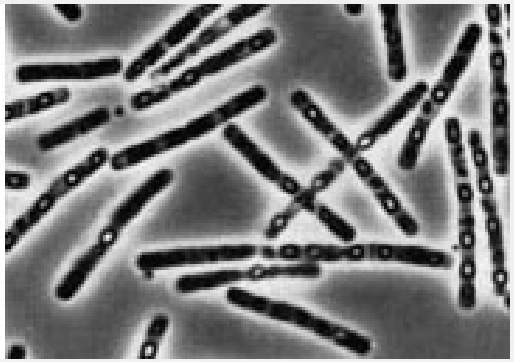
- Bacteria have specific nutritional requirements
- Food must provided that is a ready source of nutrients
- We can limit growth of pathogenic or spoilage bacteria by adding a “Good” bacteria

Survival: Atmosphere

- Aerobic = require oxygen
- Anaerobic = oxygen is toxic
- Facultative = anaerobes that can tolerate some oxygen
- Places where no oxygen is present?

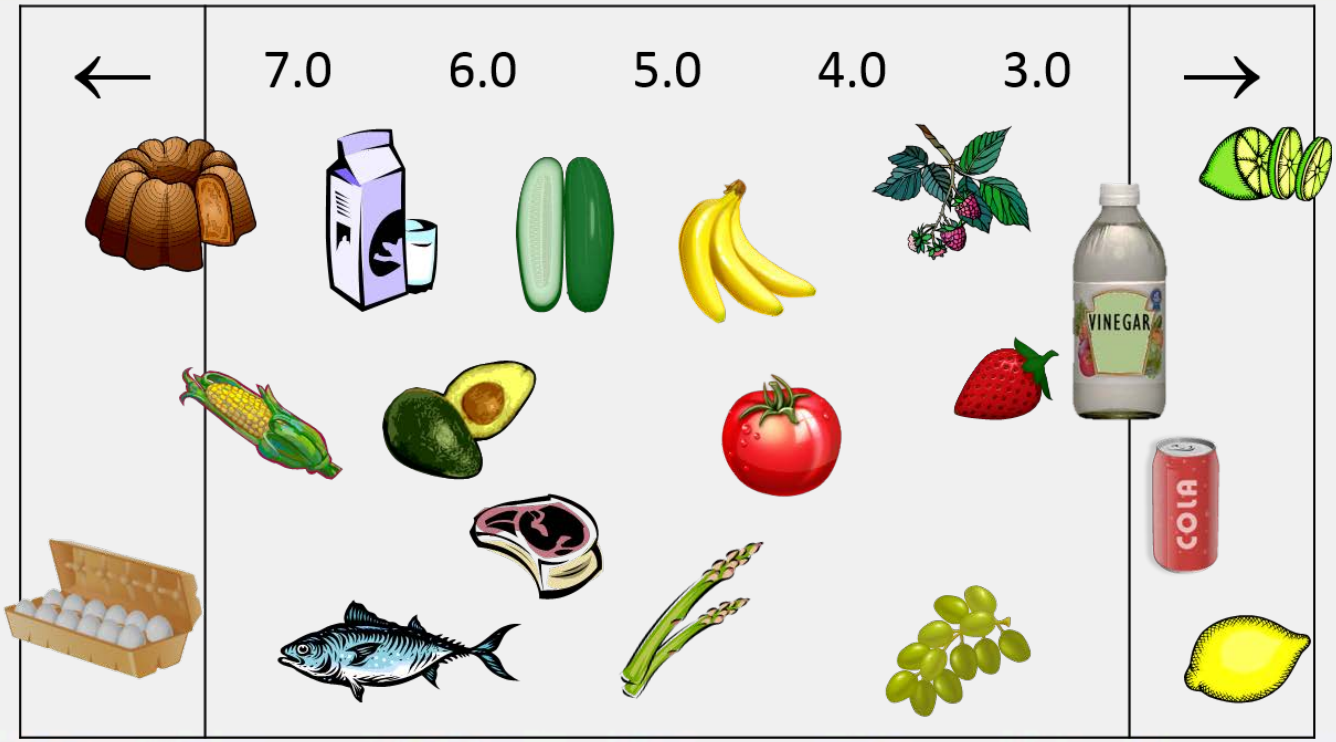
Growth: Acidity

- Acid slows the growth of some bacteria
- Acid prevents germination of bacterial spores
- Vinegar, citrus juices, tomatoes



Most foods are between 7.0 (neutral) and 3.0 (acidic)



Growth: Temperature

- Each bacteria prefers a different temperature range
- The temperature danger zone: 40 – 140F
- Heat can destroy, cold only preserves

FDA – “Exempt” Products

- Refrigerated, frozen, or Aw < 0.85
- Labeling: 21CFR §101
- Processing: 21CFR §110
- Standards of Identity: 21CFR §135 to 169
- FDA Food Processor registration required

Examples of “Exempt” Products

- Candies and syrups
- Dry mixes, spices/herbs, and flavorings
- Roasted nuts
- Dehydrated fruits and vegetables
- Dried pasta and noodles
- Full-sugar jams and jellies
- Some BBQ sauces




FDA – Acid Food Regulations

- Canned or bottled foods with a natural pH < 4.6
  - Should not contain more than 10% low acid ingredients
- Labeling: 21CFR §101
- Processing: 21CFR §110
- Standards of Identity: 21CFR §135 to 169
- FDA Food Processor registration required

Examples of Acid Foods

- Canned tomatoes and tomato products
- Canned fruits
- Flavored vinegars
- Vinegar and oil dressings
- Low-sugar fruit preserves
- Fermented foods (no other acid added)

FDA – Acidified Food Regulations

- Natural pH > 4.6, but added acid drops pH
  - Require Process Authority letter & regular filings
- Labeling: 21CFR §101
- Processing: 21CFR §114
- Standards of Identity: 21CFR §135 to 169
- FDA Food Processor registration required
- FDA Acidified Food Processer registration required

Examples of Acidified Foods

- Salsa and spaghetti sauces
- Most hot sauces and BBQ sauces
- Worcestershire sauce
- Pickled vegetables
- Mayonnaise and salad dressing
- Some vegetable juice blends, Clamato juice

FDA – Acidified Foods Guidance

- Draft Guidance for Industry: Acidified Foods (September 2010)
  - Definitions, decision trees, and example calculations
- Form FDA 2541 – Food Canning Establishment Registration
- Form FDA 2541a – Process Filing for Acidified Foods

FDA – Low Acid Food Regulations

- Natural pH > 4.6, no acid added
  - Require Process Authority letter & regular filings
- Labeling: 21CFR §101
- Processing: 21CFR §113
- Standards of Identity: 21CFR §135 to 169
- FDA Food Processor registration required
- FDA Low Acid Food Processer registration required

Examples of Low Acid Foods

- Canned vegetables
- Canned beans and legumes
- Canned or bottled olives
- Vegetable juices
- Canned vegetarian soups and broth
- Evaporated milk
- Canned tuna, clams, and shrimp

Value-Added Foods

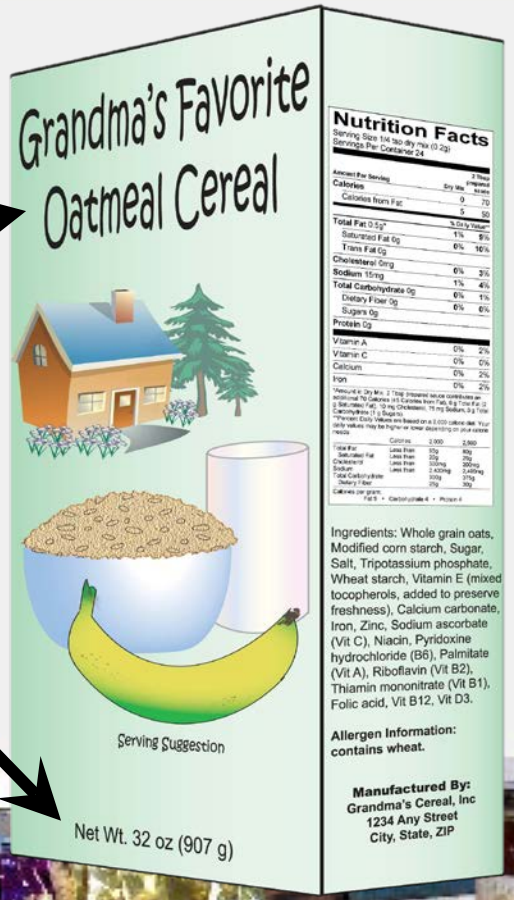
- Local, organic, vine-ripened, or specialty crops
- “Gourmet” foods
  - Jams, jellies, preserves
  - Pickled vegetables
  - Hot sauces, salsas, tapenades
  - Herbed oils and vinegars
- Must consider regulatory, safety and **labeling** issues

Required Label Components

- Primary Display Panel

Statement of Identity

Net weight statement



Statement of Identity

- Many foods have a legally established name that must be used [CFR21 §101.3]

Standards of Identity exist for:

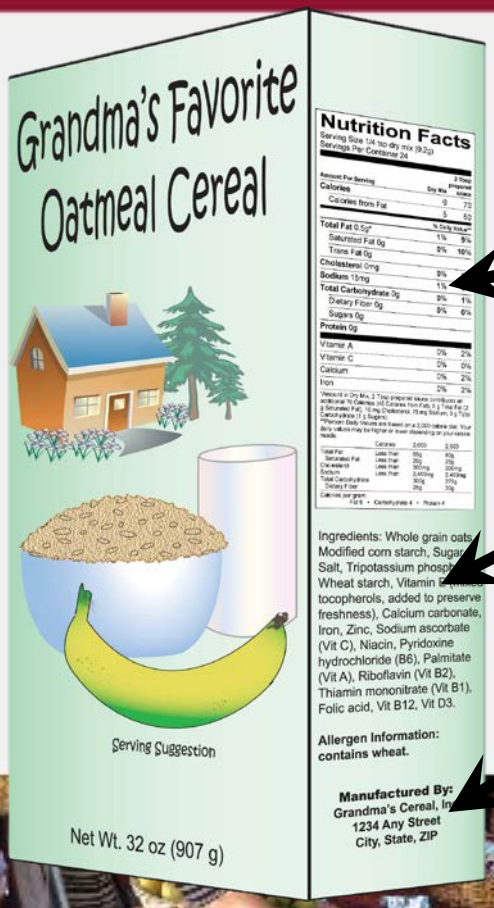
- § 131 Milk & cream
- § 133 Cheese
- § 135 Frozen desserts
- § 136 Bakery products
- § 137 Cereal flours
- § 139 Macaroni & noodles
- § 145 Canned fruit
- § 146 Canned fruit juice
- § 150 Jellies & preserves
- § 152 Fruit Pies
- § 155 Canned vegetables
- § 156 Vegetable juices
- § 158 Frozen vegetables
- § 160 Eggs & egg products
- § 161 Fish & shellfish
- § 163 Cacao products
- § 164 Tree nuts & peanuts
- § 165 Beverages
- § 166 Margarine
- § 168 Sweeteners & syrups
- § 169 Dressings & flavorings




Statement of Identity

- Many foods have a legally established name that must be used [CFR21 §101.3]
- All others must use “common or usual name”
- Other requirements include:
  - Form of food (e.g. sliced, cubed, crushed)
  - “Imitation” if lower protein, vitamins, minerals
  - “___% Juice” for any drink showing fruit or vegetables on the label

Required Label Components



Information Panel

Nutrition Facts panel

Ingredient statement

Producer name & address

Ingredient Statement

- Ingredients must be listed in order by weight
- Must list function of any preservatives
  - "Ascorbic Acid to promote color retention"
- "Spices", "Natural Flavor" or "Artificial Flavor" can be grouped to save space
  - *Except:* onion/garlic/celery items, salt, and MSG
- Certified colors must be specified
  - "Red 40" or "FD&C Red 40"

Allergen Statement

Nutrition Facts

Ingredients: Enriched flour (wheat flour, malted barley, niacin, reduced iron, thiamin mononitrate, riboflavin, folic acid), sugar, partially hydrogenated cottonseed oil, high fructose corn syrup, whey (milk), eggs, vanilla, natural and artificial flavoring, salt, leavening (sodium acid pyrophosphate, monocalcium phosphate), lecithin (soy), mono- and diglycerides.

Any Cookie Company
College Park, MD 20740

(1) Include the name of the food source in parenthesis following the common or usual name of the major food allergen in the list of ingredients in instances when the name of the food source of the major food allergen does not appear elsewhere in the ingredient statement for another allergenic ingredient.

OR

(2) Place the word "Contains," followed by the name of the food source from which the major food allergen is derived, immediately after or adjacent to the list of ingredients, in a type size that is no smaller than that used for the ingredient list.

Nutrition Facts

Ingredients: Enriched flour (flour, malted barley, niacin, reduced iron, thiamin mononitrate, riboflavin, folic acid), sugar, partially hydrogenated cottonseed oil, high fructose corn syrup, whey, eggs, vanilla, natural and artificial flavoring, salt, leavening (sodium acid pyrophosphate, monocalcium phosphate), lecithin, mono- and diglycerides.

Contains: Wheat, Milk, Egg, and Soy.

Any Cookie Company
College Park, MD 20740

Nutrition Labeling Is Changing…

Helvetica Regular 8 point with 1 point of leading

3 point rule

8 point Helvetica Black with 4 points of leading

1/4 point rule centered between nutrients (2 points leading above and 2 points below)

8 point Helvetica Regular with 4 points of leading

8 point Helvetica Regular, 4 points of leading with 10 point bullets.

Nutrition Facts

Serving Size 1 cup (228g)
Serving Per Container 2

Amount Per Serving

Calories 260 — Calories from Fat 120

% Daily Value*

Total Fat 13g — **20%**
Saturated Fat 5g — **25%**
Trans Fat 2g
Cholesterol 30mg — **10%**
Sodium 660mg — **28%**
Total Carbohydrate 31g — **10%**
Dietary Fiber 0g — **0%**
Sugars 5g
Protein 5g

Vitamin A 4% • Vitamin C 2%
Calcium 15% • Iron 4%

* Percent Daily Values are based on a 2,000 calorie diet. Your Daily Values may be higher or lower depending on your calorie needs:

	Calories:	2,000	2,500
Total Fat	Less than	65g	80g
Sat Fat	Less than	20g	25g
Cholesterol	Less than	300mg	300mg
Sodium	Less than	2,400mg	2,400mg
Total Carbohydrate		300g	375g
Dietary Fiber		25g	30g

Franklin Gothic Heavy or Helvetica Black, flush left & flush right, no smaller than 13 point

7 point rule

6 point Helvetica Black

All labels enclosed by 1/2 point box rule within 3 points of text measure

1/4 point rule

Type below vitamins and minerals (footnotes) is 6 point with 1 point of leading




Nutrition Labeling

- Reference Amounts Customarily Consumed

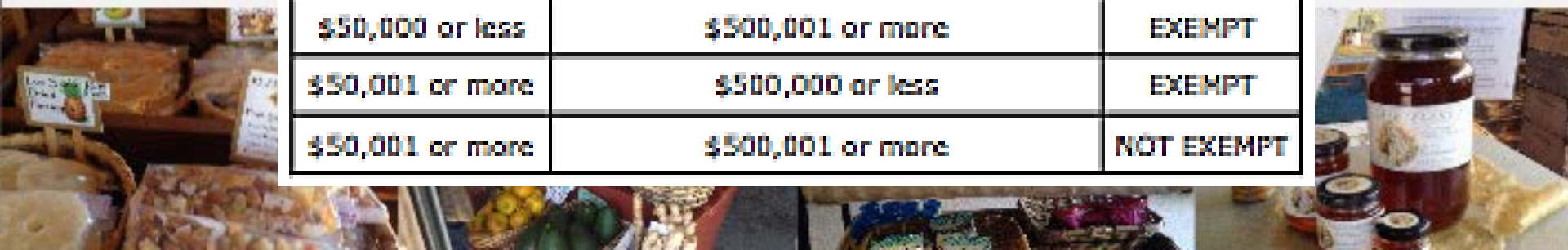
TABLE 2—REFERENCE AMOUNTS CUSTOMARILY CONSUMED PER EATING OCCASION: GENERAL FOOD SUPPLY[1,2,3,4]

Product category	Reference amount	Label statement[5]
Bakery products:		
Biscuits, croissants, bagels, tortillas, soft bread sticks, soft pretzels, corn bread, hush puppies.	55 g	__ piece(s) (__ g)
Breads (excluding sweet quick type), rolls	50 g	__ piece(s) (__ g) for sliced bread and distinct pieces (e.g., rolls); 2 oz (56 g/__ inch slice) for unsliced bread
Bread sticks—see crackers		
Toaster pastries—see coffee cakes		
Brownies	40 g	__ piece(s) (__ g) for distinct pieces; fractional slice (__ g) for bulk
Cakes, heavy weight (cheese cake; pineapple upside-down cake; fruit, nut, and vegetable cakes with more than or equal to 35 percent of the finished weight as fruit, nuts, or vegetables or any of these combined)[6].	125 g	__ piece(s) (__ g) for distinct pieces (e.g., sliced or individually packaged products); __ fractional slice (__ g) for large discrete units
Cakes, medium weight (chemically leavened cake with or without icing or filling except those classified as light weight cake; fruit, nut, and vegetable cake with less than 35 percent of the finished weight as fruit, nuts, or vegetables or any of these combined; light weight cake with icing; Boston cream pie; cupcake; eclair; cream puff)[7].	80 g	__ piece(s) (__ g) for distinct pieces (e.g., cupcake); __ fractional slice (__ g) for large discrete units
Cakes, light weight (angel food, chiffon, or sponge cake without icing or filling)[8].	55 g	__ piece(s) (__ g) for distinct pieces (e.g., sliced or individually packaged products); __ fractional slice (__ g) for large discrete units

Small Business Exemption

- Very small companies (< $50,000 total sales or fewer than 100 employees) do not even need to file with FDA
- **ANY** NUTRITION CLAIMS VOID THIS EXEMPTION

SALES IN FOOD	TOTAL SALES (FOOD & NON-FOOD)	STATUS
$50,000 or less	$500,000 or less	EXEMPT
$50,000 or less	$500,001 or more	EXEMPT
$50,001 or more	$500,000 or less	EXEMPT
$50,001 or more	$500,001 or more	NOT EXEMPT



Types of Health Claims

- Nutrient content claims
  - Specific guidelines for different types of food
- Approved health claims
  - General scientific consensus has been reached
  - Must put in context of whole diet
- Qualified health claims
  - No scientific consensus, but some evidence
  - Stricter wording requirements

Nutrient Content Claims

- Content Claims [21CFR§101.60-62]
  - "Free", "Low", "Reduced/Less"
- Relative Claims [21CFR§101.13(j)]
  - "Light", "Reduced" or "Added", "More" or "Less"
- Other Claims
  - "High", "Rich In" or "Excellent Source of"
  - "Good Source", "Contains" or "Provides"
  - "Lean" and "Extra Lean"
  - "Modified"
  - "Fiber" claims

Nutrition Initiative

Enforcement Letters

The product makes claims such as, "Healthy Options," but has more fat than is allowed in products labeled as "healthy."

Ken's Foods, Inc.

Nutrition Initiative

Enforcement Letters

The front panel shows that the product has no trans fat, but it doesn't have a disclosure statement to alert consumers that the product has significant levels of saturated fat and total fat.

Dreyer's Grand Ice Cream, Inc.

Organic Labeling

- Crop, livestock, or food product certification
- USDA does not require certification for organic sales <$5000 / year
- Specific requirements for how it is stated on the label

“100% Organic”

- Must contain only organic ingredients (not including water and salt)
- Must list certifying agency information
- Can use USDA and/or certifying agency seal

“Organic”

- Must contain 95% organic ingredients
- Cannot contain sulfites
- Must list certifying agency information
- Can use USDA and/or certifying agency seal

“Contains Organic _____”

- Must contain 70% organic ingredients
- Cannot contain sulfites (except wine)
- Must list certifying agency information
- Can use certifying agency seal, but not USDA

Natural Labeling

- No specific legal definition from FDA
  - USDA has stricter requirements
- Cannot contain artificial or synthetic ingredients
  - Colors
  - Flavors
  - Preservatives

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Questions?

USDA FSIS – Meat Regulations

- All products containing > 3% raw or > 2% cooked meat by weight
- Beef, Pork, Lamb, Goat
- Labeling requirements: 9CFR §317
- Processing requirements: 9CFR §318
- Standards of Identity: 9CFR §319

USDA FSIS – Poultry Regulations

- All products containing > 3% raw or > 2% cooked poultry by weight
- Chicken, Turkey, Goose, Duck, Guinea, Squab
- Labeling requirements: 9CFR §381 Subpt. N
- Processing requirements: 9CFR §381 Subpt. O
- Standards of Identity: 9CFR §381 Subpt. P

FSIS and FDA – Eggs & Egg Products

- USDA FSIS regulations
  - Processing and Grading: 9CFR §590
- FDA regulations
  - Labeling: 21CFR §101
  - Storage and Transport: 21CFR §115 and 118
  - Standards of Identity: 21CFR §160

FDA – Dairy Regulations

- Labeling: 21CFR §101
- Processing: Pasteurized Milk Ordinance and 21CFR §110
- Standards of Identity: 21CFR §131 to 135
- FDA Food Processor registration required

FDA – Bottled Water Regulations

- Labeling: 21CFR §101
- Processing: 21CFR §110
- Standards of Identity: 21CFR §129
- FDA Food Processor registration required
- UDAF Food Establishment registration required

FDA – Juice Regulations

- Labeling: 21CFR §101
- Processing: 21CFR §113 (low acid), §114 (acidified), or §120 (all others)
- Standards of Identity: 21CFR §146 and 156
- FDA Food Processor registration required

FDA – Fish and Fish Products

- Labeling: 21CFR §101
- Processing: 21CFR §123
- Standards of Identity: 21CFR §161
- FDA Food Processor registration required

FDA – Dietary Supplements

- Labeling: 21CFR §101
- Processing: 21CFR §111
- No Standards of Identity for supplements
- FDA Food Processor registration required

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Assessing Feasibility: Business and Financial Plans

Overview

- Understand the elements of economic feasibility analysis
- Evaluate market size and estimate volume
- Calculate cost of production or service
- Use break-even analysis to identify minimum required pricing and volumes
- Compare pricing approaches and select appropriate pricing

Steps in Economic Feasibility Analysis

- Assess potential demand (volume and pricing)
- Estimate cost of production
- Examine break-even volume and pricing
- Choose a pricing approach

Assess Potential Demand

- Target consumers who have a need for the product/service
- Conduct market research
  - Estimate available customer base and purchase amount
  - Estimate feasible range of prices (cover production costs)
  - Assess consumer sensitivity to pricing
- Market research methods
  - Survey existing customers
  - Conduct product/pricing trials
  - Ask fellow providers – competitors
  - Use secondary data resources
    - USDA, marketing firms, Extension

Estimating Market Size – Farm Based Examples

- Local Farm Tourism
  - Local customers traveling for a day or weekend outing, such as in-state or less than 100 miles away
  - Farm stand example
- Destination Tourists
  - Visitors on a long vacation to specific destinations
    - National and state parks, heritage sites, etc.
  - Farm store/shop with café example




Local Tourism Demand

- If selling items directly from farm/ranch stand
  - Consider how far you can expect customers to travel
- The USDA Forest Service's National Survey on Recreation found the average distance traveled to visit a farm in 2000 was 80 miles
- Western operators find their consumers travel over 75 miles to participate in U-picks, farm festivals, and related farm activities
  - No or few other alternatives exist in metro area

Local Tourism Demand

- Potential number of customers
  - Demographics and population size in the area is an important part of estimating demand
    - Demographics from the most recent U.S. Census can be searched online by state and by zip code - http://factfinder.census.gov/faces/nav/jsf/pages/index.xhtml
      - Ages, household and family size, income, ethnicity, etc.
      - All of which can provide information as to the characteristics of potential customers in the surrounding area
- Potential purchase size
  - Examining current and historical consumption patterns can be helpful
    - Average annual consumption levels for hundreds of foods in the US can be found on USDA's Economic Research Service (USDA-ERS) website - http://www.ers.usda.gov/data-products/food-availability-(per-capita)-data-system/.aspx
    - ERS data is for standard, conventional products only

Farm Stand Example

- A producer is considering turning one acre of the operation into hoop house/high tunnel strawberry production for a multi-season farm stand
- Estimates that each acre (20 high tunnels) will yield 10,000 pounds
- The average annual consumption of strawberries per person is 8 pounds (ERS, 2014)
- Use the following equation to determine the appropriate market size

$$\frac{\text{(Acres in operation)*(Output per acre)}}{\text{(Average consumption per person/year)/(52 weeks/year)}} = \text{Market size required}$$

$$= \frac{10,000}{8/52} = \frac{10,000}{.154} = 64,935$$

- The producer will need a market size of 64,935 consumers/visits annually to sell all output

Farm Stand Example

- For the farm stand operation, the producer may be interested in targeting families
  - Would be helpful to know if nearby communities have enough families to make up a portion of the 65,000 consumers needed to make the operation feasible
- Bend/Redmond, OR
  - 26,073 families, average of 3.5 persons (2010 Census)
  - 91,255 potential customers

Farm Stand Example

- What percentage might visit the stand?
  - If 40%, then 36,502 customers
    - Almost 30% of the US population visited farms one or more times (2000)
      - But, agritourism has been growing at a rate of 6% annually
- If customers purchase 16 pounds/pp for freezing/canning
  - Only need 32,467 customers/visits annually

Destination Tourists

- Many rural areas in the West are located between a major urban center and national/state parks, ski resorts, etc.
  - Vacation destinations for many foreign and out-of-state visitors
- Estimating the potential size of these markets requires information on
  - Where visitors are coming from
  - Where visitors are returning to

Grand Canyon National Park Example

- Consider Grand Canyon National Park (GCNP)
  - Attracts around 4.4 million visitors annually
    - GCNP Statistics at http://www.nps.gov/grca/learn/management/statistics.htm
- Seasonal visitation is another important item to consider
  - Annual visits to the GCNP by season
    - Winter: 11% of total visits
    - Spring: 27% of total visits
    - Summer: 39% of total visits
    - Fall: 23% of total visits
  - Visitation by month at https://irma.nps.gov/Stats/Reports/Park/GRCA

Grand Canyon National Park Example

- Where visitors to Grand Canyon National Park stayed before and after visiting the park

Destination	Before	After	Destination	Before	After
Flagstaff, AZ	17.5%	10.6%	St. George, UT	1.5%	1.4%
Williams, AZ	12.6%	7.3%	Scottsdale, AZ	1.4%	1.5%
Las Vegas, NV	9.4%	12.7%	Zion National Park, UT	1.4%	1.7%
Sedona, AZ	6.0%	6.7%	Jacob Lake, AZ	1.4%	<1%
Phoenix, AZ	5.3%	8.0%	Kingman, AZ	1.3%	2.1%
Tusayan, AZ	4.3%	2.4%	Tucson, AZ	1.2%	<1%
Page, AZ	3.4%	4.0%	Holbrook, AZ	1.1%	1.1%
Kanab, UT	1.9%	1.4%	Albuquerque, NM	1.0%	1.2%
Bryce Canyon National Park, UT	1.7%	2.1%	Cameron, AZ	1.0%	<1%

Grand Canyon National Park Example

- Consider a business located between Page, AZ and GCNP
  - 3.4% of visitors stayed in Page prior to visiting GCNP
  - 4.0% of visitors stayed in Page after visiting GCNP
- The average number of visitors who would pass by this business location can be found with the following equation:

$$\frac{(\text{Total annual visitors})*(\text{Average percentage of visitors})}{12} = \text{Average monthly visits}$$

$$\frac{(4.4 \text{ million visitors})((.034+.040)/2)}{12} = 13,567 \text{ visitors}$$

- The number of GCNP visitors that would pass by the business location each month averages 13,567
  - With a low of around 5,970 visitors during the winter months (11% of total)
  - And a high of 21,164 visitors during the summer months (39% of total)

Farm Store Example: Grand Canyon National Park

- The Page, AZ business is a farm store/shop with cafe
  - Assume venture needs to earn an average of $10,000 in sales monthly to be viable
  - Expects average purchase of $25/person
- Calculate the percentage of total visitors to GCNP the venture needs to attract

$$\frac{\text{Monthly sales needed} / \text{Expected sales per visitor}}{\text{Estimated monthly visitors}} = \text{Percentage of total visitors needed}$$

$$\frac{\$10{,}000 / \$25}{13{,}567} = 2.9\%$$

Farm Store Example: Grand Canyon National Park

- The farm store venture would need to attract 2.9%, on average, of the monthly GCNP visitors
  - 6.7% of winter visits
  - 1.9% of summer visits
- This is a fairly high percentage of total visitors
- For the business plan to work, the venture may try
  - Starting the venture on a smaller scale
  - Attracting more of the heavy summer traffic

Estimate Cost of Production

- Create enterprise budget, by service/product or product groups
- Estimate operating costs
  - Costs that vary with quantity produced
    - Packaging, seed, labor, marketing, etc.
- Estimate fixed costs
  - Costs incurred regardless of production
    - Building/land payments, equipment, etc.
- Calculate break-even cost per unit
  - Provides lower limit for pricing

Enterprise Budget

Strawberry production – 1 high tunnel

	Units	Quantity	Price	Total
Revenues				
Early Out-of Season Strawberries	1 lb clamshells	373	$6.00	$2,238.70
In-Season Strawberries	1 lb clamshells	472	$4.50	$2,122.61
Total Revenues				**$4,361.31**
Operating Expenses				
Supplies				
Preplant and preparation costs				
Soil test	Each	1	$14.00	$14.00
Fuel	Gallons	0.38	$3.50	$1.31
Preplant fertilizers and soil amendments	Pounds	2.25	$15.00	$33.75
Plastic mulch	Foot	281	$0.05	$14.06
Drip tape	Foot	576	$0.05	$28.80
Strawberry establishment and growth				
Plug plants	Each	743	$0.26	$193.05
20-20-20 water soluable fertilizer mix	Pounds	11.34	$1.23	$13.95
10-30-20 water soluable fertilizer mix	Pounds	2.84	$1.49	$4.22
Captan	Pounds	0.43	$9.82	$4.20
Thionex 50 W	Pounds	0.03	$7.51	$0.20
Strawberry harvest				
1 lb clamshells	Each	1033	$0.25	$258.19
Labor				
Preplant and preperation costs				
Soil test	Hours	0.5	$10.00	$5.00
Apply preplant fertilizers	Hours	0.75	$10.00	$7.50
Tillage	Hours	7.5	$10.00	$75.00
Form raised beds	Hours	13	$10.00	$130.00
Install drip tape	Hours	0.75	$10.00	$7.50
Cover with plastic mulch	Hours	1	$10.00	$10.00
Strawberry establishment and growth				
Planting labor	Hours	6	$10.00	$60.00
Fertigation	Hours	2	$10.00	$20.00
Pesticide applications	Hours	4.5	$10.00	$45.00
Hand weeding	Hours	4	$10.00	$40.00
Plastic and shade cloth install/removal	Hours	12	$10.00	$120.00
Monitoring and ventilation	Hours	30	$10.00	$300.00
Strawberry harvest				
Hand harvest	Hours	68	$10.00	$680.00
Post-harvest				
House clean out	Hours	4.5	$10.00	$45.00
Total Operating Expenses				**$2,110.73**
Fixed Expenses (Depreciation)				
High Tunnel Annual				$248.17
Irrigation System Annual				$58.82
Total Fixed Expenses				**$306.98**
Total Expenses				**$2,417.71**
Net Income				**$1,944.27**

Annual Depreciation

	Units	Useful Life (yrs)	Quantity	Price	Total
High Tunnel					
High Tunnel	Each	6	1	$497.00	$497.00
Initial Construction Labor	Hours	6	25	$10.00	$250.00
6 mil Greenhouse Film	24'x100' sheet	3	2	$221.00	$442.00
Shade Cloth	20' x 100' piece	6	1	$300.00	$300.00
High Tunnel Total					$1,489.00
Annual Depreciation Cost of High Tunnel					**$248.17**
Irrigation system					
3/4" Poly Pipe	Foot	6	14	$0.42	$5.88
1" Valve	Each	6	1	$5.15	$5.15
Misc. Fittings	Each	6	10	$1.00	$10.00
Drip Hose Adapter	Each	6	6	$0.56	$3.36
Injector*	Each	6	1	$265.00	$265.00
Filter*	Each	6	1	$12.50	$12.50
Pressure Regulator*	Each	6	1	$11.00	$11.00
Installation Labor*	Hours	6	4	$10.00	$40.00
Irrigation System Total					$352.89
Annual Depreciation Cost of Irrigation System					**$58.82**

*May be used for multiple high tunnels

Break-Even Analysis

- Break-even analysis answers the questions
  - How much needs to be sold to break even?”
    - If this quantity fits within potential demand, it may be feasible
    - Calculate break-even quantity/volume across a range of prices
  - Or
  - What would the price need to be to break even?
    - If the price that would need to be charged is unrealistic, then the idea is not feasible
    - Calculate break-even prices across a range of possible volumes

Break-Even Example

- Specialty Cheese Example
- Initial quantity of 400 lbs at a price of $12/lb, or $4,800 in revenue
- Profit is $1,635
- Break-even price is total expenses/number of units (400lbs) or $7.91/lb
- Break-even quantity is total expenses/price ($12/lb) or 263 lbs

Cost/Income	Total	Per unit (pound)
Revenue	**$ 4,800**	**$ 12**
Expenses		
Inputs	$ 1,400	$ 3.5
Labor	$ 1,200	$ 3
Overhead	$ 565	$ 1.4
Total Expenses	**$ 3,165**	**$ 7.9**
Net Income before taxes	**$ 1,635**	**$ 4.08**
Income taxes	$ 605	$
Net Income	**$ 1,030**	**$ 2.57**

Estimating Product Price

- Major pricing approaches
  - Cost-based
  - Demand-oriented
  - Competition-oriented

  - Not normally used independently

Cost-Based Pricing

- Cost-plus pricing
  - Price equals total costs divided by number of units
  - Shortcomings
    - Not tied to consumer demand
    - No incentive to reduce costs
    - Adjustments for rising costs poor
- Mark-up pricing
  - Add a percentage to the cost of product (mark-up)
  - Very popular for retailers and wholesales
    - Easy, too many products to estimate demand
  - Shortcomings
    - Not tied to demand
    - Profit biased by pricing

Retail Distribution Example

- Plan to sell product retail (local farm shop)
- Set pricing at retail level and then evaluate demand
  - Ask wholesales and retailers what margin they require
- Example
  - $5.00 cost of production
    - Multiply by 1.25 for wholesale price (Average 20-30%)
  - $6.25 wholesale
    - Multiply by 1.40 for retail price (Average 30-50%)
  - $8.75 retail
- Will consumers pay $8.75?
- Need to use this price at all outlets

Demand-Oriented Pricing

- Price at customer value (willingness to pay)
- Price skimming
  - Charge high price at first to pick up consumers willing to pay more
  - Gradually reduce price to pick up consumers who are more price sensitive
- Penetration pricing
  - Initial low price to capture market share
  - Discourages competition
  - Price is increased later when consumers are hooked
  - Common in new food products

Determinants of Consumer Price Sensitivity

- Perceived substitute effect
  - How many substitutes exist?
  - If many, then consumers more price sensitive
- Unique value effect
  - Increase market share through differentiation
  - Consumers less price sensitive if “unique” product/service
- Switching cost effect
  - Cost of changing from one product to another
  - People are reluctant to change and seek out new information
  - Consumers less price sensitive if large switching costs

Determinants of Price Sensitivity

- Difficult comparison effect
  - Hard to compare products/services, then consumers less price sensitive
- Price-quality effect
  - Often associate a higher price with higher quality
- Expenditure effect
  - Consumers more sensitive to price changes on large, expensive products than small, inexpensive ones
    - Price changes on meat compared to salt

Determinants of Price Sensitivity

- Fairness effect
  - Impacted by what they consider fair - (sense of value-added)
- Inventory effect
  - Seasonality affects price sensitivity
    - Higher demand for steak in summer due to outside grilling
- End-benefit effect
  - May be willing to pay more for products that protect the environment, preserve open space, support family farms, etc.

Competition-Oriented Pricing

- Simple form of pricing
- Ideal when similar products exist
- Penetration pricing
  - Lower than competition pricing
  - Stimulate demand
- Parity pricing
  - Equals competition pricing
- Premium pricing
  - Higher than competition pricing
  - Signal quality

Competitive Analysis

- How many competitors operate in the market?
- Are competitors large or small? Near or far?
- What types and numbers of products do they sell?
- What pricing methods do they use?

Consider External Factors

- Distribution
  - Wholesale and retail margins
  - Transportation and packaging costs
- Environmental factors
  - Taxes, weather events, fad diets, energy policy
- Legal/regulatory factors
  - Labeling, certification, permits, safety

Pricing Resources

- Fresh and processed fruits and vegetables
  - http://www.ers.usda.gov/data-products/fruit-and-vegetable-prices.aspx
- Meats and poultry
  - http://www.ers.usda.gov/data-products/meat-price-spreads.aspx
- Organic foods
  - http://www.ers.usda.gov/data-products/organic-prices.aspx
- Drinks and meals away from home
  - http://www.ers.usda.gov/data-products/quarterly-food-away-from-home-prices.aspx

Pricing Example - Pomegranate Juice

- Produce and sell juice at specialty/health stores and tourism outlets
- Cost of production is $.80 per 8 oz. juice
  - $.80 cost of production (multiply by 1.20)
  - $.96 cost with profit (multiply by 1.25)
  - $1.20 wholesale price (multiply by 1.40)
  - $1.68 minimum retail price required
- $1.47 per 8 oz. retail price (ERS, 2013)
  - Pricing data is US average, specialty retail price may be much higher
  - Target market may be willing to pay more (health benefits, families with children, seniors, etc.)
  - What packaging, labeling, etc. may differentiate the product?

Pricing Example - Farm Stand

- Strawberry farm stand operation
  - 10,000 pounds per acre
  - $40,000 in revenue per acre
    - $4.00 per pound retail price (locally grown)
  - $32 in revenue per person
    - Average consumption is 8 pounds/year (ERS, 2014)
- Need to know the cost of production
  - High tunnel cost of production is $2.86/lb plus stand costs of $.75/lb or total $3.61/lb

Pricing Example - Farm Stand

- Visitors may purchase much more than 8 pounds (processing, events, etc.)
- Visitors may be willing to pay more or less than retail depending on…
  - $2.36 per pound retail price (ERS, US Average 2013)
- Experience
  - Family outings, may pay much more per pound for the farm "experience"
- Amount purchased
  - Bulk purchases for canning, freezing, etc., may pay less per pound
- Specialty item
  - For local, organic, and other specialty labels or designations consumer may pay more
  - $3.48 organic wholesale price per pound or $4.88 retail (ERS, San Fran 2013)
  - $4.50 in-season local direct market outlet price per pound (Maughen et al., 2014)
- Off season
  - Availability off season may increase pricing 30-60%
  - $6.00 out-of-season local direct market outlet price per pound (Maughen et al., 2014)

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Thank you!