Pros and Cons of Local Food Purchasing

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College of Human Sciences
Objectives:

At the end of this session, the participant will be able to:

- Identify benefits and challenges of purchasing from local sources for retail foodservices
- Implement food safety assurances with local vendors
- Apply best practice when purchasing local foods
Topics

• Background
• Research
• Benefits
• Challenges
• Applications
Farm to Fork Food Supply Chain: Number of links, risks and impacts vary by products
Local food sourcing eliminates links
Local Foods: *In the News*

- Food Politics
- Buy Fresh Buy Local Campaigns
- Farm to School programs/School Gardens
- Know Your Farmer, Know Your Food
- Let’s Move Initiative– White House Garden
- Farmers’ Markets Increasing
- Corporate Sustainability Initiatives
- Top trend by chefs
Drivers of Local Trend

• Environmental concerns
• Economic Development – rural communities
• Entrepreneurship small-medium farms
• Alternative to corporate farming/control supply
• Food Safety
• Food Security/Hunger issues
• Food Defense – *know where food comes from*
• Educational opportunities and experiential learning
• Perceptions local is healthier or more nutritious
• Answer to obesity problems
• Animal welfare issues
• Social justice framework
• Sustainability initiatives
Sustainability definitions:

• “meets needs of present without compromising ability of future generations to meet their own needs.” United Nations

• “…addresses the ecological, economic and social aspects of agriculture”.

DIAGRAM: Venn diagram with circles labeled Environment, Economic, and Social, intersecting at the center labeled Sustainable, Viable, Bearable, and Equitable.
Comprehensive Model

Addresses production, processing and handling impacts on nutritional viability of foods
Then and now.....
The U.S. food system over 100 years ago
• Rural living
• Limited long term cold storage
• Limited transportation
• Self-sufficient/known food supply
• Any safety concerns limited

Will it work today?
• Increasing populations
• Population density
• Lack of available land
• Lack interest/skills
We’ve Been Disconnected!
Consumers knowledge about food

Role of Food Channel: Chefs’ influence

Role of Politics:
- Voters tell farmers how to farm
- Battles re: meat, organics, pasteurization
- Ex: Prop 2 CA dictated free-range eggs; national
Contentious Issues

1. CAFOs versus Free Range (poultry and pork)
   - Animal welfare
   - Environmental impact
   - Human health

2. Grass Fed versus Grain Fed
   - Nutritional benefits
   - Environmental impact

3. Local Versus National
   - Carbon footprints
   - Food safety
What we hear....
Is it true?

• Local foods less carbon footprint.
• Local and/or organic foods are more nutritious.
• Cage free eggs improve:
  – environment
  – animal welfare
  – product safety
• Local and/or organic foods will reverse obesity trends
Sez who?

**Using credible information**

- What is the source of the information?
- Example: Are the U.S. Humane Society or P.E.T.A. reliable and non-biased sources of information regarding animal welfare?
- Trust is an issue among consumers
- As decision maker – must have accurate information (not just your preference)
- Goal is to have peer-reviewed science
- Generally .gov or .edu good sources
- Problem is this is limited on many of these subjects
Some goals of advocacy groups consistent with public health

1. Reduce diet-related disease by promoting safe & healthy foods.
2. Support sustainable farms
3. Expand access to food and alleviate hunger
4. Protect environment and animals
5. Promote health
6. Support fair conditions food and farm workers

Differences are in how to achieve
Role of Foodservices

• Most have goal to be responsible and sustainable
• Procurement has far reaching impacts
• Organization policies: Costco, Bon Appetit, McDonalds, etc.
• Decisions not based on opinions
• Coming soon: Guide Sustainable Procurement
Research Review

• Foodservice buyers’ perspectives buying from local sources
  – benefits
  – challenges

• Economic impacts

• Environmental impact
Foodservice Buyers DO see Benefits

• helps the regional economy
• purchase smaller case packs
• promote local vendors
• unique varieties of products
• good PR
• fresher food
• safer food

Perceived Disadvantages* (not in order)

• Year round availability of product
• Working with multiple vendors
• Adequate and reliable supply
• Consistent package size – product size
• Local and state regulations
• Order methods
• Safety issues/liability
• Extra labor
• Costs

*From same studies
Economic Impacts

- Sharma et al* looked time spent transactions food flow longer for local products than national
- Tracked 60 items
- Self reported time inputs and observations
- Findings:
  - Purchasing - *128 hours to source local versus 92 hours national products*
  - Receiving – *increased time communications local vendors*
  - Preparation – *variable findings depending skill and commitment to using local*

Economic Impacts

• Ortiz’s Master’s project in Tearoom
• Assessed behaviors not intentions
• Promoted Local Ingredients fixed menu location
  • Over 40% of 129 patrons on one of 6 days paid premium of .25$ to $1.00 for promoted local ground beef.
  • Over half (59%) of 79 patrons paid $.75 for local apples
  • Greater food cost

• Findings in Extension publication P 1853f – Restaurants’ Return on Purchasing Locally Sourced Foods
Promotion and pricing considerations

• Local products higher in cost due to economies of scale, lack of infrastructure, delivery fees, and foodservice labor (indirect cost).
• Concern of foodservices on fixed budgets
• Can compensate by premium pricing of promoted local items
Research take aways...

• Opportunity for connections exist
• Champion needed in foodservice
• Clear communications necessary
• Important to promote when using local foods
How To's

Want to know more?
Contact these groups.

- Buy Fresh Buy Local:
  Iowa program—
  www.practicalfarmers.org/buyfresh.asp
  national program—
  www.foodroutes.org

- City or county health inspector
- Food Alliance—www.foodalliance.org/
- Iowa Department of Agriculture and
  Land Stewardship—
  www.agd.diversification.htm
- Iowa Department of Inspection and
  Appeals—www.dia.iowa.gov/food
  515/281-6538
- ISU Extension Distribution Center—
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- Leopold Center for Sustainable
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- New England Extension Food Safety
  Consortium—
  www.hort.uconn.edu/ipm/foodsafety/
  index.htm
- United States Department of Agriculture—
  www.ams.usda.gov/fv/lb/loghospphp.htm
- University of California-Davis
  Postharvest Technology Research and
  Information Center—
  http://postharvest.ucdavis.edu

What retail foodservices should know when purchasing local produce directly from farmers

Prepared by Catherine Strobahn, Ph.D., R.D., C.F.S.P., HRIM extension specialist; Sam Beattie, Ph.D., food safety extension specialist; Neric Smith, county extension education director; and Diane Nelson, extension communication specialist. Design by Jane Lehanen, extension graphic designer.

... and justice for all
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Application: A True Story
Farm to School Project
Think about your operation...

- Characteristics of operation  
  *i.e. clientele, ownership, menu, scope of production, and budget*
- Location of operation and proximity to sources
- Organizational Procurement Guidelines
- Regulations for specific products
- Vetting of sources
  - “Approved suppliers”?  
  - Are vendors reliable?  
  - Is product safe?  
- Package and delivery considerations
- Promotion capability
Key benefits

• Engagement or marketing impact
• Community support
• Known provenance or source
  – Production practices
  – Food with a face
  – Safety assurances
  – Onsite confirmation
Key Challenges

• Awareness regulatory requirements
  • Depends on food
  • By producers and foodservices (sellers and buyers)
• Common terms
• Food safety assurances - at risk clientele
• Cost differentials
• Time to invest
**Foodservice Procurement Regulations**

- Food purchased from an approved supplier
  - *Sellers’ implied warranty that food is safe.*
- **Packaging** must protect integrity of food and be approved food contact material.
- Most fresh produce is NOT considered a Potentially Hazardous Food Item
- No license required by vendor to sell whole, unprocessed or minimally trimmed fresh produce (not in edible portion)
- Organizational rules may be in place

*Source: Food Code 2009*
Want to know more?
Contact these groups.
- Buy Fresh Buy Local:
  Iowa program—
  www.practicalfarmers.org/buyfresh.asp
  national program—
  www.foodroutes.org
- City or county health inspector
- Food Alliance—www.foodalliance.org/
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Judy Harrison, Chief, Food and Consumer Safety Bureau
Iowa Department of Inspections and
Appeals.

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of Science and Technology, Ames, Iowa.
General Guidance for FSE

- Term of Approved Suppliers in *Food Code 2009*
- Restrictions for some products:
  - Shellfish
  - licensed operator at state level - i.e. fresh shell eggs
  - Processing – i.e. pasteurization of milk
- No regulatory oversight? Buyer due diligence is needed
- Attention to farm production practices and flow from farm to foodservice to ensure product integrity, quality, and safety
Fresh Produce Safety Concerns

• Agriculture product – Mother Nature inputs
• Fresh produce NOT typically heat treated – no kill step
• Study 2013* found 46% reported outbreaks from produce/nuts
• Lower risk due to acidity and lack of protein, BUT pathogens (i.e. Norovirus, E. Coli 0157:H7, Hepatitis A) can contaminate the product.
• Foodservice Buyer may ask about:
  – GAPs
  – Water supply and testing program
  – Packing procedures and materials,
  – Health and hygiene of your employees
  – Transportation practices.

*Iowa State University
Extension and Outreach
Healthy People. Environments. Economies.
Fresh Produce Growers and Packers ARE Food Handlers !!!

Healthy People. Environments. Economics.
Buyers’ Food Safety Assurances – one of more of these

- License by government
- Demonstration of knowledge – i.e. *certificate of training*
- Documented practices and procedures – i.e. *checklist, review of a farm food safety plan*
- Certification by third party – i.e. *GAPs Certification*
- Farm Tours – i.e. DIY
# Checklist for Buyers

## Checklist for Retail Purchasing of Local Produce

<table>
<thead>
<tr>
<th>Production Practices</th>
<th>Yes</th>
<th>No</th>
<th>N/A</th>
</tr>
</thead>
<tbody>
<tr>
<td>Are wells protected from contamination?</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>If irrigation is used, what is its source?</td>
<td>☐ Well</td>
<td>☐ Stream</td>
<td>☐ Foul</td>
</tr>
<tr>
<td>Are types of manure used?</td>
<td>☐ Raw manure</td>
<td>☐ Composted</td>
<td>☐ Manure</td>
</tr>
<tr>
<td>Is raw manure incorporated at least 2 weeks prior to planting and/or 120 days prior to harvest?</td>
<td></td>
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</tr>
<tr>
<td>Is the history of land use available to determine risk of product contamination (e.g., run-off from upstream flooding, chemical spills, or excessive agricultural crop application)?</td>
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<tr>
<td>Is the field exposed to runoff from animal confinement or grazing areas?</td>
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<tr>
<td>Are land that is frequently flooded used to grow food crops?</td>
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<td></td>
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<tr>
<td>Are uniform tests conducted on soil in frequently flooded land?</td>
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<tr>
<td>Are farm livestock and wild animals restricted from growing area?</td>
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<tr>
<td>Are portable toilets used in a way that prevents field contamination from waste water?</td>
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</tbody>
</table>

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<tr>
<th>Product Handling</th>
<th>Yes</th>
<th>No</th>
<th>N/A</th>
</tr>
</thead>
<tbody>
<tr>
<td>Are storage and packaging facilities located away from growing areas?</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Is there risk of contamination with manure?</td>
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<tr>
<td>Are harvesting baskets, totes, or other containers kept covered and cleaned (with possible water) and sanitized before use?</td>
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<tr>
<td>Is harvesting equipment/machinery that comes into contact with the products kept as clean as possible?</td>
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<tr>
<td>Are products and non-product containers available and clearly marked?</td>
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<tr>
<td>Is dirt, mud, or other debris removed from product before packing?</td>
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</tr>
<tr>
<td>Are food grade packaging materials clean and stored in areas protected from pests, livestock, wild animals, and other contaminants?</td>
<td></td>
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<td></td>
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</tbody>
</table>

<table>
<thead>
<tr>
<th>Transportation</th>
<th>Yes</th>
<th>No</th>
<th>N/A</th>
</tr>
</thead>
<tbody>
<tr>
<td>Are products loaded and stored to minimize physical damage and risk of contamination?</td>
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<tr>
<td>Is transport vehicle well maintained and clean?</td>
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<tr>
<td>Are there designated areas in transport vehicle for food products and non-food items?</td>
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<tr>
<td>Are products kept cool during transit?</td>
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Common Terms: *What does Local Mean?*

- No standard definition given
- One producer cooperative NE Iowa uses 60 mile radius
- Other projects range 2-hour drive; others 200 to 400 miles (or a day’s drive)
- Often considered regional
- Specific definition up to buyer
Examples of third party sources
Cost Differentials

• Making local work
• Negotiate with sellers
  – one time transaction
  – less inputs
  – Increased volume
  – Promotion
  – Lower unit cost
Bridging the Gap

• This room “gets” foodservice operational side
• Challenge is to communicate thru supply chain.
• Fewer links in food chain with Local Foods Producers/suppliers need to know their audience
• To producers, often foodservice market is one thing – view it as one size fits all
Tomato – *tomato*
Understanding perspectives
Producers Know the Market

- Foodservice many shapes and forms which influence procurement sources and methods
- ownership status – public or private
- independent or chain (national or regional)
- Franchise
- scope of menu
- extent of preparation in house
- skill level of labor pool
- service style
Producer understanding of your needs

- Product specifications – understand how product will be used (specific name/cut/variety; quality characteristics; product size; package materials, number, wt or count)
- Product delivery times and process
- Payment process/time frame
- Food safety assurances
- Approved containers for harvesting and packing
- Clean product
- Storage of product
- Avoiding time-temperature abuse
Strategies

• Foodservice tours
• See operation
• Visit with clients
• See product in play
• Scope of practice
Short guide for producers

Want to know more?
Contact these groups.

• Buy Fresh Buy Local:
  Iowa program—
  www.practicalfarmers.org/buyfresh.asp
  national program—
  www.foodroutes.org

• City or county health inspector

• Food Alliance—www.foodalliance.org/

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What producers should know about selling to local foodservice markets

Prepared by: Catherine Simholbein, Ph.D., R.D., C.S.P., HRIM
  extension specialist; Sam Beazley, Ph.D., food safety extension
  specialist; Neric Smith, county extension education director; and
  Dane Nelson, extension communication specialist. Design by
  Jane Lenahan, extension graphic designer.

Gary Guthrie Farms near Nevada, Iowa.

IOWA STATE UNIVERSITY
University Extension
Welcome to your world - Build understanding

• What works and what won’t
Start a Community Garden

tip: work with a partner

- Known source
- Production practices
- Engagement
- Reduced cost
- Promotion
Bottom line: Buying local takes time

- Wear many hats in their operations and put out multiple fires each day – i.e. no show employees, equipment malfunctions, late deliveries, internal strife
- Best market to date has been independently owned, upscale restaurants (commitment of chefs, cost and menu flexibility, etc)
- Public foodservices must ensure taxpayer dollars spent wisely
- A common theme has emerged in every study to date – Purchasing must be easy!
- Foodservice buyers don’t have time to search the market and compare and don’t realize need for food safety assurances
Other Challenges

1. Knowledge of regulations – Food Safety Modernization Act pending

2. Who to buy from
   - Supply of needed quality/quantity?
   - Awareness of production practices
   - Product Liability coverage

3. Organizational policies –

4. Time in communication with producer – product specifications and packaging, delivery, payment processes

5. Trust product delivered on time correct amounts

6. Product is safe – often at risk groups served

7. Cost adjustments needed to maintain food cost %
Is it doable? YES!

• Questions to ask
  1. Is there an onsite champion?
  2. Does local purchasing mesh with organization mission?
  3. Is there willingness to promote – by buyer and seller?
  4. What will be returns on investment – direct and indirect?
Thank you for invitation

QUESTIONS?

cstrohbe@iastate.edu
515-294-3527