Food Systems, Healthy Food & Fitness Options for Kids and Communities

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83 million in U.S. <= 19 years old
~100 Billion Pounds Food Needed
Need to Provide in An Ever More Uncertain World –

Climate change & water stress
Population 2007 - 2050

302 → 420 million

- 48 countries water stressed/scarce
- 54 countries by 2050
- Parts of U.S. are today

6.6 → 9.1 billion
Locally-integrated Food Systems Across America

A dynamic blend of local direct; local indirect; regional; national and global

With criteria for “local”
– If we can, we should
And Recognize the Importance of Diversity As a Part of This

• Diversity of Scale
• Diversity of Product
• Diversity of Production Strategy
• Diversity of Background
• Diversity of Ownership Strategies
Maximum crop acreage adjustments implied by full adoption of select recommendations from the 2005 Dietary Guidelines for Americans

<table>
<thead>
<tr>
<th>Crop</th>
<th>Average harvested area, 1999-2003</th>
<th>Adjustments in acreage</th>
<th>Acreage needed to meet Guidelines</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fruit</td>
<td>3.5</td>
<td>4.1</td>
<td>7.6</td>
</tr>
<tr>
<td>Vegetables:</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Dark green</td>
<td>0.3</td>
<td>0.5</td>
<td>0.8</td>
</tr>
<tr>
<td>Orange</td>
<td>0.2</td>
<td>0.4</td>
<td>0.6</td>
</tr>
<tr>
<td>Legumes</td>
<td>2.0</td>
<td>8.8</td>
<td>10.8</td>
</tr>
<tr>
<td>Starchy</td>
<td>2.3</td>
<td>-0.8</td>
<td>1.5</td>
</tr>
<tr>
<td>Other</td>
<td>1.7</td>
<td>--</td>
<td>1.7</td>
</tr>
<tr>
<td>Wheat (example for whole grains)</td>
<td>22.6</td>
<td>-5.6(^2)</td>
<td>17.04</td>
</tr>
<tr>
<td>Dairy(^3)</td>
<td>NA</td>
<td>NA</td>
<td>NA</td>
</tr>
<tr>
<td>Total(^4)</td>
<td>32.6</td>
<td>7.4</td>
<td>39.9</td>
</tr>
</tbody>
</table>

\(^{2}\text{Adjusted to whole grains.}\)

\(^{3}\text{Dairy acreage is not reported.}\)

\(^{4}\text{Total includes all crops.}\)

Opportunities

Fruit Diversity 1997

Data source: Agricultural Census 1997

Colunga-Garcia, Bingen, Gage. 2004
Opportunity: Jobs

WHAT IF... Michigan’s residents bridged the “Public Health Gap”?

- Shift from current consumption to public health recommendations
- Eating more of what people currently eat
- Get it from MI when available fresh with typical technology
- Need approximately 37,000 more acres of production

$211 Million increased net income; 1,800 off-farm jobs

From: Conner, D.S., Knudson, W., Peterson, H.C., Hamm, M.W.  
Many Lack Access

- Study in Michigan- 59% of residents have inadequate access to a complete diet
- Many cities have large ‘food desert’ areas
- Many rural areas are underserved with healthy food access
Range of Strategies to Improve Access

- Increasing supermarkets
- Improving status of grocery stores
- Creating greater farmer – consumer connections
  - For family through farmers markets, etc.
  - For children through school meals, after school, summer meals
Example:
Farm to School

QUESTION 15.
I would purchase food directly from a local producer (grower/farmer) if price and quality were competitive and a source was available.

- strongly agree or agree
• Includes: “Purchasing Michigan Products: A Step by Step Guide” for Food Service Directors

• Includes: “Marketing Michigan Products to Schools: A Step-By-Step Guide” for Farmers
Moving to Policy: Legislative Action

House Bills:  
H.B. 6365, H.B. 6366, H.B. 6368

What if:  
The $.10 or $.35 Solution

Photo: www.farmersmarkets.msu.edu
Household Expenditure for Fruits and Vegetables

Example: Direct Markets & Linkage of Effort

- Network of Corner Markets, Farmers Markets & Youth Farmstands
- New Farmers & New Markets
- EBT Supplemented for Purchase of Local Fruits and Vegetables
- All EBT Accessible

EBT Accessible

New Farmers & New Markets

Network of Corner Markets, Farmers Markets & Youth Farmstands

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New Farmers & New Markets

Network of Corner Markets, Farmers Markets & Youth Farmstands

EBT Supplemented for Purchase of Local Fruits and Vegetables

All EBT Accessible
What if… we had 5,000 30'x96' unhedged houses producing vegetables year-round in Michigan?

Could gross $25–100 million per year (depending on a number of variables) – Could produce 12–25 million pounds of vegetables per year – A percentage of them could be at schools around the state as a tool for science, math, geography and food...
Example: Urban Agriculture

Colasanti and Hamm (2009) In Preparation
A Simple Case Connecting Diet and Activity (Urban)

“Open Space” Considered in highest use category

Land Open

Lack of These – Chronic Disease Risk

Unlimited Potential

Children’s Garden

A Safe Space Close to Home For Exploration With Safe Routes To Get There

Active and Healthy

Being Outside Leads to Being More Active; Fruits and Vegetables in Schools Relates to Total Intake
A Simple Case Connecting Diet and Activity (Metro)

“Open Space” Considered in highest use category

Clustered Development

Insure a healthy, sustainable diet for all residents now and in the future

Regional Food Goals

Able to be more active where live

Fitness

Food

Food for the region through rural-urban partnerships

the c.s. mott group for Sustainable-Food Systems at MSU
Michigan Good Food Charter

• Summit - February 2010
• 5 month planning/charter development process
• www.michiganfood.org
• 5 focus areas:
  Healthy Food Access for Families & Communities
  Youth Engagement in Community Food
  Farmer Viability & Development
  Institutional Food Purchasing
  Food System Infrastructure

Photo: www.farmersmarkets.msu.edu
The End