UNITED IN FIGHTING HUNGER

OCTOBER 14, 2014 • DES MOINES, IA

WWW.IOWAHUNGERSUMMIT.ORG
Hunger in Iowa: An Evolving Challenge
Objectives

• Who are the hungry in Iowa
• How that has changed and evolved since the recession of 2008
• Why are they food unsecured?
• What is being done to confront hunger in Iowa
• Hidden Hunger- nutrition and our brain

• Your experience/Q
Hunger in Iowa: An Evolving Challenge

- **Dr. Kimberly Greder**, Associate Professor & Extension Specialist, Iowa State University

- **Mr. Cory Berkenes**, Executive Director, Iowa Food Bank Association

- **Moderator**: Dr. Yogesh Shah, MD, MPH, FAAFP
  Associate Dean, Department of Global Health, Des Moines University
Dr. Kimberly Greder  
Associate Professor & Extension Specialist, Iowa State University

- Kimberly Greder is an associate professor and extension specialist in the Department of Human Development and Family Studies at Iowa State University.
- She studies the health and well-being of families who have low incomes across rural America, and designs educational materials and interventions to promote family well-being and health.
- She co-leads *Rural Families Speak about Health*, she specifically studies Latino immigrant families.
- Additionally, she co-authors county level Poverty and Food Needs Profiles for Iowa’s 99 counties.
Mr. Cory Berkenes
State Director, Iowa Food Bank Association

• As State Director of the Iowa Food Bank Association, Mr. Berkenes collaborates with the eight Feeding America Food Banks in the state that serve all 99 counties.

• Mr. Berkenes currently serves on the Leadership Team of the Food Access and Health Work Group of the Iowa Food Systems Council and co-chairs its policy committee, sits on the Advisory Council of the Iowa Food and Family Project, and has co-led the Iowa Anti-Hunger Coalition.

• Prior to joining the Iowa Food Bank Association in 2013, Mr. Berkenes served as Executive Director of the Waverly-Shell Rock Area United Way for 5-1/2 years.
Food insecurity: Trends & implications for health and well-being

Kimberly Greder, PhD
Associate Professor & ISU Extension Specialist
Food Insecurity
Nonmetropolitan, Suburban, Cities
2004 - 2009

FIGURE 1  Prevalence of food insecurity and very low food security by residence and year.
Source: Data from CPS Food Security Supplement.
Poverty and Food Insecurity
2007-2013
Unemployment and Food Insecurity
2007-2013

- US Unemployment Rate
- Iowa Unemployment Rate
- US Food Insecurity Rate
- Iowa Food Insecurity Rate
Individual SNAP Participation
2007-2013

US Average Monthly SNAP Participation Rate
Iowa Average Monthly SNAP Participation Rate
US Food Insecurity Rate
Iowa Food Insecurity Rate
Food insecurity effects mental and physical health. It influences…

- child growth and development
- parent-child interactions
- family functioning
Rural Families Speak about Health
A study of low-income families with children
Food insecurity **directly** effects individual health and well-being

- Household Food Insecurity
- Maternal depression
- Child Behavior
  - **Internal:** anxiety, depression, withdrawal
  - **External:** aggression, hyperactivity, noncompliance

* Higher rate of negative child behaviors when mother has high depressive symptoms.
Food insecurity effects **Health**

- **Compromised nutrition** (folate, Vitamin C, fiber, iron)
- **Maternal depression**
- **Compromised child development & immune functioning**
  - low birth rate
  - birth defects
  - depression
  - developmental delays
Food insecurity effects

Child behavior
– Anxiety
– Depression
– Withdrawal
– Aggression
– Hyperactivity
– Noncompliance

Implications for...
– Substance abuse
– Smoking
– Poor grades- leads to lower graduation rates
– Poor social-emotional functioning
Food insecurity effects Family functioning

Persistent stress and disrupted family dynamics places children at risk for poor mental and physical health.

Maternal depression results in less sensitive parenting style, and increased risk for poor child mental health.
Steps forward

Food assistance makes a difference

- **SNAP**: lessens food insecurity
- **WIC, NSLP**: positive effects on child development
- **Private assistance**: critical role; evaluate more rigorously
Steps forward

Recognize environmental barriers

• Access to transportation
• Life stress
• Interpersonal violence
Steps forward

Reduce poverty, reduce food insecurity

- Jobs that pay a living wage
- Help families build assets
  - Savings to help in emergency
  - Less debt
- Earned income tax credit
- SNAP and other work supports
Steps forward

Food insecurity is a systems issue... effected by policies

Interdisciplinary efforts needed
– Food systems
– Nutrition
– Health
– Economics
– Human and family development
Poverty & Food Needs Profiles

http://www.icip.iastate.edu/special-reports/poverty

• Specific to Iowa counties
• Range of indicators related to food insecurity and health outcomes
• Updated regularly as new data available
• Assist with community awareness and decision making
Hunger in Iowa: An Evolving Challenge
Iowa Food Bank Association Mission

Mission: coordinate efforts to alleviate hunger by supporting Feeding America food banks that serve Iowa

- Policy and Advocacy
- Food and Fund Procurement
- Disaster Response and Recovery
- SNAP Outreach
- Collaboration and Communication
Hunger in Iowa: Recession to Today

Impact of Recession - then and now
- More people in need
- Record levels of food distributed
- Food supply and demand not balanced
- Development of innovative programs
- Influx of volunteers, businesses stepping up
Hunger in Iowa: Recession to Today

Food Insecurity

- 2010
- 2011
- 2012
- 2013
Hunger in Iowa: An Evolving Challenge
Hunger in Iowa: Demographics

Race/Ethnicity
• 69% of clients identify themselves as white
• 17% as black or African American
• 7% as Hispanic or Latino

Age
• 31% are children under age 18
• 11% are seniors age 60 and older
Hunger in Iowa: Health

• 23% of client households have no members with health insurance of any kind
• 65% of households chose between paying for food and paying for medicine or medical care at least once in the past 12 months.
Hunger in Iowa: Education

- 77% of all clients have attained a high school degree or General Equivalency Diploma (GED) or more
- 30% of all clients have post-high school education
Hunger in Iowa: Housing

- 96% of households reside in non-temporary housing, such as a house or apartment,
- 4% of households reside in temporary housing, such as a shelter or mission, a motel or hotel, or on the street
Hunger in Iowa: Employment

- 66% of households have a household member who had worked for pay in the last 12 months
- 49% of client households - the most-employed person from the past 12 months is currently out of work
Alleviating Hunger in the Future

• Collaborate and Communicate
• Keep it Simple
• Coordinate
• Volunteer and Advocate

A total of **22,900 volunteers** provided a total of **77,500 hours each week** to programs in Iowa.
Dr. Shah MD, MPH, FAAFP
Associate Dean
Des Moines University
Hidden Hunger

• Food Insecurity- limited availability of nutritionally adequate and safe foods
  – under eating (fruits and vegetables)
  – over eating (soda)

• Hidden Hunger – deficiencies of vitamins and micronutrients like iron, zinc..
WHAT HAPPENS TO BODY AND BRAIN DUE TO HUNGER?
Effect on fetus, child and adult brain
• Ill equipped to excel in the classroom

• Capacity to land a well-paying job when they become adults

• Can effect our memory - Dementia
Combined with physical activity on a regular basis, adhering to a Mediterranean diet pattern can reduce the risk of developing Alzheimer's disease by 50% percent.

Mediterranean Diet

50% more vegetables and fruits
50% less meat
Consumption of meat, dairy product and eggs were halved

–40% reduction in saturated fat

–40% reduction in greenhouse gas –Co2
Figure 4. Estimated Greenhouse Gas Emissions From Diet Types

Mean greenhouse gas emissions (in kilograms of carbon dioxide equivalents per day) as a function of meat consumption (g/d) and diet type. The data points represent mean values across different diet types and meat consumption levels.
Figure 4. Estimated Greenhouse Gas Emissions From Diet Types

Mean greenhouse gas emissions (in kilograms of carbon dioxide equivalents per day, kg)

Diet Type:
- Meat, g/d
  - ≥100
  - 50-99
  - <50
- Fish
- Vegetarian
- Vegan

Mean greenhouse gas emissions (in kilograms of carbon dioxide equivalents per day, kg)
Higher CO2 – Reduces protein, Iron and Zinc

Hidden Hunger
CLIMATE, NUTRITION AND HEALTH

In conjunction with the esteemed
World Food Prize Symposium

Wednesday, October 15, 2014 • 9 a.m. – 3 p.m.
James Hansen, Ph.D., presenting at 4:30 p.m. in Sheslow Auditorium

Drake University, Parents Hall, Olmsted Center
2507 University Avenue, Des Moines, IA 50311
Lunch provided.

Registration Required
- Free for students, faculty and staff from Heartland Global Health Consortium member schools:
  - Central College
  - Des Moines University
  - Drake University
  - Grinnell College
  - Iowa State University
  - Mercy College of Health Sciences
  - Simpson College
  - University of Iowa
  - University of Northern Iowa
  - William Penn University
- $50 for all other attendees

KEYNOTE SPEAKERS
- Carlos Dora, M.D., Ph.D., World Health Organization
- James Hansen, Ph.D., Earth Institute, Columbia University
- Dr. Simon Estes, World-Renowned Baritone and Philanthropist

PANELISTS:
- Cheri Domina, Director, Center for Community-Based Learning, Central College; President, Heartland Global Health Consortium (moderator)
- David Coward-Hauri, Ph.D., Environmental Science and Policy, Drake University
- Frank Cownie, Mayor of Des Moines
- Mureen McCue, M.D., Ph.D., Global Health, University of Iowa
- J.D. Folk, D.O., Dean of College of Osteopathic Medicine, Des Moines University

STUDENT POSTER PRESENTATIONS

http://www.heartlandconsortium.org/
Hope for the Hungry

6th

November 8, 2014
9:00 am to 2:00 pm

“HUNGER IN THE HEARTLAND”

Plymouth Congregational
United Church of Christ,
Waveland Hall,
4126 Ingersoll Avenue,
Des Moines, IA
Iowa India Summit
Tuesday, October 14, 2014
THE CHANGING FACE OF HUNGER IN IOWA
Learn from examples of anti-hunger work on the ground.