

# Food Insecurity and Health

Health Care Homes Webinar

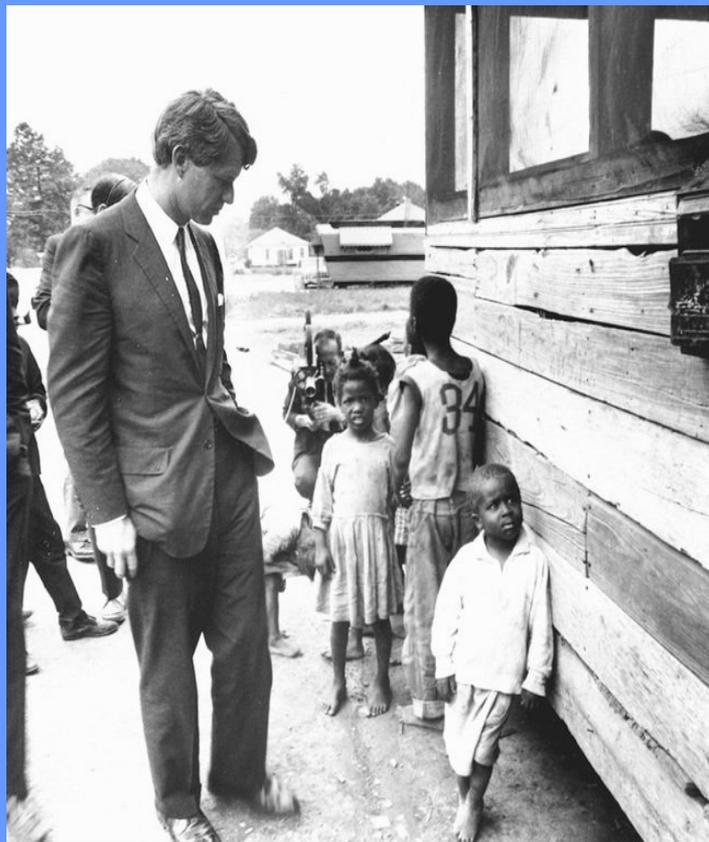
November 18, 2015

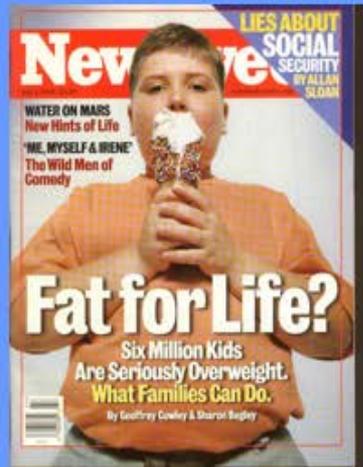
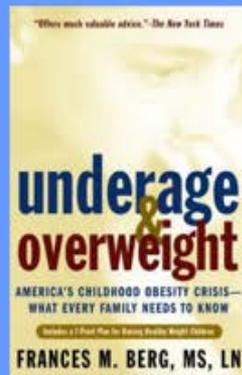
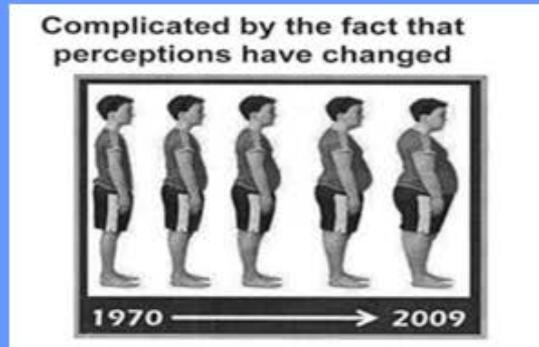
Diana Cutts, MD

HCMC Department of Pediatrics

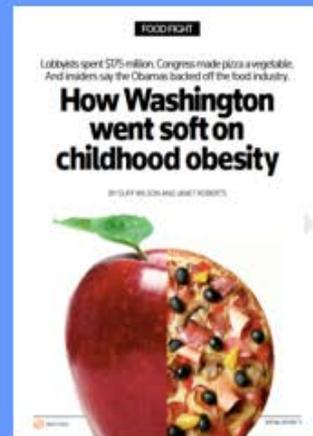
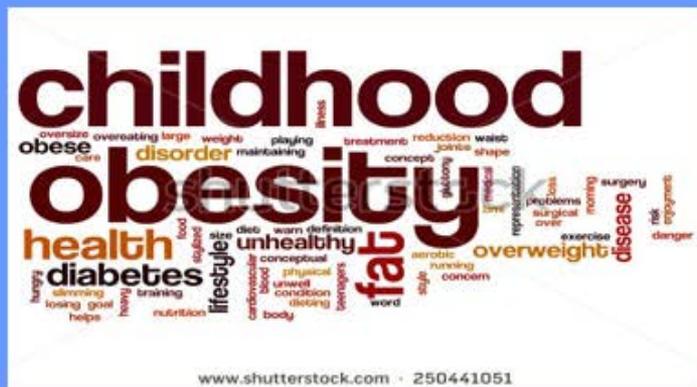
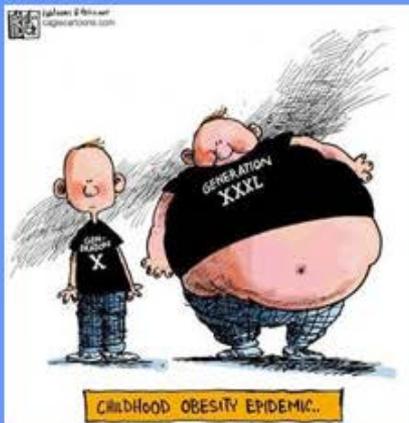


# Robert Kennedy Mississippi 1967





# How to Reconcile with Current Headlines?



# Food Insecurity

The limited or uncertain access to enough nutritious food for all household members to lead an active and healthy life.

Note: copy link and paste in browser

**<https://www.youtube.com/watch?v=F5FTUuqNZn4>**

# Household Food Security/Insecurity Questions

## **18 Questions measure:**

**ANXIETY** - household food budget/supply inadequate

**PERCEPTIONS** - food eaten was inadequate in quality/quantity

**REPORTED INSTANCES** - reduced food intake/consequences (sensation of hunger, reported weight loss), in ADULTS of household

**REPORTED INSTANCES** - reduced food intake/consequences for CHILDREN in households

**COPING ACTIONS** - augment food budget/supply (e.g. borrow money, get food from emergency pantries)

# The Hunger Vital Sign

A 2 question screening tool:

**Within the past 12 months we worried whether our food would run out before we got money to buy more.**

**Within the past 12 months the food we bought just didn't last and we didn't have money to get more.**

Positive if sometimes or often true to one or both

Validated on over 30,000 families

83% specificity, 97% sensitivity

Hager, et al. Peds 2010

# Prevalence in US

- **14%** US households food insecure in 2014
  - 48 million people, including 16 million children
  - 14% in 2013, no change
- **19%** households with children
- **20%** households with children under age 6

# CONTEMPORARY Pediatrics

Pediatrics v2.0:  
Level 4 office-visit coding

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Expert Clinical Advice for Today's Pediatrician

ContemporaryPediatrics.com



FOOD INSECURITY  
AFFECTS MORE THAN  
**16 MILLION**  
**U.S. CHILDREN**

How to screen and intervene

**Oral and  
facial trauma**

How to proceed in an emergency

**Dermcase**

Patterned bruises  
on 2 infants

ADVANSTAR

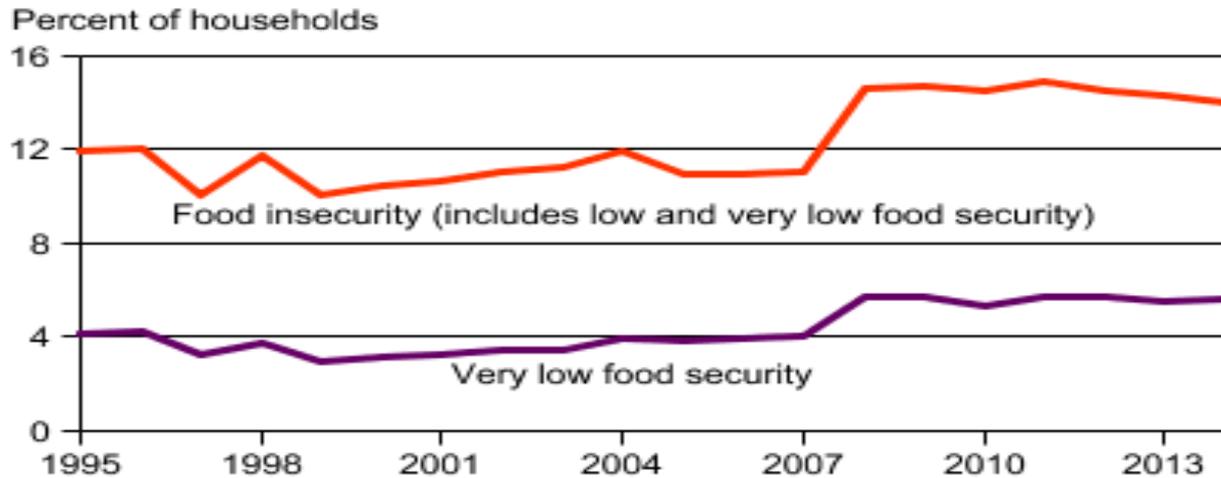
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# Disparities in Food Insecurity

- **35%** Households with children headed by a single woman
- **26%** Black, non-Hispanic households
- **22%** Hispanic households

# Time Trends in Food Insecurity

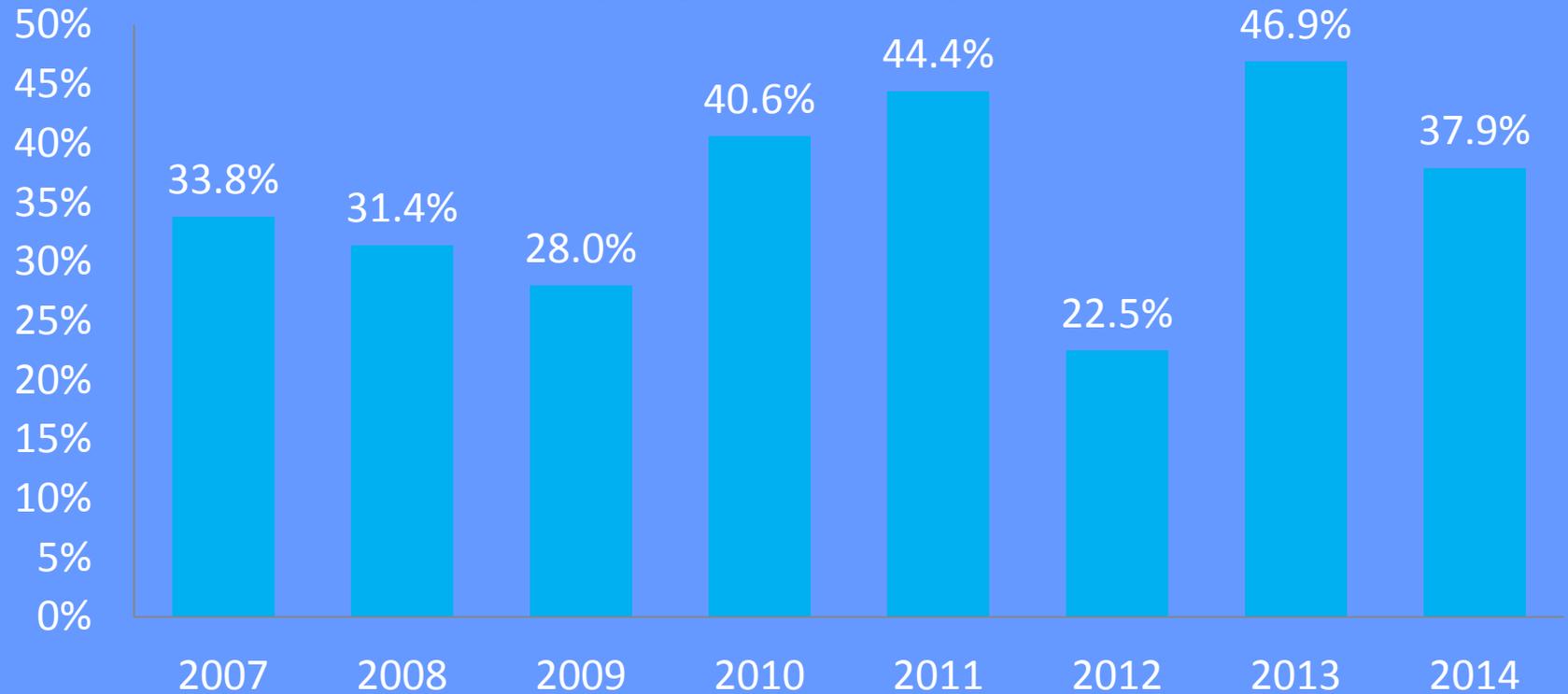
**Trends in prevalence rates of food insecurity and very low food security in U.S. households, 1995-2014**



Prevalence rates for 1996 and 1997 were adjusted for the estimated effects of differences in data collection screening protocols used in those years.

Source: Calculated by USDA, Economic Research Service using Current Population Survey Food Security Supplement data.

# Household Food Insecurity in Young Children at HCMC



# Health Effects- Children

- Low birth weight
- Inadequate diet associated with increased risk of infectious disease - otitis, respiratory illness
- Increased fatigue
- Increased headaches, stomachaches
- Increased hospitalizations, poor/fair health
- Higher prevalence of anemia
- Conflicting evidence re: obesity

# Health Effects - Behavior

- Younger children – more passive, less exploratory, shorter bouts of play, less attentive to novel and social stimuli – at greater risk for developmental delays
- School children - behavioral changes - apathy, aggression, anxiety, attention difficulties – more likely to repeat a grade, to drop-out
- School studies - negative effects of even temporary hunger on cognitive tests

# Health Effects - Adults

- More healthcare utilization
- Poor diabetes control
- Increased risk of chronic disease
- Obesity
- Depression
- Anxiety

Lange's 1936, Migrant Mother



# Economic Cost of Food Insecurity

- ✓ **\$54.6** Million for Tx of excess congenital defects
- ✓ **\$1.2** Billion for Tx of excess mental health problems in children
- ✓ **\$1.8** Billion in excess child hospitalization costs
- ✓ **\$5.9** Billion in excess special education costs in public primary and secondary schools



So, I care about this because...??????

# Strategy 1: Improve Nutrition For All Children

“I am determined to work with folks across this country to change the way a generation of kids thinks about food and nutrition.”



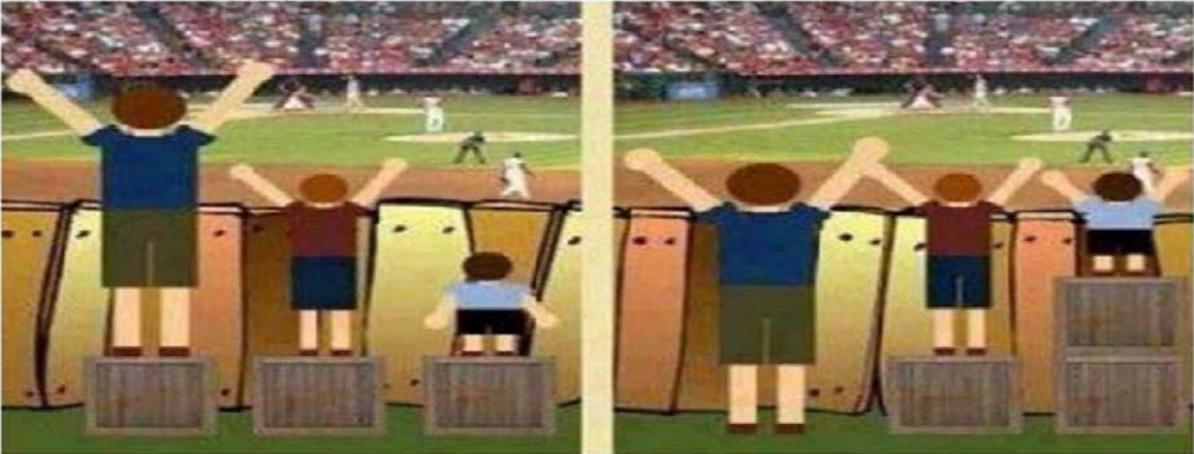
# Strategy 2: Think Equity

How do we help those that need it the most?

 ADVANCING HEALTH EQUITY

Advancing health equity is not about averages  
It's about creating opportunities to be healthy

**Equality** **Equity**

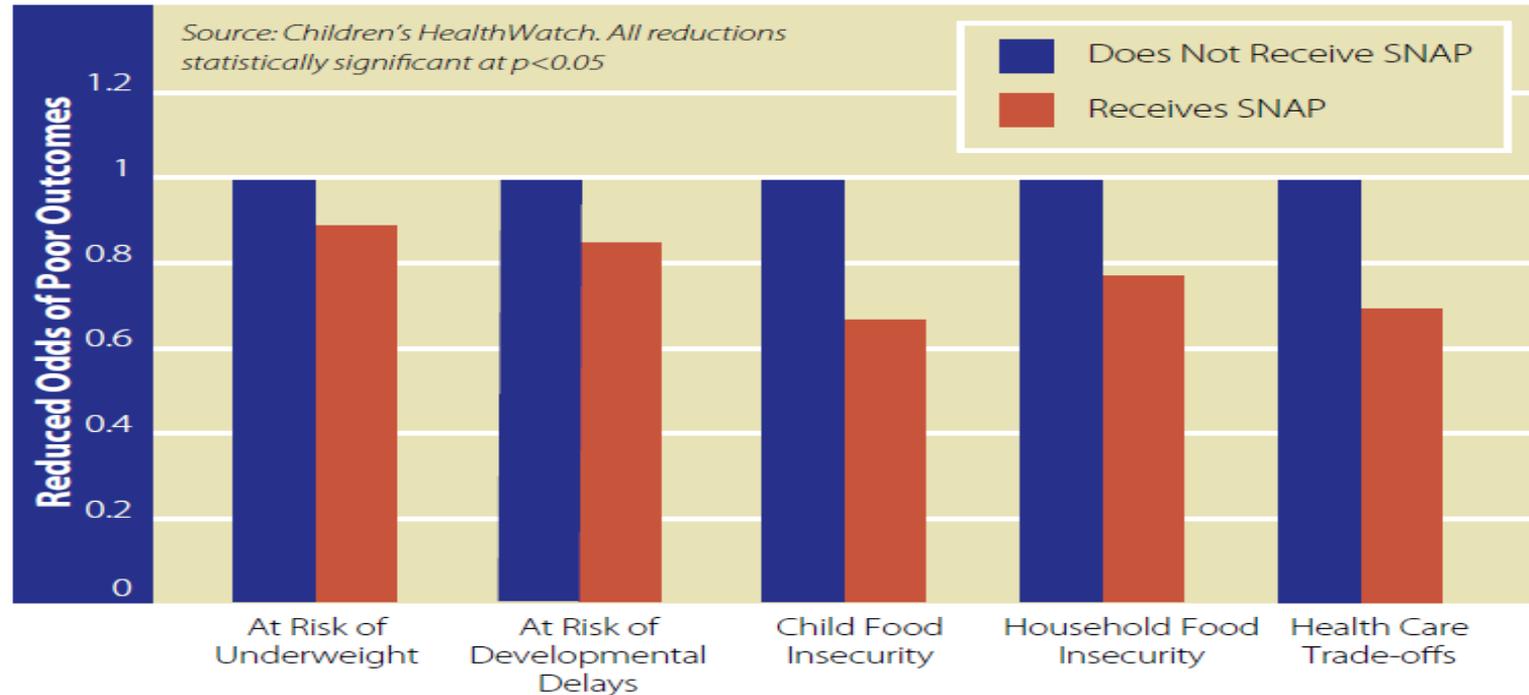


The illustration is split into two panels. The left panel, labeled 'Equality', shows three people of different heights standing on crates of equal height to watch a baseball game. The tallest person can see easily, the middle person can just see, and the shortest person cannot see at all. The right panel, labeled 'Equity', shows the tallest person standing on the ground, the middle person on a crate, and the shortest person on a taller crate. Now all three can see over the fence.

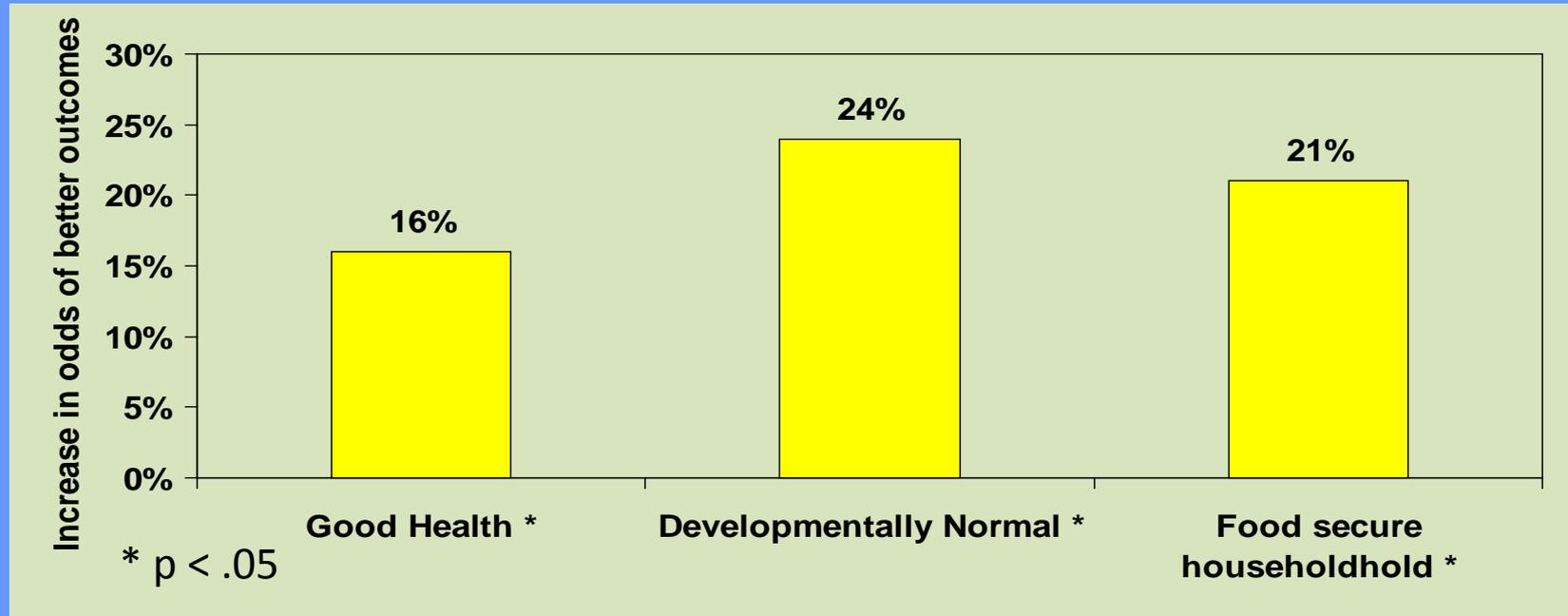
# SNAP and WIC

	SNAP	WIC
<b>Funding</b>	USDA (\$72 Billion)	USDA (\$7.2 Billion)
<b>Population</b>	44.7 million Seniors, disabled, families with children, limited access for able bodied adults without dependents	8.9 million Pregnant and postpartum women, infants, children up till age five
<b>Eligibility</b>	165% FPL	185% FPL and/or Adjunct Eligibility
<b>Program Focus</b>	Food program	Health program
<b>Immigrants</b>	Five or more years documented status	Serves eligible regardless of immigrant status
<b>Nutrition Education</b>	SNAP-Ed Projects	Nutrition assessment and education part of each visit

# Children On SNAP Healthier Than Eligible Non SNAP participants



# WIC Improves Child Health and Development



Adjusted for site, race/ethnicity, age, gender, birthweight, caregiver education, depression, & receipt of TANF.

Black et al. Archives of Pediatrics & Adolescent Medicine 2012;166(5)

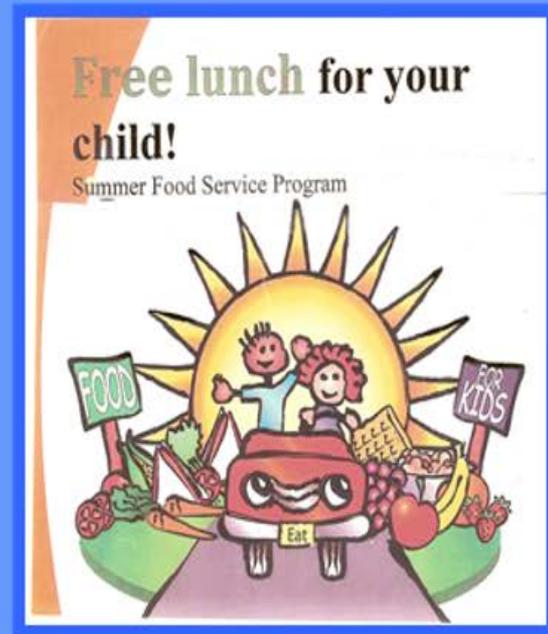
# School, Summer, and Childcare Feeding Programs



From 2012-2013, 21.5 million children



In 2012, 3.4 million children



In 2014, 2.6 million children

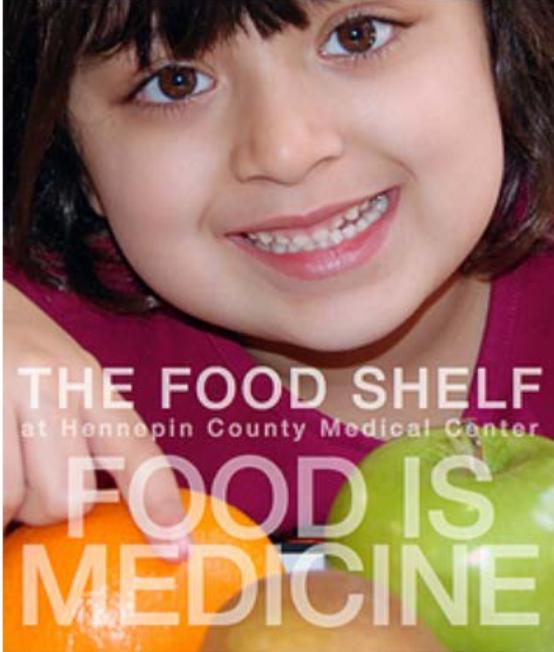
# Food Assistance: Your Community Resources

- Share Our Strength - [nokidhungry.org](http://nokidhungry.org)
- Feeding America - [feedingamerica.org](http://feedingamerica.org)
- Food Research and Action Center (FRAC) - [frac.org](http://frac.org)
- Hunger Free Communities Network  
[hungerfreecommunities.org](http://hungerfreecommunities.org)

# WHY HEALTHCARE SETTINGS?



# The Food Shelf @ HCMC



THE FOOD SHELF  
at Hennepin County Medical Center

FOOD IS  
MEDICINE

IT'S HARD  
TO BE  
HEALTHY  
WHEN  
YOU'RE  
HUNGRY

# Healthcare Sponsored Summer Feeding Programs

Proud to be a meal site for the USDA's

## Summer Food Service Program



Hennepin County  
Medical Center

**Free breakfast and lunch for hungry children during summer vacation**

**DATE:** June 2-August 28, 2015  
**LOCATION:** HCMC Cafeteria (Orange Building, Level 3)  
**TIME:** Monday-Friday, 9:30-10:30 am & 10:30 am-1:15 pm

Acceptance and participation requirements for the program and all activities are the same for all regardless of race, color, national origin, gender, age, or disability.

# EMR Facilitated Referrals

REFERRAL TO FOOD RESOURCES Accept Cancel Remove

Priority:

Questions:

Prompt	Answer	Comments
1. Patient's preferred phone #/contact info:	<input type="text"/>	<input type="text"/>
2. Patient would like food assistance and asks that a SNAP Outreach staff member call.	<input type="button" value="Yes"/> <input type="button" value="No"/>	<input type="text"/>
3. Contact's preferred language:	<input type="button" value="English"/> <input type="button" value="Spanish"/> <input type="button" value="Other (please use comments)"/>	<input type="text"/>

Single response

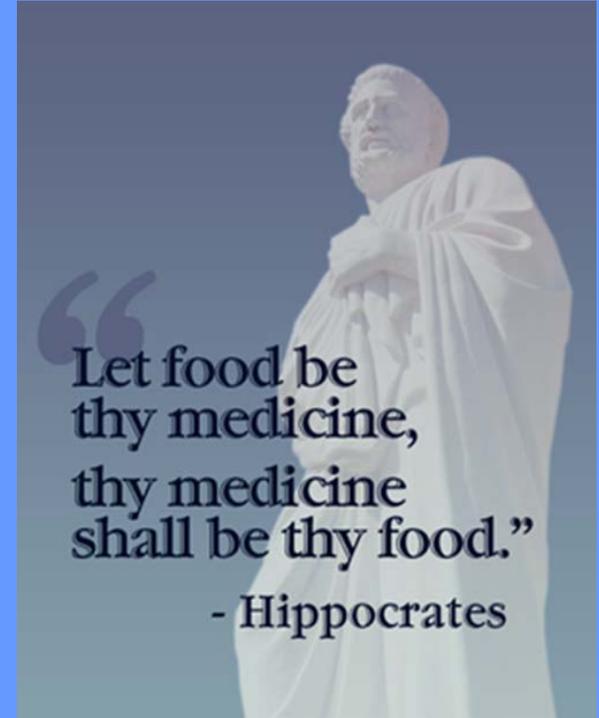
Comments (F6):

This order will automatically fax to Second Harvest Heartland @ 651-484-1064, upon signing. A member of their SNAP Outreach Staff will contact the patient using the contact information provided above.

Sched Inst:

# Other Health Care Based Interventions

- Cooking classes
- Community Gardens
- CSA Distribution Sites
- Produce Kiosk
- WIC onsite
- Week-long pre-packed meals
- Meal Delivery



# Changes You May Wish To Make In Practice

1. **ASK** questions about Food Security
2. **REFER** to governmental & community food assistance programs
3. **INTEGRATE** Food Security awareness and resources into healthcare infrastructure

# References

For more information on this subject, see the following publications:

- Hager, ER, et al. “Development and validity of a 2-item screen to identify families at risk for food insecurity.” *Pediatrics* 126.1 (2010):e26-e32.
- Cook JT and Frank DA. “ Food Security, Poverty, and Human Development in the US.” *Annals of the NY Acad of Sciences* 1136 (2008): 193-209.
- Makelarski, JA, et al. “ Feed First, Ask Questions Later: Alleviating and Understanding Caregiver Food Insecurity in an Urban Children’s Hospital.” *AJPH* 105(8) (2015):e1-e7.
- *Fighting Hunger Through Healthcare: A Seamless Solution*  
Share Our Strength No Kid Hungry
- *Hunger in the Community: Ways Hospitals Can Help*  
Project Bread

Note: copy link and paste into your browser.

<https://www.youtube.com/watch?v=vhJ6hfbn4x8>