



United States  
Department of  
Agriculture

National Institute  
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The logo for the National Institute of Food and Agriculture (NIFA), featuring the letters "NIFA" in a large, white, sans-serif font. The letters are set against a background of a stylized landscape with rolling hills and a sun or moon in the sky, rendered in shades of orange and yellow.

# From Roots to Branches: Growth of National Nutrition Education over 50 Years

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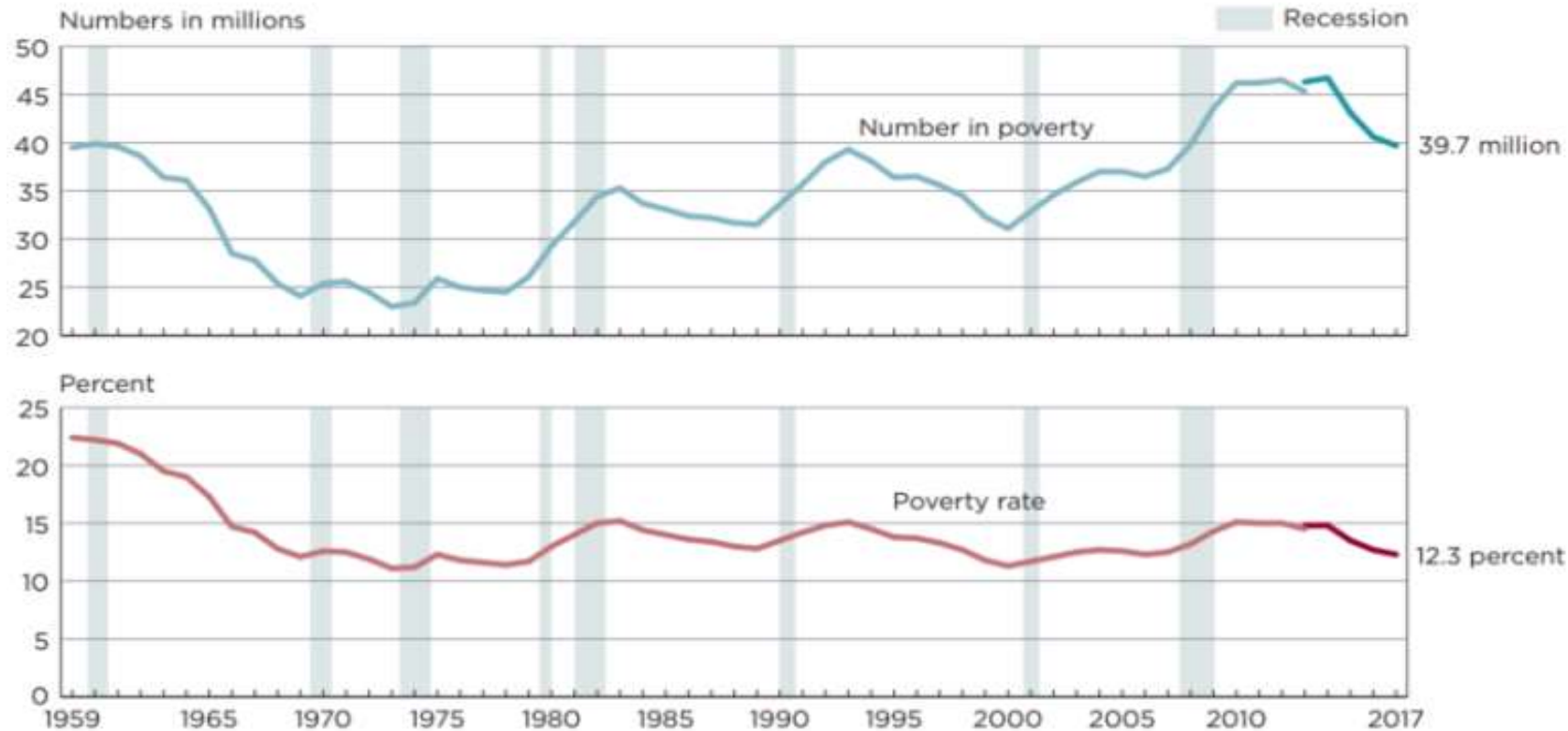
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*The Findings and Conclusions in This Presentation Have Not Been Formally Disseminated by the U. S. Department of Agriculture and Should Not Be Construed to Represent Any Agency Determination or Policy.*

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# EFNEP: At the Nexus of Poverty, Nutrition, and Health

Number in Poverty and Poverty Rate: 1959 to 2017



Note: The data for 2013 and beyond reflect the implementation of the redesigned income questions. The data points are placed at the midpoints of the respective years. For information on recessions, see Appendix A. For information on confidentiality protection, sampling error, nonsampling error, and definitions, see <[www2.census.gov/programs-surveys/cps/techdocs/cpsmar18.pdf](http://www2.census.gov/programs-surveys/cps/techdocs/cpsmar18.pdf)>.

Source: U.S. Census Bureau, Current Population Survey, 1960 to 2018 Annual Social and Economic Supplements.

# How has EFNEP Reached This 50-Year Milestone?

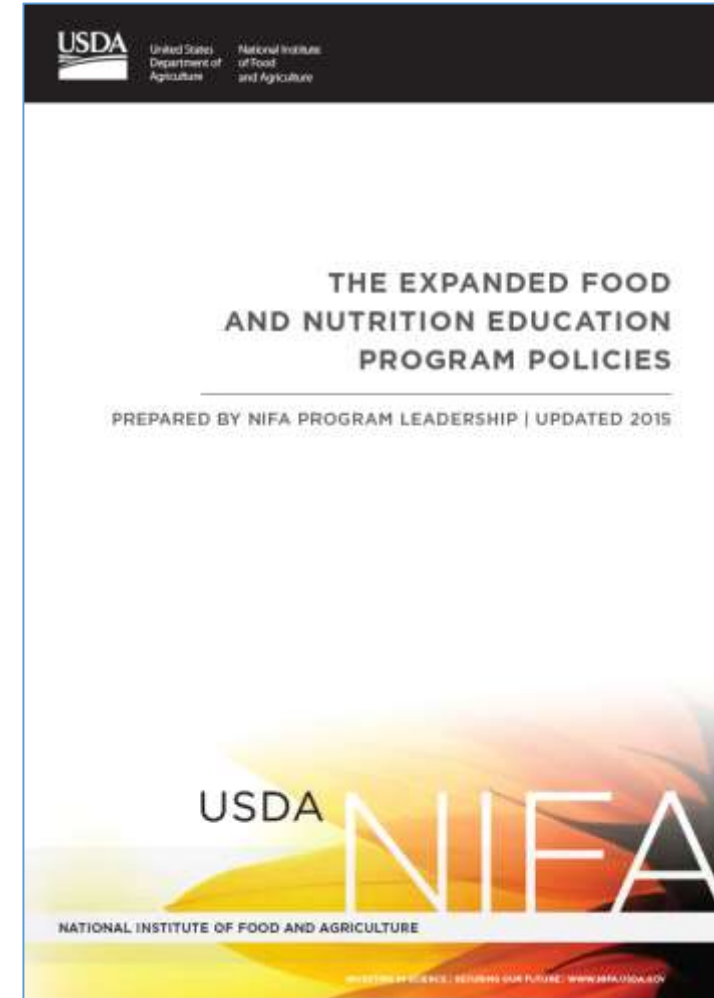
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- Sound Legislation and Policies
- Commitment to Evaluation and Evolution
- Effective Federal/University Extension/Partner Structure
- Values-Driven: People, Methods, and Science

# Sound Legislation and Policies

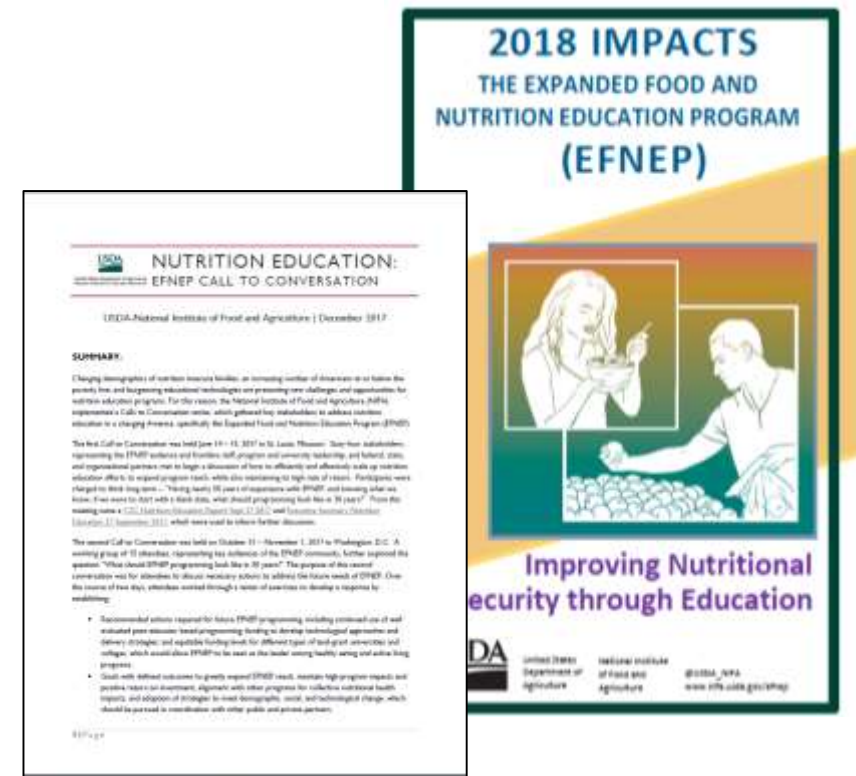
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- Paraprofessional peer educators as primary educators
- Bi-partisan support, yet near level funding (reduced constant dollars)
- Results driven and stakeholder awareness – able to share more than need



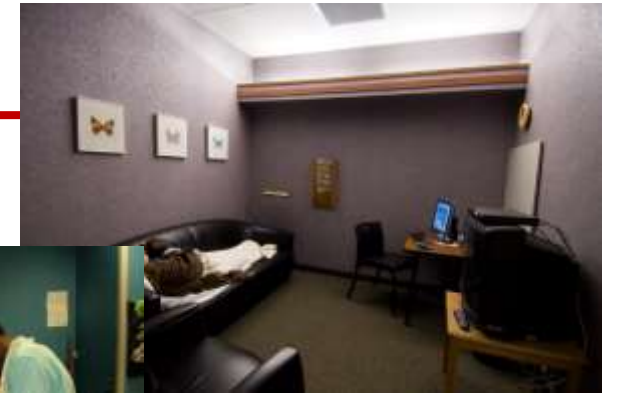
# Commitment to Evaluation and Evolution

- Attention to program integrity – reach, quality, accuracy, and effectiveness
- Results driven – use of data at every level to plan, evaluate, report, and demonstrate change; and to adapt as needed
- Nimble – constantly improve; anticipate and implement change

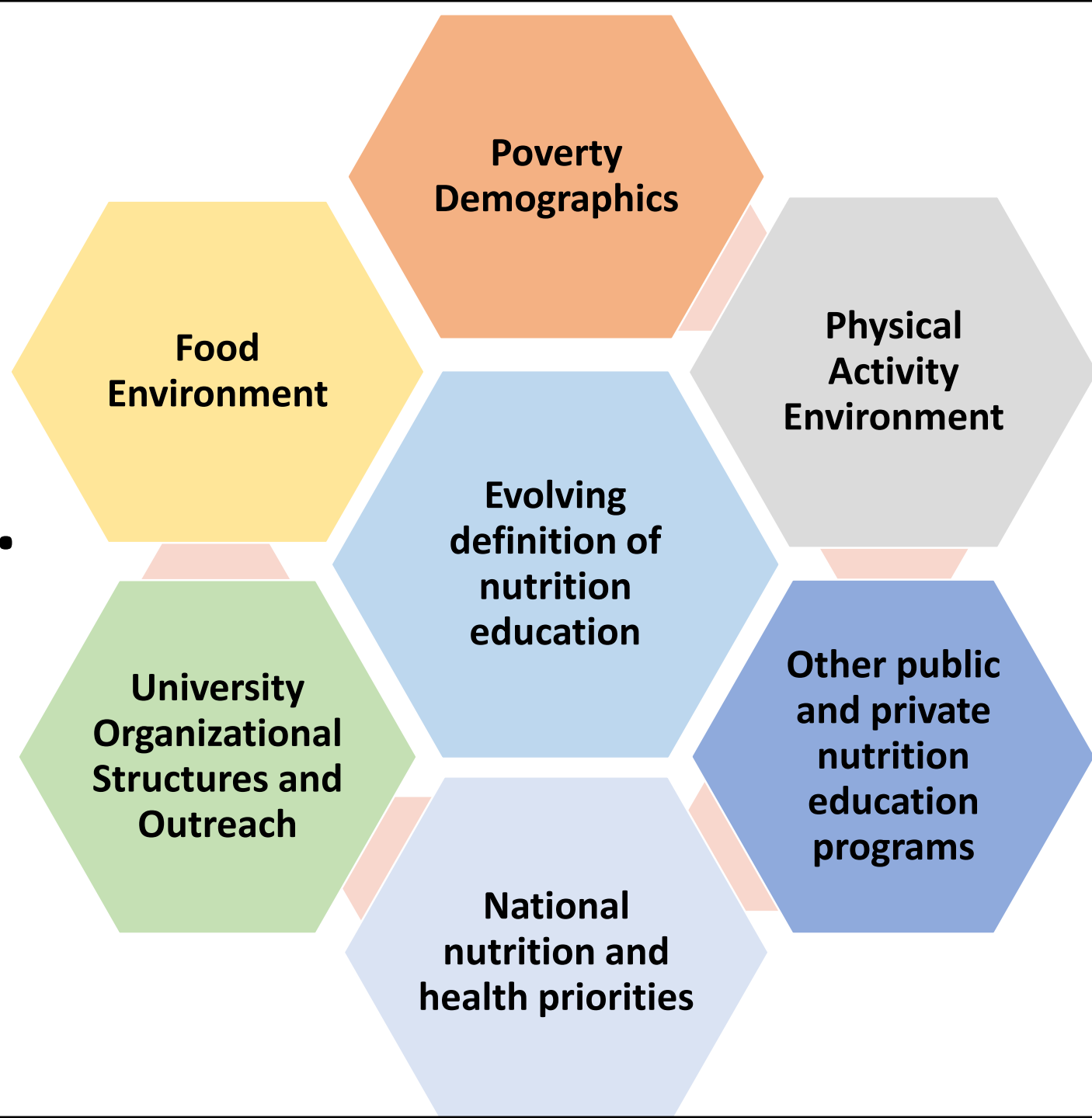


# Being Nimble – Influenced by and Responsive To Context of People’s Lives

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# Other Changes...





# Effective Federal, University Extension, and Partner Structure

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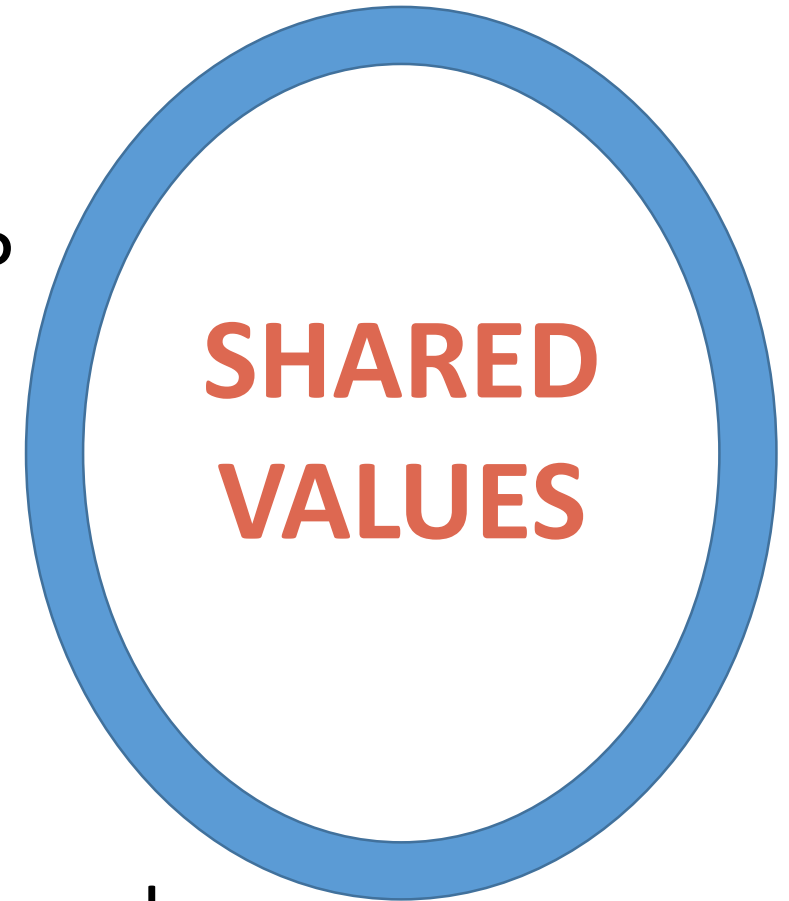
- Centralized leadership and oversight; local flexibility and accountability
- Ongoing training to support quality teaching
- Coordination, collaboration, and community engagement



# Values-Driven: People, Methods, and Science

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- Honor and listen to the “community”
- Cultural competence
- Respect for those who are part of EFNEP at every level
- Learner-centered; hand-on, interactive learning
- Dosage needed for optimal outcomes
- Practical application of the evidence – embracing program implementation research



# EFNEP – It's About The Outcomes



# CONSISTENTLY

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- ★ **More than 90% of adult participants report improved diets**
- ★ **Recently developed and audience-tested indicators continue to show specific improvements by adults and youth**

# EFNEP COLLABORATION

## *“When A Plan Comes Together”*

*In 2006, the Budget and Advocacy Committee and the Farm Bill Committee added \$400,000.00 to the 2006 Farm Bill for 1890 LGUs participation in EFNEP. How did this happen? Who was instrumental? Who are the ultimate winners?*

**What** was needed?

- Additional funding from Congress for Nutrition Education (EFNEP)
  - Funding had decreased for EFNEP nutrition education, however, the need was ever present. Therefore, more funding and partners were needed to meet this growing need.

**Why** should additional funds be added?

- There was a compelling need for more money.
  - Obesity rates were increasing along with the rates of disease and death that could be attributed to diet and health. Also, the economic costs associated with these increasing rates could not be ignored.
- EFNEP had a successful model for nutrition education with proven successes.



# EFNEP COLLABORATION

## *“When A Plan Comes Together”*

### **Who** were the Champions?

- Key champions for the effort:
  - 1862 & 1890 Administrators
  - Program Leadership at the National Institute for Food and Agriculture (NIFA)
  - The Board on Human Sciences
  - Extension Committee on Organization and Policy (ECOP)
  - The Congressional Board of Advocacy Committee
  - The Farm Bill Committee

### **How** was it done?

- 1890s were already positioned to undertake the effort – *little planning time needed*
  - Clientele
  - Curriculum
  - Trained staff
- Meetings, Meetings, Meetings – *great minds working together for the greater cause*
- Champions mobilized – *strength in numbers*



# EFNEP COLLABORATION

## *“When A Plan Comes Together”*

### **Takeaways & Successes**

- Initially \$400,000 was added to the Farm Bill, but ultimately new language was added that indicated each 1890 would received at least \$100,000 a year.
- The Champions worked synergistically for the betterment of the whole.
- The champions saw poverty as being about the people and did not merely focus on who was delivering the services.
- There was commitment from all involved.
- Just because there is struggle doesn't mean its not worth the fight.



# Legislative Events That Have Shaped EFNEP

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1968

President Johnson authorized  
\$10 million for a nutrition  
education program

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Funded the first national nutrition education program that matured into today's Expanded Food and Nutrition Education Program (EFNEP).

# 1977 Food Stamp Act

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Law that extended the Expanded Food and Nutrition Education Program to reach Food Stamp Program (FSP) participants.

# 1977

## Food and Agriculture Act

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This legislation directed EFNEP to provide employment and training for professionals and paraprofessionals for direct nutrition education of low-income families.

# 1981 Agriculture and Food Act

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Legislation that specifies that 'to the maximum extent practicable, EFNEP paraprofessional aides shall be hired from the indigenous target population'.

# 1990 National Nutrition Monitoring & Related Research Act

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Law directing USDA and DHHS to review and publish the Dietary Guidelines for Americans every five years.

# 2000 Public Law 106-580 Amendment to the Food Stamp Act of 1977

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This legislation directed State Agencies to encourage FSP participants to participate in EFNEP.

Also made EFNEP institutions eligible for competitive grants to enhance nutrition education for FSP participants.

# 2008 Food, Conservation, and Energy Act (Farm Bill)

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Increased the authority for EFNEP to \$90 million.

And provided the opportunity for 1862 and 1890 land-grant institutions to receive funds appropriated for EFNEP.

# 2018 Agriculture Improvement Act (Farm Bill)

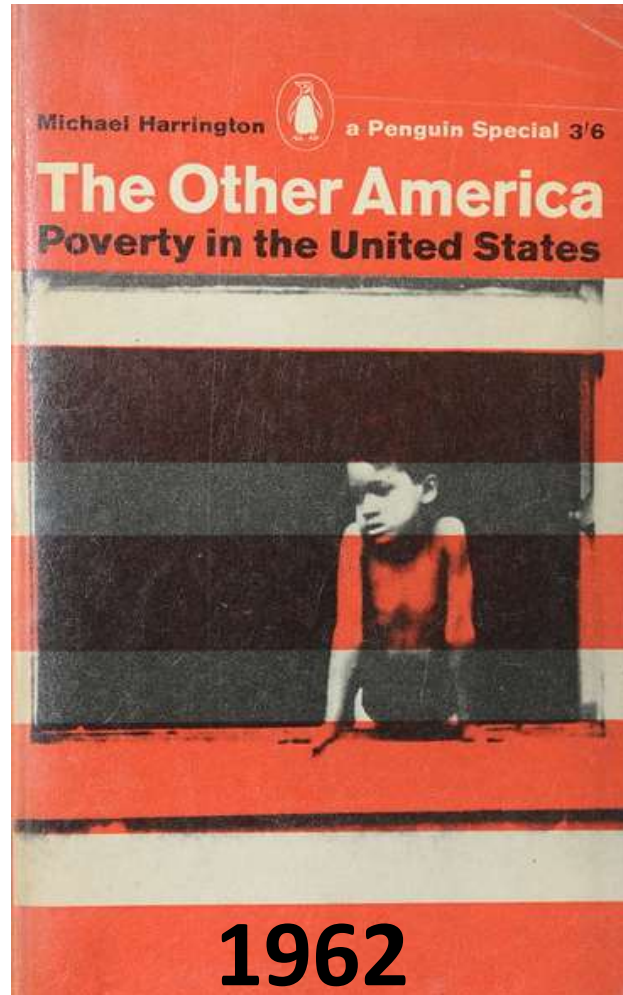
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This legislation directs the Administrator of the Food and Nutrition Service, in consultation with the Director of the National Institute of Food and Agriculture to submit a report that evaluates coordination between nutrition education programs and the use of funds on nutrition education programs.

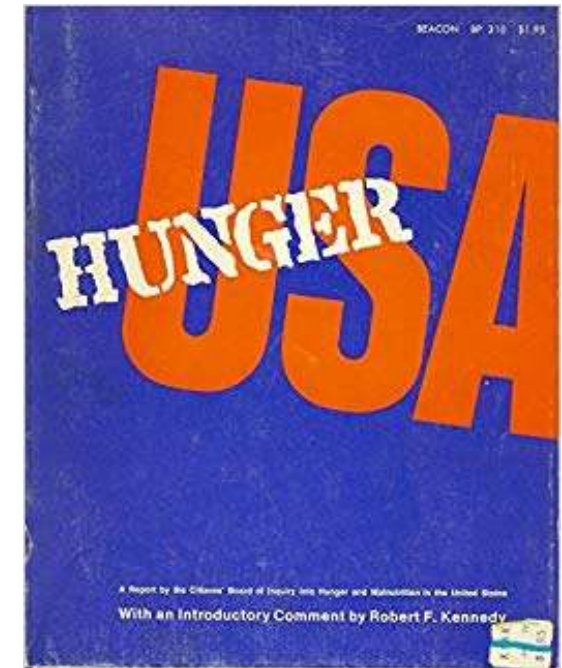


# Setting the Stage for EFNEP: The 1960s

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1964: LBJ Declares  
War on Poverty



**Hunger USA**  
**(Citizens Board)**



Garry J (2014, March 12). CBS *documentary hunger in America (1968)* [Video file]. Retrieved from: <https://www.youtube.com/watch?v=h94bq4JfMAA>

# Birth of the “Expanded Program”

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C  
O  
P  
Y

August 19, 1968

MEMORANDUM

To: The President  
The White House

From: Orville L. Freeman  
Secretary of Agriculture

Subject: Homemakers for Sub-poverty Families

This is to recommend as strongly as I can that the President authorize USDA to proceed with an expanded homemaker program.

- Built off paraprofessional education pilots’ successes
- USDA convinced President Johnson to allocate \$10 million in Section 32 funding for a national pilot in November 1968 (FY 1969)
- Fully funded by Smith-Lever in November 1969

# Late 60s/Early 70s: Alleviating Hunger For All

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White House  
Conference  
on Food,  
Nutrition  
and Health

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- **1969: White House Conference – variety of stakeholders included professional, academic, and community members**

**“The most critical audience, the hard-to-reach poor and near-poor, requires person to person intensive education efforts.... Nonprofessional personnel well trained and supervised by a professional staff can and are filling this need at less cost and in many instances with greater empathy.”**

# 1960s & 1970s



**Also, A  
Time for  
Change!**



# EFNEP Added a Little Color to Cooperative Extension!

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# In More than One Way!!!

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**2019 EFNEP National Conference**

# Late 70s: Shift to a Disease Prevention Focus

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## *The Goals Suggest the Following Changes in Food Selection and Preparation*

1. Increase consumption of fruits and vegetables and whole grains.
2. Decrease consumption of meat and increase consumption of poultry and fish.
3. Decrease consumption of foods high in fat and partially substitute poly-unsaturated fat for saturated fat.
4. Substitute non-fat milk for whole milk.
5. Decrease consumption of butterfat, eggs and other high cholesterol sources.
6. Decrease consumption of sugar and foods high in sugar content.
7. Decrease consumption of salt and foods high in salt content.

## *The Goals Suggest the Following Changes in Food Selection and Preparation:*

1. Increase consumption of fruits and vegetables and whole grains. (See pages 17-26.)
2. Decrease consumption of refined and other processed sugars and foods high in such sugars. (See pages 33, 34.)
3. Decrease consumption of foods high in total fat, and partially replace saturated fats, whether obtained from animal or vegetable sources, with poly-unsaturated fats. (See pages 43-48.)
4. Decrease consumption of animal fat, and choose meats, poultry and fish which will reduce saturated fat intake. (See pages xxxix-xli, 43-48, and use particularly, tables 11-13, pp. 45-48.)
5. Except for young children, substitute low-fat and non-fat milk for whole milk, and low-fat dairy products for high fat dairy products. (See pages 43-48.)
6. Decrease consumption of butterfat, eggs and other high cholesterol sources. Some consideration should be given to easing the cholesterol goal for pre-menopausal women, young children and the elderly in order to obtain the nutritional benefits of eggs in the diet. (See pages xxxvii-xxxix for more details concerning eggs and cholesterol, pp. 43-48.)
7. Decrease consumption of salt and foods high in salt content. (See page 51 and Appendix E.)

**February 1977: Dietary Goals  
for the United States**

**December 1977: Dietary Goals  
for the United States, 2<sup>nd</sup> ed.**



# 1979: USDA Hassle-Free Guide to a Better Diet

Many scientists say the American diet is contributing to some of the chronic diseases that hit people in later life. And that cutting down on calories, fat (especially animal and other saturated fats), cholesterol, sugar, and salt and eating more whole grains, fruits, and vegetables are positive steps toward reducing heart disease, certain cancers, and strokes.

Other scientists believe just as strongly that the evidence doesn't support such conclusions.

So the choice is yours. You can make changes in the way you eat—or not.

The information in this Guide is offered to make it easier for you to follow a balanced diet, *if you want to*. The problem has been that it isn't always easy to do what you want to do nutritionally.

VEGETABLE  
FRUIT  
Group



BREAD  
CEREAL  
Group



MILK  
CHEESE  
Group



MEAT  
Fish and Poultry  
BEANS  
Group



FATS  
SWEETS  
ALCOHOL  
Group



# Nutrition and Your Health

## Dietary Guidelines for Americans

- 1** Eat a Variety of Foods page 4
- 2** Maintain Ideal Weight page 7
- 3** Avoid Too Much Fat, Saturated Fat, and Cholesterol page 11
- 4** Eat Foods with Adequate Starch and Fiber page 13
- 5** Avoid Too Much Sugar page 15
- 6** Avoid Too Much Sodium page 17
- 7** If You Drink Alcohol, Do So in Moderation page 19

U.S. Department of Agriculture  
U.S. Department of Health and Human Services

## Nutrition and Your Health

# Dietary Guidelines for Americans

- 1** Eat a Variety of Foods page 6
- 2** Maintain Desirable Weight page 9
- 3** Avoid Too Much Fat, Saturated Fat, and Cholesterol page 15
- 4** Eat Foods with Adequate Starch and Fiber page 17
- 5** Avoid Too Much Sugar page 19
- 6** Avoid Too Much Sodium page 21
- 7** If You Drink Alcoholic Beverages, Do So in Moderation page 23

Second Edition, 1985  
U.S. Department of Agriculture  
U.S. Department of Health and Human Services

By the *Dietary Guidelines for Americans* 1<sup>st</sup> (and later) editions, scientists had come to consensus

# EFNEP Fell Into Step

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- **1981: *Eating Right is Basic* curriculum is developed by Michigan State University for use with EFNEP/Food Stamps pilots**
- **Picked up by many states and became essentially a national curricula**
- **Updated three times in 1984, 1995, and 2007**

[hopefully picture of an educator using the flip chart]

# Late 80s and 90s

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- **↑ number of nutrition education graduate programs...  
and graduates  
RESULT = More curriculum development**
- **↑ belief that dietary fat was the enemy**
- **Development of the Partnership for  
Food Safety Education and its campaign**



# Government Accountability Office

## GAO Audit (1980)

- **EFNEP's 1-on-1 education limited the number of families that could be reached;**
- **High crime rates in many low-income areas put educators' safety at risk. Working in pairs helped but resulted in fewer families served.**
- **Going into people's homes often caused educational interruptions.**
- **Working in homes often resulted in service > 2 years due to personal relationships formed or because it was easier to keep someone in the program than to recruit someone new (or) to use the new friend for recruitment assistance.**



# SNAP-Ed Connection

U.S. DEPARTMENT OF AGRICULTURE

Marilyn Herman, former Wisconsin Family Living Educator who administered EFNEP, wrote the 1st FSNE grant when EFNEP funds were reduced in Brown County.

# Shift Towards More Practice-Based and Evidence-Based Curricula

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**EATING SMART**  
**BEING ACTIVE**

# 2000s Got EFNEP Moving!

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## 2005: *Dietary Guidelines*

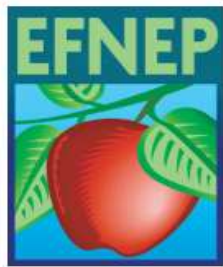
- Had separate **Physical Activity goals** for first time
- “Unlike in previous Dietary Guidelines, **an evidence-based approach was used to develop the key messages.**” J Am Diet Assoc. 2005;105:1418-1424

Dietary Guidelines  
for Americans  
2005

U.S. Department of Health and Human Services  
U.S. Department of Agriculture  
[www.health.gov/dietaryguidelines](http://www.health.gov/dietaryguidelines)



# Today



NAME

ENTRY

EXIT

DATE

 /  / 

**Expanded Food and Nutrition Education Program  
Food & Physical Activity Questionnaire**





EASY TO MAKE RECIPES from MASTER MIX

1. In a large bowl, combine flour, sugar, salt, and dry milk powder. Stir well. Add 1/2 cup of oil and 1/2 cup of water. Mix well. Add 1/2 cup of eggs and 1/2 cup of milk. Mix well. Add 1/2 cup of oil and 1/2 cup of water. Mix well. Add 1/2 cup of eggs and 1/2 cup of milk. Mix well.

**Saving Money With Homemade Master Mixes**

UNIVERSITY OF MAINE Cooperative Extension

**MIXES**

**PURPOSE MASTER MIX**

1 1/2 cup all-purpose flour

1/2 cup white sugar

1/2 cup white salt

1/2 cup white dry milk powder

1/2 cup white oil

1/2 cup white water

1/2 cup white eggs

1/2 cup white milk

**Eat Better for Less!**

**Master Mix**  
All-purpose baking mix

**CNP Master Mix**

Makes 10 1/2 cups of all-purpose baking mix which can be made ahead of time, stored ready, and used to make many dishes. It can be baked or drizzled to make your waffles and french fries.

- 4 cups unbleached enriched flour
- 4 cups unbleached white-wheat flour
- 1 cup baking powder
- 1 Tablespoon sugar
- 1 Tablespoon salt
- 1 1/2 cups non-fat dry milk powder
- 1 cup canola oil

1. In a large bowl, combine flour, sugar, powder, sugar, salt, and dry milk powder. Stir well. Add 1/2 cup of oil and 1/2 cup of water. Mix well. Add 1/2 cup of eggs and 1/2 cup of milk. Mix well. Add 1/2 cup of oil and 1/2 cup of water. Mix well. Add 1/2 cup of eggs and 1/2 cup of milk. Mix well.

Makes approximately 10 cups. Keeps for 3 months in the refrigerator.

**The *Southwest Nutrition Program* Cookbook**

1077-760-5373. See back for more details.

**Kids Cooking!**

**Pancakes**

- 2 cups CNP Master Mix
- 1 1/2 cups water or low-fat milk
- 1 egg, beaten

1. Put all the ingredients in a bowl and stir together until all wet.

2. With help from a parent, heat a frying pan with non-stick spray and warm on medium.

3. Drop batter by the spoonful onto the warm pan.

4. Flip the pancake over when bubbles appear.

5. Pancakes are done when both sides are brown.

**Breadsticks**

- 1 cup CNP Master Mix
- 1/2 cup flour
- 1/2 to 3/4 cup water
- Season as desired (optional)

1. Mix together CNP Master Mix and flour in a bowl.

2. Add water a little at a time until you have a soft dough.

3. Roll the dough into pencil-shaped logs 1/2-inch thick. Cut into 3-inch pieces.

4. Roll each log in tooth, if you want.

5. Bake on a preheated sheet at 400°F for 15-20 minutes.

**Large batch of Missouri Mix**

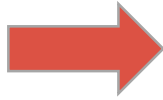
1077-760-5373. See back for more details.

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# **EFNEP represents the nexus between research and practice**

50 years of EFNEP = 50 years of research

1,130  
articles



- 841 excluded after reviewing titles and abstracts

289  
articles



- 139 excluded (MS thesis, PhD dissertations excluded; research not related to EFNEP)

150 articles  
included in  
this prelim.  
analysis

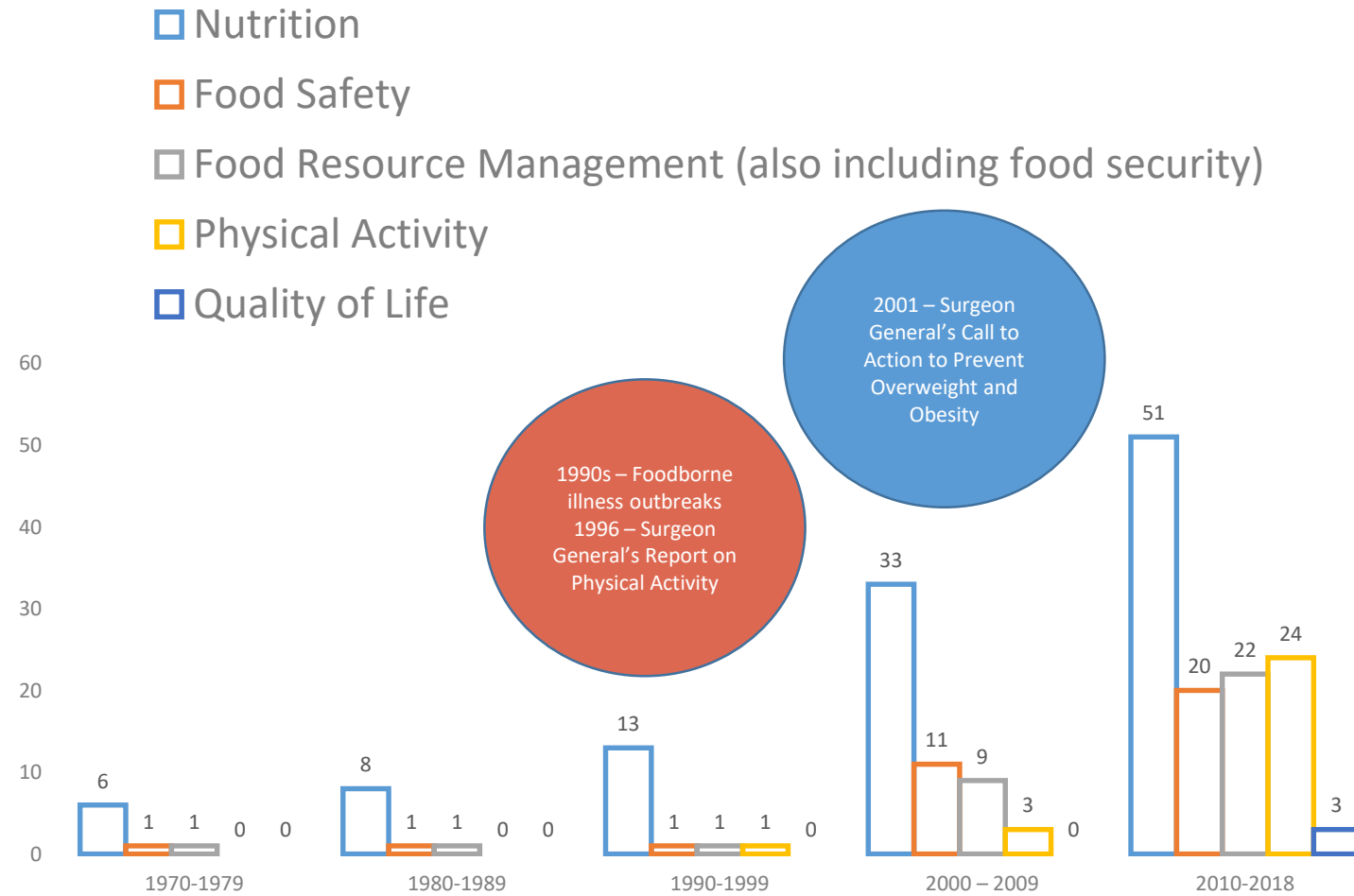


- 1970 – 1979: 7
- 1980 – 1989: 9
- 1990 – 1999: 13
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- 2010 – 2018: 74

• Search terms:

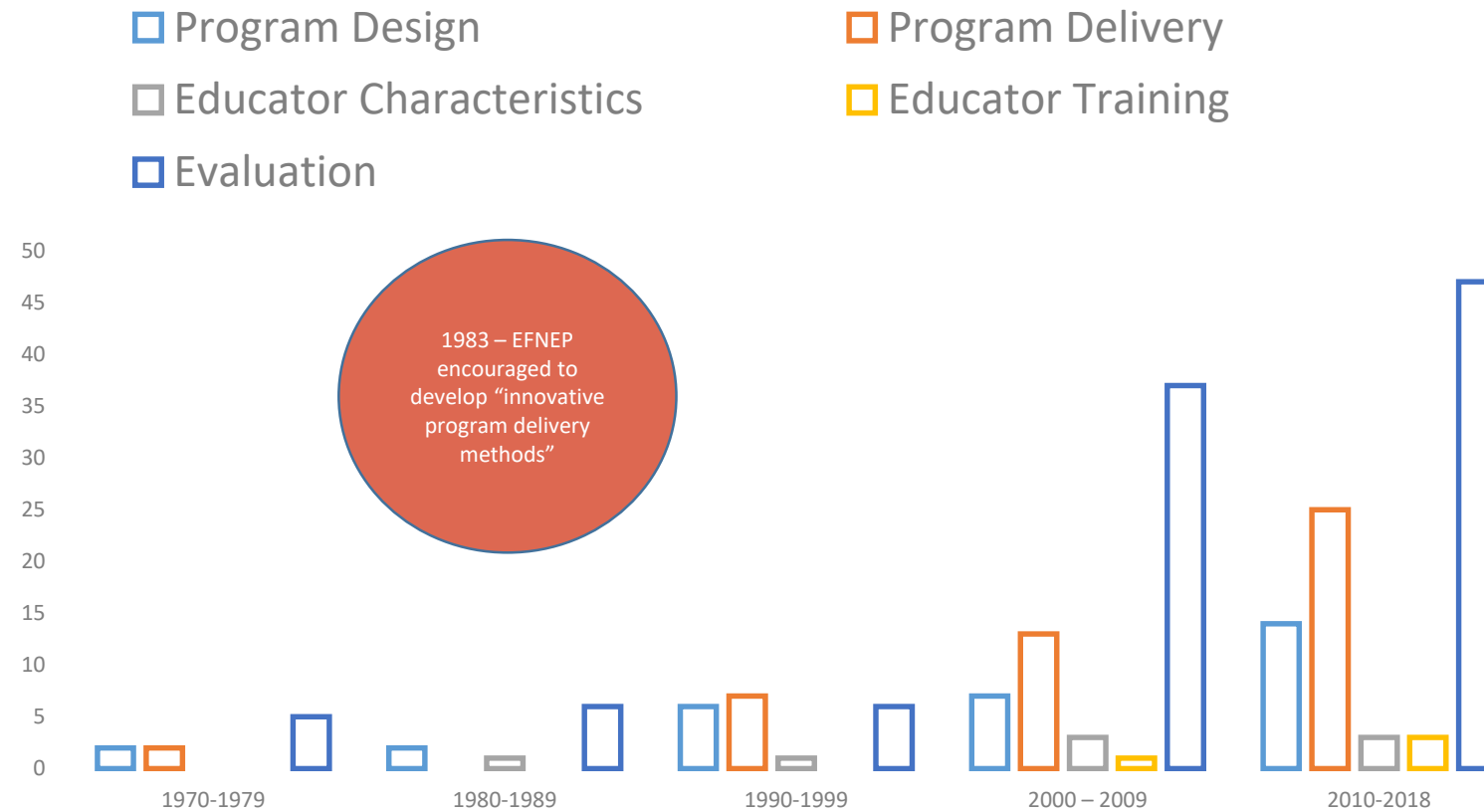
- “extension”
- “nutrition”
- “food”

# EFNEP Research over the Decades



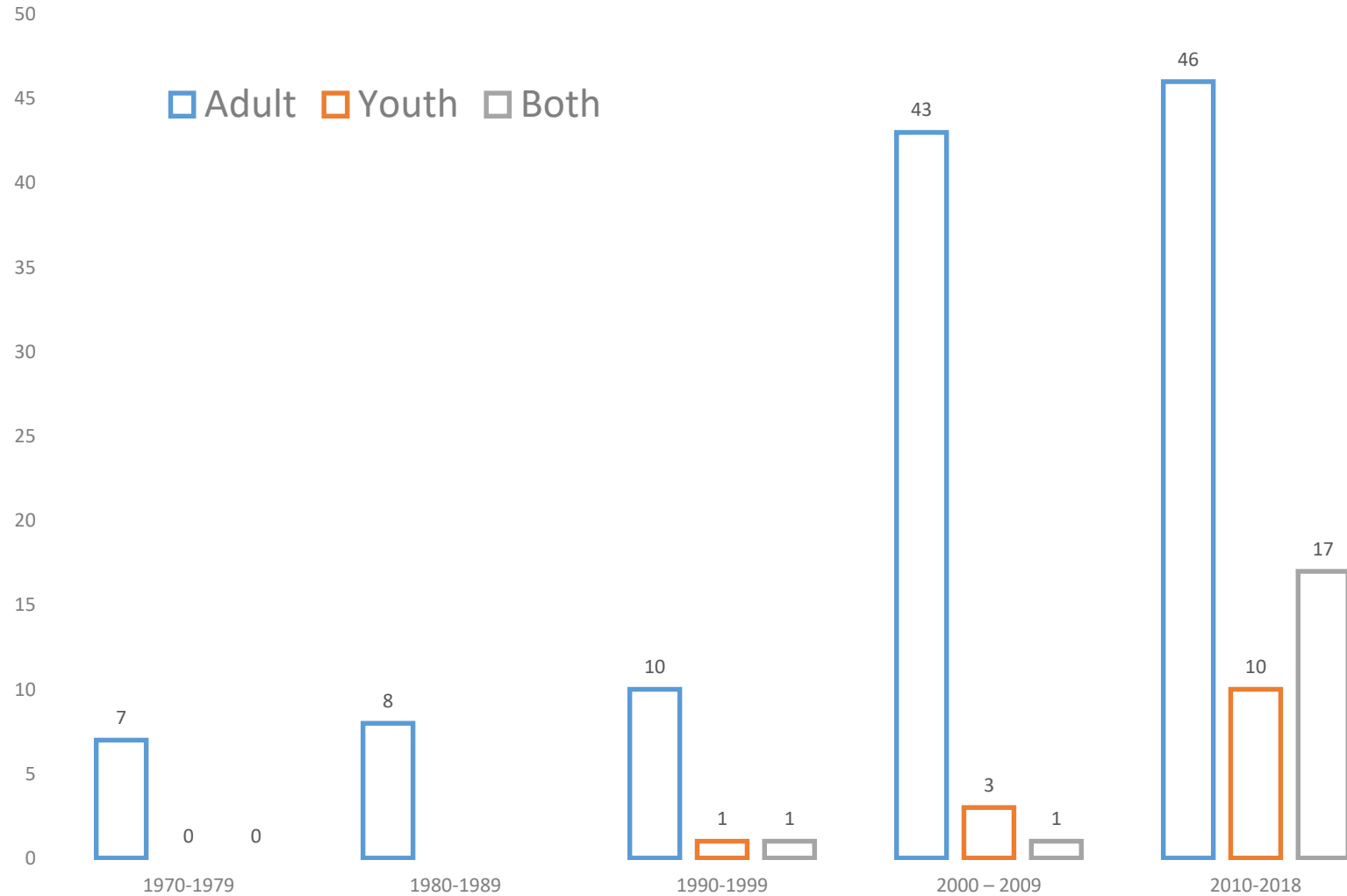
Topics

# EFNEP Research over the Decades

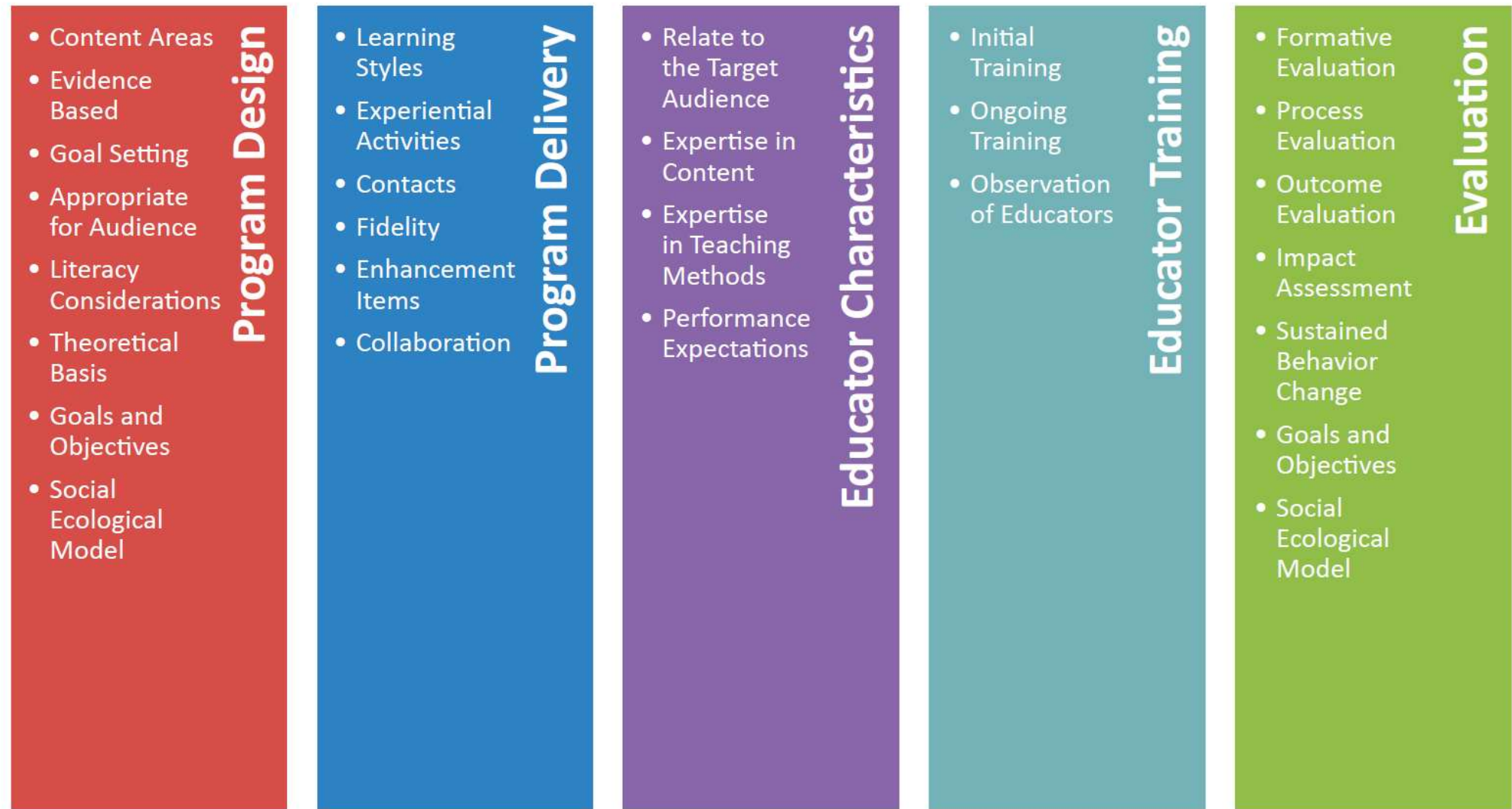


Domains

# EFNEP Research over the Decades



EFNEP Audiences



# BEST PRACTICES IN NUTRITION EDUCATION FOR LOW-INCOME AUDIENCES



# Beginning of EFNEP Research

1960s

1969: Establishment of EFNEP and Inception of JNEB (vitamins and minerals article)

1970s

1971: ENEP evaluated (JNEB; V Wang, P Ephross, U of Maryland) – Assessed homemakers' changes in nutritional practices

1972: Formally recognized as the Expanded Food and Nutrition Education Program

# EFNEP Research over the Decades

1970s

## Program delivery

Dosage of program to maximize benefits

## Evaluation

Impact on EFNEP participants

## Educator characteristics

Qualities that characterize successful EFNEP paraprofessionals

1980s

## Program design

Education guided by the Theory of Reasoned Action

## Evaluation

One-year follow-up study of EFNEP participants

Behavioral outcomes via one-on-one education

Examination of EFNEP's benefits beyond nutrition (educational advancement, quality of life, movement to new and improved housing)

# EFNEP Research over the Decades



1990s

## Program delivery and design

Client behavior assessment to guide programming

Risk of osteoporosis among EFNEP participants

Comparison of EFNEP participant's dietary quality to homeless individuals

Motivators for participating in nutrition education

Exclusive breastfeeding practices among Hispanic subgroups

Coordinated, large-scale, multi-level community-based effort (rural Arkansas delta)

Effect of hybrid group and telephone follow-up lessons on attrition

Group versus individual programs

# EFNEP Research over the Decades



1990s

## Educator characteristics

Worksite wellness for EFNEP nutrition aides

## Evaluation

Breastfeeding support

# EFNEP Research over the Decades

2000s

## Program delivery and design

### Client behavior assessment to guide programming

Food safety knowledge and behavior among EFNEP participants

Food security assessment of participants through EFNEP educators

Assessment of shopping characteristics and relationship to dietary quality

Barriers to participation, challenges in reaching and recruiting

Assessment of adequate tools for cooking

# EFNEP Research over the Decades

2000s

## Program delivery and design

### Design of interventions

- Guided goal setting
- Improving social interaction
- Addressing the healthy home food environment
- Focus on obesity
- New programs that included physical activity
- Use of emerging technology (video lessons)
- Supplemental topics – field gleaning

Content  
Expansion

# EFNEP Research over the Decades

2000s

## Educator characteristics

## Evaluation

-Assessment methods – developing and/or testing different methods to assess behavior and behavior change

- selection of specific questions

- sensitivity testing of food behavior checklist questions

- readability

- developing and testing of a bilingual interactive online dietary assessment

- qualitative tools

-Randomized control trials

-Eating Smart Being Active

-Cost-benefit analyses

Data and  
Program  
Integrity

# EFNEP Research over the Decades

2010s

## Program delivery and design

-Client behavior assessment to guide programming

## Social media use

-Curricula

Healthy Baby, Healthy Me food safety curriculum

Formative evaluation for ESBA

Nutrition content of EFNEP curricula

Content analysis of EFNEP curricula

Program for nutrition education and parenting

Blended delivery method (distance education)

Use of goal attainment

-Program integrity/quality assurance (implementation fidelity) (also more focus on educator characteristics)

Content  
Exploration



# EFNEP Research over the Decades

2010s

## Educator characteristics

Perceptions of access to farmers markets

Impact of EFNEP on quality of life of Educators

Online nutrition certification program for EFNEP educators

Job satisfaction and retention of community nutrition educators

## Evaluation

Instrumentation – reliability, validity

Randomized control trials

Cost-effectiveness analyses

Characteristics of EFNEP graduates

Long-term impacts of EFNEP, including quality of life

Sustainability and  
Public Value

# EFNEP Research Aligns with Dissemination and Implementation Science Frameworks

- Characteristics of participants, characteristics of para-professionals
- Inner setting (culture of organization)
- Intervention characteristics
- Outer setting (policy, systems, and environments)
- Process (executing, planning, reflecting, evaluating)
- Implementation outcomes
- Participant outcomes

Reference: Consolidated Framework for Implementation Research  
Constructs <https://implementationscience.biomedcentral.com/track/pdf/10.1186/1748-5908-4-50>  
<https://cfirguide.org/constructs/>

# EFNEP represents the nexus between research and practice

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## 50 years of research on EFNEP reflects:

- the adaptability of EFNEP programs and staff to meet (changing) needs of participants and stakeholders
  - the opportunities that EFNEP has afforded for robust research to be conducted
- the importance of EFNEP in shaping nutrition education “best practices” (and vice versa) and dissemination and implementation science frameworks
- the bread and depth of insight on low-income audiences and communities (to serve researchers and practitioners beyond EFNEP)

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