# The Expanded Food and Nutrition Education Program (EFNEP)

## A Community-Based Intervention that Achieves Results

## BACKGROUND

Chronic disease associated with **obesity, poor nutrition, and physical inactivity** disproportionately affects **minority and low-income populations**. Implementation research on programs that favorably influence the health of such populations is limited.

**The Expanded Food and Nutrition Education Program (EFNEP),** funded by the U.S. Department of Agriculture's **National Institute of Food and Agriculture**, assists limited resource audiences in acquiring the knowledge, skills, attitudes, and changed behavior necessary for nutritionally sound diets, and to contribute to their personal development and the improvement of the total family diet and nutritional well-being. Data is collected annually and consistently demonstrates strong results.

EFNEP is a Federal **Extension** (community outreach) program which began in 1969. It is funded through the **Smith Lever Act, Section 3(d),** and receives approximately $68 million annually in Federal funding. The current study is based on Federal EFNEP funding for 2007 through 2011 which equals $331,253,727.

## METHOD

EFNEP operates through the **1862 and 1890 Land-Grant Colleges and Universities (LGUs)** in every state, the District of Columbia, and the six U.S. territories. LGUs hire, train, and supervise local **paraprofessional staff** (peer educators) to recruit and educate low-income families and low-income youth in community settings.

Paraprofessionals deliver a series of **hands-on, interactive lessons** to program participants. Lessons are **evidence-based** and **tailored to meet the needs of the audience**. Lessons focus on the core areas of EFNEP:

- **Diet Quality and Physical Activity**
- **Food Resource Management**
- **Food Safety**
- **Food Security**

All program participants provide **demographic data**. In addition, adult graduates complete entry and exit **behavior checklists**[1] and **diet recalls**[2]. All LGUs use the same forms which allows the data to be collected locally and analyzed nationally. The current study compares behavior change results by race and ethnicity for adult graduates between 2007 and 2011. It then compares those results to the national averages for that same five-year period.

## PARTICIPANTS

Each year EFNEP reaches over 600,000 low-income adults and low-income youth from over 800 counties nationwide. The current study includes data from **365,185 adults who graduated from EFNEP between 2007 and 2011.**

Table 1 shows the breakdown of adult graduates between 2007 and 2011 by race and ethnicity. **At least 70% self identified as minorities.**

Of those participants, **over 85% reported being at or below 100% of poverty,** earning $25,000 a year or less for a family of four.

**Table 1: Racial and Ethnic Breakdown of Adult Graduates (2007-2011)**

| | Hispanic or Latino (n=134,609) | Not Hispanic nor Latino (n=230,576) | TOTAL By Race (n=365,185) |
|---|---|---|---|
| **White** (n=170,187) | 18% | 29% | 47% |
| **Black or African American** (n=103,381) | 1% | 27% | 28% |
| **American Indian or Alaska Native** (n=11,003) | 1% | 2% | 3% |
| **Asian** (n=7706) | 0% | 2% | 2% |
| **Native Hawaiian or Other Pacific Islander** (n=4061) | 0% | 1% | 1% |
| **Multiple Races Indicated** (n=5839) | 0% | 1% | 2% |
| **Race Not Provided** (n=63,008) | 16% | 1% | 17% |
| **TOTAL By Ethnicity (n=365,185)** | **37%** | **63%** | **100%** |

70% *Minority* 30% *Non-Minority or Not Provided*

University of Vermont

University of Kentucky

University of Idaho

University of the District of Columbia

Cornell University

University of California

University of Maine

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University of Nevada

## RESULTS

Participants from all racial and ethnic backgrounds improved their nutrition practices, stretched their food dollars farther, handled their food more safely, improved their diet quality, consumed more fruits and vegetables, and increased the number of minutes they were physically active.

Data demonstrates that five-year averages for races/ethnicities individually were comparable to National averages for all EFNEP graduates.

- **Charts 1, 2, and 3** show improvements reported by graduates through entry and exit behavior checklists[1].
- **Charts 4, 5, and 6** show improvements reported by graduates through entry and exit diet recalls[2].

**KEY**

- **AI/AN:** *American Indian or Alaska Native*
- **NH/OPI:** *Native Hawaiian or Other Pacific Islander*
- **Multiple**: *More than one Race Indicated*
- **All:** *All Races Combined (National Averages)*

*Note: Ethnicity data is collected in combination with race per Federal Standards. Percentage Hispanic/Latino or Not Hispanic/Latino can be found in Table 1.*

[1] ***EFNEP Behavior Checklist****—sample form available at: https://www2.aq.purdue.edu/programs/hhs/efnep/Resources/EFNEP%20Behavior%20Checklist.pdf*
[2] ***EFNEP Diet Recall****—sample form available at: https://www2.aq.purdue.edu/programs/hhs/efnep/Resources/24%20Hour%20Food%20Recall.pdf*

**Chart 1: Percentage Improvement in Nutrition Practices by Race/Ethnicity for Adult Graduates (2007-2011)**

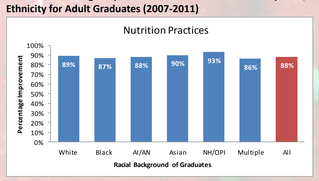



**Chart 2: Percentage Improvement in Food Resource Management Practices by Race/Ethnicity for Adult Graduates (2007-2011)**

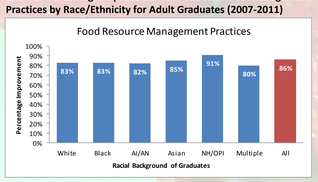



**Chart 3: Percentage Improvement in Food Safety Practices by Race/Ethnicity for Adult Graduates (2007-2011)**

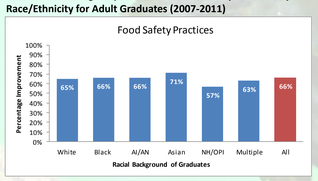



**Chart 4: Percentage Improvement in Diet Quality by Race/Ethnicity for Adult Graduates (2007-2011)**

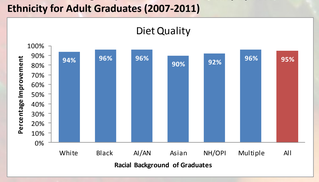



**Chart 5: Additional Cups of Fruits and Vegetables Consumed by Race/Ethnicity for Adult Graduates (2007-2011)**

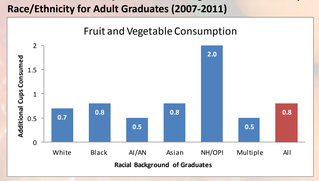
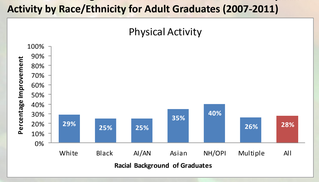



**Chart 6: Percentage Increase in 30 Minutes or More of Physical Activity by Race/Ethnicity for Adult Graduates (2007-2011)**




## DISCUSSION

Research demonstrates that EFNEP is an excellent nutrition education model. **2007-2011 EFNEP data for graduates confirm**:

- **95% Improved their Diets**
- **88% Improved Nutrition Practices**
- **86% Stretched Food Dollars Farther**
- **66% Handled Food More Safely**
- **28% Increased Physical Activity Rates**

**And, 0.8 additional cups of Fruits and Vegetables were consumed**.

Native Hawaiian and Other Pacific Islanders emerged as having the greatest overall improvement. They had the highest scores in four out of the six categories.

Those who indicated multiple races had the lowest overall improvement. They had the lowest scores in three of the six categories.

Even though scores varied to some degree for each race, strong improvements were demonstrated for all races.

**Additional research** is needed to:

- Test statistical significance of results.
- Determine if lower starting values led to higher overall change.
- Assess poverty levels and dosage effects.
- Monitor improvements in physical activity — *changes are likely to increase with added programmatic emphasis.*

**In conclusion, the Expanded Food and Nutrition Education Program is an effective community-based nutrition education program. It successfully improves nutrition, physical activity and food related behaviors across low-income audiences and it may serve as a useful model for future interventions.**

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**Background Photo: University of Connecticut**