

## Situation

(Note\* This Action Plan is an adaptation of the plan developed by the Nutrition, Food Safety, and Health Program Focus Team.)

Nutrition and physical activity are important for overall health and confer benefits throughout the lifespan. Poor dietary intake and physical inactivity have been linked to many health conditions – including obesity, diabetes, hypertension, stroke, heart disease, certain cancers, respiratory disorders, joint problems and osteoporosis – as well as to psycho-social problems.

Research shows obesity to be a major cause of preventable disability and death in the U.S. In the past three decades, childhood obesity rates have increased. The prevalence of obesity among children aged 6 to 11 years increased from 6.5% in 1980 to 19.6% in 2008, and the prevalence of obesity among adolescents aged 12 to 19 years increased from 5.0% to 18.1% during the same period (Centers for Disease Control and Prevention). In 2010, 29.4 % of adults in Kansas were obese. The New England Journal of Medicine published an article in March 2005 stating that the prevalence and severity of obesity is so great among children that the associated diseases and complications – type 2 diabetes, heart disease, kidney failure, and cancer – are likely to strike people at younger and younger ages. Some researchers suggest that the current generation of children in the U.S. may have shorter life expectancies than their parents, if the childhood obesity rates continue at current levels.

Many factors have been linked to the increase in obesity rates. In Kansas in 2013, 40% of high school students and 41% of adults reported eating fruits and vegetables less than once daily. Also in Kansas, 55% of high school students did not participate in at least 60 minutes of physical activity per day, and 52% of adults did not meet the recommendation of at least 150 minutes of moderate-intensity physical activity/week or 75 minutes of vigorous-intensity activity/week.

In addition to low intake of fruits and vegetables and insufficient amounts of physical activity, the increase in obesity is also linked to increased portion sizes, eating out more often, poor nutrition choices (i.e., choosing foods low in nutrient density), increased consumption of sweetened drinks, increased screen time (e.g., television, computer, electronic games), changing labor markets, and fear of crime which prevents outdoor exercise.

Although body weight is the result of a many factors, behavioral and environmental influences are large contributors to overweight and obesity and provide the greatest opportunity for actions and interventions designed for prevention and treatment. Consequently, there has been a greater recognition of the importance of education about healthy eating and physical activity for Kansans of all ages.

School-based physical activity and nutrition initiatives can reach a large and diverse number of Kansas children. Kansas Schools participating in the National School Meals Program have implemented Local Wellness policies focused on nutrition guidelines for food available to students in schools, nutrition education, and physical activity. KSRE was listed in the Kansas Department of Education Wellness Model Guidelines as an approved provider of nutrition education for schools. Additionally, the national 4-H Healthy Living Mission Mandate seeks to engage youth and families through opportunities that achieve optimal physical health and well-being. By supporting health-related programs for adolescents, 4-H Healthy Living encourages all youth to adopt healthy eating and physical fitness habits.

## Public Value

When you support K-State Research and Extension Healthy Eating and Physical Activity programs, participants learn healthy eating and physical activity habits and make healthier lifestyle choices. These choices lead to fewer weight-related chronic and acute diseases and improved quality of life. This benefits all community members by lowering the public cost of health care and health insurance, as well as increasing the number of productive contributing citizens.

## Outcomes

### Short-Term (Knowledge)

- Increase awareness and knowledge of recommendations related to healthy eating and physical activity.
- Improved attitudes about healthy eating and increased physical activity.
- Staff and volunteers increase their awareness and knowledge of what constitutes an environment with healthy food choices and physical activity in schools and public venues
- Program participants will set goals to improve their dietary practices and physical activity.

#### Indicators

- What awareness, knowledge or change in attitudes did program participants gain regarding healthy eating and physical activity?
- What awareness or knowledge did program participants gain regarding environments that support healthy food choices and physical activity?

#### Target Indicators:

- Number/percent of participants who agree or strongly agree with the following statements:
  - By participating in an Extension Healthy Living program, I learned about:
    - The foods that I should eat every day.
    - What makes up a balanced diet.
    - Why it is important for me to eat a healthful diet.
    - The amount of physical activity I should engage in each day.
    - The importance of family meal time.

Measurement Instruments: 4-H Common Measures - Healthy Living (2013)

### Medium-Term (Behavior)

- Program participants demonstrate improved eating and physical activity habits.
- Staff, volunteers and families advocate or develop plans for increased access to healthful eating choices and physical activity environments in schools, homes and public venues.

#### Indicators

- Three to six months after a program, what changes do participants report regarding more healthful eating and physical activity habits?
- Three to six months after a program, what changes have participants taken to support healthier food choices and physical activity in schools and public venues?

#### Target Indicators:

- Number/percent of participants who agree or strongly agree with the following statements.
  - By participating in an Extension Healthy Living program, I now take the following actions:
    - I eat more fruits and vegetables
    - I eat more whole grains
    - I eat less junk foods
    - I drink more water
    - I encourage my family to eat meals together
    - I exercise 60 minutes every day
    - My school or workplace provides healthy food choices

Measurement Instruments: 4-H Common Measures - Healthy Living (2013)

### Long-Term (Change in Condition)

- More Kansans are at a healthy weight and meet both the dietary and physical activity Guidelines for Americans' recommendations
- More Kansas schools, families and public venues plan and ensure healthy eating and physical activity environments for students/Kansas residents

**Indicators**

- \* Are more Kansans at a healthy weight and report consuming more vegetables and fruits and being physically active on most days?
- \* Do more Kansas schools and public venues plan and ensure environments for healthy eating and physical activity?
- \* Do more Kansas communities use strategies that increase their residents' access to high quality, abundant and safe foods?

Measurement Instruments: 4-H Common Measures - Healthy Living (2013)

**Outputs****Participants:**

- General public: school-aged youth, adults working with these youth
- Staff, volunteers and families in 4-H, schools and public venues.

**Activities:**

- Agents work with 4-H volunteers to implement the Health and Wellness projects within local 4-H clubs and community settings
- Deliver education messages via newsletters, Internet, programming, community and 4-H sponsored events
- Facilitate and increase collaborations for healthier environments in communities (e.g. increasing the number of walking trails/bike lanes, healthier vending machine choices, community gardens, farmers markets)
- Agent and other professional in-service training on wellness best practices
- Specialists/agent technical support and consultation
- Agents are involved in school wellness committees and contacted for information and programming on nutrition and wellness for school-aged youth.