

## **Extension/UAES – Individuals, Families and Communities**

### **Nutrient Composition of Food**

This area is concerned with the determination of the quantities of nutrients and other food components in food; development of analytical methods; development and maintenance of data banks of information on food composition; development of software and other systems to facilitate use of data on food composition, including recipe calculations; development and evaluation of educational materials and strategies on food composition; and dissemination of information on food composition for professionals, students, and the public.

Areas of work include but are not limited to:

- Composition of food, including nutrients and other food components
- Databank development and utilization systems
- Analytical methods
- Development, evaluation and dissemination of educational strategies and information on food composition.

Exclude:

- Development of foods for improved health, e.g., nutraceuticals, functional foods
- Production of improved food plants and animals

### **Requirements and Function of Food Components**

This area concerns fundamental knowledge about relationships of food eaten by people to their physical development, physical activity, and mental status, and to the maintenance of optimal health. It is concerned with defining nutrient requirements and functions throughout the life span and in response to the environment. Functions include cellular and molecular regulation of gene expression by specific nutrients. This area is also concerned with development of methods to quantify relationships of nutritional status to well-being to provide a scientific basis for establishing Dietary Reference Intakes and Dietary Guidelines. Programs on nutrient requirements and function are concerned with the development and evaluation of education activities, strategies, and materials, and with the dissemination of related information for professionals, students, and the public.

Areas of work include but are not limited to:

- Functions of nutrients and other food components
- Relationship of nutrients and other food components (such as phytochemicals) to gene expression, health, physical and mental development, performance, and longevity
- Requirements for energy, fat, protein, amino acids, fatty acids, minerals, and vitamins related to age, sex, and life stage, including maternal and infant nutrition, physical activity, and physiological, psychological, and environmental conditions
- Interrelationships among nutrients and non-nutrient components of food as they affect absorption, metabolism, growth, and maintenance requirements
- Methods of evaluating nutritional status
- Development, evaluation and dissemination of education programs, strategies, and information on nutrient requirements and function.

Exclude:

- Development of foods for improved health; e.g., nutraceuticals, functional foods
- Aspects of health unrelated to food and nutrition

### **Nutrition Education and Behavior**

This area is concerned with assessment of food intake and dietary patterns, the factors that influence food intake and dietary patterns, the interrelationships among these factors, and with the assessment of food and nutrient intake in relation to nutrient requirements, dietary guidance, and food plans. The focus is frequently on population groups at nutritional risk and on the factors that promote or hinder healthful food choices in these groups. Programs on dietary standards, guidance, food guides, and behavior change are concerned with the development, evaluation, and dissemination of education activities and strategies for professionals, students, and the public.

Areas of work include but are not limited to:

- Food consumption, use, patterns, and analytical methods
- Nutrition monitoring and surveillance
- Development of dietary standards, dietary guidance, and food guides to meet nutritional needs of the general population and population subgroups with special needs
- Dietary status assessments, e.g., comparisons to standards
- Factors that influence dietary status and behavior change including food accessibility and affordability
- Development and evaluation of education, communication, and food assistance strategies, programs, and policies that affect dietary status
- Development and evaluation of education programs and strategies on dietary standards, guidance, food guides, and behavior change, and the dissemination of related information for professionals, students, and the public.

Exclude:

- Consumer economics, including food assistance, where the focus is not on the healthfulness of diets
- Community resource management, where the focus is not on the healthfulness of diets)
- Aspects of health education unrelated to food and nutrition
- General education and information delivery, where the focus is not on the healthfulness of diets
- Family resource management, where the focus is not on the healthfulness of diets
- Home and commercial food service, where the focus is not on the healthfulness of diets

### **Nutrition and Hunger in the Population**

This area is concerned with food insecurity, insufficiency, and hunger in the population. Included are the development of analytical methods and pro-active attempts at hunger reduction through food banks, communities organizing to gain farmers markets, community gardens, gardening, food buying clubs, food recovery, and gleaning.

Areas of work include but are not limited to:

- Assessments of food sufficiency in the population
- Development and evaluation of strategies for addressing food insufficiency.

Exclude:

- Aspects of poverty, welfare, and food assistance programs unrelated to nutrition and hunger
- Local marketing of local produce

## **Individual and Family Resource Management**

Work in this area provides an understanding of how individuals and families obtain and use resources of time, money, and human capital to achieve their standard of living and overall quality of life. This area is also concerned with factors affecting the decision making process, such as availability of resources, life events, living patterns, values, goals, interests, and attitudes of families, and external forces such as public issues, policies, and programs.

Areas of work include but are not limited to:

- Resource management, including time, money, and human capital
- Interrelationships between society and households to improve family well-being
- Improvement of basic occupational skills
- Development of financial management skills
- Families and work/business relationships
- Retirement planning for individuals and families
- Supplemental income strategies
- Asset building, management, protection, and transfer
- Financial security or planning
- Predatory lending and consumer fraud
- Debt management
- Saving and investing
- Estate planning.

Exclude:

- Consumer economics
- Community economic development
- Poverty and economic analysis of welfare programs
- Dietary status
- Entrepreneurship

## **Human Development and Family Well-Being**

Work on family and human development provides an understanding of the social, cognitive, emotional, and physical development of individuals and families over the human lifespan. The focus is on family and life cycle studies. Work in this area also provides a better understanding of family systems, family performance, and well-being.

Areas of work include but are not limited to:

- Human (child, adolescent, adult) development throughout the life cycle
- Parenting, parent-child relationships, and grandparents/relatives as caregivers
- Child care, dependent care, and after-school programs
- Aging and intergenerational issues, including elder care
- Care giving across the life cycle

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- Family-focused prevention and intervention programs
- Family strengths/resiliency
- Family policy
- Individual communication and family interactions
- Character/ethics education
- Children, youth, and families at risk
- Marriage/couples relationships
- High-risk, fragile, ethnic, underserved individuals and families
- Volunteer recruitment, development, and management
- Workforce preparation (including school-to-work, welfare-to-work, work-to-work)

retooling)

- Training and development of youth workers
- Professional development.

Exclude:

- Family economics and resource management
- Social impacts on families
- Physical fitness
- Human development activities that focus on youth

### **Change Affecting Individuals, Families and Communities**

Work in this area provides an understanding of the technological, demographic, and social changes occurring in society. Work also provides an understanding of the current and historic ways in which individuals, families, and communities cope with sociological and technological change, and includes activities that extend this knowledge to the population.

Areas of work include but are not limited to:

- Composition and trends in population
- Sociology/psychology of the farm family and other aspects of rural life and living conditions
- Social aspects of agrarian reform
- Migration patterns of farm and rural populations
- Migrant labor and related social issues in local communities
- Impact of cultural trends and technology on society
- Impact of racial, ethnic, diversity, pluralism, and gender issues on society
- Cultural awareness and respect for diversity
- Impact of change on communities
- Community development, asset building, civic engagement, and leadership
- Social and educational factors affecting poverty
- Social impact of environmental change
- Public lands/private lands conflicts
- Private lands/public benefits
- Conflict resolution and conflict management
- Political movements
- Social aspects for planning and development of healthy communities.

Exclude:

- Land use
- Acceptance of pest management systems
- Community planning and development
- Policy analysis
- Rural, agro- or eco-tourism
- Character/ethics education
- Community services
- Social and emotional development of youth
- Leadership development and leadership opportunities for youth

### **Youth Development**

Work in this area includes programs and activities that promote positive youth development, including 4-H. These activities extend knowledge to youth and convey a sense of belonging, teach life skills, and provide opportunities for mastery, competence,

and independence. This work also includes a focus on the social and emotional development of program participants.

Areas of work include but are not limited to:

Literacy, communication, problem solving, and other life skills

- Self confidence and self esteem
- Interaction and relationships with adults and peer groups
- Civic engagement (connecting youth to government and institutions)
- Leadership development and leadership opportunities for youth
- Sense of belonging/sense of safety
- Youth initiatives in non-formal science, engineering, and technology
- Volunteerism and community service for youth
- Youth policy.

Exclude:

- Policy analysis
- Entrepreneurship
- Development of financial management skills
- Human development activities that focus on families
- Early childhood development
- Cultural awareness and respect for diversity

## **Primary Program Emphasis Areas – Areas of Work Defined**

### **2007 Addendum**

## **Individuals, Families and Communities**

### **Insects and Other Pests Affecting Humans**

This area includes work on insects, ticks, mites, and other pests that are an annoyance to humans. The emphasis is on developing safe, effective, and economical ways of controlling these pests.

Areas include but are not limited to:

- Biology of insects, ticks, and mites affecting humans, including those important in forensic studies
- Developing attractants and repellents
- Developing and improving methods of pest control.

Exclude:

- The role of insects, ticks, and mites in disease transmission
- Management of insects affecting livestock and pets
- Management of insects affecting stored food products
- Management of insects affecting wood products
- Protection of residential structures from insects and other pests
- Apparel and textiles to protect against insects

### **Hazards to Human Health and Safety**

Work in this area is concerned with reducing hazards to the health, safety, and biosecurity of people involved in the production, processing, and distribution of agricultural and forest products. This area includes safety aspects of agricultural injuries and illnesses and methods for effective intervention. The emphasis is on immediate hazards to humans.

Areas include but are not limited to:

- Developing worker safety procedures for people handling agricultural products, supplies, and livestock
- Developing methods for safe handling of agricultural chemicals, fuels, and other products
- Determining health impact of pesticides on farm workers
- Determining need for and developing protective devices and procedures for safe usage and transportation of farm and forest machinery and equipment
- Determining nature, frequency, and causes of agricultural injury and occupational illness
- Developing methods to reduce fire risks

Developing methods to reduce fire risks and improve fire control measures for storage facilities, barns, and other farm structures or equipment

- Characterizing, measuring, or mitigating potentially harmful compounds derived from agricultural products such as tobacco that have pharmacologic actions
- Protection of humans against non-food allergens and toxins, and poisonous plants
- Mitigation of pollutants such as pesticides, radio-nuclides, heavy metals, excess fertilizer chemicals, growth regulating chemicals, airborne particulates, dust, ozone, odors, volatile compounds, combustion products, and smog
- Measuring and mitigating exposure to noise, vibration, sun, ergonomic, and other occupational hazards in agriculture
- Equipment and techniques for fire-fighter safety and survival.

Exclude:

- Agricultural and forestry practices to achieve safe levels of pollutants
- Disposal of pesticide rinsate and surplus pesticides
- Toxic residues on or in food products
- Pathogenic microorganisms and naturally occurring toxins, including allergens, in food
- Transmission of parasites and zoonotic diseases to humans
- Development and evaluation of textiles and textile products for their protective properties
- Methods to reduce fire risks and to improve fire control measures for range and forests

## **Healthy Lifestyle**

This area concerns activities related to healthy lifestyles, including maintenance of social, emotional, and physical health. The focus is on physical activity, exercise, stress management, and health-related practices including screening, immunization, and preventive care. The work in this area frequently involves population groups at risk and the factors that promote or hinder healthy lifestyles in these groups. Work is also concerned with development of a theoretical basis for behavior related to healthy lifestyles. Education and extension programs on healthy lifestyles and behavior change are concerned with the development, evaluation, and dissemination of education programs and strategies for professionals, students, and the public.

Areas of work include but are not limited to:

- Assessment of the healthfulness of lifestyles and analytical methods
- Factors that influence the healthfulness of lifestyles
- Development of standards and guidance on healthy lifestyles
- Development and evaluation of education programs and strategies on healthy

lifestyles and the dissemination of related information for professionals, students, and the public.

Exclude:

- Aspects of health related to nutrition
- Insects and other pests affecting humans
- Zoonotic diseases and parasites affecting humans
- Hazards to human health and safety
- Human development and family well-being
- Community institutions and health and social services
- Healthy lifestyle programs that focus on youth

### **Residential and Commercial Structures**

Work on social, aesthetic, and functional aspects of apparel and textiles provides a better understanding of the interface among producers, retailers, and consumers. This area also provides knowledge about the products of agriculture used in apparel and textiles and on factors that affect consumer choice. Work includes the social, economic, and design aspects of housing and other structures.

Areas of work include but are not limited to:

- Developing and evaluating textile products for superior functional characteristics to meet consumer needs, aesthetics, and preferences
- Determining properties of fibers that affect consumer satisfaction
- Textiles and apparel for special physical needs
- Preservation and storage of artifacts
- Effect of textiles and apparel on human development
- Development of textile products for production
- Availability of goods, services, and product information to the producer, retailer, and consumer
- Protection of residential and commercial structures and apparel from pests
- Determining family housing requirements on the basis of selected characteristics such as age, income, size, stage in the life cycle, health, occupation, and ethnic background
- Determining community, regional, and national needs for housing on the basis of user needs
- Effect of housing environment on quality of life issues
- Determining costs and benefits of construction systems and materials, giving special attention to consumer needs
- Improved design, technology, materials, and construction methods for renovation, pest control, and construction
- Housing environmental issues, including indoor air quality and "green" design
- Reviewing and developing building codes and other legal requirements based on life safety issues, health, and welfare of users of a built environment.

Exclude:

- Improvements in agricultural practices to enhance raw materials
- Functioning of markets, including capital markets, related to real estate
- Development of new textiles
- Agricultural structures and facilities construction
- Health and safety hazards such as pesticides, fire, and sun exposure
- Disposal, recycling, and new development of textiles from waste products
- Market economics and practices related to apparel and textiles

## **Community Institutions, Health, and Social Services**

This work addresses the development, quality, and functioning of community institutions and social services. Work in this area enhances the scope, scale, and effectiveness of public and private community institutions and services, including emergency preparedness and response, and public safety.

Areas of work include but are not limited to:

- Development, coordination, and adaptation of agencies and organizations
- Provision of social services
- Measuring the adequacy, quality, and cost of public services
- Organizational and operational efficiency of government agencies and units
- Community service institutions, including volunteer organizations, non-profit groups, and centers
- Development of community fire prevention, attack, and suppression plans and related homeland security activities
- Delivery of health services, including telemedicine centers
- Community and civic engagement.

Exclude:

- Dietary status
- Public administration
- Policy analysis
- Workforce preparation
- Outdoor recreation
- Community-related hunger, nutrition, and food programs
- Activities and programs that focus on youth development
- Entrepreneurship