



# Healthy Living

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## 4-H Healthy Living Literature Review and Recommendations for Program Planning and Evaluation

**EXECUTIVE SUMMARY 2009**

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*The 4-H Healthy Living mission engages youth and families through access and opportunities to achieve optimal physical, social, emotional well-being. This literature review was undertaken in the furtherance of this mission.*

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## EXECUTIVE SUMMARY

The 4-H Healthy Living mission engages youth and families through access and opportunities to achieve optimal physical, social, and emotional well-being. The 4-H Healthy Living mission utilizes research-based information and practices to create supportive communities that provide such access and opportunities through the acquisition of knowledge, skills, positive attitude, development of positive relationships, and engagement in behaviors that enable them to thrive. The purpose of the present document is to provide recommendations to the 4-H Healthy Living Task Force in its development of a five-year strategic plan to guide the 4-H Healthy Living Mission Mandate. To this end, we review current thinking about the health and well-being of children and youth in the contexts of their families and communities; then we apply these perspectives and definitions to a discussion of the direction, design, implementation, and evaluation of 4-H Healthy Living programming.

*We recommend using Bronfenbrenner's (1979) ecological model of development as a unifying framework for the execution of the Task Force's mandate.* Bronfenbrenner's model conceives of child and youth development as a function of interactions between individuals and the multiple contexts in which they live, including families, schools, neighborhoods, and communities, as well as the broader contexts of cultures and societies. By extension, effective attempts to define and promote healthy living must consider not only youth and children, but also the contexts in which they live and grow. This model is consistent with the 4-H Healthy Living mission.

Bronfenbrenner's framework provides a conceptual guide for strategic planning and a coherent approach to thinking about programming, but application of the framework to programming poses several challenges. First, there are philosophical differences about whether effective programs should be oriented toward prevention of poor outcomes through managing and reducing risk, or toward promoting positive outcomes by identifying and building on strengths, or both. Second, regardless of the perspective one chooses (prevention versus promotion), there is a plethora of definitions of health and well-being, which makes the identification of desired outcomes difficult. And finally, even when outcomes are agreed upon, there are numerous indicators available to measure health and well-being, and selection of good indicators is a complicated task.

However, there is a convergence of opinion in the developmental literature about the necessary preconditions for healthy development. These conditions fall into four coherent domains which can be broadly described as:

- 1) having a sense of efficacy in the world, fostered by acquiring skills and knowledge that enable competence in chosen tasks,
- 2) having a sense of autonomy, fostered by responsibility for age-appropriate tasks and behaviors,
- 3) being attached to and involved with peers and important adults, fostered by safe and caring relationships, and

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- 4) being connected and contributing to community, fostered by community acceptance, attention to growth of the spirit, and youth service in community efforts.

These domains are concisely represented in the Essential Elements of 4-H: Mastery, Independence, Belonging, and Generosity. Thus, another recommendation is that the Task Force use the Essential Elements as a global, descriptive definition of child and youth health and well-being. We also recommend that the 28 assets outlined by the National Research Council (NRC) Panel on Community Based Programs for Youth serve as indicators and targeted outcomes of those Essential Elements.

*Our second major recommendation is that 4-H apply standards of program design and evaluation that encourage high quality of implementation and reward strong evidence of effectiveness.* In order to facilitate this recommendation, we recommend using programs that are evidence based, or when such programs are unavailable, using a rigorous, theory-based process of program development and evaluation, visually represented by program logic models, and consistent use of measures across programs to assess change in targeted outcomes.

*Finally, we recommend that 4-H Healthy Living strategic plans include attention to expanding the scope of programming to include parent, school, and community contexts reflecting diverse individuals and communities, and a variety of delivery modes.*

Below we provide an overview of the paper's content and recommendations.

## **OVERVIEW OF PART I: PERSPECTIVES, DEFINITIONS, AND INDICATORS OF HEALTH AND WELL-BEING**

### **Bronfenbrenner's Ecological Theory of Development**

In Part I, we begin with a brief review of Bronfenbrenner's ecological model of development. Several features of the Bronfenbrenner model are especially relevant to questions of program design and implementation for child and adolescent health and well-being. First and foremost is that it focuses on the importance of thinking about relationships — both the relationship of individuals to their larger contexts as well as the relationships of those contexts to one another — when we think about how to define and promote health and well-being. Second, the model is developmental; it takes into account the changing importance of different contexts as children grow. Third, the model also enables us to think in terms of reciprocal interactions — for example, when a community youth development program mobilizes young volunteers, a community may become more connected to its adolescent members. And finally, the model provides guidance for decision making in complicated situations. For example, it demonstrates that there are multiple opportunities to promote health and well-being: we may be able to capitalize on strengths of some systems even when other systems are not functioning well.

**Another recommendation is that the Task Force use the 4-H Essential Elements as a global, descriptive definition of child and youth health and well-being.**

**Our second major recommendation is that 4-H apply standards of program design and evaluation that encourage high quality of implementation and reward strong evidence of effectiveness.**

**Finally, we recommend that 4-H Healthy Living strategic plans include attention to expanding the scope of programming to include parent, school, and community contexts reflecting diverse individuals and communities, and a variety of delivery modes.**

### **Challenges in Development of a Strategic Program of Healthy Living**

We then highlight some of the challenges that may arise in considering how to design and target healthy living programming because of different perspectives on health, different definitions of health, and different approaches to measurement of health and well-being. The literature is inconsistent about what constitutes child and adolescent health and well-being, how to measure it, and how to optimize health outcomes.

An important philosophical theme, familiar to most of those who provide direct youth services, is whether we think about health in terms of promotion or enhancement of good health, of prevention of risk and management of poor health, or of both together, since they are not mutually exclusive. Another theme is whether we define and assess health as a property of the individual, of the context of a given individual or of the population as a whole. In addition, we may choose to define health in specific and separate domains (e.g. physical, emotional, and social) or as a global attribute across domains (overall health). Finally, developmental considerations may change definitions of health, approaches to promoting health, and expected outcomes of healthy living programs.

### **Prevention and Promotion Perspectives on Health**

We examine risk prevention, resilience, and positive health promotion perspectives including their history, areas of commonality and difference, and their contextual approaches to defining health.

Prevention scientists use approaches that were originally developed in the field of public health to prevent disease and apply them to the identification and prevention of physical, social, and emotional behaviors in children and youth.

Prevention scientists have been successful in designing programs that effectively reduce aggression, substance abuse, depression, and other problems. However, a criticism of the prevention approach is that it focuses exclusively on eliminating problems (the “deficit approach”) and that good health should be defined as something more than an absence of problems. Health promotion approaches are represented by Positive Youth Development (PYD) and Community Youth Development (CYD) programs, which focus on building on existing strengths and promoting developmental assets. A criticism of the PYD and CYD approaches is that they have been less likely to use a systematic theory-based approach to development and evaluation of programs.

We argue that the two approaches are complementary and have benefited through their influence on each other; “prevention” programs are more likely now to incorporate health promotion goals, and PYD/CYD programs are more likely now to focus on developing an evidence base to demonstrate effectiveness. Also, both approaches consider health and well-being contextually and recommend intervention with families, schools, and communities as well as with individuals. Thus, both approaches are consistent with Bronfenbrenner’s ecological model and with the mission of 4-H Healthy Living.

## Other Definitions and Indicators of Health

In contrast, many national and international organizations define health more narrowly, as a property of either the child (e.g. absence of asthma or other health problems), or of the contexts in which children develop (e.g. a secure environment). In the last sections of Part I, we explore the different ways in which health is measured: global indicators of overall well-being and indicators of health in specific areas; health as a property of the individual, and health as a property of the contexts in which individuals develop. We consider these different approaches to measurement of physical, emotional, and social health as they are used in youth development programs (assets and risk and protective factors); other developmental contexts; and in medical and clinical fields.

We describe some indicators that may be especially useful as targeted outcomes for 4-H Healthy Living Programs:

- the 28 assets grouped into four major categories (physical health, cognitive development, psychological and emotional development, and social development) of the National Research Council (NRC) (2002),
- the risk and protective factors in multiple contexts (individual, peer, school, family, neighborhood) identified by the Social Development Research Group (Hawkins, Catalano, & Miller, 1992),
- the contextual indicators of health identified by the NRC, and
- the indicators used in the current 4-H study of Positive Youth Development (Lerner, Lerner, Phelps, and Colleagues, 2008) that assess positive functioning (Competence, Confidence, Connection, Character, and Caring).

## OVERVIEW OF PART II: CONSIDERATIONS IN PLANNING AND EVALUATION OF 4-H HEALTHY LIVING PROGRAMS

### Evidence-Based Practices and Programs

We begin the second part of the paper with a look at definitions of evidence-based practices and programs. Because those who work in 4-H Youth Development face pressure to use evidence-based programs or to provide evidence that their programs work, this section describes in some detail how programs come to be designated evidence based and the value and limitations of relying on evidence-based practices and programming. *Evidence-based practices* are those practices which have been identified through systematic review as effective in achieving their goals (e.g. hand washing to prevent the spread of infection). Once effective practices have been identified through this review process, they are incorporated as recommendations for practitioners and disseminated.

*Evidence-based programs* are a subtype of evidence-based practice. Most programs designated as evidence based (or model, exemplary, or promising) have three primary criteria in common: 1) the program must be theory based; 2) there must be strong evidence that a program works; and 3) the program must be ready for dissemination.

**The model provides guidance for decision making in complicated situations. For example, it demonstrates that there are multiple opportunities to promote health and well-being; we may be able to capitalize on strengths of some systems even when other systems are not functioning well.**

**An important philosophical theme, familiar to most of those who provide direct youth services, is whether we think about health in terms of promotion or enhancement of good health, of prevention of risk and management of poor health, or of both together, since they are not mutually exclusive.**

We then review the processes that lead to a program being designated as evidence based and the advantages and disadvantages of requiring that programs go through such a process. Evidence-based programs are generally time limited, target a specific audience, and serve a specific purpose (e.g. reduction of substance use through improvement of family attachment).

A primary advantage of using evidence-based practices or programs is that they provide convincing evidence of accountability in the use of limited resources. Other advantages include standardization of program materials and corresponding ease of dissemination, organizational credibility, and increased access to funding. A primary disadvantage is that establishing program effectiveness is expensive, time consuming, and requires extensive collaboration of practitioners and program developers with researchers. A promising and less resource-intensive approach is the systematic incorporation of brief, evidence-based, behavioral interventions (or “kernels”) (Biglan & Embry, 2008) into ongoing healthy living programs and activities that are less structured and are not designated as model programs.

### **Best Practice Principles Applied to 4-H Programs**

In the next section, we outline some general best practice principles relevant to 4-H program development and evaluation. First, all 4-H programs should be explicitly based on a theoretical model of change, optimally in the form of a logic model available as part of the program materials. Program goals should be clearly articulated in the logic model, and program activities should be designed to produce outcomes that will achieve those goals. A logic model should also specify the audience for which a program is intended and the level of ecosystem for which change is targeted. Second, program outcomes should be documented, and evidence of program effectiveness should be readily accessible through peer-reviewed publications or through evaluation outcome reports available online in a central repository. Third, evaluation should be budgeted for and funded as a standard part of program costs. Fourth, programs that work should be disseminated and evaluated in a variety of settings. Finally, programs should incorporate both prevention and promotion approaches, clarifying the level and domain of health they address and whether they intend to affect the health of an individual, the individual’s context, or both.

### **Current 4-H Healthy Living Programs**

Next, we briefly review a selection of 26 Healthy Living programs (featured on the 4-H Headquarters website as Programs of Distinction or Programs of Excellence) ([http://www.national4-Hheadquarters.gov/about/4-H\\_programs.htm](http://www.national4-Hheadquarters.gov/about/4-H_programs.htm)) in light of the definitions, perspectives, and principles discussed above. The purpose of this section is to highlight areas of health and well-being that are addressed by current 4-H Healthy Living Programs and areas that are underrepresented. We also examine the evidence base and availability of evaluation material for these programs.

Most of the programs combine both prevention and promotion principles and most focus on a specific aspect of physical health. Direct interventions with children of all ages are balanced with programs that target larger contexts, including families, schools, and communities. There were few programs on the website that specifically target diverse, high-risk, or minority audiences, though a number of the programs appear to include a variety of demographics.

Only a minority of programs explicitly stated their theory base and none provided a logic model linking activities to intended outcomes. There was no solid evidence of accountability for a majority of programs. Evaluation and outcome data were either not available or were difficult to locate for many of the programs.

## Conclusion and Recommendations

In the last section of Part II, we present a series of considerations that may be useful in informing the selection, design, and evaluation of 4-H Healthy Living Programs. These considerations are derived from: (1) our use of the ecological systems model of development as a unifying framework; (2) the earlier discussion (Part I) of challenges in the definition and measurement of health and well-being; and (3) the intent of 4-H programming to represent “best practices” in the promotion of health and well-being. These “best practices” will be rooted in theoretical grounding, a logic model with clearly specified activities leading to measurable goals, and documentation of program effects through careful selection of indicators.

### 1. Use a Unifying Theoretical Framework to Establish Strategic Goals and Priorities

#### *Adopt a Uniform Theoretical Framework for 4-H Healthy Living Programs*

Adoption of a uniform theoretical framework for healthy living programs and a uniform set of indicators for assessing health outcomes will be necessary to create a manageable evaluation system and to allow for comparison of results across studies. Bronfenbrenner’s ecological model of development provides a unifying theoretical framework that is consistent with the 4-H Healthy Living Mission Mandate.

#### *Establish Strategic Plans for 4-H Healthy Living Programs*

4-H systems and organizations at national and state levels should use this unifying framework to set strategic goals and to identify specific health-related issues and outcomes. The 4-H Essential Elements, Five C’s, and 28 Assets reviewed in this paper provide a framework that can be used to guide priority setting in strategic planning processes around 4-H Healthy Living Programs across all levels of the Extension system.

### 2. Expand the Evidence Base for 4-H Healthy Living Programs

#### *Include Evidence-Based Practices, Programs, and Curricula that Address Health Across Domains as Part of the 4-H Program Delivery Mix*

Adoption of evidence-based models offers Extension the opportunity to extend programs with a track record of successful impacts and to expand Extension’s traditional role of disseminating research to the broader arena of translating research from controlled trials to community settings.

#### *Use Theory-Based Program Planning and Evaluation Processes*

Deliberate, theory-based program planning processes lead to clear specification of activities designed to produce specific outcomes. In turn, this facilitates strong program evaluation and ensures that strategic goals are being met.

## Recommendations:

1. Use a unifying theoretical framework to establish strategic goals and priorities.
2. Expand the evidence base for 4-H Healthy Living Programs.
3. Expand the scope, targets, and delivery modes of 4-H Healthy Living programs.

*Invest in Research Partnerships and in Building Evaluation Capacity*

Significant investment in partnerships with researchers and in building evaluation capacity will be necessary to create a strong and sustainable program of research and evaluation.

This will increase potential for leveraging state and federal funding.

**3. Expand the Scope, Targets, and Delivery Modes of 4-H Healthy Living Programs**

*Expand the Scope of Health Programming to Include Family and Community Contexts in Addition to Targeting Individual Youth*

In Extension, opportunities to work across 4-H youth and family program areas are an organizational advantage that often remains unexplored. The systematic creation of integrated family and youth program models would strengthen both the outreach capacity and potential impacts of 4-H work in the arena of healthy living. The 4-H system also has the opportunity to apply its experience with community youth development approaches to health programming. Engaging 4-H youth in assessing and impacting factors that affect health at the community level could potentially increase the visibility of Extension's work to a larger set of constituents, as well as improve policies and local conditions to better support healthy choices for families and youth.

*Recognize the Importance of Cultural Differences in Designing and Delivering Programs that Address Health Indicators*

The equity, access, and opportunity domain of the 4-H Professional Research, Knowledge and Competencies (PRKC) system clearly defines the commitment of 4-H to “interacting effectively and equitably with diverse individuals and building long-term relationships with diverse communities.” In the context of 4-H Healthy Living Programs, it suggests that priority audiences are youth and family populations with multiple risk factors who are underserved by traditional health care systems and are disproportionately affected by chronic disease.

*Incorporate Health Programming into the Variety of Delivery Modes Utilized by the 4-H System*

In order to achieve maximum impact in improving health outcomes for youth, it will be important to guard against health-related programs becoming marginalized into one delivery mode. The integration of health programs into the 4-H club program merits particular attention, given the numbers of youth engaged and the opportunities for sustained activities and impacts offered by the club delivery model.