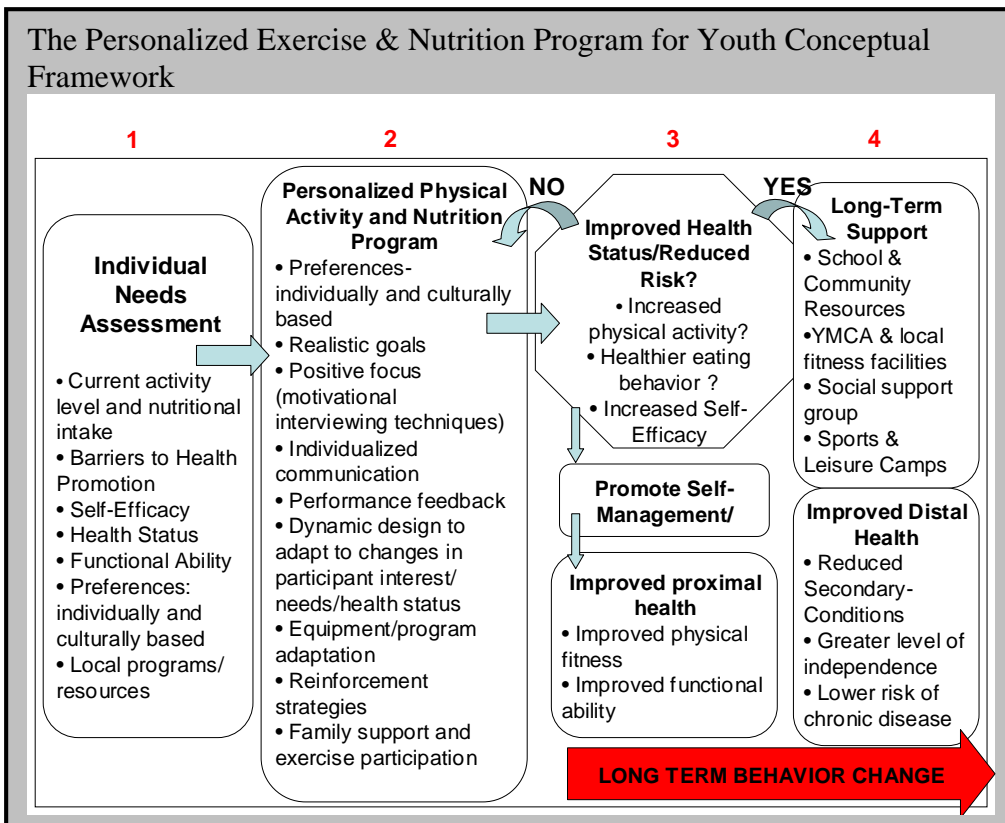


**The PEP-for-Youth Conceptual Intervention Model**

The conceptual intervention model that we are using in this project has been modified from a successful health promotion intervention developed for adults with mobility disabilities and is referred to as the *Personalized Exercise and Nutrition Program or PEP-for-Youth*. The *PEP-for-Youth* conceptual model takes into account the specific needs, preferences, history and learning style of each participant in order to promote acquisition and long-term maintenance of the targeted health behaviors. The model employs an ecological framework that emphasizes the link between individual behaviors and social and environmental support. The primary theories embedded in the model include social cognitive theory (i.e., improving self-efficacy), and social support theory (i.e., use of a wellness coach to facilitate behavior change using motivational interviewing methodology).



The *PEP-for-Youth* framework (illustrated in Figure) begins with a *needs assessment* (column 1) that establishes baseline measures for (a) current level of physical activity, (b) nutritional intake, needs and limitations, (c) barriers to health promotion, (d) self-efficacy, (e) health status (i.e., secondary and other health conditions), (f) functional ability (full, partial or no use of legs), (g) personal preferences, and (h) environmental mapping of *PEP-for-Youth Conceptual Framework*

local programs/resources in the home, school and neighborhood. This initial assessment provides the context for developing a program that will meet each youth's specific needs, interests, and circumstances.

A *PEP-for-Youth* wellness coach and participant review the needs assessment and collaboratively develop a *personalized* physical activity and nutrition plan (column 2) to assure that the participant feels ownership of his/her health behavior and fully agrees with the intervention targets (i.e., goals and short-term objectives). The resulting individually tailored health promotion activities are communicated and prompted through short text messages (SMS) and biweekly (every two weeks) coaching calls, lasting approximately 30 minutes, between the *PEP-for-Youth* wellness coach and the participant.

A key feature is that the resulting program is not static and can be altered as required to meet changing needs and unanticipated barriers encountered by the participant. A successful intervention (column 3) will result in improved health behaviors such as higher levels of physical activity and better nutritional choices. However, if positive changes do not occur, the dynamic design of the *PEP-for-Youth* intervention model and its *person-centered* approach allows it to be revised and modified *iteratively* to meet the changing needs and desires of the participant. The ultimate goal is to have each participant successfully connected to existing health promotion resources available in their community in order to sustain key health behaviors acquired in the program (column 4).

The *PEP-for-Youth* intervention model has several key elements that enhance its effectiveness: a) it focuses on encouraging youth to make positive health behavior changes in realistic, easily achievable increments using motivational interviewing techniques to address resistance and promote development of self-efficacy for target behaviors; b) it builds in support activities tailored to the specific needs and desires of each participant based on personal and environmental contextual factors; c) it supports wellness coaches through a computer software application (*PEP-for-Youth* platform – Attachment 3) used to collect needs assessment data, prepare goals and objectives, develop implementation strategies, and evaluate the program's success (Assess, Plan, Implement/Coach, Evaluate); d) it facilitates revision of a participant's program to accommodate changing needs, desires, or conditions; and e) it promotes long-term maintenance of newly acquired health behaviors through linkage to community or web-based resources.