

## **Physical Activity and Nutrition: What 5th Graders Know and Say**

*Eloise Elliott<sup>1</sup>, Steve Palmer<sup>2</sup>, Christa Ice<sup>1</sup>, Derek Belcher<sup>3</sup> and Luciana Braga<sup>1</sup>, (1)West Virginia University, Morgantown, WV, (2)Northern Arizona University, Flagstaff, AZ, (3)eLearning for Kids, Inc, Princeton, WV*

Background: Healthy Hearts for Kids (HH4K) ([healthyhearts4kids.org](http://healthyhearts4kids.org)) was developed in 2001 as one of the first web-based instructional modules for children to learn about nutrition and physical activity, and how to live a healthier lifestyle. To date, HH4K has been used by 34542 students in 1048 schools in 49 US states. The development of HH4K is based on Bronfenbrenner's Ecological Systems Theory, which views individuals as part of a number of ecological contexts that influence and are influenced by the others. Methods: Both the content knowledge tests and the attitude/behavior survey were embedded in the electronic delivery of the instructional module, and registered users were forced to take both surveys at baseline. The 23-question pre/post attitude and behavior survey was derived from the YRBSS, and validated instruments used in the SPARK program. The knowledge test items were developed from HH instructional objectives (5-7 per content topic) and validated by content experts. Results: Children's knowledge scores in both nutrition and PA were right at 50% overall, with nutrition scores somewhat higher than PA scores at baseline. Children are eating far below the recommended five fruits and vegetables a day, and are consuming upwards to five soft drinks daily. About  $\frac{3}{4}$  of the children reported being PA about 60 minutes on most days of the week. Regarding behavior intentions, a majority of the children reported intentions to be PA tomorrow, but less than half intend to eat five F&V. When considering intent a year from now, kids are reporting greater intent to eat more F&V, but report that PA levels will remain constant. Conclusions: Despite ongoing national, state, and local efforts to better inform and education children and their parents about physical activity and nutrition, there appears to be minimal change over the last few years in 5th grade children's overall general PA and nutrition knowledge and attitudes/behaviors prior to the start of a specialized health intervention.