

## Elementary school students learn about hunger and fullness

### The Situation

There is much societal concern about childhood overweight and obesity. Consequently, there have been many programs to prevent or treat these conditions focusing on controlling external factors to food intake and activity level. Research indicates that few have lasting success. An alternative is to use internal cues of hunger and fullness to regulate food intake promoted by a growing number of healthcare providers and research studies.

### Our Response

A University of Idaho Extension Educator developed a program, "Hunger and Fullness," to teach elementary-age students the importance of listening to internal cues of hunger and fullness for regulating food intake.

Children learned about hunger, how to recognize physical signs of hunger, the difference between hunger and appetite (a psychological desire to eat), the actual size of their stomach, fullness, how to recognize the physical signs of fullness, and strategies for waiting to eat until hungry and stopping when full. Additionally, children watched a demonstration about how their stomach is like a balloon and can stretch and get bigger. Younger students listened to *A Very Hungry Caterpillar* by Eric Carle, a children's book in which the main character responds to hunger in a variety of ways. Each student received a balloon to remind them that their stomach is like a balloon.

Over 800 students were taught in two Franklin County elementary schools by an Extension Educator, SNAP-Ed paraprofessional, and school wellness educator. The majority of the students were Caucasian with 7 percent Hispanic and 2 percent American Indian, Black, Pacific Islander, and Asian.



Hunger and Fullness presented by Katie Smith, Harold B. Lee Elementary School Wellness Educator

### Program Outcomes

Students in grades 3-5 completed an evaluation before the class and immediately after the class. The number (n) of students answering varied from 495-639 depending on the question. A McNemar's cross-tab test was used to determine if pre-test and post-test scores were significantly different. Results are shown on the table (next page).

### The Future

Healthy lifestyle education programs for youth will continue to be taught in elementary schools and in out-of-school settings. Other topics that will be taught in the future include eating mindfully, what to do when you are not hungry but want to eat, and other intuitive eating topics. The program will be shared initially with other Extension Educators in Idaho and then throughout the nation.

<b>Question</b>	<b>n</b>	<b>Percent correct in Pre-test</b>	<b>Percent correct in Post-test</b>
How do you know when your body needs food?	639	95%	94%
What is one physical sign you need to eat?*	499	63%	76%
What is the size of your stomach?*	503	29%	96%
How do you know when your body has had enough to eat?	634	92%	94%
What is one physical sign to stop eating?*	495	15%	31%

\* p<0.01

### FOR MORE INFORMATION

**Laura Sant**, Extension Educator  
University of Idaho Extension, Franklin County  
561 W Oneida  
Preston, ID 83263  
Phone: 208.852.1097  
Fax: 208.852.2812  
E-mail: lsant@uidaho.edu

6-13lsant-hunger.pub  
4/13