Chew the Fat

1. **DESCRIPTION:** Teams will demonstrate knowledge of the human digestive system and proper nutrition.

2. **ESSENTIAL STANDARDS ALIGNMENT:** 4.L.2, 5.L.1

3. **TEAM OF UP TO:** 2

4. **MAXIMUM TIME:** 60 min.

5. **TEAMS:** Must bring a writing instrument.

6. **EVENT LEADERS:** Will provide a hands-on event with all necessary items, objects, materials, questions, and response sheets for participants to complete stations. Examples include but are not limited to: models, slides, and pictures.

7. **SAFETY REQUIREMENTS:** None

8. **IMPOUND:** No

9. **THE COMPETITION:** This event will be run in a station format. Teams will rotate through stations that assess any or all of the following topics:

   a. Identify the major organs and body parts involved in the digestive process and understand the important job each body part has:
      i. salivary glands
      ii. taste buds
      iii. teeth: incisors, premolars, molars, and canines
      iv. esophagus, stomach, liver, small intestine, large intestine
      v. kidney, urine, bladder
   b. Compare and contrast chemical and physical digestion.
   c. Understand food and the benefits of vitamins & minerals.
      i. Vitamin List: A, B, C, D, E, K
      ii. Minerals List: Calcium, Iron, Magnesium, Phosphorous, Sodium
   d. Be able to test for the presence of fats and oils using the paper bag test and know which foods tend to contain high amounts of fats and oils.
   e. Know what foods are considered starches and the result of an iodine test on starch and non starch foods. Students will not be required to perform this test but may be shown pictures of the results of this test and asked to draw conclusions about the results.
   f. Know how to use food labels to make better food choices, specifically identifying serving size, vitamin and mineral content, overall caloric content plus identifying where the calories are coming from (fat, protein, carbohydrate).
   g. Know common foods in the major food groups: fruits, vegetables, grains, protein, dairy and where they fit in the food pyramid and in the USDA My Food Plate.
   h. Understand the relationship among the amount of food energy (calories) consumed, weight, and metabolism.

10. **SCORING:** Points will be awarded for the accuracy of responses. Ties will be broken by the accuracy or quality of responses to pre-selected questions chosen by the event leader.

11. **EVENT RESOURCES:**
    See the Event Resources tab on our website at www.sciencenc.com for instructions, videos and more.