

Island Grown Schools Nutrition Unit

Unit Title: Nutrition, Food and Sustainability

Grade: 9-12

Essential Questions: Why is it important to know where our food comes from? / What does it mean to “Vote with your Fork?”

<p>Connections to IGS Enduring Understandings:</p> <ol style="list-style-type: none"> 1. Appreciate the farming profession 2. Recognize difference between the industrial food system and localized food systems 3. Understand the connection between healthy soil, healthy plants, and healthy people 4. Know that everyone can grow food 5. Feel confident in making healthy food choices 	<p style="text-align: center;">Knowledge:</p> <p>Unit Enduring Understandings:</p> <ol style="list-style-type: none"> 1. Students will understand the difference between the industrial and local food system 2. Students will recognize their power as consumers and understand the meaning of “Vote with your Fork” 3. Students will understand the impacts of the industrial food system and how we can make change on a local level <p>Students will know:</p> <ol style="list-style-type: none"> 1. Our food choices affect our personal health, the health of the environment, and the health of our community as a whole 2. The food system is not an isolated system, but is nested within political, economic, and social systems that have both local and global implications.
<p>Connections to MA Nutrition Frameworks:</p> <p>3.14 Describe how food choices are influenced by availability, individual and family preferences, media, and background, and identify healthy foods within various social groups</p> <p>3.15 Explain the relationships among dietary intake (including nutritional supplements), eating behaviors, physical activity, and emotional health</p> <p>3.17 Identify the effects of food preparation techniques on the nutritional value of the food</p> <p>3.18 Identify common food-borne illnesses</p> <p>3.19 Identify and practice resource management skills needed to maintain and improve nutritional health</p>	<p style="text-align: center;">Skills:</p> <p>Students will be able to:</p> <ol style="list-style-type: none"> A. Identify ingredients in the foods they eat and trace the origin of those ingredients B. Read food labels C. Maneuver a grocery store in order to find the freshest and healthiest items D. Make healthy eating choices

3.21 Identify how social and cultural messages about food and eating influence nutrition choices	
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Evidence

Performance Tasks(s): <i>Specific activities we create for students, to engage in learning concepts...</i>	Evaluative Criteria
<ul style="list-style-type: none"> * <i>Students complete surveys (from Food Inc. Guide), and discuss class responses</i> * <i>Students trace their lunches, and present their case</i> * <i>Students create their own “food rules” and read them aloud</i> 	<ul style="list-style-type: none"> *Thoughtfulness of responses, scope of understanding overarching food issues *Accuracy of maps, depth of research into food origins, clear and effective presentation *Meaningful food rules
<p>Non-activity based evidence: <i>Educators will be able to assess student learning by...</i></p> <ul style="list-style-type: none"> * <i>Conversations with students during and after activities (Strawberry Milkshake cards)</i> * <i>Observations of change in student eating behavior</i> * <i>Student interest and involvement in local food community</i> 	<ul style="list-style-type: none"> *Awareness of the industrial food system * Students have a sense of what they learned, and have questions they want to keep exploring * See students making healthier choices in the cafeteria * Email list sign-ups, participation in community events (IGS, Slow Food, School Gardens, etc.)

Learning Plan

Code (link to IGS Enduring Understandings, Standards)	Learning Events: <i>Specific steps students will take in this unit, with and without IGS coordinator, in chronological order</i>	Notes to support learning event success:
3.14, 3.15 IGS EU 2 3.21 IGS EU 1 3.17 IGS EU 5 3.18 IGS EU 1,2,3 3.19 IGS EU 2 3.19 IGS EU 2 3.21 IGS EU 5 3.19 IGS EU 5 3.19 3.21 IGS EU 1 3.17, 3.19	<p><i>* Hand out survey from Food Inc. Discussion Guide for students to fill out</i></p> <p><i>“Vote with your Fork” - introduction to IGS, empowerment through food choices</i></p> <p><i>* Read aloud: Strawberry Milkshake activity</i></p> <p><i>* Follow-up discussion: “Anyone want to guess what you just read?” and “What is missing from these ingredients?” “Where do you think these ingredients come from?”</i></p> <p><i>* Continuing discussion: “Why is it important to know where food comes from?” “What are the impacts of our food choices?”</i></p> <p><i>* Tracing food: Individually or in groups of 2-3, students can trace their lunch, or trace items passed around (canned soup, frozen chicken nuggets, etc.) (20 mins; 1 hr; 1 week; depending on depth of research)</i></p> <p><i>* “From Seed to Fork” activity, from French Fries and the Food System</i></p> <p><i>* (Optional, if time allows) Organic vs. Non-organic</i></p> <p><i>* So now what? What can we do with this information?</i></p> <p><i>* Introduce Michael Pollan’s Food Rules. Read some aloud. Ask students to create their own on index cards that we will display around the room</i></p> <p><i>(If time allows) Watch 1:49 clip of Michael Pollan’s, “Supermarket Secrets”</i></p> <p><i>* Make Strawberry Milkshake using local ingredients</i></p>	<p>* Have apples for students to eat (follow-up at the end of class: “extra credit” for anyone who can tell me where these apples come from, discussion on why they chose the apples they did)</p> <p>* There are several ingredients, so ask students to pick 2-3 from the bag</p> <p>* Break down the implications of food choices: economic, social, environmental</p> <p>* Use survey as guide – students can use the meal they used in survey to trace where it came from</p> <p>** Give example, sandwich: break down each ingredient, where it comes from, how it was made, use map if possible, and statistics on where corn, wheat, sugar, etc. come from.</p> <p>* Have pesticide sheet for students to take home; have Organic Industry Structure for students to look at; have print-out of M. Pollan’s Food Rules</p> <p>* Have email list sign-up for interested students</p> <p>* Need index cards, hole punch, string, tacks, and markers/crayons</p> <p>* Need projector, screen, Mac converter for projector, etc.</p> <p>* Mermaid Farm yogurt and milk, “Our Honey” or any local honey, and local strawberries/blueberries</p>

Materials:	Resources:
<ul style="list-style-type: none"> - apples (variety: organic, local, non) - survey - Michael Pollan's Food Rules - index cards - markers/crayons - hole puncher - string - tacks - Pesticide handout - Organic Industry Structure handout - maps of US grown crops - Email list sign-up sheet - Strawberry Milkshake cards - computer - projector 	<p>Books: Omnivore's Dilemma (original or Young Reader's Edition)</p> <p>Articles: "Contaminated Food Products" sheet "Food Rules" NY Times – 10/11/09, http://www.nytimes.com/interactive/2009/10/11/magazine/20091011-foodrules.html "Vote with your Fork", Michael Pollan - http://www.nourishlife.org/2011/03/vote-with-your-fork/ What the World Eats, Time Magazine: http://www.time.com/time/photogallery/0,29307,1626519_1373735,00.html</p> <p>Community resource people: Island Grown Schools coordinators Jan Buhrman – food activist, chef Island farmers The FARM Institute</p> <p>Websites: worldmapper.org http://noimpactproject.org/educators-middle-high-school-environment-curriculum-html/lesson-plan-3-of-5-food/</p> <p>Movies: Fresh Food Inc. Nourish Short Films: - - "Supermarket Secrets" http://www.youtube.com/watch?v=snP40-unO0A&feature=related - - "Twinkie vs. Carrots" http://www.youtube.com/watch?v=JH-Qv3f73x4&feature=related</p> <p>Other involved organizations: Slow Food MV</p>