**FACS State Course Name:** Nutrition and Wellness

**Unit:** USDA Dietary Guidelines  
**Lesson:** 5-A-Day/More Matters

**Competencies/Purpose:** N14.0 Demonstrate nutrition and wellness practices that enhance individual and family well-being.

**Time Needed:** 180 minutes (2 block periods)  
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**FACS Standards (Colorado and National):**
N14.2.3 Analyze the effects of food and diet fads, food addictions, and eating disorders on wellness.
N14.3.1 Apply various dietary guidelines in planning to meet nutrition and wellness needs.

**Colorado Academic/Model Content Standards (CDE):**
RWC01.03.a - Oral Expression and Listening - Verbal and nonverbal cues impact the intent of communication - *Give informal talks using an appropriate level of formality of verbal language and nonverbal interaction with audience*
RWC01.07.b - Oral Expression and Listening - Oral presentations require effective preparation strategies - *Use verbal and nonverbal techniques to communicate information*
HPE 02.04.c - Physical and Personal Wellness – Analyze the benefits of a healthy diet and the consequences of an unhealthy diet – *Describe the importance of eating a variety of foods to balance nutrient and caloric needs*
HPE02.06.d – Physical and Personal Wellness – Demonstrate ways to take responsibility for healthy eating – *Set a goal to improve one’s personal food choices that lead to a healthier diet*
SCI02.06.a - Life Science - Cells, tissues, organs, and organ systems maintain relatively stable internal environments, even in the face of changing external environments - *Discuss how two or more body systems interact to promote health for the whole organism*

**PWR2.2.a-Postsecondary & Workforce Readiness, Learning and Behavior Skills, Find and Use Information / Information Technology - Select, integrate, and apply appropriate technology to access and evaluate new information**

**PWR2.7.d-Postsecondary & Workforce Readiness, Learning and Behavior Skills, Personal Responsibility - Take responsibility for actions.**

**PWR2.7.g-Postsecondary & Workforce Readiness, Learning and Behavior Skills, Personal Responsibility - Attend to personal health and wellness.**

**PWR2.8.a Postsecondary & Workforce Readiness, Learning and Behavior Skills, Communication - Read, write, listen and speak effectively.**

**Objectives:** Upon completion of this lesson, students will be able to create a personalized plan to increase their intake of fruits and vegetables, so they consume at least 5 different colors of fruits and vegetables daily.

**Instructional Strategies:**
- Assigned Questions
- xxBrainstorming
- Case Study
- Computer Assisted Instruction
- Concept Attainment
- xxCentral Questioning
- Conducting Experiments
- xxCollaborative Learning
- Debates
- Demonstration
- discussion
- Drill & Practice
- Field Trip
- Inquiry
- Interviewing
- Jigsaw
- xxJournal Writing
- Laboratory Groups
- Learning Centers
- Lecture
- xPeer Learning
- Problem Solving
- Reading for Meaning
- Research Projects
- Role Playing
- Simulations
- Storytelling
- Think, Pair, Share
- Tutorial Groups
- xxWriting to Inform
Tools, Equipment & Supplies:
Computers (Wall Wisher, Prezi, Go Animate, Glogster)
Construction Paper
Markers, Scissors, etc.
Paper
Printer(s)

Key Terms:
Phytochemicals: naturally occurring chemical compounds found in plant-based foods.
Synergy Foods: food combinations whose combined interactions are better than just eating the foods separately.
Carotenoids: Phytochemicals which may prevent some cancers, heart disease, and other health conditions.
Lycopene: a carotenoid, found in red fruits and vegetables, which may reduce the risk of cancer and heart disease.
Lutein: a carotenoid which may help prevent blindness.

Introduction of Lesson: (Day one is scheduled for the computer lab or with laptops)
Bellringer Question (Daily Supplement): “What 2 dietary guidelines are you following well and which 2 dietary guidelines could you improve on. (Students know that they are expected to answer the DS question, in a well developed paragraph, using at least 5-7 sentences)

1. Wallwisher: Students will be asked to post at least 4 different fruits and vegetables that they have eaten in the last week. After seeing common fruits and vegetables listed repeatedly, teacher will ask the students to evaluate the wall and try to add different fruits and vegetables.

2. Class will review USDA Dietary Guidelines, which were introduced in the previous class.

3. Class Discussion: Dietary Guidelines that the students follow frequently and Dietary Guidelines that they could improve on. (One guideline that will likely be reviewed is “Choose a variety of fruits and vegetables daily.”

Exploring the Content (Lesson):
1. Think, Pair Share: Working in pairs, students will be asked to categorize fruits in vegetables into the common color groups: Reds, Yellows, Oranges, Greens, Whites, Blues/Purples, listing at least 5 fruits and vegetables per category.

2. Class Discussion: Groups will share their findings with the class, with a student listing the different kinds on the whiteboard, smartboard or other format that the whole class can see.

3. Students will watch one of the following podcasts:
   b. http://www.youtube.com/watch?v=d3P5LCRKZg&feature=related
   c. http://www.youtube.com/watch?v=Sgr19kChbUo

4. Students will then be asked to create a visual using a brochure format, Prezi, Glogster or Go Animate, to illustrate how they can increase the “colors” in their own diet. They will be encouraged to create a useful theme (with an creative slogan), such as a team, puzzle pieces or a rock band to illustrate how the different colored fruits and vegetables work together to increase their overall health and well-being. They should also include what constitutes a typical serving size of at least 2-3 fruits or vegetables per color category.

5. Students will finish, edit and share their presentations the next class period.

6. Before the student presentations, as students finish up, they will be asked to go to: http://www.fruitsandveggiesmatter.gov/index.html to determine what their personal goal should be, based on their age, sex and level of physical activity. Students will be asked to explore other sidebars such as “Top Ten Reasons to Eat fruits and Vegetables”, Nutrition of Fruits and Vegetables, Fruit and Vegetable of the Month, In the News, etc. The teacher will explain that the “5 A Day” campaign was updated with the “More Matters”.

Resources:
Handouts
Multimedia
Overhead Masters
Workbook pgs. Click here to enter text.
Other Click here to enter text.
Review/Summary:

1. Students will list new fruits and vegetables that they either haven’t eaten in the last month and/or would like to try for the first time, using Wall Wisher. This time, they will be asked to read each others’ postings and not repeat a fruit or vegetable that is already posted.

2. Taking the students suggestions, the class will categorize the fruits and vegetables that they list, according to the color groups.

3. To conclude the lesson, students will participate in a “Wheel of Juices” game, where they will spin a dial signifying the colors of various juices such as pomegranate, blueberry-cranberry, V8 Splashes, Chocolate Soy Milk (considered a juice because it is extracted from soy beans), etc. They will then come to the front of the room and sample the selected juice from small cups. (Cups will have covers so they don’t see the color of it.). Teacher will caution students about the high sugar content in juices but still better choices than soda, and some of the caffeine/energy drinks that teens often consume.

Assessment:

1. Informal Assessment on Day 1 (sometime in the last 30 minutes) : Human Multiple Choice Quiz: Students will be asked to stand, using different poses for each of the 5 A Day categories as the teacher or student aide names a fruit or vegetable, the students will categorize which fruit or vegetable goes in each category. (Example: Reds: hands above their heads, Yellows: touch their toes, Greens: Hands stretched out at shoulders, Oranges: hands at Hip, etc.-although not an accurate personal assessment, the teacher will be able to view how much class as a whole, understood the concept and a great way to get their blood moving!)

2. Visual Presentation: Students will be evaluated on the construction of the visual as well as the presentation

3. Informal Assessment after Day # 2’s presentations: Students will use puzzle pieces to analyze what fruits and vegetables work well together (Food Synergy) for better nutrient consumption, building bones and teeth, maintaining a healthy heart, etc.

4. Written Open-Ended, multiple choice and matching questions on the Unit Test.

5. Food Journal entries during future weeks. (Are they documenting an increase in their fruit and vegetable intake?)

FCCLA Integration:

FCCLA National Programs that can be Used for STAR Event Projects may include Community Service such as preparing healthy snacks for a local preschool, after school program, day program for developmentally delayed adults, or nursing home. Another idea might be Student Body, where the students could use some of their presentations as an introduction to an elementary school class, YMCA After School Program or they could create a peer education program.