

Winter Squash

1. **What are some nutritional benefits of winter squash? How do the nutrients vary between different color varieties?**

Primary/Secondary-level response:

[Answers will vary]

- The nutritional and health benefits may include: healthy vision (vitamin A), healthy immune system (vitamin C), healthy skin, heart health and antioxidant properties (vitamin E), intestinal tract health (fiber), and maintenance of body metabolism and basic muscular system (potassium).
- Darker yellow/orange flesh varieties (acorn, butternut, pumpkin) contain more Vitamin A (more than 300%).
- Darker green shell varieties (kabocha) contain more vitamin C and less vitamin A.
- Spaghetti squash, a lighter colored flesh, contains very little nutrients (no good or excellent sources).

2. **What is iron? What does it do for the body? How much iron do you need? Make a list of foods that are good and excellent sources of iron.* Then, develop a daily meal plan that will meet your daily needs. *Good sources provide 10-19% of the recommended Daily Value (DV). Excellent sources provide at least 20% DV.**

Primary/Secondary-level response:

Iron is a mineral needed for healthy blood and to promote good health. You need iron to prevent iron deficiency anemia. Every day you should eat foods that have iron in them, like meats and fortified cereals. Foods with vitamin C in them help your body use iron. Excellent sources of iron come from beef, poultry, chicken, liver, fish, and pork. Good sources include: fortified cereals, nuts, seeds, dried beans, tofu, and raisins.

3. **How is the iron provided by plants different from the iron provided by animal sources?**

Primary/Secondary-level response:

Not all foods contain the same type of protein. Lean meats, eggs, and dairy products are considered complete high-quality sources of protein that provide the full package of essential amino acids needed to stimulate muscle growth. Plant proteins such as grains,

legumes, nuts, and seeds are incomplete proteins in that they do not provide sufficient amounts of essential amino acids.

4. Search for recipes with winter squash. List the various ways squash can be prepared.

Primary/Secondary-level response:

[Answers will vary]

Baked, boiled, sautéed, steamed, pureed (for soup), chopped and cooked in soup, strained, stuffed, grilled, roasted, and used in pies and cakes.

5. Go to the grocery store and identify all of the different varieties of winter squash. Do a price cost comparison. What are the most and least expensive varieties?

Primary/Secondary-level response:

[Answers will vary by store and region]

Varieties include: acorn, banana, buttercup, butternut, calabaza, delicata, kabocha (Japanese), Mediterranean, pumpkin, and spaghetti.

6. What are the top three squash-producing countries in the world? Hypothesize why these countries lead squash crop production.

Primary/Secondary-level response:

- 1) China (30% of world output)
- 2) India (19%)
- 3) Ukraine (5%)

[Hypotheses will vary. Possible answers may include:]

- Winter squash is an important food staple (long winters) to country's population.
- There is a large area for growing crop.
- There is high bee infestation (ideal for growing squash).
- Climate is subtropical to tropical (ideal for growing squash).

Sources:

www.eatright.org

www.ers.usda.gov

www.nal.usda.gov/fnic/foodcomp/search/

www.pyramid.gov/MenuPlanner/downloads/RateWhatYouAte.pdf

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