FN1399 (Reviewed Oct. 2026)

Eat Smart. Play Hard.

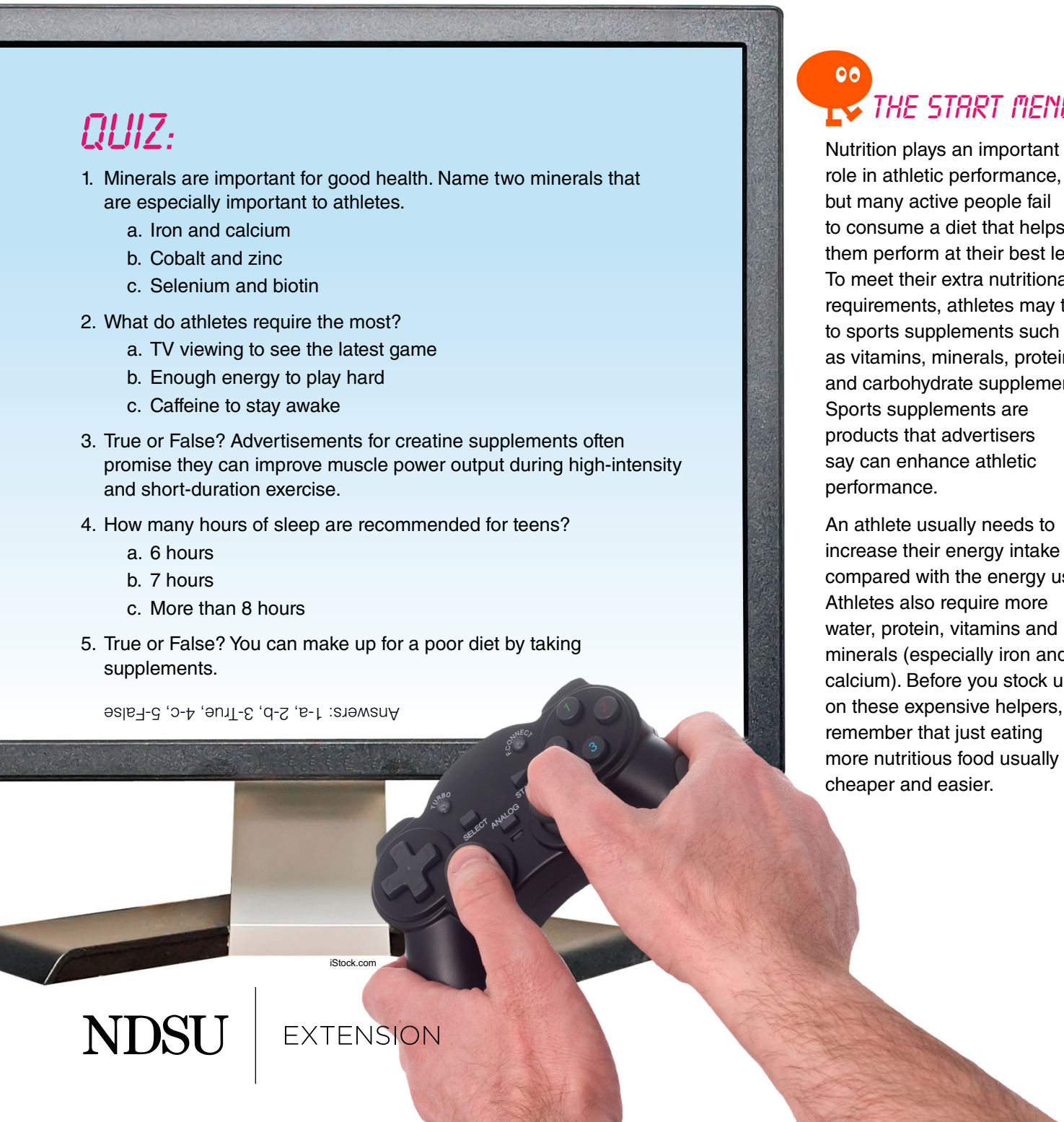
SPORTS SUPPLEMENTS: PLAY THE GAME RIGHT

Shannon Medenwald, Former Program Assistant
Julie Garden-Robinson, Ph.D., R.D., L.R.D., Food and Nutrition Specialist

QUIZ:

1. Minerals are important for good health. Name two minerals that are especially important to athletes.
   a. Iron and calcium
   b. Cobalt and zinc
   c. Selenium and biotin
2. What do athletes require the most?
   a. TV viewing to see the latest game
   b. Enough energy to play hard
   c. Caffeine to stay awake
3. True or False? Advertisements for creatine supplements often promise they can improve muscle power output during high-intensity and short-duration exercise.
4. How many hours of sleep are recommended for teens?
   a. 6 hours
   b. 7 hours
   c. More than 8 hours
5. True or False? You can make up for a poor diet by taking supplements.

Answers: 1-a, 2-b, 3-True, 4-c, 5-False



iStock.com

THE START MENU

Nutrition plays an important role in athletic performance, but many active people fail to consume a diet that helps them perform at their best level. To meet their extra nutritional requirements, athletes may turn to sports supplements such as vitamins, minerals, protein and carbohydrate supplements. Sports supplements are products that advertisers say can enhance athletic performance.

An athlete usually needs to increase their energy intake compared with the energy used. Athletes also require more water, protein, vitamins and minerals (especially iron and calcium). Before you stock up on these expensive helpers, remember that just eating more nutritious food usually is cheaper and easier.

NDSU | EXTENSION

PLAYERS 1 AND 2: PROTEIN AND CREATINE

Athletes may be tempted to buy supplements to improve their athletic performance. Some of the most popular supplements used by athletes to improve their performance include protein powders and creatine.

Protein supplements promise many benefits, such as increased strength, more energy, bigger muscle mass and extreme weight loss. In general, is extra protein truly beneficial or just hype? The results are conflicting with little to no data supporting the benefits of protein supplements.

Creatine is made by the body in the liver, kidneys and pancreas. It also occurs naturally in foods such as meat and fish. Creatine supplements promise to improve muscle power during high-intensity and short-time exercise. The long-term safety of creatine supplementation is unknown. Creatine supplements, as with other dietary supplements, are not well-regulated and could contain substances that could put an athlete's health and eligibility at risk.

GAME OVER

Dietary supplements, while recommended in some cases, cannot replace a healthful diet. Some dietary supplements can be harmful, and sports supplements haven't been tested for safety or effectiveness with teens and kids. Supplement manufacturers do not have to prove that their products are safe. They are not highly regulated, so athletes may run the risk of consuming a dietary supplement that is harmful to their health.

Studies on adults have shown that many supplements do not keep the promises from the advertisements. Most won't make you any stronger, and none will make you any faster or more skillful.

RESTART

Don't waste your money on expensive and possibly harmful supplements. Instead, try these tips:

- **Eat smart.** Focus on eating foods such as lean meats, whole grains, vegetables, fruits and low-fat dairy products.
- **Play hard.** If you want to increase your endurance, consider weight training or other techniques to increase your muscle strength.
- **Stay energized.** Not getting enough food to fuel an activity can wear you out quickly — and even place you at risk for injury or muscle fatigue.
- **Sleep.** Studies show that teens need more than eight hours of sleep a night, and sleep is important for athletes.
- **Consult a professional.** Talk to your doctor or another health professional before taking any supplements or changing your physical activity.

For information about supplements, visit www.consumerlab.com (an independent testing lab) or http://ods.od.nih.gov/ (the Office of Dietary Supplements of the National Institutes of Health).

For more information about nutrition and fitness, visit **www.ag.ndsu.edu/food**.

NDSU Extension does not endorse commercial products or companies even though reference may be made to tradenames, trademarks or service names.

For more information on this and other topics, see www.ndsu.edu/extension

North Dakota State University is an equal opportunity educator and employer. This work is supported by the U.S. Department of Agriculture's National Institute of Food and Agriculture. Requests for accommodations related to disability may be made at 701-231-1865. web-12-21, web-10-26