Exercising the Body and Brain

Studies have shown a strong relationship between the health of the body and the health of the brain. Exercise revs up complex processes inside the brain that can deter depression, help you stay calm, and keep your mind sharp.

Exercise Boosts Mental Fitness

The brain has approximately 86 billion neurons designed to give orders to the rest of the body through chemical messengers called neurotransmitters. Studies show that deficiencies of two of these neurotransmitters (glutamate and gamma-aminobutyric acid, or GABA), can lead to mood disorders such as depression. However, moderate exercise can increase the amounts of the two neurotransmitters, contributing to increased mental fitness.

Exercise Decreases Stress

When you’re stressed, your brain secretes the “fight or flight” hormone, cortisol. Elevated cortisol levels can create a constant and unnecessary feeling of stress. But, if you exercise, you expose your body to “controlled stress,” which helps regulate your brain’s stress response, keeping you more calm.

Exercise Slows the Brain’s Aging Process

Your brain ages just like the rest of your body, but exercise can help the brain handle natural, age-related deterioration without taking a toll on your memory. Older adults who exercise have larger brain volumes than those who don’t. Plus, the brain’s hippocampus (which is responsible for memory and learning) is larger in people who are active. Exercising won’t make you smarter, per se, but it will help you remember things better as you age.

Zika: Why Men Should Be Concerned Too

More athletes are avoiding competing in Brazil’s 2016 Olympics due to fears related to the Zika virus. Although the media has placed a high focus on the dangers for women who contract the virus, infectious disease experts agree—reproductively speaking—that men have the most reason for concern after visiting a country with a large Zika outbreak.

If a pregnant woman is bitten by a mosquito that carries the Zika virus, or if a woman becomes pregnant shortly after being bitten, her unborn baby runs the risk of being born with microcephaly, a severe, neurological birth disorder linked to Zika. But, the virus can also been found in the semen of infected men, and the amount of times the virus can be sexually transmitted is uncertain. This creates a chance of a man infecting his partner and putting their unborn baby at risk for microcephaly.

Because there is limited data, the Centers for Disease Control and Prevention (CDC) recommends that men who have been diagnosed with or who have had symptoms of Zika use condoms or abstain from sex for at least six months after symptoms occur.
Avoiding Sports-related Eye Injuries in Children

Eye injuries are the leading cause of blindness in children, and most eye injuries incurred by those ages 11 to 14 happen while they are playing sports. Every 13 minutes, an emergency room in the United States treats a sports-related eye injury. Of the estimated 2 million Americans who sustain eye injuries each year, approximately 40,000 will go on to be considered legally blind in the injured eye.

August is “Children’s Eye Health and Safety Month.” This is not only a good time to get your child’s eyes checked before school starts, but it is also a good time to ensure that they are protecting their eyes while playing sports.

Many youth sports teams don’t require eye protection, so parents should insist that their children wear safety glasses or goggles when playing. Parents can also set a good example by wearing protective eyewear themselves. The following graphic shows the type of protective eyewear that should be worn while playing popular sports.

### Recommended Protective Eyewear

- **Baseball**
  - Face guard attached to the helmet for batting; sports goggles for playing in the outfield

- **Basketball**
  - Sports goggles

- **Football**
  - Face shield attached to helmet

- **Ice Hockey**
  - Helmet with full face protection

- **Field Hockey**
  - Face mask for the goalie; sports goggles for the other positions

- **Soccer**
  - Sports goggles

- **Swimming**
  - Swim goggles

- **Tennis**
  - Sports goggles

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**APPLE & CHICKEN SALAD**

- 2 red apples
- 2 celery stalks, diced
- 2 skinless chicken breasts, cooked, and diced
- ¼ cup plain, nonfat Greek yogurt
- ½ cup raisins
- ¼ cup mayonnaise
- ¼ tsp. salt
- ½ tsp. ground black pepper
- 16 lettuce leaves (Bibb, romaine, green, or red leaf)

**Directions**

Cut the apples into quarters, remove the cores, and then chop the quarters into bite-sized pieces.

In a medium-sized bowl, mix all the ingredients except the lettuce.

Arrange four lettuce leaves on a plate and top with one-fourth of the salad mixture.

Makes: 4 servings

**Nutritional Information (per serving)**

- Total Calories: 290
- Total Fat: 8 g
- Protein: 25 g
- Carbohydrates: 34 g
- Dietary Fiber: 4 g
- Saturated Fat: 2 g
- Sodium: 330 mg

Source: USDA