

Name: \_\_\_\_\_  
Date: \_\_\_\_\_

## Eye on the Field, Volume 7, Issue 11, November 2006

### “Adolescent Brains are Insensitive to Alcohol for a Short Time, But at Great Cost”

1. The research results presented in the article support the theory that adolescents’ nervous systems allow them to adapt to alcohol’s effects more quickly than adults.

TRUE                  FALSE

2. What are some of the potential implications of the findings described in the article?

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

### “Alcoholism May Cause Decreased Density of Neurons in the Orbitofrontal Cortex”

3. The findings in the article suggest that disturbances in the orbitofrontal cortex (ORB) that arise as a result of alcoholism may lead to what behavioral features of alcoholism?
- a. Impulsive behavior
  - b. Risky decision-making
  - c. Compulsive reward-seeking behavior
  - d. All of the above

4. The results of this study show that the progressive loss of neurons in the ORB is irreversible, so it is important that an individual stop abusing alcohol as soon as possible.

TRUE                  FALSE

5. What are some important questions that this research leads the authors to believe need to be addressed in the future?

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

### “The GAD1 Gene May Play a Pivotal Role in Developing Alcoholism”

6. What is the main function of the GAD1 gene, and how does alcohol consumption affect it?

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

7. Although there is not a consensus as to the meaning of the relationship between the GAD1 gene and alcoholism, there is a link between certain variants of the GAD1 gene and a propensity for alcohol dependence.

TRUE                  FALSE

### “Heavy, Chronic Drinking Can Cause Significant Hippocampal Tissue Loss”

8. What specific types of learning managed by the hippocampus are most affected by drinking large amounts of alcohol over a period of time?

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

9. The findings of this study show that the memory and cognitive impairments described in chronic alcoholics are completely reversible over time.

TRUE                  FALSE

10. This study had led to additional studies to examine what associated issues?
- a. What happens to the hippocampus when heavy drinkers stop drinking
  - b. Can the hippocampus heal itself and what can be done to help it along?
  - c. Both a and b
  - d. None of the above