## Teens, parents learn of alcohol's effect on brain

## By Tom Betz

ntbetz@nwkansas.com Organizers had to bring out extra tables and chairs Wednesday as about 150 teens and parents crowded into the Elks Lodge to hear about a new study showing changes in brain activity of young people who drink.

The Sherman County Community Partnership for Prevention and Education planned the event with help from the Grant Junior High chapter of Students Against Destructive Decisions and the Goodland Elks Lodge. The audience was mostly younger kids from the junior high, but there were some high school students among the 105 kids registered. The 39 adults were mostly parents.

People in the audience were asked to answer 10 true or false questions about drinking and the expected effects of drinking over the short and long term.

Then they watched a video about the study, which the audience through a magnetic resonance imaging view of the damage done to a teenage brain by even a little binge drinking.

In the video, students were asked about their drinking habits, and talked about how it felt to get drunk and how they felt a day or two afterward.

Moderator Burton Pianalto, an investigator for the sheriff's department and the county attorney, paused the video, and the teens in the audience agreed it was an eye opener to see the differences the brain scans showed between those who did not drink and those who did.

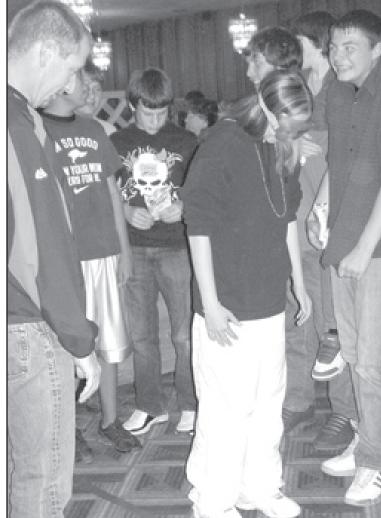
"You do stupid things that can affect the rest of your life," said one girl who was the spokesperson for her table.

showed brain scans of a girl who had been a weekend binge and that of a person who said she had not been drinking.

In the video, Monica Ortiz, a college student, explained that most teenagers believe they can drink for 20 or 30 years before any serious physical problems develop. Challenging that belief, she interviewed with Dr. Scott Swartzwelder, a Duke University neuropsychologist who has used rats to study the effects of alcohol on the brain.

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what would happen if -as a 16-year-old — she drank on week-



Police Officer William Fulcher helped students try on "fatal vision" goggles that give the wearer a sense of what it is like to try to do things while drunk. He told the teens to walk a line, but with the glasses on, they couldn't. Photo by Tom Betz/The Goodland Star-News

those who had used in their late 20s. The younger subjects showed a lower ability to learn new information than those who were just a few years older. He said the difference appeared to change when the person reaches the age of about 25, The second part of the video and then the brain effects seemed to more of those of an adult.

Aggressive behavior of teenagers who drink was explained by Dr. Swartzwelder. He said alcohol's sedative effect is less in adolescents than in adults. As a result, teenagers may be at a higher risk for the dangerous behavior such as fighting, unprotected sex, or criminal activity.

In a segment at the Medical Center at the University of California, San Diego, Ortiz introduces Dr. Susan Tapert who is studying the effects of alcohol on the brain us-Ortiz asked Dr. Swartzwelder ing magnetic resonance imaging, or MRI, technology.

A machine with a large magnet ends and got drunk three times a that takes pictures of the brain. month. He said the effects on the By recruiting young people who liver and heart wouldn't be seen drink, as well as those who do not, for years. The brain however, can Dr. Tapert said, she has been able show changes almost immediate- compare the brain scans. The re-In the video, Ortiz answered questions while undergoing an MRI exam, and Dr. Tapert compares the results with a 17-year-old who said she regularly drinks six to nine beers on Friday and Saturday nights. The scans show the welder said, he focused on two alcohol user has fewer changes in groups of people - those who had blood-oxygen levels, translating to less brain activity.

In wrapping up the study, Dr. Swartzwelder said the research linking alcohol to brain impairment is big news, and the differences between teens and adults is startling.

"You want your brain to work as well as possible," he says. "You're really going to need it in your early 20s."

After the video, the kids and adults were asked to go back to the true-false questions and see how many they got right. Moderator Pianalto read each question, then asked for the answer from the audience.

In some cases the audience was right, but on others the audience was split and Pianalto gave them the correct answer.

He gave talked about what could happen if a teen is caught drinking even before having a drivers license, and what the legal consequences could be later as a driver.

After snacks, the young people got to try a set of "fatal vision" goggles, allowing them to test their skills while "under the influence." Pianalto and Officer William Fulcher of the Goodland Police taped lines on the floor and the students were told to walk the line with the goggles on. No one could.

At the end of the program, door prizes were given to many of the

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These are the true-false questions presented to the teens and adults at a forum Wednesday on the effects of drinking, with the correct answers provided by Investigator Burton Pianalto.

1. It commonly takes at least 15 years of drinking alcohol for any serious physical problems to develop. False.

2. As long as a young person doesn't drink enough to get sick or pass out, alcohol will not have a negative effect on brain development. False.

3. It commonly takes years of drinking alcohol to see its damages on the liver and heart. True.

4. It commonly takes years for the brain to show physical changes caused by drinking alcohol. False.

5. Alcohol effects adolescent brains and adult brains differently. True.

6. People who use alcohol in their early 20s have less ability to learn new information than those who use alcohol in their late 20s. True.

7. Because teen brains are developing, they are at greater risk for impairment due to alcohol than adult brains. True.

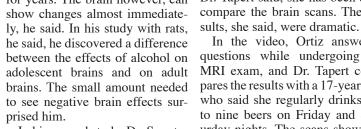
8. Teenagers may be at a higher risk than adults for dangerous behavior related to alcohol, such as fighting, unprotected sex or criminal activity. True.

9. Teens who do not drink alcohol have more brain activity than teens who drink more than half a dozen beers on weekend nights. True.

10. The brain of a teenager who drinks alcohol is effected more emotionally by alcohol advertising than the brain of a nondrinking teenager. True.



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In his second study, Dr. Swartzused alcohol in their early 20s and

Lt. Gov. vows continued fight against coal plants

leen Sebelius' top energy adviser said Tuesday that her administratwo coal-fired power plants even if legislators insist on allowing them.

Lt. Gov. Mark Parkinson promised the dispute over the two plants won't end even if legislators override Sebelius' veto of a bill authorizing their construction. She has vetoed two similar bills.

Sebelius' administration has blocked the plants since October over their potential carbon dioxide emissions. Sunflower Electric Power Corp. wants to build them outside Holcomb, in Finney County.

"We're certainly going to evaluate all of our options," Parkinson said. "I assure you, there are multiple options, and if Sunflower's out there telling people that all they need to do is get this veto overridden and the plants will be built, and if they believe that, they're sadly mistaken."

Top Republican legislators accused the Democratic governor's administration of ignoring public support for Sunflower's project.

"What is this, a monarchy?" said Christian Morgan, the state Republican Party's executive director.

Environmentalists believe most Kansans oppose Sunflower's project, but backers point to the bipartisan legislative majorities favor-

TOPEKA (AP) - Gov. Kath- ing it as evidence that critics are wrong.

'You have Republicans and tion is considering steps to block Democrats, you have conservatives, moderates, liberals, rural, urban, a cross-section of every walk of life in this state, supporting this," said Senate President Steve Morris, a Hugoton Republican who supports the project.

Parkinson made his comments during a brief Earth Day observance, calling on legislators to sustain Sebelius' vetoes. He is co-chairman of an energy policy council.





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