Just because you’re not on campus doesn’t mean your Snap Story has to stop...

Swipe right for the APPLE 2018 Snapchat filter! Let’s chat @APPLEathletics and #APPLE2018

APPLE Goals:
The APPLE Training Institute aims to prevent alcohol, tobacco, and other drug (ATOD) abuse through:

Education
Empowering teams
Post-training coaching

Student-Athlete Substance Use
Compared to all college students, student-athletes are LESS likely to use...
(no use in past 12 months)

Compared to all college students, student-athletes are EQUALLY likely to use...
(in past 12 months):
Alcohol
(19.5% did not use in past year)  Anabolic Steroids
(99.5% did not use in past year)

Heavy drinking is down significantly among student-athletes.
Student-Athletes Who NEVER Use in Competition Season

- Includes 71.8% who don’t use at all

Student-Athlete Use of Marijuana

- 71.8% of SA includes 19.3% who don’t drink at all

Top Reasons Student-Athletes Don’t Drink

- No desire to experience effects
- Don’t want to hurt athletic performance
- Against beliefs/values
- Concerned what it might do to health
Most student-athletes’ alcohol use does NOT interfere with their sport

94.3% didn’t show up late or miss a practice or game.

84.0% didn’t perform poorly in a practice or game.

Brain areas not fully developed until ~ age 25:

- Reasoning
- Impulse control
- Planning
- Decision-making

Compared to other student drinkers, student-athletes who drink...

- Consume more alcohol
- Drink more frequently
- Have more negative consequences including
  - Driving under the influence
  - Unsafe sexual behaviors
  - Criminal offenses

Source: Scott Swartzwelder, Clinical Professor of Psychiatry and Psychology and Neuroscience, Duke University. Research supported by NIAAA and the U.S. Department of Veterans Affairs.
“Alcohol and other drug use can be the difference between a winning and a losing season.”

In groups, discuss how much you personally agree or disagree with this statement.

Be sure to provide reasons & defend your answer!

Alcohol & Athletic Performance

NCAA Resources
Alcohol Decreases Aerobic Performance

- Decreases blood flow to muscles and organs
- Decreases energy available for muscles to perform

Alcohol Impairs Motor Skills

- Decreases strength, power and sprint performance for up to three days (72 hours)
- Decreases HGH secretion by up to 70%
- Reaction time can be affected up to 12 hours after drinking

Alcohol Disrupts Sleep & Learning

- Reduces time spent in deep, restful sleep.
- Impedes memory formation
- Disrupts muscle repair

How well can game plans be learned?

American Athletic Institute: www.americanathleticinstitute.org
Alcohol Negatively Impacts Body Composition

- Increases body fat
  - Often mixed with high-calorie drinks and high-calorie foods
  - Overall weight gain

Alcohol Dehydrates

- Up to 3% body weight loss within 4 hours of drinking
  - fluid loss
  - chance of heat cramps, exhaustion and stroke
  - temperature tolerance
  - reverses heat acclimation training

How many cups of water may an athlete need to rehydrate after 5 standard alcoholic drinks?

17 cups

Sources:
- Berning, J. (1996)
- Shirreffs & Maughan (2006)
Athletes + Rehydration

- 12+ cups of fluid per day
- 1 alcoholic drink = at least 1 additional cup of fluid
- 5 alcoholic drinks = 17+ cups of fluid

Alcohol Inhibits Absorption of Key Nutrients

...needed for:
- Converting food into fuel
- Healthy red blood and nerve cells
- Making new oxygen-carrying cells
- Energy metabolism and endurance

27% of student-athletes report to practice with low blood glucose levels (not all due to alcohol use)

Why does alcohol matter?
The body spends energy metabolizing alcohol, not making more glucose.

So What?
Can lead to severe hypoglycemia 6 to 36 hours after heavy drinking.
Alcohol Slows Recovery

Alcohol delays muscle repair
Drinking after competition hinders recovery

Risk of injury is doubled:
Injury rate for non-drinkers 23.5%
Injury rate for drinkers 54.8%

American Athletic Institute: www.americanathleticinstitute.org

#1 Day of the Week for Injuries:

Monday

American Athletic Institute: www.americanathleticinstitute.org

Alcohol Increases Risk of Illness

Drinking depresses immune function.
Athletes who drink get sick more often.

American Athletic Institute: www.americanathleticinstitute.org
What’s the harm in a hangover?

82% of student-athletes drink
Of those, half (52%) had at least one hangover in the past year.

EFFECTS of a hangover:
• Increased heart rate
• Decreased left ventricular performance
• Increased blood pressure
• Decreased endurance performance
• Dehydration

Getting drunk 1 time can negate up to how many days of training effects?

Due to lost physiological conditioning including:
Heart rate
Ventilation
Muscle enzymes

MARIJUANA’S IMPACT ON PERFORMANCE

Break out session tomorrow @ 3:05 pm
Negative Impacts of Marijuana

Can last several days beyond initial use

- Respiratory system
- Cardiovascular system
- Cognition
- Psychomotor performance
- Perception
- Motivation
- Mental health

Marijuana Effects on Respiratory Systems

- Decreased oxygen
- Muscles deprived of optimal energy level
- More quickly fatigued
- Decreased performance
- At risk for respiratory problems (chronic cough, etc.)

Marijuana Effects on Cardiovascular System

- Heart rate
- Burden on heart
- Blood pressure
- Efficiency in distribution of oxygen
- Stamina
- Endurance
- Oxygen uptake
- Can affect ability to regulate body temperature
Marijuana Effects on Cognitive and Psychomotor Performance

- Decreased coordination
- Slowed reflexes
- Short & long-term memory loss
- Increased time needed to learn
- Reduced ability to problem-solve
- Impaired memory
- Impaired ability to recall events
- Disrupted balance and posture
- Skill impairment may last up to 36 hours
- Significant risk to athletic performance

Marijuana Effects on Spatial and Time Perception

- Impairs ability to accurately judge distances
- Creates illusion that time is moving more slowly

Motivation

- Marijuana can decrease motivation to perform
- Fractions of seconds and inches count in sports
- Student-athletes have invested many hours of training and practice to act with precision
Alcohol and Team Success

Abstaining from alcohol use while in season can increase the likelihood of having a successful season.

Keller (2013)

Alcohol and Performance Potential

The lingering effects of alcohol hangovers reduces athletic performance by up to 11.4% in elite athletes (e.g., national teams)

Impacts are higher for college student-athletes.

Source: American Athletic Institute: www.americanathleticsinstitute.org

“The Hangover Effect or Disturbed Recovery Process”
What Is Acceptable Performance?

- Full Capacity: 100%
- Acceptable Performance: 90%
- Is 80% Capacity Acceptable?


What would a 15% performance INCREASE look like for your team?

For your individual performance?

Football 4-2

All-American 

Source: American Athletic Institute: www.americanathleticinstitute.org
Softball 24-31
28-27

NCAAs
Six 1-Run Losses

Avg. .254
Opp. .285
OBP .336
ERA 4.35

.292
.242
.386
3.69

Source: American Athletic Institute: www.americanathleticinstitute.org

Test Your Knowledge!
Prizes!

On your phone or other device, go to kahoot.it and enter:

GAME PIN

Create a nickname

Enter the answer on your device by matching color/shape.
Accuracy AND speed count!

Kahoot.it
Prizes for top Student-Athlete AND top administrator score!

• Save your screen image!