

Avoiding Drugs and Alcohol

Materials:

Worksheet

Brainstorm

This lesson will focus on the topic of drugs and alcohol. In this lesson students will learn what alcohol and drugs are, how to best avoid peer pressure, and how alcohol affects the brain. Ask students: what are some ways to avoid peer pressure? What are your preferred peer pressure aversion statements?

Write the students' answers on the white board. Here are some additional prompts to ask to further the discussion.

- Who in your life would be upset and disappointed if you consumed alcohol? How could this be a strategy to avoid peer pressure?
- Do you do any extracurriculars? How could alcohol or drug consumption affect your performance?
- Does drinking go against your character? How would you feel if you gave into peer pressure and drank?

There are many strategies that one can use to avoid peer pressure. Have students in groups share some of their suggestions. Here are a few of ours:

- I am busy that night!
- My parents will be so mad if I drink.
- I am allergic to alcohol.
- Honestly, I don't think it is cool to drink.
- Be honest and direct, just say no.
- I have an early morning.
- No I can't it will affect my progress for training (this could be used if you are an athlete)
- I don't like the way it makes me feel.
- Drinking makes me feel anxious.
- I am taking antibiotics. (When taking antibiotics you are prohibited from consuming alcohol).
- I am taking medication where I can not drink.



- My doctor has advised me to avoid alcohol with the medication I am taking.

Discuss

What is alcohol?

- Alcohol is classified as a depressant substance. Alcohol is made from the distillation and fermentation of fruits, grains, or even vegetables. Alcohol when consumed can alter one's perception, thoughts, feelings, judgment, and body functions.
- There are many side effects to consuming alcohol as it is a depressant substance. Some of those being: loss of consciousness, impaired speech, dizziness, and lack of coordination.

What are drugs?

- Drugs are chemical substances that alter how our bodies perform. There are four main classifications of drugs: stimulants, opiates, depressants, and hallucinogens.
 - Stimulants- Stimulants aid the central nervous system and help it to function at a higher rate. If you have ever had a cup of coffee and felt a "boost" after consuming it then you have experienced the effects of a stimulant. Stimulants include caffeine, ADHD medication, and narcolepsy medication. Stimulants are beneficial for the increased energy levels that they provide the user but at a cost. The brain can become dependent on the stimulant. For example, have you ever skipped your morning cup of coffee and felt more tired than usual for the rest of the day? This is because of that brain dependency on caffeine. Stimulants of a pharmaceutical nature should only be taken when prescribed by a doctor.
 - Opiates- Opiates are derived from the poppy flower. There are two types of opiates, natural and synthetic. Traditionally, opiates are prescribed to treat pain as they have the ability to help dampen the connections in receptors that signal the pain. Opiates are a type of sedative and while that is a plus for its use in the medical world, recreationally this makes them deadly. Opiates give users a feeling of euphoria and lightness. Some examples of opiates are heroine, morphine, and codeine. Opiates are highly addictive and one's body can build a resistance to them,



prompting the user to consume more and more of the drug. This can result in a loss of consciousness and in many cases an overdose which can cause aspiration of vomit into the lungs causing death.

■ Depressants- Depressants damper and inhibit our body's central nervous system from processing information. Neuron rate is slowed down which can provide a sense of relaxation as one's awareness of their thoughts or pressing issues can seem to "melt away". Depressants such as alcohol can be dangerous and easy to abuse. Alcohol is a depressant meaning that it lowers one's heart rate, and inhibits the body's central nervous system from processing information. This can have a relaxing effect. Depressant abuse can result in the inability to navigate the world around you without depending on constant intake of this type of drug.

In the next section we will discuss binge drinking and how that contributes to the overconsumption and abuse of alcohol.

Hallucinogens- Hallucinogens alter how our mind and body receives and interprets external stimuli. Hallucinogens include LSD, psilocybin, magic mushrooms, and mescaline. Things such as time, sounds, and visual stimuli are altered when hallucinogens are consumed. In large doses hallucinogens can produce a dangerous out-of-body-experience or cause dissociation.

What is peer pressure?

Peer pressure is the influence that group members or members can have on a person's decision making. There are positive and negative types of peer pressure. For example, a positive type of peer pressure would be a group of friends studying together to achieve a common goal of improved grades and better understanding of course content. In this lesson, we will be focusing on negative peer pressure. In a negative peer pressure situation a person may feel "pressure" to give into the idea being proposed by the group members or members. Peer pressure can be indirect such as there is an expectation to do something or act a certain way within a group and stepping out of line from that behavior is viewed negatively and not encouraged. Peer pressure can also be



direct such as in the case of a party where someone hands you an alcoholic beverage and tells you to drink, in a room where others are drinking and there is a direct proposition, some can feel pressured to give in.

Dive in!

In this section we will discuss how underage drinking affects the growing brain as well as how consuming drugs or alcohol affects our body budget. All students know that they should not consume drugs or alcohol, in this section we will get into the WHY students should refrain. Students will gain a new perception on another aspect that should deter them from drinking or consuming drugs.

How does underage drinking affect the growing brain?

- Ouring your teenage years, your brain changes and develops in many ways. Consuming drugs and alcohol can inhibit that growth. The developing teenage brain does a number of functions to promote it's growth such as refining the neural pathways that are not being used (this is called **pruning**) and increasing the volume of white matter in the brain (white matter aids in sending signals up and down the spinal cord to your brain) this is just the beginning of all of the amazing things that our brains do for us to prepare for our adult years. From these preparations our brains are able to function more effectively, handle more complex thinking patterns, and increase our plasticity. **Plasticity** is the ability to learn new skills, develop those interests, adapt to new situations, and learn from previous stimuli more effectively.
- So knowing this, how does alcohol and drug consumption impact the teenage brain? There are two main ways that consumption of these substances negatively impacts the size and functioning of the brain. First, it has been shown that teens who consume alcohol regularly have markedly smaller brain volumes and lower density (less white matter) in certain areas such as the hippocampus and prefrontal cortex.
 - You may be asking yourself, "Why is that an issue? Adolescence is a crucial time for brain growth and when inhibited from substance use, there are lasting effects on the brain's overall development. When any part of our brain is not functioning to the best of our ability, we are not as in control of our motor movements, thoughts, and actions as best as we could be. A person who consumes alcohol regularly and abuses it runs the risk of **brain degeneracy. Brain degeneracy,** otherwise known as



permanent brain damage, where areas of the brain become smaller and nerve cells die off. This results in learning and developmental difficulties.

- In extreme cases of alcohol abuses there are numerous other risks including but not limited to:
 - Liver damage
 - Wernicke-Korsakoff Syndrome
 - Around 80% of alcoholics have a deficiency in thiamine, which can cause the onset of serious brain disorders like Wernicke-Korsakoff Syndrome (WKS). WKS is characterized by the onset of Wernicke's Encephalopathy and a debilitating condition called Korsakoff's psychosis. Symptoms of Wernicke's Encephalopathy include mental fogginess, paralysis of eye nerves, and decreased muscle coordination. For example, a patient with Korsakoff's psychosis would find it difficult to comprehend how to exit a room or use their body to move in a fashion to assist that exit. Korsakoff's psychosis is a condition where one has difficulty with learning and memory retention. This condition can extend to difficulty making new memories and even difficulty remembering previously made memories.
 - It would then make sense that your brain's formation of concepts (which the brain uses to predict future events) would then be limited. This would have lasting negative impacts that would be irreversible. This is one of the many reasons why it is important to limit and never abuse alcohol.

How does consuming drugs or alcohol affect our body budget?

There are three aspects to our body budget that are affected when alcohol or drugs are consumed. First is sleep. Alcohol and drugs both affect the amount one sleeps and the quality of said sleep. Stimulants and hallucinogens can impair the amount of sleep one gets which can lead to sleep deprivation. Opioids and depressants can make one sleep too long but the quality of sleep is not optimal as your body can not relax properly due to the substances in your system. When we have a lack of sleep or lack of optimal sleep quality it can be difficult to function the following day. Think about how this lack of sleep might affect your day to day responsibilities such as school, homework, spending time



with friends and family, extracurriculars, and so on. Sleep deprivation can also cause irritability and mood swings which can take a toll on one emotional strength as well. Next, hydration, when you are impaired on any substance you can lack the awareness and ability to take care of your body, such as forgetting to drink water or any liquids while using. This dehydration can make it more difficult for your body to repair after a drug has been consumed recreationally. Third, nutrition, drugs and alcohol can lead to over or under eating. When one eats too much they feel sluggish and have lower energy levels. Consuming stimulants can lead to appetite suppression which then does not allow your body to get the energy and nutrients it needs to function properly. It is for these reasons that consuming drugs and alcohol does not promote a strong body budget and has many lasting and negative effects on your body's functioning.

Note: It is important to note that if a medication has been prescribed to you that you take as intended by the doctor and support your body by maintaining your body budget.

What is binge drinking?

- Binge drinking, defined as consuming 4 or more drinks on an occasion for a woman or 5 or more drinks on an occasion for a man. If this consumption of numerous drinks occurs on 10 or more occasions in a year, then that is viewed as continuous/frequent binge drinking. It can be difficult to know how much alcohol is in a given drink as well. When you have consumed multiple drinks it is additionally difficult to know how many drinks you have consumed on top of that. Binge drinking wreaks havoc on our body's functions and can lead to people making dangerous or rash choices that they would not have made sober.
- It is important to remember that the best person to be concerned with your safety is YOU!
 But if you consume alcohol your judgment is impaired that can in some cases cost you your safety and wellbeing.

Activity

In a group, students will make a list of ways that they think work best to say "no" in a peer pressure situation. They will then go through the scenarios and a pick the "no" strategy that works best for them. Finally they will act out what this scenario would look like. Allow 2-3 minutes per group.



Reflect

There may be times when you are in situations where you can be pressured into consuming drugs or alcohol. As we learned, alcohol consumption on the developing brain has many negative impacts that do not outweigh the benefits. Alcohol can easily be abused as well which has many lasting impacts on your growth and wellbeing. Finally, when consuming alcohol or drugs underage, you are not supporting your body budget. Use the following questions below to reflect on this lesson and your own values against consuming alcohol or drugs.

- How would those around you feel if you began to consume drugs or alcohol? How would their feelings affect you?
- How would you feel about yourself and your actions if you began to consume drugs or alcohol? How does this connect to your core values?

Extend and Enrich

Teen Substance Use & Risks | CDC

But you and dad drink: Talking to teens about alcohol | UMN Extension

The impact of alcohol on the developing brain

For Further Study

How to Connect with Your Teenager to Prevent Drug Use - Partnership to End Addiction

The longer you wait, the harder it may be to deal with your child's substance use

Teens and drugs: 5 tips for talking with your kids - Harvard Health

Talking with teenagers about drugs - Canada.ca

Professional Development

Are you setting a good example about moderation of alcohol?

<u>Binge Drinking | CDC</u>

What Is A Standard Drink?