Effects of Prenatal Exposure to Nicotine

Researchers have long wondered about the impact of prenatal exposure to drugs on a child's vulnerability to drug abuse. With regards to nicotine, this question has recently been addressed.

Dr. Denise Kandel of Columbia University found that daughters of women who smoked cigarettes while they were pregnant are four times more likely to begin smoking during adolescence and to continue smoking more than daughters of women who did not smoke during pregnancy. The study suggests that nicotine, which crosses the placental barrier, may affect the female fetus during an important period of development so as to predispose the brain to the addictive influence of nicotine more than a decade later.

Specifically, Dr. Kandel analyzed follow-up interview data on 192 mothers and their first born adolescents. The analyses revealed that 26.4 percent of girls whose mothers smoked while pregnant had smoked in the last year. By comparison, only 4.3 percent of girls who were not prenatally exposed to nicotine had smoked in the last year. While more prenatally exposed boys had also smoked in the last year compared with boys whose mothers had not smoked during pregnancy, the difference was not statistically significant.

To ensure that it was a mother's prenatal smoking and not her postnatal smoking that affected her daughter's smoking, the researchers analyzed the impact of those mother's smoking both during and after pregnancy. They found that, regardless of the amount of duration of current or past maternal smoking, the strongest correlation between maternal smoking and daughter's smoking occurred when the mother smoked during pregnancy.

Smoking activates several brain neurotransmitter systems including the dopamine system, which is involved in the reinforcing effects of addictive drugs in general. Dr. Kandel points out that, "The children whose mothers smoked during pregnancy are not only going to be more likely to smoke, but also may be more likely to use and become dependent on other drugs." Dr. Kandel hopes to research this issue by following the adolescents in her study for another six years.


FUNDING IN PART BY THE CITY OF MANHATTAN
Quit Smoking Football Style!

Just like all the great football teams in history, you can not succeed without a strong offense and defense. This is also true for the millions who try to stop smoking every year. Prepare for your “football game” by following these great offensive and defensive strategies. Before you know it, you could be in the next Smoke-free Superbowl.

Offense

- Maximize your motivation by listing on paper reasons for you to quit (health, bad breath, cost, early facial wrinkles, smoker’s cough, cancer, etc.).
- Drink extra fluids (however, caffeine and alcohol may trigger cravings).
- Eat plenty of fruits and healthy food.
- Avoid sweets because they may also trigger cravings.
- Try the “buddy system” and ask a friend to quit with you.

Defense

- Carry a supply of cigarette substitutes such as sugarless gum, carrot sticks, toothpicks, and sunflower seeds.
- Breathe the cravings—take a deep breath, hold it for a few seconds and exhale slowly. Repeat this several times. The craving should subside in 1 or 2 minutes.
- Mark your milestones with small, personal rewards.

A food reminder before the “big game”: “Just as a football team can come back from behind, so can you. Sometimes a response occurs, don’t let it distract you from your long term goal of making it to the Smoke-free Superbowl.”

Underage Drinkers at Colleges Suffer More Alcohol-Related Problems

Underage drinkers on this nation’s college campuses use alcohol as often as legal-age college students and experience many more problems because of their drinking. Specifically, 60% of college students under age 21 use alcohol, 84% of legal-age students use alcohol. Compared with older students, underage drinkers report their alcohol and other drug use leads to twice as many injuries and fights. Underage drinkers are also twice as likely to be victims of sexual misconduct. Finally, they suffer more hangovers, nausea, vomiting, memory loss, impaired academic performance, and more suicidal thoughts and actions.

Prevention Pipeline, July/Aug. 1993
How Long Does It Take
The Body To Rid Itself
Of These Substances?
A substance may be detected in the body for a longer period of time, depending upon individual differences, the amount taken, the route by which it is taken, and individual body composition and metabolism. Thus, these are general guidelines:

<table>
<thead>
<tr>
<th>Substance</th>
<th>Detection Time</th>
</tr>
</thead>
<tbody>
<tr>
<td>Alcohol</td>
<td>1 day (average)</td>
</tr>
<tr>
<td>Anabolic Steroids</td>
<td>1-8 months</td>
</tr>
<tr>
<td>Amphetamines</td>
<td>1-7 days</td>
</tr>
<tr>
<td>Barbiturates (sedatives)</td>
<td>1-3 weeks</td>
</tr>
<tr>
<td>Cocaine</td>
<td>3-7 days</td>
</tr>
<tr>
<td>Codeine</td>
<td>1-2 days</td>
</tr>
<tr>
<td>Heroin</td>
<td>4 days</td>
</tr>
<tr>
<td>LSD</td>
<td>30 hours</td>
</tr>
<tr>
<td>Marijuana</td>
<td>2-6 weeks</td>
</tr>
<tr>
<td>Nicotine</td>
<td>3-7 days</td>
</tr>
<tr>
<td>PCP (phencyclidine)</td>
<td>1-8 days</td>
</tr>
</tbody>
</table>

Dept. of Health Education, University of Kansas, 1994

Celebrate Safe!
With the approaching holidays comes lots of celebrating. So why not make the effort to ensure your celebrations are safe? Here are free ideas for keeping things under control and safe at your celebrations.

1. **Offer a choice**—Be considerate of your guests. One third of adults don't drink at all. Also, your guests may be taking medication or pregnant. Thus, if alcohol is being served, offer a variety of nonalcoholic beverages as well.

2. **Don't push refills**—Wait until the glass is empty before you offer another drink.

3. **Don't double up on drinks**—A lot of people count their drinks and doubling up is more alcohol than they can handle. Use a jigger to avoid “guestimating” how much you are pouring.

4. **Serve dinner or snacks**—This is important because it slows down the rate at which alcohol is absorbed into the bloodstream. It also slows the rate at which people drink.

5. **Friends don't let friends drive drunk**—Be sure everyone arrives home safely. Thus, provide safe rides, taxis, or allow them to “sleep it off” at your place.

Have a Safe and Happy Holiday!

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**GHB**

Gamma-Hydroxybutyrate (GHB), also known as “G-X” or “Liquid X,” is a relatively taste-free drug which comes in powdered, liquid, or capsule form. It was formerly sold by health-food stores and gyms as a sleep aid, anabolic agent, fat burner, enhancer of muscle definition, and a natural psychedelic. It was also used by rifle shooters to reduce tremors. GHB occurs naturally in the body, however it is not a nutritional requirement. Thus, it is an example of a drug being promoted as a natural supplement. When combined with alcohol, GHB can have similar side effects to that of Rohypnol (see Higher Education, Fall 1995). Above, the side effects of GHB include:

- **Slow reaction, decreased reaction time**
- **Loss of balance, dizziness, and disorientation**
- **Increased heart rate**
- **Increased blood pressure**
- **Increased breathing rate**
- **Seizure or coma**
- **Respiratory collapse**

In November 1999, the Food and Drug Administration issued a warning that GHB can cause seizures, coma, respiratory arrest, and death, especially when used with alcoholic beverages. It is now illegal to sell GHB in the United States. However, there were two reported cases from the Truman Medical Center in Kansas City where the patient developed a coma due to GHB ingestion. It is believed that GHB is in the Manhattan area.
Anabolic Steroids

Bear Bryant, the legendary football coach at the University of Alabama, used to say after his team had an impressive win, “Sometimes you lose when you win.” This statement could also be applied to those athletes who use steroids. They might gain some weight, but sooner or later they will be wearing a loser’s label. Anabolic steroids may put muscle on some people while they are lifting weights, but the list of side effects is long and severe.

Many people who use steroids are aware of the possible side effects, but they think that most of the problems will be in the future. This is a very naive view. The established side effects and adverse reactions possible from anabolic steroids are: acne, increase in cholesterol level, edema (water retention in tissue), focal damage, heart disease, hypertension, in women, increased risk of coronary artery disease, heart attack, stroke, jaundice, liver disease, liver tumors, peliosis hepatitis, male pattern baldness, prostate enlargement, sterility, shrunken growth, swelling of feet or lower legs, testicular atrophy, cancer, and death. In those users aged 12 through 17 years old, steroid use is also significantly and positively associated with the use of cigarettes, alcohol, and illicit drugs.

Other possible side effects and adverse reactions include: abdominal or stomach pains, aggressive, combative behavior ("wild rage"); bone pain, male breast development, depression, frequent urge to urinate, high blood pressure, impotence, insomnia, kidney stones, rash, sexual problems, unnatural hair growth, weight and breast odor, unusual bleeding, and variance blood.

The popularity of anabolic steroids is attributed to the growth of a large black market. Conservative estimates put the black market gross for steroids at $100 million a year. Many of the black market products come from underground labs and foreign countries. The quality and purity of these products are questionable.

The appetite for anabolic steroids is created by society’s value of good looks, masculinity and “playing to win.” The important message here is that it is not important to win at all costs!