**So What’s The Problem?**

Dopamine is a chemical that your brain produces whenever you do something that feels good or is life sustaining. This positive reinforcement is known as a reward or pleasure circuit. It evolved over millions of years to reinforce human behavior that prolonged the life of the individual or the species. For instance, your brain releases dopamine when you eat, especially when you eat calorie dense (sweet or fatty) foods, because you need calories to survive. Your brain also releases dopamine when you have sex or do things that make you happy.

**Dopamine and Drugs**

Drugs make you feel good because they cause you to get an artificial dopamine high—one that is much stronger than any that we get naturally. Each drug works slightly differently, but they affect your reward circuit by causing the brain to release more dopamine, or by causing the dopamine to stay in the brain longer, or by pretending to be dopamine and tricking your brain into feeling good.

When you use drugs, they cause you to get a much stronger dopamine “high” than you ever get in nature, which causes your brain to think that the drug is the most important thing in the world—more important than anything else in your life (food, sex, people you love, your career, your hobbies, etc.). Then you get addicted.

You only have a limited supply of dopamine in your brain. When a drug tricks your brain into using more dopamine than you’d normally use, you run out and have to wait for it to make more. This is part of what causes drug withdrawals. In severe cases it can cause you to feel down or depressed for months or even years at a time while your brain catches up. This is also why your brain develops a tolerance to drugs. The first time you use a drug it causes your brain to get a flood of dopamine, but after that there isn’t as much dopamine to flood your brain, so you have to use more and more of the drug to get the same effect. This also leads to addiction, and can be a cause of overdose.

For more information about how marijuana affects the teenage brain, scan this QR code with your smart phone to check out this Youth Speaks Out! radio show featuring marijuana expert Ralph Cantor being interviewed by Laytonville teens.

Are you concerned about someone’s drug abuse? Counseling and treatment services are available at Long Valley Health Center (984-8089). There are two Narcotics Anonymous meetings a week in Laytonville (call 984-8339 for information) or visit Healthy Start (984-8089) for more resources.

For more detailed information about how drugs work in the brain, check out [http://teens.drugabuse.gov/](http://teens.drugabuse.gov/)