UNDERSTANDING HOW YOUR BRAIN IS DIFFERENT

Yes, you are different. But you can change your life by changing your brain. What has happened to you is a physiological problem.... a chemical imbalance which has caused a change in your brain driving you to crave excessive alcohol. As you begin to learn how the imbalance began and continued worsening, perhaps your new understanding of your brain will explain questions you have had for a long time about your alcohol use disorder.

We want you to understand five basic facts:

- 1. A brain chemical imbalance has caused you to have abnormal cravings for alcohol.
- 2. It has been proven that the difference in your brain can be reversed.
- 3. Statistically, it is unlikely you can reduce your alcohol consumption solely with will-power.

4. When your brain is back in balance and not being driven by brain chemical impulses, you can make good choices about your use of alcohol including whether to abstain or drink socially.

5. We can explain how your brain got out of balance so it makes sense to you.

Cutting back on alcohol is not a matter of simple will-power. If you find yourself consistently drinking more than you intended, you may have a chemical imbalance that caused a change in your body that drives you to have an abnormal desire for alcohol.

Telling a person with this brain chemical imbalance not to drink excessively ever again is like telling an individual with a stutter to not stutter or advising one who is hypoglycemic to stop craving sugar. A hypoglycemic patient craves sugar and has to have it or they could suffer from serious medical problems such as seizures, loss of consciousness, slurred speech, personality changes, and even stroke or death (just like the symptoms of alcohol withdrawal). No one would hide the sugar from such a person or tell them, "just stop having hypoglycemia".

The good news is that your brain chemical imbalance can be reversed so that your brain is more like the neurology of those who enjoy alcohol as a normal part of a healthy life.

Science has now clearly identified the cause, what has gone wrong, and how balance can be restored. We will provide a simple understanding what has happened to you and how chronic, excessive alcohol consumption chemically changes your brain.

We believe that most people reading this have already have arrived at the conclusion that their response to alcohol is different but they don't know why or what to do about it. Now their focus can be more on the possible restoration of their healthy lives and the hope that comes with understanding what happened.

We do not give advice on whether to consume alcohol or completely abstain. We are suggesting you use follow our CETF Alcohol Use guidelines. When not being driven by brain chemical impulses, you can make good choice about your use of alcohol and benefit more from counselling if you choose to do so. Addressing your alcohol use with our healthy model means if you choose

to use alcohol, you do not have unusual cravings for excessive alcohol. If you choose to abstain, you won't have strong cravings for alcohol.

Your cravings for alcohol are abnormal. What is it like for normal people?

The vast majority of people who drink alcohol do so as a normal, enjoyable part of a healthy lifestyle. For most people, alcohol simply adds to the enjoyment of a dinner, gathering, a family occasion, or a special celebration. The mixing of flavors from foods and various alcoholic beverages brings an extra layer to their experience.

For over 80% of those who add alcohol to their lives, alcohol is not their focal point – it is an addition, not a drive and they enjoy it without being physiologically driven to drink excessively. Occasionally, these people may consume a little more than they intended, but it is rarely a problem. Most people do not have to control the amount they drink. They are naturally satisfied with a moderate amount in the same way that most people who love chocolate find a reasonable portion satisfying and they are not driven to eat the entire box. For the vast majority of those who use alcohol as a normal, healthy part of life, it does not negatively affect their health, family, relationships or careers because their brain chemicals are balanced.

The reason for an abnormal reaction to alcohol is now clearly understood:

Some people have a difference in their brain that predisposes them to have an abnormal reaction to alcohol. The knowledge contemporary addiction science has gained clearly explains the difference among those who use alcohol in a healthy manner and those who have problems related to the use of alcohol.

Those who drink excessively may have used alcohol for many years before it started to negatively affect their lives. How did this happen? What difference occurred that brought on the problem? Why can't they stop when they recognize they have had too much? What is the root of alcohol use disorders? Science now knows and it has led to a solution.

Do you want to know what has happened to you?

The following is what has happened to you. Most people don't have this information so they don't understand why you don't just stop and blame you. Your excessive drinking probably doesn't even make sense to you at times. Just think about the times you really intended to have only a few beers but ended up drinking MUCH more. What happened?

BRAIN CHEMISTRY'S ROLE IN ABNORMAL ALCOHOL CRAVINGS

As excessive alcohol use becomes more consistent in the body, the alcohol inhibits the activity of certain bio-chemical receptors. The chronic, excessive alcohol consumption causes these receptors to over-produce. This is because the body is compensating for the inhibitory effect of the alcohol on these receptors and thinks it needs to produce more of these receptors.

Let's stop here and think about this part of the science more graphically using a child's toy - marbles:

A. Your brain knows it's supposed to keep two bowls of marbles filled to the same level. One bowl has a picture of an accelerator pedal and the other one has a picture of a brake pedal (like the pedals in your car). These are the excitatory (accelerator) and inhibitory (brake) brain chemicals.

B. Your brain keeps the marbles in the two bowls perfectly balanced for a long time.

C. When you start drinking alcoholic excessively, your brain will begin to make adaptations.

D. If you drink excessively for a long period of time, your brain gets confused.

E. Confused, because alcohol blocks the accelerator pedal marbles, additional marbles are generated to compensate for the loss. It's like your brain can't see them so it thinks that the accelerator pedal bowl needs more marbles (which it certainly does not need) and induces some brain regions to generate more accelerator pedal marbles.

At this point, here's what's happening to you:

F. Now your brain is starting to make more marbles and putting them in the accelerator pedal bowl. As your over-drinking continues, imbalances occur disrupting your system of accelerator pedal and brake pedal marbles. Your body now has much more excitatory chemicals (accelerator pedal marbles) than its inhibitory chemicals (brake marbles).

More and more the alcohol limits your chief inhibitory chemical (brakes) and causes your main excitatory chemical (accelerator pedal) to increase. With no way to restore your brain chemicals to their prior balance except for maybe a very long period of abstinence (which 80% fail to achieve) you are lost to an unexplainable, unnatural craving for alcohol.

The positive effects from a body made healthier via our CETF Alcohol Use Guidelines assists the natural homeostatic principle which is regulated by the brain by supporting overall body function rather than forcing control on the body.

G. It's like you are applying more on the gas pedal therefore you are having a harder time controlling your alcohol consumption. In addition to giving it more gas, your brakes aren't working as well as they used to. You can't help it

H. Your brain continues to add marbles to the gas pedal bowl. You can't stop it; its confused.

Now What?

I. At this point, behavioral counseling becomes less and less effective because your brain is not listening due to the fact your body now has a physical problem driving it to get more alcohol.

J. Without some physiological help, it's going to be really difficult to get the bowls back to a balanced amount of marbles in each bowl.

K. Now you probably know you are in trouble but think you can manage it OK.

When you cut back on alcohol it can get worse. Why?

If you do decide to cut back on alcohol consumption, the excessive number of receptors you now have (lots of accelerator pedal bowl marbles) are no longer restricted by alcohol and the withdrawal induces a huge surge in the release of excitatory neurotransmitters (accelerator bowl marbles). This physiologically drives you to consume more alcohol to raise the blood alcohol level and repress the withdrawal symptoms.

TROUBLE!

Now your body is really getting into trouble but, according to your now altered brain, this genius knows exactly what you need to feel better. Speaking strictly physiologically, your brain is absolutely correct. And what does your brain tell you?

GET ME SOME ALCOHOL!!

Your body actually must have some alcohol. It is part of the brain's duty for protection of the body. Sudden withdrawal can bring about delirium, tremens, and even excitotoxic neuronal death. This physiologically drives you to consume more alcohol to raise the blood alcohol level and repress the withdrawal symptoms. Using our CETF guidelines encourages your body toward balance, supports body function and greatly contributes to the re-regulation of the body's internal equilibrium (homeostasis) in response to sudden decrease in blood alcohol levels as well as in maintaining homeostasis.