## Level 3 Coaching Course – David Ley "Getting to know your drug dealer"

Much has been said about the progress of Rugby over the last decade with key and core skills required to play at the top level. The advent of better training methods and new coaching styles developing at an ever increasing pace yet if we don't understand our bodies and more importantly the natural drugs our body produces we run the risk of diminishing performance. In this paper getting to know your drug dealer I will discuss a selected few of the bodies naturally occurring drugs and how we can benefit from understanding and utilizing them to our benefit.

What if we could just get high naturally? To be able to unlock the natural drug store in our body just flick the switch and feel great from our own internal chemistry. If we learn what affects us and how we may be able to benefit as Rugby players and individuals. The human brain consists of about 100 billion special cells called neurons which communicate through chemicals called neurotransmitters.

Researchers have identified about 40 neurotransmitters that regulate mood, appetite, mental capacity and wake/sleep cycle. These transmitters have among them Serotonin our own privately produced happy drug. What we eat when we eat and what exercise comes with it will all impact on the production use and advantage of this drug. Typically when we think of people getting high naturally we may think of the word endorphins. Sometimes referred to as the "runners high". To date there are no significant findings that would suggest the average athlete would have elevated levels of endorphins in their system after a normal exercise period. It does show elevated levels of endorphins in the system of some long distance runners. The theory has been put forward that the endorphins create a morphine type effect to help eliminate the pain they would otherwise feel. It appears that prolonged duration of exercise is the key factor in the release of these natural pain killers.

Many people of course get high through the so called recreational and escapism drugs which always comes at a cost. Often these drugs suppress the manufacture of our own natural drugs. The body comes under attack by fast acting, hard hitting manufactured chemicals which diminish the capacity for the natural process of feeling happy, satisfied and aware to exist. Nicotine use for example depletes the brains natural supply of our feel good

chemical Serotonin. This why people trying to give up smoking are irritable, cranky and crave food and can be depressed. The artificial drug has reduced the natural process of feeling good.

Feeling good naturally comes in two forms the 'Rush' and the 'Bliss'. The rush is propelled by the dead line the need to complete the task under pressure. The Rush can give that feel of relief and pleasure at the end. The Rush is caused by the nervous system providing Adrenaline. Learning how to control your body chemistry is key component and has direct impact on peak performance. As Adrenaline is released into our system it speeds up the heart rate and makes us all but immune to pain and help keep and maintain focus under stressful situations. Imagine defending your own try line in a Grand Final that requires constant effort and focus and desire to succeed at all costs. An overuse of this emergency system can result in being uptight and exhausted rather than calm and focused. The incorrect use of nervous energy can fatigue an individual or a team if not controlled, players simply waste themselves. Eating red meat and fatty foods drinking coffee and mentally pumping yourself up will all give the Rush feeling. They place you in an Adrenaline state and quite often this feel good Rush is followed by a crash period. Total exhaustion at the end of that big game and feeling totally drained and empty.

If you draw on your Adrenaline system for everyday activities you will most probably die from heart disease or become so moody from the chemical imbalance that your life simply falls apart and you blame it on stress. Most people draw on their Adrenaline system to often. They drive flat out rather than leaving a few minutes earlier. You tend to feel in control when Adrenaline is pumping through your system, you can deal with lots of decisions, feel super human and think faster than normal & you continue to draw on untapped energy sources. You can work for long periods and feel all your senses and abilities are enhanced. Its easy to see how you can become addicted as coming down from these superhuman efforts dissipates the great feeling. Problems will arise from the continuous use of the bodies' emergency system. The Rush gets things done but burnout is inevitable.

Coming down from the Rush is tough .The feeling after the work has been completed should be good instead it leaves an empty flat feeling. The fall after a Rush is what causes many people in high pressure roles to abuse speed or cocaine or simply stay full on and never being able to rest. This helps avoid the Crash feeling .In order to be able to manage our ups and

downs and reduce the rollercoaster ride we need to stay up more often and learn how to improve our bodies Serotonin production.

The Bliss effect is very different and is caused by our pleasure chemistry Serotonin .Some carbohydrates, controlled lollies (sugar only) and a healthy lifestyle will all keep your up beat chemistry functioning. Serotonin helps even out the emotional ups and downs of our busy lifestyle. Some classic mood booster foods include a skim milk banana smoothies ,1/2 a cup of dried fruits, cup of frozen berries are all classic additions when battling that flat mid afternoon blues. Of course the amount eaten is of prime importance. Unfortunately most people don't stop at just one red frog and continue to overdose from the lollie jar. Overdosing will have a detrimental effect as you need to stop eating after your mood food boost. After 20 to 30 minutes their effect on the brain will kick in. The blood brain barrier that acts to protect the brain from being overdosed with sugar will commence production of Serotonin our own happy drug. Serotonin also helps control our moods and is helpful in inducing sleep.

The drug Prozac is a Serotonin uptake inhibitor which causes Serotonin to stay longer in the brain rather than being removed to storage areas in the body. This will help a person who may be depressed to keep their feel good drug levels up to be better able to cope with life. Low levels of Serotonin have been linked with depression and anxiety.

Drinking lots of water can also be of great benefit to the body. While you may have to go to the toilet more regularly this is positive for our body. Quite often we crave sugary foods when under pressure and mistake this craving as the need for energy when it may be the initial stages or dehydration. Try drinking 1 cup of water every hour and send the message to your system that all is fine.

Whilst we all need sleep we don't necessarily all sleep well? In order to have a deep and well rested sleep and recharge our batteries we must understand the sleep wake cycle. To ensure we are in the optimum state to use Adrenaline if needed and ensure high levels of Serotonin to keep us calm relaxed and happy we must have effective sleep patterns. A comfortable sleeping environment is essential for good sleep. Of critical importance is the level of light. Light has a profound effect on the brain chemistry, particularly the production of Serotonin and Melatonin. Melatonin is the brains natural sleep drug and performs best when its dark and we are more

awake when it's light. Noise levels and body temperature are also major contributing factors. Maintaining a constant body temperature at a comfortable level is also essential. Establishing a routine or sleep cycle is also very important, that is going to bed at the same time each night. If you are successful in maintaining a consistent sleep wake cycle your body is in its best position to evenly supply the chemicals our body desires and needs. More important than the time you go to bed is the consistency of the time you wake up. Try to wake and rise at the same time each day. Sleeping in overly long on weekends gets the body out of synch and feels similar to jet lag. Sleep as many hours as required usually between 6 to 10 hours. If this is not possible try an afternoon siesta. The length and quality of your sleep has a direct bearing on the degree to which the body and brain can restore and replenish your chemicals to optimum levels. A good night's sleep with the desired level of Melatonin will have you up out of bed in the morning with Serotonin at peak levels and Adrenaline ready when and if required.

If we are able to understand even the basics of how our own body can be of assistance in our desire to strive to perform at maximum capacity and are wiling to adapt our body is and should be our best friend.