

Alcohol Explained

By William Porter

For my wife.

Contents

1. Introduction.....	5
2. The Physiological Effects of Drinking.....	10
3. The Subconscious.....	21
4. Craving.....	27
5. The Relaxing Effects of Alcohol	33
6. Alcohol and Sleep	38
7. Dehydration.....	45
8. Taste.....	50
9. Alcohol and Fitness.....	54
10. Alcohol's Effect on Emotions	57
11. Blackouts	64
12. Emotional Resilience	68
13. Shyness – Drinking at Social Occasions.....	71
14. Drinking and Obesity	76
15. 'I Shall Be as Sick as a Dog in the Morning'	83
16. Fading Affect Bias	89
17. The Slowing Down of the Mind – Boredom Drinking	95
18. 'I'd Rather Have No Drinks Than Just One or Two'	97
19. The Process for the Binge Drinker	106
20. The Process for the Regular Drinker.....	113
21. A Typical Alcoholic Day Explained	116
22. Do I Have a Problem? The Stages of Alcoholism	121
23. The Problem with Accepting That You Have a Problem.....	138
24. The Disease Theory of Alcoholism.....	145
25. Alcoholics Anonymous	152
26. Just One Drink	158
27. Stopping Cold Turkey – The Physical.....	164
28. Stopping Cold Turkey – The Psychological	169
29. The Mental Agony of Stopping.....	172
30. A Better Way of Stopping – The Options.....	178
31. A Better Way of Stopping – The Subconscious Triggers, the Spiral of Craving, and the Mental Agony of Stopping.....	182

32. A Better Way of Stopping – The Effects of FAB.....	191
33. A Better Way of Stopping – Undermining the Addiction.....	195
34. A Better Way of Stopping – The Physical Withdrawal.....	200
35. The Benefits of Stopping.....	202
36. Conclusions.....	205

1. Introduction

Most riddles we face in life are like jigsaw puzzles with missing pieces. We try to put together the pieces we have as best we can, then we guess at the missing pieces to try to understand the overall picture. With alcohol consumption and alcoholism we almost have the opposite problem. We have too many pieces. It's like a puzzle of a hundred pieces, but when you open the box you find there are ten thousand pieces in there. There is so much information out there on alcohol, alcoholism and addiction, but what are the actual key parts that we need to understand why so many people drink, and why some find it so difficult to stop?

In fact it gets even more complicated than that because some of those hundred pieces we need aren't even in the box, but are in other boxes for other puzzles.

Alcohol consumption and alcoholism is made up of the chemical, physical, physiological, and psychological effects that alcohol has on human beings, and the accumulative impact of these effects. I myself spent 25 years of my life drinking, however I have always been curious and have always sought practical answers to understand anything that takes my interest. Throughout my drinking life (and even since I have stopped drinking) I would research and seek to understand any particular aspects of the effects of alcohol that became apparent to me. So when I was in my early twenties and found that on the nights I drank I would wake up in the middle of the night and be unable to get back to sleep, I researched the impact alcohol has on sleep. Over the years I continued to think about and analyse my drinking. I had no thoughts of writing about the subject, I

just took an interest in it and looked to understand it, and as alcohol took more and more of a grip on me, so I spent more and more time trying to understand it. I did this from both my own research and by analysing my own experiences.

As things became increasingly desperate I turned to Alcoholics Anonymous thinking it would further the understanding I was looking for. Unfortunately it didn't. Alcoholics Anonymous is essentially a spiritual programme. It is based on the premise that God will provide the solution. This is fine if you are looking for a spiritual answer, but I wasn't. I wanted a logical and scientific answer. If God, in whatever shape or form he or she may exist, lets innocent children die from painful and degrading deaths, why on earth should he save me, a middle-aged city lawyer, from his own greed for alcohol? I am not debating the existence of God; I just struggled to understand why he or she would get so directly involved in this area and not others. If God does exist then it seems to me that rather than solve our problems for us, he or she instead provides us with the potential for great intelligence, understanding, wisdom, and compassion. It is then left up to us to use these to solve our own problems.

What I could never accept, from the very beginning, was that there is an irrational, collective insanity that is alcoholism; that it is impossible to provide some form of rationalisation for it, on whatever level; that it is impossible to understand the reasons that the alcoholic reaches for each and every drink. Some people think they just become obsessive with things, and alcohol just happens to be the object of their obsession. But if this is the case why aren't there a similar number of people obsessed with drinking water or juice? There

are an estimated 17.6 million in the US alone with alcohol dependency. Why isn't there a similar number of people drinking too much water? You may think it is because drinking too much water isn't bad for you. In fact it is, hyponatremia is a condition caused by drinking too much water and it can be fatal. Why is it alcohol specifically that so many people seem to become obsessed with?

One thing that became apparent to me from listening to drinkers, both problem and 'normal', was that I wasn't unique in wanting to understand the phenomenon, and more importantly I began to realise that the knowledge and understanding I had could help others. This is why Alcohol Explained exists. Its purpose is to provide an understanding of alcohol consumption, alcoholism and addiction generally, and to provide a practical solution for those wanting to quit. It is my conclusions based on my research and my own observations of my own drinking.

For those who are reading this book out of interest there is no reason to read further in this chapter; you can proceed straight to Chapter 2. However, for those who are intending to stop drinking, for those who consider they may have a problem, or for those who are considering the possibility of either stopping or cutting down with the help of this book, there are a few tips worth giving at this stage to ensure you get the best you can out of this book.

Firstly, if you are still drinking there is no need to stop before reading this book. There are some caveats to this. The key to this book is the information it provides. It will only be of benefit to you if you can understand and absorb this

information. If you have drunk alcohol before you actually start reading on any particular day, you will impair your ability to understand and absorb the information contained here. The more you have drunk, the more this ability will be impaired. It is best if you can read it each day before you start drinking. However, equally, if you are a chronic alcoholic you are unlikely to be able to read, understand, and absorb the information in this book while suffering from severe alcohol withdrawal. If you are in this position, the best way to overcome this problem is to just concentrate on one chapter a day. Read this one chapter as often as you can during the day. The chapters are fairly short and concise and you will be able, over the course of a day, to absorb (through sheer repetition if nothing else) enough to understand the information contained in these pages.

Secondly, if you are drinking while reading this book, the most effective method of stopping is to ensure that when you do drink you do so in a quiet and private environment if at all possible. You should be checking out everything I say with reference to your own drinking. You need to do as I did and I start analysing and thinking about your drinking while you are doing it, concentrating on the taste and effect of each drink, the accumulated effect of many drinks, and the physical effect as these drinks start to wear off. Ultimately, this book is just a collection of words, it's just a bunch of ideas. These ideas will only be of help to you if you can prove to yourself that they are the truth. The best way of doing this is with reference to your own drinking. So when you drink, you need to do so somewhere quiet and private so you can really concentrate on the entire experience and apply what you have read to your own drinking.

Finally, you should note that drinking while you are reading this book only applies if you are still drinking. If you have stopped, no matter how short a period you have stopped for, there is no need to start drinking again before reading this book. You can still test what I am saying with reference to your own memory and by applying your own common sense and logic.

2. The Physiological Effects of Drinking

Alcohol is an anaesthetic and a depressant. This is an accepted medical fact. If we are feeling tired or in pain it will take the edge off this. However, it is also a fact that the human body and mind is not a passive object; it is reactive, and will react to the world around it and to the food and drugs we put into it. The brain has its own store of drugs that it releases into our bloodstream as and when they are required. It will release these in times of stress, hunger, and fear, and will also release them in reaction to external drugs that enter our system. If we regularly take a drug then our brain and body will react to this, and will even act in expectation of this. Indeed, the more often we take an external drug, the more proficient our body will become in countering its effects.

To give an example, I drink coffee. I drink a fairly good amount of it in the morning, then I tend not to have any in the afternoons and evenings. When I wake up in the morning I tend to feel very groggy until I have had my first coffee. But before I drank coffee I wasn't groggy all the time because I hadn't had coffee, and I felt much as I do now after I have had a coffee; that is to say, pretty bright and breezy. This all makes perfectly good common sense. As a child (and even an adult when I did not regularly imbibe caffeine), when I woke up my brain released stimulants into my system and I felt awake and ready to start the day. Then at some point I tried coffee. Coffee contains caffeine, which is a stimulant, the effect of which is that I immediately felt more awake. So I started having a morning coffee on a regular basis. However, my brain realised that an alien stimulant was being put into me in the morning, so it stopped releasing its own stimulant. Without my morning hit of caffeine I feel groggy and disorientated, and

when I have had my caffeine I feel pretty much as I ought to. I also know from giving up caffeine that the body also responds when the caffeine is withdrawn. The groggy feeling gets less and less until it is entirely gone within four to five days. All that is happening is that my body compensates again for the lack of external stimulant and goes back to providing its own stimulant. This experience is something the vast majority of people can relate to. So if we accept that the body acts in this way in relation to a stimulant, why would it not react in a similar, if opposite, way to a depressant?

To put the point another way, everyone knows that the more we drink, the more we build up a tolerance to the alcohol and the more we are capable of drinking. Richard Burton was drinking three to four bottles of spirits a day at one stage. Most people don't even drink that much water in a day! Richard Burton was obviously a physically very strong man to be able to cope with that amount of alcohol in a day, but even he must have built up to that level of drinking over time. Even the strongest person on the planet couldn't sit down and drink four bottles of spirits in a day, having never imbibed a drop of alcohol before, and expect to survive.

If you look at how much you could comfortably handle when you first started drinking compared with the amount you could drink after a few years, I am sure you will see a marked increase. This is pretty standard stuff and in no way controversial, and the same applies to many other things such as smoking, caffeine intake, etc. But how many of us have actually stopped to consider what has actually changed that allows us to imbibe a larger amount of a particular

poison, an amount that would have left us extremely ill or even dead had we imbibed it in the first instance? It is not, for example, that our liver becomes stronger. The liver is not a muscle that when exercised becomes stronger. In fact, the more we pummel it the weaker it gets. So what actually changes?

The changes are in fact twofold. Firstly, those parts of our brain and nervous system that are particularly vulnerable to the depressive effects of alcohol become more sensitive so that they can work even when under the influence of the anaesthetising effects of alcohol. Secondly, the body becomes more proficient at manufacturing and releasing stimulants and stress hormones to counteract the effect of the alcohol. This is a perfectly natural and healthy reaction. It is the human body dealing with and countering the poisonous effects of an external substance so that we can survive it. The stronger and healthier the human, the more proficiently their bodies will counter the poisonous effects of the alcohol in this way.

It is also the case that the more often we imbibe alcohol and the greater the quantity we imbibe, the better and more efficient our bodies become over time in countering it. However, perfectly natural and healthy though it may be, the fact of the matter is that when we have parts of our brain and nervous system that are more sensitive, and when we have an increased amount of stimulants and stress hormones in our system, we feel not just unrelaxed but usually out-and-out nervous and anxious. The more we drink, the more pronounced this feeling of nervousness and worry is when the alcohol wears off, and it is quite usual for it to cause full-blown depression. After all, the alcohol will wear off, but the

nervous feeling caused by the increased sensitivity and stimulants will remain for some time after.

There are numerous studies dealing with these two effects; however, for practical purposes, the science behind this is neither here nor there. All we need to know is that the relaxing effect of a drink is soon replaced by a corresponding feeling of anxiety. One drink will produce a relatively minor feeling of relaxation and a correspondingly minor feeling of anxiety. However, if we consume larger quantities then the feeling of anxiety is correspondingly increased and can evolve from anxiety into out-and-out depression. It is also the case that over time the effects become more pronounced as the body becomes more proficient in countering the effects of the alcohol. There is in fact a very clear connection between depression and alcohol, and self-harm and suicide are much more common in people with alcohol problems. Indeed, alcoholism is a factor in about 30% of all completed suicides and approximately 7% of those with alcohol dependence will die by suicide. In the US drunk tanks they constantly have a guard on suicide watch because inmates with hangovers are so much more likely to attempt suicide.

No doubt some people will claim that those with a mental illness are more prone to problem drink and are also more prone to depression. That may or may not be the case, but the simple fact is that hangovers cause depression whether you are mentally ill or not. Even for those with mental health issues, the withdrawal from alcohol will only make things worse. No matter how bad you think you are, you will be much worse off if you are drinking.

Drinker's remorse is a very common hangover symptom. It is usually assumed that this is due to things that the person has done when they were inebriated that they then regret the following day. This may exacerbate the problem, but the real cause of it is the chemical imbalance in the brain and body. This is why people often feel depressed the day after drinking, and when we are depressed we naturally focus on the most negative parts of our lives, whatever they may be, even if these are otherwise minor things that would ordinarily cause us little or no consternation at all. Of course, when we spend time concentrating on the worst, most negative parts of our lives, the more miserable we become, and if we are depressed anyway due to the chemical imbalance in our brains then we are more likely to view these negative things as overpowering and awful, and thus the tendency is to just spiral down.

This is why there is this tendency to look at things such as anger, guilt, and regret when trying to answer the question of why people develop a drinking problem. When someone is depressed as a result of drinking they are not depressed because of an actual reason, they are depressed because of the direct chemical reaction to the previous drinking. However, this depression causes them to dwell on anything and everything they can in their life that is negative. The hung-over mind will always find the most disturbing thing in any panorama and focus in on it. This is essentially what the chemically depressed drinker does with their life. Every single human being on the planet has any number of negative things in their lives they can dwell on if they want to, or if

they are depressed due to a chemical imbalance in their brains (be it caused by drinking or anything else).

However, when the depression is caused by a chemical imbalance which in itself is caused by the previous drinking, it can be relieved by more drink. Imagine the brain working normally. We then introduce a depressant (alcohol). The brain cannot therefore work normally, so part of it becomes more sensitive so it can work while still under the influence of the depressant. It also releases stimulants and stress hormones to counter the depressant. The alcohol is then removed but the stimulants remain, and we are left feeling nervous, anxious, out of sorts, and even out-and-out depressed. But if we then imbibe more alcohol we immediately get rid of the nervous, anxious, depressed feeling.

In essence, the depression derives from the fact that the brain has been reset to work when under the influence of alcohol, so without the alcohol the brain is on hyper drive. Therefore, if our depressed drinker takes a drink, the brain then gets back to being on a nearer to normal level and, surprise surprise, he or she feels much better and the negative things they have been focussing on in their alcohol-withdrawn depression suddenly cease to worry them, or at least worry them a lot less. So they genuinely believe that there are certain parts of their life that cause them misery and depression and that drinking relieves this depression. In fact it does, but what they miss is that it is the drinking that has caused the depression in the first place. The depression isn't just caused by the chemical imbalance resulting from the previous drinks, it is also exacerbated by the physical side effects such as lack of sleep (which is dealt with in detail in a

later chapter) and nausea, and the physical degradation generally. These all contribute to our depressed state. So we either suffer the ill effects, the mental anguish, and the depression until it wears off, or we drink again. If we drink again the alcohol depresses the physical side effects, so we immediately feel better. However, when that alcohol wears off, the depression and anxiety return.

This is one of the key strands to understanding alcohol. It relieves the depression and anxiety caused by the effects of the previous drinks. The drinker in question can be as successful, as lucky, as rich, as famous, or as powerful as it is possible for a person to be. It does not matter who a human being is or what they have. They can be the luckiest, most successful person in the world. But if they have had a right old skinful the night before, they will wake up feeling depressed, and only another drink will take away that depression.

Alcoholism and problem drinking often seems illogical to those on the outside; indeed, it is often equally perplexing for the alcoholic or problem drinker themselves. However, there is nothing illogical in this. Would you rather have everything and be depressed, and by depressed I mean properly, chronically depressed? Or would you rather have nothing and be happy? This is the choice the alcoholic faces. No matter what they have, the chemical effect of the alcohol causes them to be depressed and miserable. And only a drink will relieve this. Even if you think you would opt for having everything and be depressed, how long do you think you would last if there was one thing you could do to relieve your depression, and that thing was freely available and was offered to you several times a day, and everyone else around you was imbibing it happily?

This is why alcohol can have such a strong hold on people, causing them to sacrifice their friends, family, job, home, even their very life. Often with famous and successful people who are alcoholic, people look at them and wonder why, for someone who seems to have everything, they are so unhappy and turn to drinking. In fact, they are simply doing what everyone else does. They drink because it makes them feel good, but over time the drink itself causes them to be unhappy. However, they cannot see this because it is also the drink that seems to relieve their unhappiness, so they keep drinking and exacerbate the problem. Rich and successful people are just as likely to take a drink as anyone else; in fact, they are often more likely to drink and to drink too much. For most people, their drinking is tempered by the fact that they have to go to work, or it is constrained by finances. For famous people such as film stars and musicians, not only do they have more free time on their hands, they also spend much more time socialising where alcoholic drinks are served, they have more money to spend on drink, they can often work while under the influence of alcohol, and so they are simply more likely, or more able, to drink irresponsibly and end up with alcohol problems.

This is why so many alcoholics believe they are a breed apart; they are not happy no matter what they have in life, and the only thing that can truly take away their misery is a drink. No matter what they have in life and no matter how happy they ought to be, they will be depressed because of the chemical imbalance caused by the drink. And they believe that this depression can only be relieved by more drink. This is of course correct, but the crucial part that they

are missing is that it is the alcohol that has caused them to be depressed in the first place and that relieving this depression by drinking is partial and temporary. The only permanent and complete cure is for them to stop drinking. The irony is that problem drinkers often spend thousands of pounds on expensive counselling to work out why they are so unhappy so they can in turn stop drinking, but in fact they need to go about things in exactly the opposite way: stop drinking, allow the effects to wear off, then take stock of their lives. They will find that the things they were getting depressed about when they were drinking either cease to worry them or at least become much more manageable and less overpowering.

Really, what more powerful factor could you need to create a chronic addiction than a substance that takes away a depression that you suffer from no matter how happy you ought to be?

Of course, just as there are negative things in every human being's life that they can dwell on if they are depressed due to a chemical imbalance in their minds, there are also things that are genuinely depressing even if there is no chemical imbalance. Alcohol, being a depressant, will also take the edge of these. However, when it wears off, the drinker will not only be left with the depressing event but also the after-effects of the drink, which can only exacerbate the misery. Very simply put, if you have a problem, drinking will not solve it. In fact, it can only make it worse. Things that are genuinely awful but manageable can transform into the genuinely awful and unbearable if you factor in the depressing after-effects of alcohol consumption.

If it is the case that alcohol causes and then relieves this anxiety and depression, then surely virtually everyone would be alcoholic from the off, and there would scarcely be a sober person on the planet? It would also be the case that simply explaining the position would immediately cure any alcoholic or problem drinker (or indeed any other type of drinker). If you are anxious and depressed (for whatever reason) and something relieves this, this won't mean you immediately become addicted to this substance. You may want it to relieve your anxiety and depression if you suffer from it again, but if someone explained that the substance was actually a poison, that if you took it you would lose your job, your house, your friends, your family, your self-respect, and your very life, and in any event it was this substance that was causing the depression, you would most likely stop taking it with little or no problem.

Of course it is not as simple as this. So what are the additional factors that cause something to be 'addictive', i.e. something that you will be forced against your will to take even though it is categorically proven to you that the substance is the cause and not the cure of your problems, and that it will not only kill you but it will rob you of your friends, family, job, home, and self-respect before it does so? To consider this we now need to move from the chemical and physiological to the psychological, in particular our subconscious mind. It is worth remembering as well that while a huge binge will result in a feeling of depression the next day, drinking on a lesser scale will produce a negative impact but on a correspondingly reduced scale. One drink will produce a

corresponding feeling of anxiety, but this will be almost imperceptible.

Imperceptible to our conscious mind at least, but not to our subconscious.

3. The Subconscious

The conscious, thinking part of our brain is 17% of the total brain. The rest is the subconscious. The brain receives approximately 2,000 bits of information per second, and the vast majority of these are routed to the subconscious. The role of the subconscious is essentially to process information that you do not have the capacity to process consciously. It is the subconscious that makes us act 'instinctively'. What does instinctively actually mean other than 'I know the right thing to do I just don't have a logical reason for it'?

In fact, when you act instinctively there is a logical reason for it, and the reason is that over the course of your life your subconscious has been receiving and processing data and it is upon this that an instinctive decision is made. It is based on trial and error. If you do something a thousand times with the same result, it will be programmed into your subconscious. The more you do it, the deeper it becomes ingrained. In fact, the vast majority of information that is passed to the subconscious mind is simply disregarded. It is only when the same or similar data is received time and again with the same or similar results that it starts to register on the subconscious, and over time it will become a large and influential part of our subconscious reasoning. This is how I can be sitting in the passenger seat of a car and, if the driver is leaving the braking too late, I find my braking foot tensing. There is no logical reason for it, there is no brake on the passenger side, but for years as a driver my subconscious has absorbed the message that extending my left leg will slow down a vehicle. Another example is whenever I step on an escalator that is not moving. I always lurch even when I know full well in my conscious mind that it is not moving. Although my conscious

mind knows the escalator is not moving and that I have to use it as if it were stairs, my subconscious comes up from nowhere and tells me that escalators move and that I need to compensate when I step onto one. My subconscious always wins and I step onto the escalator with exactly the right muscle coordination to meet a moving floor, and as it isn't moving I lurch slightly. The subconscious often wins because it is an extraordinarily strong force and it takes intense concentration to counter it, and when I am walking through a busy commuter station in rush hour I simply do not have the time or inclination to counter my subconscious. We often refer to the subconscious as 'instinct'. It is not, however, instinct (and by that I mean an almost supernatural force causing us to act or react in a certain way); it is based on our personal experience, arising from trial and error over many years.

There are several points to note there. Firstly, the subconscious is extremely powerful and it takes a conscious effort to override it. Secondly, it is based on trial and error: the more something happens with the same or similar result, the more deeply ingrained this becomes in our subconscious. Finally, it is impossible to know the actual reasons behind the subconscious trigger, nor is it possible to analyse the reasons logically. When I step onto a stationary escalator I don't recall the myriad of times I have stepped onto an escalator that is moving. It is based purely on subconscious memory, and as such each individual occasion making up the subconscious trigger cannot be recalled to the conscious mind.

So what has this to do with alcohol? Simply this: every alcoholic drink any human being has ever drunk has caused a feeling of relaxation followed by a

corresponding feeling of anxiety. One drink will cause a very minor and almost unnoticeable feeling of relaxation then anxiety, particularly if we are otherwise occupied at the time (such as if we are socialising or sleeping). Another drink will relieve that very minor feeling of anxiety in addition to any other anxiety we happen to be feeling at the time. This may or may not register on your conscious mind, but it will pass through your subconscious mind. It will pass through your subconscious mind without making an impact the first, second, or third time, but the repetition will eventually be marked by your subconscious mind, which will process the data and form conclusions. And the conclusion will be this: that an alcoholic drink will relieve anxiety and depression. And over the days, weeks, months, and years this message will become more and more reinforced in your subconscious mind until every time you suffer from any stress or anxiety your mind will trigger the instinctive thought that you need an alcoholic drink to relieve the stress and anxiety, and that thought will become stronger and stronger as the message is continually reinforced. Your subconscious mind will recognise that an alcoholic drink will relieve the feelings of anxiety and depression because the drink and the relief will be close together chronologically. You will take a drink and very shortly after this you will experience the relief. However, it will not associate the alcoholic drink with the cause of the anxiety and depression in the first place as it takes far longer for the anxiety and depression to accumulate after the final alcoholic drink has been drunk.

In this way, the subconscious mind misses out this key piece of information: that it was the alcohol that caused the feeling of anxiety in the first place. So although we can understand on a conscious, logical level that it was the alcohol

that caused the anxiety in the first place and that alcohol's 'benefit' is in fact to relieve a symptom that it has largely caused, it won't stop us wanting a drink because the subconscious mind will still be triggering a desire for an alcoholic drink every time we feel anxiety or depression, be it caused by alcohol withdrawal or anything else.

The timing between the consuming of a substance and the effect of it is key, not only to understanding alcoholism, but to understanding addiction generally. The quicker the effect of a drug is felt after it is consumed, the quicker the subconscious will link the one with the other and the quicker and more effectively the addiction will take hold. The effect of a drug is felt when it enters the bloodstream, so the quicker this happens after it is consumed, the more addictive it is. In order of speed from quickest to slowest, the methods of consuming a drug are:

1. Injection – which places the drug directly into the bloodstream.
2. Smoking – the smoke diffuses directly into large blood vessels that receive oxygenated blood directly from the lungs and affects the user within less than a second of the first inhalation.
3. Snorting – the drug is absorbed into the bloodstream through the soft tissue in the sinus cavity.

4. Swallowing – this is the slowest method as the drug has to pass through the stomach and into the small intestine before it is absorbed into the bloodstream.

Obviously the almost universal method of consuming alcohol is by swallowing it, with the result that it is one of the drugs that takes longest to become addicted to. In fact, the time lapse between the swallowing of the alcohol to the feeling of the effect of it can itself be greatly varied depending on circumstances, primarily whether our stomachs are full or empty, if we have been exercising, and the strength of the alcoholic drink being consumed (a stronger alcoholic drink will result in a quicker uptake into the bloodstream). This is why so many people prefer drinking before a meal and/or after exercising, and why consumption of spirits (as opposed to wine or beer) is associated with alcoholism. It is also the case that when people start to become dependent on alcohol they often tend to eat less (this is dealt with more fully later in this book) and they become physically debilitated, with the result that alcohol is absorbed into their bloodstreams even faster, and the process of addiction accelerates.

So if we take an alcoholic or a problem drinker and explain to them how alcohol works on a chemical and physiological level only, they may well (and indeed should) conclude that they are better off without drinking and that the only logical thing to do is to stop. However, when they do stop they will suffer anxiety and stress, caused by either alcohol withdrawal in the short term or by the stresses and strains of life generally that every human being suffers from to one degree or another. Whenever they suffer this stress their subconscious will trigger the thought of having an alcoholic drink, and how long these triggers last for will

directly depend on how long the individual has been drinking for. The longer the drinking, the more deeply ingrained the subconscious triggers are.

These subconscious triggers explain why some people find they are regularly thinking about alcohol, but ultimately they just trigger the thought of a drink. The thought is no stronger than 'how about having a drink?' It doesn't explain why some people are prepared to give up everything most dear to them (including their very lives) to keep drinking. The reason is that these subconscious triggers in themselves trigger another psychological process known as craving which, when combined with the subconscious triggers, really explains why it is so difficult for some people to stop or control their drinking.

4. Craving

A craving is an extraordinarily powerful force, and indeed many definitions of alcoholism include the craving for alcohol. A craving is an overwhelming desire for something, and someone who craves alcohol on a regular basis clearly has serious problems. Let's look a bit closer at the psychological process of craving so we can understand it fully before applying it to alcohol.

Let's start by taking an example of something entirely benign. Let's say we crave an apple. Let's look at the psychological factors at play. Right. We want an apple. We can't have one. Either there are none available or (for some reason) we have decided that we would be better off not having one and have resolved not to have one. We can then do one of two things. We can abandon the idea or we can continue to want one. We aren't likely to abandon the idea because we have already decided we want one. It may be that part of us thinks we would be better off without it, but part of our mind must want it or the idea wouldn't have entered into our head in the first place.

So we are now in the position of wanting something we can't have; however, our mind doesn't give up on the idea and we continue to think about having that apple. We dwell on it, we think about it, we fantasise about it, we can't concentrate on anything else, we are miserable because we want something that we cannot have. If we are at work we can't concentrate on our job because we are too busy obsessing about having an apple. If we are at a social function or at home supposedly relaxing for the evening we find we can't enjoy the social

function, nor can we relax, because we are too busy obsessing about the apple that we cannot have.

Ultimately, again, we have only two choices: we either give in and have the apple, or we don't. If we give in and have the apple then we have removed the distressing mental conundrum; we can then get on with our work, enjoy the social function, or actually start relaxing at home. That apple has actually been the difference between happiness and misery, the difference between living our lives and having to put them on hold while we are miserable wanting something we can't have. On the other hand, if we don't have the apple then the evening or day is a write-off and for the rest of our lives we will remember how unhappy we were without that apple. So when we next come to crave, the craving will be all the more powerful as we will know from personal experience that we are incapable of enjoying ourselves or functioning without the apple. This process is what I will refer to from here on as 'the spiral of craving'.

Now the craving for an apple is a relatively silly example, but if we were to substitute a chocolate bar or a burger, or any of our favourite foods, it would be a bit more understandable. This would particularly be the case if we were very hungry and were craving our favourite food. The position would be even more pronounced and understandable if there were ample of this food lying around and everyone else was happily tucking into it. In that situation we could not possibly be happy, even if it were a social function at which we were supposed to be enjoying ourselves.

This is essentially the situation faced by the drinker who has stopped drinking. They want something that they cannot have and, moreover, something that they see everyone else enjoying. If they have stopped drinking for some considerable time there is no physical aspect at all, it is entirely mental and is triggered firstly by the subconscious triggers, which set off a desire for something they cannot have, which leads on to the spiral of craving. This can last forever. Every time you want something you can't have you will be miserable, particularly if you see other people enjoying what you can't have. This is why so many people believe that alcoholics have a different genetic make-up from other people. Even after the physical aspect must have ended, the person can find they still can't function fully without a drink. However, it is purely a placebo at this point and is caused by them thinking that they would be happier with a drink, so the spiral of craving starts and they are miserable until they have one.

This is why craving is so powerful. When the thought enters our mind and we start to obsess about it, we won't know a moment's peace until we have it. At this stage, the thing we are obsessing about then starts to take on a life of its own.

Let's consider this as it applies to alcohol. Let's say we are feeling anxious or depressed (be it because of alcohol withdrawal or any other reason). Our subconscious will trigger an urge for a drink. If, at this point, we simply take the drink, we have simply relieved a (possibly minor) feeling of anxiety or depression, this will register on our subconscious and this is about the sum total of the effect. However, if we have decided we ought not have a drink for any

reason, and we do not take one such that the spiral of craving starts, when we do eventually take the drink we are not only relieving the feeling of anxiety or depression, we are also relieving the mental torture, confusion, and misery of the spiral of craving. This will be registered on our subconscious and conscious mind as well, but crucially from this point on the lesson is not just that a drink will relieve a minor feeling of anxiety, but that having an alcoholic drink is the most important thing on God's earth, and without it we simply cannot function or ever be happy ever again.

This is actually a part of the process of becoming addicted to alcohol. When we try to stop drinking, the spiral of craving starts and the drink relieves this, along with any minor feelings of anxiety. Many people believe that the drinker who tries to stop and cannot is already fully addicted to alcohol; the attempt and subsequent failure to stop is simply evidence of this. In fact, the process of attempting to stop actually takes the already existing addiction to a new level. It is when we try to stop that the spiral of craving starts, and from then on the lesson being absorbed by the subconscious is not that alcohol provides a neat remedy to anxiety and depression, but that if we want a drink and cannot have one we literally cannot function as a human being.

There are two points to note at this stage. Firstly, that the spiral of craving is the backbone of any addiction. The subconscious triggers themselves are brief; they are literally just knee-jerk reactions to a given situation. They trigger the thought of an alcoholic drink, no more than that. However, these subconscious triggers often start us thinking very consciously about having a drink, and our thought

process is usually about how nice it would be to have a drink, of taking that ice-cold beer out of the fridge, or pouring that glass of wine or that measure of our favourite spirit. Soon we find ourselves fantasising about having a drink, and the craving is in full sway. It is the craving that creates the mental agony we encounter when trying to give anything up. The bad news is that it is an extremely powerful force and that this is why addicts find it so hard to give up the objects of their addiction. However, the very good news is that craving takes place entirely in the conscious mind, and therefore we face a conscious decision whether to crave or not. How to overcome the spiral of craving is dealt with in more detail later in this book.

The other, very important point to note is that when alcohol starts to become a problem and the drinker tries to stop and fails, the failure is due to their wanting to avoid the spiral of craving. They are not, at this stage, drinking for the supposed benefits of drinking, but rather they are drinking to avoid the misery of the craving. It is entirely negative. Without alcohol they cannot function or be happy because of the craving; with alcohol they avoid the craving, but this means they are no better off than had they never had a drink. In fact, they are far worse off because, as we all know, with alcohol they face all the problems associated with drinking: the hangovers, the relationship problems, the loss of health, self-respect, etc. So in fact they are utterly miserable without the drink thanks to the craving, and only slightly less miserable with it. It is a lose/lose situation for them.

However, even when we understand and appreciate the effects of the physical withdrawal, the subconscious triggers, and the spiral of craving, we still don't have a full explanation. If this was all there was to it then alcohol wouldn't be a problem, even for the chronic alcoholic. They would have a drink and, when it started to wear off, they would simply need to top it up with another. They would never be entirely sober, but equally they would have no reason to become utterly intoxicated. So let's now move on to the next piece of the jigsaw puzzle: the relaxing effects of alcohol.

5. The Relaxing Effects of Alcohol

If you ask anyone (be they a drinker or a teetotaler) why a person takes a drink, the most common answer is that a person drinks for the relaxing, comforting effect. Alcohol is a depressant and an anaesthetic; it anaesthetises certain feelings (such as tiredness, stress, pain, and discomfort) and the effect of this is that we tend to feel more mentally relaxed after a drink. Of course, the depressant/anaesthetising effects don't just work on our mind, causing us to feel relaxed; they also affect the rest of our body, leaving us slightly uncoordinated and slow. This is the effect of one or two drinks; if we increase our intake then we increase the effects on both sides, and this can lead to full-blown intoxication.

It has always been assumed that the relaxing mental effect and the physical impairment or intoxication go hand in hand, that they are part and parcel of the same process. However, this is not the case. The physical intoxication and the mental relaxation run their course at different speeds.

To give an example of this, where many people encounter problems with drink driving laws is that after a night of heavy drinking they can be over the limit when driving the following morning. It takes the average human one hour to process one unit of alcohol (a unit being approximately half a pint of beer or a single measure of spirits), so you can quite easily see how you could be over the limit for driving the following day, particularly if you have drunk a lot the night before and if you live in a country with a zero tolerance rule (i.e. where you are allowed no alcohol in your system at all while driving).

But, and this is a really key point, most people caught drink driving the following day do not feel drunk. They genuinely think that they are sober. In fact, it is only those who have not been drinking for very long, or those who usually drink modest amounts and then have a big binge, who still feel actually drunk the morning after. This is because their bodies have not yet learnt to efficiently counter the amount of alcohol that has been imbibed. Most people who still have alcohol in their system the morning after drinking will be physically intoxicated but will not have any corresponding feeling of alcohol-induced mental relaxation.

To go into further detail, most people, when they wake up the following morning still under the influence of the previous night's drinking, won't feel like they do when they have just had a drink one evening. If you wake up after a night's drinking with two beers' worth of alcohol in your bloodstream, you will not feel like you would if you had two pints of beer after work one day. In the latter situation you will feel the relaxing effects of the drink. You may not be drunk but you will know you've had a drink. However, when you have that amount in your system from the night before (or even a considerably larger amount), you will feel stone cold sober in that there is no feeling of relaxation. However, although you may feel mentally sober, you are not physically sober. Your reactions are as slowed as they would be if you had the drinks at the end of the day. So you can feel mentally sober but be physically intoxicated.

This is a very obvious example of how physical intoxication and a feeling of mental relaxation run their course at different speeds, with the intoxicating effect

outlasting the relaxing effect. It is obvious because it is exaggerated by several hours' abstention from alcohol in the form of a night's sleep. However, the same effect occurs with every drink we consume and the process occurs in the same way during the course of a night's drinking, only on a less obvious scale.

So, if we are drinking for the relaxing mental effect, we have to keep the drinks coming faster than the wearing off of the physical intoxication. To put it another way, if we decide that we like the relaxing effect two drinks have on us, then when this relaxing effect wears off we will need to take two further drinks to replenish the effect. However, the physical intoxication won't have worn off, so we'll be two drinks mentally relaxed but four drinks physically intoxicated. Then when the relaxing mental effect of those two drinks wears off, and we take two more, we'll be two drinks mentally relaxed but now six drinks physically intoxicated. It may be that by this time your body will have processed the physical intoxication effect of a single drink, but even so you will still be two drinks relaxed but five drinks intoxicated.

This is how we can wake up the morning after a heavy night and still be physically intoxicated even though the relaxing effects of the drink are long gone. This is also why virtually every drinker that has ever lived has had at least one occasion where they have inadvertently consumed too much alcohol. In fact, not only has virtually every single drinker consumed too much alcohol on occasion, but the vast majority have done so on several occasions and continue to do so throughout their drinking lives. Drinkers have to exercise caution about drinking too much. Do they have the same problems with coffee, tea, water, or

soft drinks? If a husband or wife is going out one evening for a drink it is commonplace for their partner to issue a warning about drinking too much, but if the person was going out for a coffee do they ever get told 'Please make sure you don't have too many, you know you get very shaky and can't sleep when you have too much caffeine'?

Now is a good time to stop and summarise where we are. Essentially, alcohol provides us with a feeling of relaxation. However, the brain and nervous system reacts to this by releasing stimulants and becoming more sensitive, with the result that when the alcohol wears off we are more anxious and unrelaxed than we were before we took the drink. So we are inclined to take another drink, and the relaxing effect of every drink we take registers on the subconscious, but the corresponding feeling of anxiety does not register on the subconscious as being the result of the alcohol as it is too far apart in time for the subconscious to link the one with the other. So over time the subconscious mind comes to believe that alcohol will relieve anxiety, so that whenever we suffer anxiety or stress in our lives we encounter a subconscious trigger to take a drink. This in turn can set off the spiral of craving, which means we simply cannot function or enjoy ourselves without a drink. All the while and throughout this entire process, as the body and brain become increasingly proficient at countering the alcohol, the mental relaxation is increasingly outstripped by the physical intoxication, meaning we are increasingly inclined to lose control when we are drinking and end up totally intoxicated.

However, there are some further key aspects we will need to consider so we can build up a full understanding of alcohol. One of the most important and one of the least well known of these is the effect alcohol has on sleep.