

# Think Before You Drink

Version 1.4



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Thank you for choosing to use this guide. The technique described here is aimed at people who want to reduce their alcohol consumption, perhaps because drinking has already led to problems at work, in relationships, or on the road. Perhaps also because you have heard that alcohol may cause physical problems, or simply because your doctor has advised you to “slow down.”

This new technique is intended to help you with this. But to succeed with it you will need insight into your drinking behavior, and an understanding that drinking can indeed cause harm. It will also require your firm resolve to break through the problematic drinking pattern. People whose physicians or families have brought up their problematic alcohol consumption but who are unwilling to curb their consumption will not benefit from this technique.

**If you have been diagnosed with a serious alcohol dependence and want to quit drinking *right away*, this manual may not help you. Instead, “qualified alcohol withdrawal treatment,” is needed during which withdrawal symptoms such as seizures that may occur.**

This guide is short and the technique is easy to use. Your actual work begins afterwards. Only if you use the technique regularly will you be able to limit your alcohol consumption. Clearly, this guide cannot replace withdrawal- or cessation therapy.

Reading and understanding as well as the decision to change are an important start, but they alone are not enough. Try to actively integrate what you have learned into your everyday life! Please read the guide from front to back and do not jump to the end or skip passages that seem familiar or irrelevant to you.

Good luck!

## **From head to toe: alcohol -- the insidious poison**

### **Introduction**

Mark Twain is credited with the following quote for smoking cigarettes, another habit that is hard to kick: "Giving up *smoking* is the easiest thing in the world. I know because I've done it thousands of times." Short-term may be easy, but as the quote implies, perseverance is needed to keep consumption low over the long haul.

Especially at the beginning, reduced consumption may feel like deprivation and renunciation, and the craving for alcohol can be very strong. This is aggravated by the fact that alcohol is available almost everywhere and alcohol has many positive short-term effects. Of course, there's the taste: for many people the thought of that first beer at the end of work, or a nice glass of Merlot, induces a sense of well-being and relaxation. It also helps them to "switch off."

In the medium term, however, continuous consumption may result in serious side effects such as nausea, loss of control, cognitive and physical problems, and, in the long run, may eventually cause addiction. The supposed positive medical properties of alcohol, such as the notion that resveratrol, a substance in red wine, protects the cardiovascular system, encourage continued drinking. This hype is wide-spread but in fact the findings are highly controversial, in part because the few studies attributing positive effects to alcohol have been partly sponsored by the alcohol industry. And even so, those findings have been ambiguous, and it is certainly unclear whether the purported benefits outweigh the many other drawbacks. In some of these studies, people who abuse alcohol were compared with teetotalers. The latter group included people who had been advised not to drink alcohol at all due to physical or mental disorders. As a result, the comparison was by no means fair.

Thus, for example, the connection between alcohol consumption and the following physical and mental disorders has been scientifically established:

- Alcohol abuse can be fatal, even if death is usually caused by late side effects.
- Among the numerous long-term consequences of alcohol abuse are liver damage such as fatty liver, hepatitis, and cirrhosis of the liver. A chronically inflamed pancreas, which can cause diabetes, is not uncommon.
- Other diseases caused by chronic alcohol consumption include gout, hormonal disorders, and sexual dysfunctions such as impotence.
- Chronic alcohol consumption damages the mucous membranes of the mouth, throat, esophagus, and stomach, often leading to inflammation of the esophagus and stomach.
- In addition, certain cancers are more common, including esophageal and throat cancer.
- Alcohol abuse also causes lasting damage to the cardiovascular system, including

high blood pressure and heart muscle diseases.

- Secondary diseases, including brain and nervous system damage, are not uncommon.
- In addition to neurological disorders such as gait insecurity due to cerebellar damage or liver- related brain damage (hepatic encephalopathy), the risk of strokes increases.
- In addition, alcohol can lead to long-term brain and neuropsychological deficits, including severe impairments of attention, memory, time perception, and problem-solving abilities. A typical alcohol-related disease is the amnesic disorder called Korsakoff's syndrome, which leads to memory loss, as recent information in particular can no longer be recalled.

Why are we writing this? After all, you have already decided to drink less and so you probably know a lot of this already. Then why scare you? For the simple reason that it happens all too often that people often get cold feet as soon as the "real work" begins. At those times we like to recall the supposed pleasures of alcohol and downplay the risks.

*"I don't like the drugs but the drugs like me" (Marilyn Manson)*

Like practically everything that is (short-term) fun, such as recreational drugs, but also eating, gambling, and sex, there can be a downside to alcohol: abuse to the point of addiction. The urge for alcohol is often so strong that the person can hardly resist the overwhelming craving. The accompanying thoughts ("I think I'll kick back with a good drink and make plans") and feelings, especially the prospect of feeling better ("Finally I can switch off, come down, and relax"), are often fueled by a kind of fever state that may include trembling and sweating. The only way to deal with this fever state and make it tolerable seems to be alcohol. This type of "prelude" is not specific to alcohol; we find it in many addictions (e.g., to cocaine and tobacco) but also in behavioral addictions (e.g., to gambling).

Accordingly, the treatment of addiction disorders has to be initiated from several angles. Typically, the treatment of alcohol use disorder aims at changing feelings and thoughts. In therapy, patients are taught over time to apply new strategies with which they can positively influence their feelings and actively tackle their problems instead of numbing or forgetting them with alcohol. Alternative leisure activities and avoidance of the environment in which the substance is available and consumed, can effectively support this.

The new technique presented here begins directly with bodily sensations, which have long been neglected in addiction therapy, although, as already mentioned, the urge for alcohol is accompanied by strong physical urges. In severe alcohol addiction, the physical symptoms are particularly obvious, as the alcoholic trembles and sweats in the morning when he craves alcohol. Even if one knows intellectually that one should finally break with the habit, the physical urge is often so overwhelming that only alcohol promises relief. It feels like the quote from Marilyn Manson above. The alcohol grabs hold and never lets go.

## **Think before you drink**

### ***Preliminary note***

Before getting into the technique itself, we would like to talk briefly about how it works psychologically. A psychological technique can only fully develop its effectiveness if the person using it understands it and is convinced of it. In this respect, psychotherapy is different from pharmacotherapy, which requires no understanding or conviction. Aspirin, for example, gets rid of headaches even if you have no idea how it works!

The "Think before you drink" technique is based on a computer-assisted procedure called "retraining" that has achieved promising results in studies with people with alcohol dependency and other addiction disorders. In the case of alcohol addiction, retraining involves viewing images of alcoholic and non-alcoholic beverages. The images become larger when you pull a joystick towards you and smaller when you push it away. The person is instructed to push pictures away with the joystick if they depict alcoholic beverages and to pull them towards him if they depict non-alcoholic beverages. The use of this technique has been shown not only to lead to a reduction in alcohol consumption but also to be effective in preventing relapse. The technique seems to help to reduce the physical urge to drink.

### ***How can that be? Isn't it too good to be true?***

A certain amount of skepticism is always appropriate when groundbreaking successes are published in scientific journals and echoed by the media. For researchers, however, "one study is no study." In this case, however, the therapeutic effect of the retraining has been repeatedly confirmed by independent scientists and can be regarded as established. However, this technique is quite complex and monotonous and has further disadvantages (see below), so that from our point of view its efficacy could be improved by some changes. Before we talk about this, we would like to explain briefly what we know so far about the psychological mechanisms by which the procedure works. This is important because we have taken into account some of these mechanisms of action in a somewhat modified form for the new technique presented later.

## *How retraining works*

Let us start with the word: *Retraining* is about new learning. The new technique makes use of unconscious processes that make us automatically approach things we like (e.g., hugging someone, approaching an object of curiosity). This has long since found its way into the language. For example, we find people *attractive* and sometimes even talk about *magnetic attraction*. On the other hand, we automatically reject and distance ourselves from things we don't like. We may find someone or something we don't like *repulsive* or *repellant*. This language is both physically and linguistically anchored, and more or less equally pronounced in all people.

### **Scientific Digression: Embodiment—The "Physicality" of Approach and Avoidance**

In basic research studies that preceded classical "retraining," test subjects with an addiction (e.g., people with alcohol problems, slot machine gamblers) viewed on a computer stimuli that depicted the addictive substance (depending on the disorder, for example, a beer bottle, a slot machine) or neutral stimuli (e.g., a mineral water bottle, a flower pot). The test subjects were told to push or pull the joystick not based on the content or the meaning of the image but on physical properties such as whether the picture was presented in portrait or landscape format. In the case of a portrait image, the subjects were instructed to push the joystick away as quickly as possible (the image then became smaller on the screen); they were instructed to pull the joystick towards them when they were shown a landscape image (the image on the screen then became larger). Important, if a subject with alcohol addiction was shown a beer bottle, he or she reacted faster if it was presented in landscape format than in portrait format (their "pulling" of the joystick was faster than their "pushing" of the joystick). Similar results have been found with other addictions. These studies show that addiction is associated with a corresponding physical preference (pathological approach behavior). In people without an addiction, this behavior pattern is absent or significantly attenuated.

Now to the opposite case. In people whose behavior is characterized by strong avoidance, e.g. people who react with fear or disgust to spiders, dogs etc., their reaction to objects that fill them with fear is correspondingly faster when they are in portrait format (i.e., the "push" movement with the joystick) than in landscape format (the "pull" movement). This shows that disgust and fear are also physically connected to a defensive reaction.

**The pathological coupling of alcohol with the physical urge to approach alcohol is broken by this technique.** By the way, it makes no difference whether test subjects "pull" in response to the landscape format and "push" in response to the portrait format or vice versa.

Retraining makes use of this normal human response tendency by blocking the urge for alcohol with the help of an opposite physical action and thus tries to reduce the urge and in the end also the consumption.

### *Disadvantage of classical retraining*

As already mentioned, retraining has certain disadvantages. For one thing, different people like different alcoholic beverages. Not everyone likes beer or hard liquor. Some drink only one kind of alcohol, others drink various kinds. Brands also play a role, as do the corresponding colors and labels. Someone who drinks only beer won't necessarily break out in a sweat at the sight of a bottle of red wine. Computers have a hard time dealing with this level of individualization. Then again, some people will do anything to avoid sitting in front of a computer every day and doing the monotonous retraining exercises. It's not much fun.

### *The new technique: Think before you drink*

The technique presented here is based on this principle of retraining, but shifts the execution from the computer to one's own imagination.

This is not unusual in psychotherapy. It has long been shown that people who suffer from a phobia, such as a fear of certain animals such as spiders or of closed or open spaces, may benefit from exposure- or confrontation therapy. That is, they deliberately expose themselves to the dreaded objects or situations. By doing so, they may get to the point where they can say: "I can deal with it and endure the feeling; it's not so bad after all." This involves the realization that the feared consequences will not occur and that the fear will eventually subside on its own. In the treatment of anxiety, this procedure is effective both when exposing oneself directly to the objects or situations as well as when imagining them or in a simulated environment (e.g., in virtual reality experiments with 3D glasses).

We make use of the latter principle (i.e., imagined exposure) for our variant of retraining. In our opinion, this shift into the world of thought has several advantages over the original computerized technology. So you can imagine your personal alcoholic beverages of choice as well as the non- alcoholic beverages that also taste good, or that you at least find OK. In addition, you can also imagine the typical environment in which you usually drink. For some it may be their own living room, for others it may be the bar counter. Several times a day you should imagine your most popular alcoholic drinks, preferably in the typical surroundings. Instead of simply pushing these away in our thoughts, as in the original computerized exercise, our imagination offers us more possibilities which, in our opinion, can significantly increase the potential and effectiveness of the technique.

Let's start with a step-by-step approach:

**Choice of alcoholic beverages:** Most people have one to three favorite alcoholic drinks. Think about this and especially the way you usually drink (i.e., from a glass, directly from the bottle or can. Vividly imagine your favorite drinks. Imagine intensely their color, smell, and taste. These drinks should be pushed away again and again as described below.

**Choice of non-alcoholic beverages:** Then think of non-alcoholic drinks that you like or consume regularly (e.g., coffee, ice tea, or water). Again, recall how you typically drink

them, whether in a glass, cup, or bottle. Use as many sensory modalities as possible to imagine these drinks. Then pull these beverages in thoughts toward you again and again as described below.

It has often been demonstrated that aversive stimuli lead to a defensive or avoidant reaction, while pleasant stimuli lead to an approach response. This is the principle on which retraining is based.

Something similar applies to up versus down. If we are depressed, people can deduce this from our posture. We may walk slumped over or make ourselves small; the corners of our mouth may droop. On the other hand, pride and a good mood do the opposite: we walk erect and the corners of our mouth let everyone know how we're feeling. As a result of *mirror neurons* in the brain, which are important for feelings of empathy and compassion and for the transference of emotions, most people react negatively when they see photos of people whose bodies and facial expressions are drooping. This may be mirrored in our own behavior; when we see someone with a bent posture we may spontaneously adopt that posture and the facial expression that goes with it. This may in turn depress our mood. Although we are often unconscious of these "infectious effects," they have been scientifically established. These effects of our imagination are exactly what we want to make use of with the technique presented here.

Our emotional and physical selves interact. An elevated or depressed mood causes us to walk upright or bent over. But this also works the other way around. Try it out. Gestures and posture are so rooted in our emotional world that straightening the body involuntarily leads to a slight improvement in mood, while slumping and walking dejectedly may darken our thoughts. Look up at the sky. Most people find it difficult to have negative thoughts when they do. The effect is amazing and shows the linkage between mind and emotion and the body.

Why is this important here? Instead of simply pushing away alcoholic beverages in your mind, we advise that you always perform the following sequence regularly:

### **Concrete exercises:**

1. Exhale and slump into yourself. Make your shoulders round and bent and reinforce this as consciously as possible with cloudy thoughts.
2. Then imagine one of your favorite alcoholic drinks. In your mind, take it in your hand and get rid of it where you drink it most often (e.g., throw it along the bar counter as if it were a bowling alley). Look at the photo below. In the end, the drink should shatter or, if you don't have moral issues with it (remember, this is only in your head), wreck the place where you drink (e.g., make sure to stain the carpet and walls; break a few chairs).
3. As we have shown, rejection is associated with a (horizontal) push movement, but also a downward motion (think of the "thumbs down" of disapproval). That is why we recommend that you throw the drink on the ground in your thoughts. You can also imagine spitting or



vomiting the wine or beer into the toilet. Make this scene as grotesque as possible. If you want, you can pretend to become nauseous, but of course don't make yourself throw up. You know yourself and your body best, and know which method to use to physically reinforce your imagination. Repeat this a few times a day.

Try to play with the technique and develop your own scenarios. The above scenarios are only suggestions, but it is important that an accelerated movement *away from the body* is included in your exercise. Important: The movement should be physically executed, not just imagined!

Think also of your "second-favorite drinks" (i.e., non-alcoholic drinks that you also consume regularly) or -- if you consume almost exclusively alcoholic beverages -- which you *might* also like. Detailed instructions follow in the next section.



*Phases of the aversion exercise: Take an alcoholic drink in your hand -- bend your body forward and contemplate negative thoughts -- and then imagine throwing the drink to the ground (see text)*

**Now the opposite sequence for non-alcoholic drinks:**

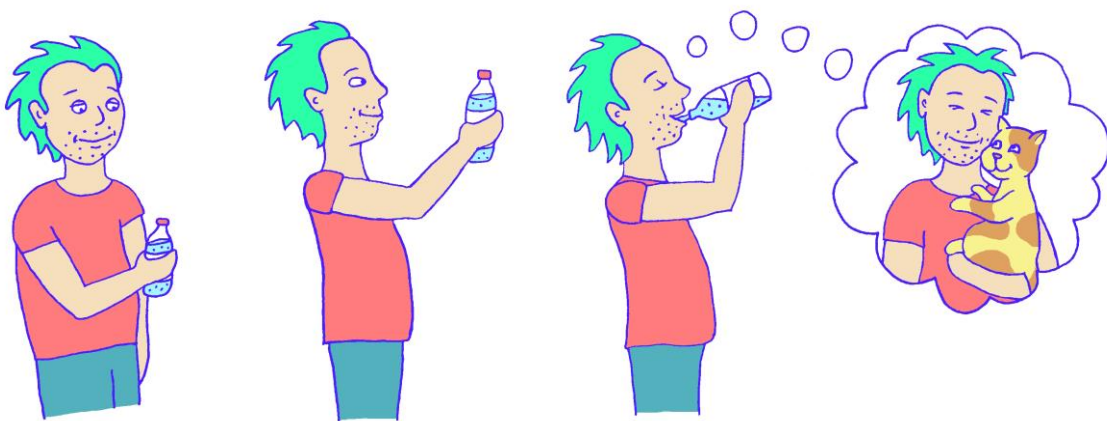
1. Take a deep breath. Make yourself tall and stand up as if someone were pulling you up by an imaginary thread attached to the top of your head. Your posture is upright and relaxed, your eyes are looking straight ahead, and your head is not bending forward. Your shoulders are back and your chest is forward. Can you feel how this posture alone creates a feeling of strength and confidence?

2. Imagine a non-alcoholic drink.

3. Now hold the glass or bottle towards your mouth, exaggerated as in the photo below or in an advertisement, so that you are looking slightly upwards (this improves the mood in many people, see above).



At the same time, if you can, try to create other pleasant feelings (if you can't, no problem), such as imagining sitting together and laughing with others while drinking or hugging a beloved person or pet. As soon as you have as vivid a positive feeling as possible, imagine drinking the beverage. It's about connecting positive feelings, especially body feelings, with the beverage.



*Grab a non-alcoholic drink -- straighten your posture as described -- lift the drink high and, if possible, couple these actions with other positive feelings (e.g., stroking a pet; see text)*

Try different things. You don't have to do the sequences in strict order. Do whatever seems to work -- but do both exercises.

### A few tips:

- Set a timer (e.g., using a smartphone or app) so that you are reminded to do the full sequence of the exercises at least twice a day. Practice for about 10 minutes a day. You do not have to do the exercises in a completely quiet environment, but it is important that you are able to concentrate on them and are not constantly disturbed by outside influences or other people. You don't always have to do the exercises at the same time of day. Of course, the benefit of having a fixed time is that you'll recall them more easily, but if you do the exercises at a different time every day, that's fine too.
- The aim of the technique is not necessarily complete abstinence from alcohol, but reduction. The following steps will help: Drink from small bottles; it's better to drink from a 12-ounce bottle of beer than from a quart. Opt for a standard glass of wine rather than the larger ones that are sometimes available. Then place the opened bottle outside your field of vision. Instruct yourself not to buy alcohol at a store, but toss the money you've saved into a piggy bank and spend it on something nice at the end of the month or year. You'll be amazed at how much money you used to spend on alcohol.
- After drinking a glass or a unit of alcohol, drink a non-alcoholic beverage of about the same quantity, preferably a little more. For example, after a glass of wine, drink a glass of water. Don't just gulp it down, but take your time -- at least 10 minutes. Compare the thirst-quenching and satisfying effect of the non-alcoholic drink with the effect of the alcoholic drink, which makes you crave more and more.
- Don't automatically drink the next glass of alcohol right away, but consciously consider whether you really want another glass. The non-alcoholic drink fills the stomach and thus reduces the urge to continue drinking, but above all it leads to a less "binge" drinking and to more conscious drinking. An almost empty glass of wine or beer may induce a feeling of emptiness or vacuum that many people find irresistible. As a result they may start thinking about the next beer or glass of wine before even finishing the one in front of them. Drinking speeds up. But if you alternate (alcohol -> non-alcohol -> alcohol etc.), you know that after the glass or the bottle, no alcohol will follow. Ideally, this will cause you to lower your alcohol consumption.
- While you are drinking the *non-alcoholic* beverages, try to do the above exercises in your imagination, that is, drink with pleasure and consciously -- in an upright position. Don't slump. Think of beautiful things or scenery. While you drink *alcohol*, however, try not to evoke any positive thoughts, because you are trying to cut the connection between alcohol and good feelings as much as possible.

The aim of the exercises is to couple alcohol with physical aversion in order to weaken the physical urge for alcohol. Try to incorporate this into your everyday life: If you pass a garbage can or notice unpleasant smells in other places, imagine your favorite alcoholic drink.

Play around with the technique and have fun with it.

**So. Let's do it:**

Start today. If you have any questions, please contact Prof. Dr. Steffen Moritz (moritz@uke.de).