

Toxins & Addictions

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Smoking, Drugs & Alcohol

Avoiding toxins such as cigarettes, certain chemicals, stress, and alcohol have all been shown repeatedly in scientific studies to lower the risk of many diseases. Before we dive into this, let's note: the word "avoid". It isn't possible to completely eliminate all of these from our lives but we can do our best to rid ourselves of most, and to limit our exposure to others. Some health presenters use the word temperance to describe the idea we should eliminate those things that are toxin, avoid those things that are eventually harmful, and use self-control with all things healthy.

Most people are aware of the problems of illicit drugs and since they are ever changing, I'll leave that up to the police and drug education. Suffice it to say, Don't Do Drugs. Simplistic, yah, maybe. But most of the harmful effects of the items we'll talk about in this handout also apply to most illicit drugs as well, at least in some degree, if not in exact comparisons.

Do I really need to list all the harmful effects of tobacco? Cigarettes, snuff, e-cigs, nicotine, are all very bad for you. Well I am going to anyway, because cigarette smoking is the leading preventable cause of death in the United States and in many other parts of the world.

Tobacco kills around 6 million people each year, or 1 in 10 people. A more than 25X that of all the terrorist attacks worldwide in the last 10 years combined! There are more than 480,000 deaths from cigarettes just in the United States alone. This is nearly one in five! These are all needless and can be avoided.

- Smoking causes more deaths each year than the following causes combined:
- Human immunodeficiency virus (HIV)
- Illegal drug use
- Alcohol use
- Motor vehicle injuries
- Firearm-related incidents
- Cigarette smoking increases risk for death from all causes in men and women:
- Heart disease by 2 to 4 times
- Stroke by 2 to 4 times
- Men & women developing lung cancer by 25 times
- And Smoking causes diminished overall health and quality of life.

Ok, enough said, so what about the next most commonly used addictive substance, alcohol. The temperance movement at the turn of the century was started by concerned friends and family who realized alcohol was destroying families. It is now looked back on with some degree of amusement because now we can hold our liquor right? In this enlightened age we have complete self-control right? No problems with alcohol induced domestic abuse, right? Unfortunately no.

But doesn't wine and beer have some benefits? Certainly, the Sardinians, who live a long life, drink wine, but in moderation, 1-3 glasses per day, and NEVER several at one sitting. Plus, they drink only wine, which they make

themselves I might add. It has antioxidants that help to counteract the properties of the alcohol. And, while that's one benefit there are problems too. Here's how even moderate alcohol consumption can affect your body:

Liver: Drinking takes a toll on the liver, and can lead to a variety of problems and liver inflammation including: Fatty liver, Alcoholic hepatitis, Fibrosis, Cirrhosis. Our liver is vital for our entire body function and metabolism, as it removes toxins and distributes and stores essential nutrients. It receives 30% of the circulating blood every minute! It process proteins, glycogen, and many vitamins and minerals. You can't live a long life without a healthy liver.

Pancreas: Alcohol causes the pancreas to produce toxic substances that can eventually lead to pancreatitis, a dangerous inflammation and swelling of the blood vessels in the pancreas that prevents proper digestion. The pancreas also regulates certain hormones and enzymes.

Heart: Drinking too much over a long time, or too much on a single occasion, can damage the heart, causing problems including: Cardiomyopathy, Arrhythmias, Stroke, and High blood pressure. While, like we mentioned, the research shows that drinking moderate amounts of alcohol may protect healthy adults from developing heart disease, that must be weighed by all the other risks of disease. Such as even a few drinks a week can increase the risk of breast cancer in women.

Cancer: Drinking alcohol can increase your risk of developing certain cancers, including: Mouth, Esophageal, throat, liver, and as mentioned before breast cancer.

Immune System: Drinking can weaken your immune system, making your body an easier target for disease. Regular drinkers are more liable to contract diseases like pneumonia and tuberculosis than people who do not drink. Drinking a lot on a single occasion slows your body's ability to ward off infections – even up to 24 hours after getting drunk.

Brain: Alcohol interferes with the brain's communication pathways, and can affect the way the brain works. These disruptions can change mood and behavior, and make it harder to think clearly and move with coordination. It makes it easier to give into lifestyle choices that can further harm you, like unprotected sex, over eating, drugs, driving impaired, staying up late, getting angry with friends, and more. Truth is, we need all the brain cells we can get! In fact, one doctor noted that alcohol was the number one cause of abuse in the home in one village where he worked. If you think being an alcoholic is rare check out a few more facts: According to the 2015 National Survey on Drug Use and Health, 15 million adults had alcohol use disorder or AUD just in the USA alone. And an estimated 623,000 adolescents, ages 12–17, had alcohol use disorder. <https://www.niaaa.nih.gov/alcohol-health/overview-alcohol-consumption/alcohol-facts-and-statistics>

If you still decide to drink, choose healthy ones, like red wine, and remember moderation is no more than 3 glasses for women and 4 for men according to Alcohol abuse and alcoholism. They also state this is a generalization and some people can be harmed by even this amount, will that be you? In a 100 page document released in 2012, The World Health Organization states, "The harmful use of alcohol is a component cause of more than 200 disease and injury conditions in individuals, most notably alcohol dependence, liver cirrhosis, cancers and injuries. The latest causal relationships suggested by research are those between harmful use of alcohol and infectious diseases such as tuberculosis and HIV/AIDS... In 2012, about 3.3 million deaths, or 5.9% of all global deaths,... (and) 5.1% of the global burden of disease and injury, were attributable to alcohol." http://www.who.int/substance_abuse/publications/global_alcohol_report/en/

Every time you hear "moderate drinking" can help reduce risk of heart disease and stroke, keep in mind it increases the risk of other diseases and health problems. Remember you can decrease the risk of heart disease far more significantly with diet and exercise which also help prevent other diseases instead of increasing the risk. So, be sure to look at the whole picture. If you need help to quit smoking, drinking, or doing other drugs please visit this free website: www.helpguide.org/articles/addiction/overcoming-drug-addiction.htm or look for a local AA group.

Caffeine:

I know, I know, you NEED your morning cup of coffee or your afternoon tea. And there are some benefits such as antioxidants and being less grumpy which has some implication of its own. But we can't neglect to point out the harmful side effects too.

The following excerpt is from "Proof Positive" a book by Dr. Neil Nedley and is used with permission.

"Coffee is another common source of carcinogens in the American diet. The experts still debate whether coffee presents a significant cancer risk, but there is no question that this popular beverage contains cancer-causing chemicals. Such chemicals include methylglyoxal^{148,149} catechol, chlorogenic acid, and neochlorogenic acid.¹⁵⁰

The pharmacologists acknowledge that even caffeine itself "has potent mutagenic effects" in laboratory studies of microbes. It can also damage the chromosomes of both plants and animals in lab settings.¹⁵¹ This fact can suggest that a substance is carcinogenic in humans. However, the same source believes that a person could not obtain high enough levels of caffeine with ordinary consumption of medications, foods, and beverages to increase cancer risk in this way.¹⁵²

This argument fails to take into account the fact that coffee brings together a variety of carcinogenic compounds. Caffeine is further superimposed on other cancer risk factors that we are all exposed to in varying degrees. In this context, there is concern that both coffee and caffeine may significantly increase cancer risk in the right setting. Such a conclusion agrees with the epidemiologic literature that shows caffeine and coffee sometimes increasing risk, and other times having no effect on certain cancers. The difference may have to do with the other carcinogens that individuals in a population may or may not be exposed to.

Dr. Winston Craig in his book, Nutrition for the Nineties, seems to come to a similar conclusion, even though he takes a somewhat different perspective.¹⁵³ Craig sides with research suggesting that caffeine is not a frank carcinogen itself, but is rather a co-carcinogen. This means that it can increase the likelihood that cancer will occur if it is in the presence of other carcinogens. The cancer sites that have been linked with coffee include kidney, breast, colon, pancreas, and ovary.¹⁵⁴ A look at a few of these epidemiologic studies is illuminating.

Pancreas cancer has probably received the most attention regarding increased risk from coffee. This apparently derives in large part from a highly publicized Harvard study in the early 1980s.¹⁵⁵ Other studies have not found such a relationship, bringing us back to my earlier point about the likely interaction between coffee, caffeine, and other risk factors. Coffee seems to bear a more striking relationship to bladder cancer. The first study that drew my attention to this was the large Adventist Health study. This epidemiological research involved some 24,000 California Seventh-day Adventists. The results of the study are depicted in Figure 16: Coffee Use and Bladder Cancer.¹⁵⁶

Notice that those who drank two or more cups of coffee per day had twice the risk of death from bladder cancer as those that did not drink coffee at all. Other research such as that conducted at the State University of New York at Buffalo has confirmed the potential of coffee drinking to double bladder cancer risk.¹⁵⁷ Significantly, the Buffalo researchers looked at cases of bladder cancer, in contrast to the SDA investigators who compared bladder cancer deaths. Other studies have also shown an increase in bladder cancer with coffee usage or other caffeinated beverages. This has lead some to speculate that for bladder cancer, caffeine itself may be the main culprit in coffee. Fatal colon cancer has also been linked to coffee consumption. Those consuming two or more cups of coffee per day increased their risk of death from colon cancer by 70 percent when compared to those that consumed less than one cup a day. The study also revealed a dose-response relationship; that is, the more coffee consumed the higher the risk.¹⁵⁸

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Other Toxins

There are many other chemicals we could talk about, like pesticides, or working with specific chemicals like industrial solvents, mining, and manufacturing. But beyond things we eat and drink, we can harbor toxins of another sort. There is one toxin you may not have considered that has a real impact on health and relationships. So what is it? Unforgiveness. "Holding a grudge appears to affect the cardiovascular and nervous systems. In one study, people who focused on a personal grudge had elevated blood pressure and heart rates, as well as increased muscle tension and feelings of being less in control. When asked to imagine forgiving the person who had hurt them, the participants said they felt more positive and relaxed and thus, the changes dissipated. Other studies have shown that forgiveness has positive effects on psychological health, too. Forgiveness doesn't mean forgetting, condoning or excusing whatever happened. It's acknowledging hurt and then letting it go, along with the burden of anger and resentment." <http://www.medicalnewstoday.com/releases/92891.php>

Overeating & Other Addictions

Lastly, while we are at it, we should briefly mention process addictions. A process addiction is a compulsive behavior, such as compulsive gambling, sexual addiction, eating disorders and spending addictions. As defined by faqs.org it is "A condition in which a person is dependent on some type of behavior, such as gambling, shopping, or sexual activity." "A process addiction is characterized by:

An obsessive need to be involved with the activity, or planning the activity.

Neglecting responsibilities in favor of doing the behavior (Showing up late to work due to gambling late the night before).

Your behavior is interfering with your relationships, such as infidelity, neglect of children or change in friendships.

Legal trouble, such as illegal gambling, prostitution, or breaking laws in order to engage in your behavior of choice.

You feel as if you do not have control over whether or not you participate in the activity.

Your life revolves around your behavioral addiction."

Taken from <http://www.processaddictions.com/>

If you struggle with any of the items in this handout, talk to your health coach about seeking professional help. There is no shame in recovery. Wouldn't you want your best friend, were they in your shoes, to get help?

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