US Genetically Altering Crops with Insects, Scientist Fear Biological War Plan

Darpa is developing virus-carrying insects to disperse genetically modified viruses that are engineered to alter the genetics of plants. They say that the plan is for bugs like aphids, leafhoppers, and whiteflies to spread a virus to plants like corn and tomatoes, that will impart genes that change the plants to become resistant to disease and drought. The program is called “Insect Allies” and researchers have more than $45 million budgeted to pursue the idea. So far, experiments have only been conducted in sealed greenhouses and labs.

An international team of scientists and lawyers believe the technology could be used for military applications, and they also warn that the spread of virus-carrying insects could be difficult to control. Guy Reeves, a biologist, and researcher at the Max Planck Institute for Evolutionary Biology is quoted:

> *Easy simplifications … of the described work program could be used to generate a new class of biological weapons.”*
>
> *“The program is primarily a bad idea because obvious simplifications of the work plan with already-existing technology can generate predictable and fast-acting weapons, along with their means of delivery, capable of threatening virtually any crop species.”*
>
> *“We have viruses which can genetically modify a plant, or even a mouse. But no one’s ever proposed dispersing them into the environment. That’s the thing that makes Insect Allies unique.”*

Related: ***How to Avoid GMOs in 2018 – And Everything Else You Should Know About Genetic Engineering***

Concerned scientists also warn that even if the program is never used for such nefarious objectives that it could enable other countries to create similar technologies for the purpose of biological warfare under the guise of agricultural improvements.

Darpa doesn't want us to worry.

> *Darpa created Insect Allies to provide new capabilities to protect the United States, specifically the ability to respond rapidly to threats to the food supply. A wide range of threats may jeopardize food security, including intentional attack by an adversary, natural pathogens and pests, as well as by environmental phenomena such as drought and flooding." – Dr Blake Bextine, the Darpa program manager for Insect Allies.*

Recommended: ***How To Heal Your Gut***

Sources:

- *US plan to genetically alter crops via insects feared to be biological war plan* – GM Watch
- *US plan to genetically alter crops via insects feared to be biological war plan* – The Guardian
- Image: *Gardening Tips: Controlling aphids* – Sweet Home Organics

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Bees Benefit From Sunflower

Pollen, Says New Study

It’s about time the bees get some good news! A new study finds that sunflower pollen can lower the rates of certain infections in two different kinds of bees, the bumblebee and the European honeybee. The pollen lowered the rates of Crithidia bombi (a particular pathogen) infection in bumble bees (Bombus impatiens) and also reduced another pathogen, Nosema ceranae, of the European honey bee (Apis mellifera). Bumblebees who consumed sunflower pollen also produced more eggs, larvae, and had a higher probability of pupating. Rebecca Irwin is a professor of applied ecology at NC State and one of the senior co-authors of the study.

> *We’ve tried other monofloral pollens, or pollens coming from one flower, but we seem to have hit the jackpot with sunflower pollen…None of the others we’ve studied have had this consistent positive effect on bumble bee health.”*

Bad News for Bees

The bee crisis has been in headlines more than ever lately. Neonicotinoids, a class of pesticides acknowledged as particularly toxic to bees, damage bee’s immune systems, promote disorientation, disrupt gut microbes, and shorten their life cycles. Recent studies have also found that the problem may be more serious than previously thought. Bees can develop a preference for pesticides. These agricultural chemicals are also impairing bees’ ability to remember and learn things.

Recommended: *Foods Most Likely to Contain Glyphosate*

Benefits of Sunflowers

While sunflower pollen won't be able to address the harm bees suffer from pesticides, the flower can still provide protection from certain infection.

Sunflower seeds have a plethora of nutrients, especially vitamin E. That might hold the key to sunflower's ability to help the bees fight off disease. Vitamin E is a great source of antioxidants, has anti-inflammatory properties, contains zinc for the immune system, and have even been shown to fight infections in human infants. A vitamin E deficiency can lead to neurological issues like balance problems and lack of coordination. These neurological problems also sound like things bees experience when they're repeatedly exposed to sunflower seeds. Could vitamin E, through sunflower seeds, do even more for the bees?

As They Go, So Do We

Bees are crucial to our food supply. Thirty-five percent of the world's crops depend on pollinators like bees. The bees needed for that are disappearing at a rapid rate. A survey of beekeepers found that 33 percent of their bees died in 2016 and 2017. Our food system depends on them. The discovery of sunflower pollen as a potential support for bees is a step in repairing the massive damage inflicted on these insects.

Recommended: ***How to Detox From Plastics and Other Endocrine Disruptors***

Sources:

- *Sunflower Pollen Has Medicinal, Protective Effects on Bees* – NC State University
- *Medicinal value of sunflower pollen against bee pathogens* – Nature.com
- *34 Amazing Benefits Of Sunflower Seeds (Surajmukhi Ke*

Beej) For Skin, Hair, And Health – Style Craze
- *Benefits of Sunflower Seeds* – Nuts.com
- *Pesticides are making bees dumber* – Popular Science

Climate Change, Droughts, and the Future: How Plants Can Help Us Find an Alternative Scenario

The last four decades have provided insurmountable evidence that the planet is experiencing rising temperatures, a situation that is perhaps irrevocable. The traditional view holds that this will lead to a unilateral move towards northern climes from both animal and plant species, the death of a wide variety of species across the globe, and an inability for humanity to feed itself.

Scaremongering or an inconvenient truth? Unfortunately, the latter seems more likely, although scientists have recently uncovered promising avenues that may avert disaster. The core of the issue is drought-tolerance and climatic resilience. In order to ensure an extension of our lease on this planet, we need to lower emissions both as individuals and through government policy, but we also must make significant inroads into concrete solutions for an ever-changing atmosphere.

Plants, Climate, and Thirst

How do plants respond to the changes we're experiencing in the earth's atmosphere? The short answer is: we don't know. At least not exactly. A study by the University of Washington shows that it's incredibly difficult to predict exactly how species will react to a changing environment, with up to 60% of plant species showing a preference for warmer climes. There are far too many variables at play for accurate predictions.

Recommended: ***How to Detox From Plastics and Other Endocrine Disruptors***

What scientists are able to do is consider the response of specific traits to experimental stimulations. These test how species react to water loss and carbon differentials. Under water-limiting conditions, the trade-off is particularly obvious and presents the basic problem plants face: during drought, do you continue photosynthesis or close off the stomata (and risk starvation)?

The choice rests on essentially two traits: the plant's so-

called ‘internal plumbing’ and its ‘breathing apparatus.’ The Fynbos of South Africa offers some insight, with plants that close their stomata more likely to survive increased temperatures. Another study led by Christine Scoffoni suggests that the salt levels of cell sap can provide insight into which plants are more likely to survive. With these results in tow, we can make educated guesses on which plants to invest in going forward.

It’s Not All Good News (Spoiler: But There is a Silver Lining!)

Bearing the aforementioned in mind, consider the potential future of corn (the major crop of many countries, including the United States). When temperatures reach higher than 95 degrees, corn does not reproduce. Considering the bleak projections for greenhouse gas emissions by 2040, it’s a very real possibility that corn-based products will be a luxury of a distant past.

Recommended: ***How to Avoid GMOs in 2018 – And Everything Else You Should Know About Genetic Engineering***

Speaking at Ted Global, Jill Farrant provides a promising answer by suggesting the use of 'resurrection' plants as drought-tolerant crops. These plants can survive droughts by lying dormant, resurrecting when given water. They can tough it out with just 5% of their cellular water for years. Using these plants as models for drought-tolerant crops it is possible to create resilience against persistent droughts (which, let's face it, are going to happen).

What are the Options for Individual Households?

Ensuring our planet continues to be a hospitable environment for humanity, we need both the government and individuals to make drastic changes to the status quo. While this can be a little daunting to the average homeowner, there's still plenty that can be done in terms of plant choices and gardening practices.

Households should try and steer clear of the obvious; think luscious green landscaped grass in the middle of a desert, for example (yes, we're talking to you, Los Angeles) Instead, invest in aesthetically pleasing plants that won't hurt the environment.

For example, the succulent is an excellent alternative to plants that require a lot of water. These resilient plants can survive with very little water (just monthly during winter!); if anything, overwatering is the more likely problem. A cultural shift towards a preference for this type of plant, one that requires very little care, would go a long way in reducing carbon emissions and water shortages.

In addition, individuals should consider growing their own produce on a small scale, using natural fertilizers (think compost heaps over nasty commercial varieties) to create

sustainable produce. With the potential to cut down supermarket consumption by a very respectable 20%, doing this is more than a token gesture.

What Does the Future Look Like?

The findings that certain plant species are moving towards warmer climates is evidence that, when it comes to climate change, there are multiple variables other than just temperature. While the planet is undeniably getting warmer, there's potential for us (and other living species) to adapt to more challenging environments. Plants that can survive the challenging conditions we are throwing at them can offer a solution. Of course, reducing emissions is still a key part of the necessary strategy. All is not lost… yet.

Further Reading:

- *How plants respond to drought* – The Conversation
- *How We Can Make Crops Survive Without Water* – TED
- *A Guide To Succulent Plant Care* – Jim's Mowing
- *Drought – tolerant crops to the rescue in Kenya* – ICRISAT

Editor Recommends this video:

Foods Most Likely to Contain Glyphosate

Glyphosate is the most commonly used herbicide in the world and, according to a recent study, it has been found in the urine of 93% of Americans tested. Genetically modified foods like corn, soybeans, canola, and sugar beets contain the

highest concentrations of glyphosate, but there's another source of glyphosate exposure that we should be concerned about. Articles about glyphosate and grains frequently refer to the herbicide as a desiccant. Desiccants are sprayed on crops right before harvest to kill them and dry them out, making the crop uniformly ready for harvest when the farmer needs them to sell the crop – no need to wait for mother nature. These non-GMO grains will likely have high levels of glyphosate sprayed on them. But organic grains have also tested positive for glyphosate.

> *Although most EPA -registered pesticides are prohibited in organic production, there can be inadvertent or indirect contact from neighboring conventional farms or shared handling facilities. As long as the operator hasn't directly applied prohibited pesticides and has documented efforts to minimize exposure to them, the USDA organic regulations allow for residues of prohibited pesticides at or below 5 percent of the EPA tolerance." – USDA*

Must Read: ***How to Avoid GMOs in 2018 – And Everything Else You Should Know About Genetic Engineering***

Grains

Non-organic and non-GMO wheat, barley, buckwheat, millet, and oats are frequently sprayed with glyphosate as a desiccant shortly before processing.

Wheat

A few years ago Tropical Traditions did some research on glyphosate levels in wheat. Commercially available conventional wheat products from Canada, Montana, and South Dakota all tested positive for glyphosate. These are not genetically modified crops. "The range was from 0.07 mg/kg to 0.09 mg/kg." For a GMO crop, "the range is typically between

3.3 and 5.7 mg/kg."

Glyphosate is not allowed to be sprayed on organic wheat, which Tropical Traditions also tested for glyphosate. They were contaminated, with a range "from 0.03 to 0.o6 mg/kg, just slightly lower than the conventional grains we tested." Organic rye and organic millet tested clean at the time. But this was from December 2015. We're guessing the situation has only gotten worse.

Related: ***How to Heal your Gut***

Oats

EWG tested more than a dozen brands of oat-based foods. Glyphosate was found to be present on most of the oat-based foods tested, including organic products. Another recent study of glyphosate an oat products found that 5 of 16 popular, organic oats or oat-based products contained glyphosate residue.

Barley, Buckwheat, Millet, Flax, Sorghum

Traditionally these crops dry out and are then ready for harvest. A combine harvester is used to harvest the grains. Farmers used to own these, but now farmers are much more often renting them.

> *When they come by with the combine, you have to be ready. There ain't no 'this is ready, need you to come back next week for that section.' No. You've got to have your whole field ready. That's why they spray. If it's a real organic farm, like one that ain't bullshitting, you need to own your own combine. But that's getting more and more rare." — Anonymous farmer*

> *According to Tom Ehrhardt, co-owner of Minnesota-based Albert Lea Seeds, sourcing grains not desiccated with glyphosate*

> *prior to harvest is a challenge. "I have talked with millers of conventionally produced grain, and they all agree it's very difficult to source oats, wheat, flax, and triticale, which have not been sprayed with glyphosate prior to harvest," he says. "It's a 'don't ask, don't tell policy' in the industry." – Non-GMO Report*

> *Along with wheat and oats, glyphosate is used to desiccate a wide range of other crops including lentils, peas, non-GMO soybeans, corn, flax, rye, triticale, buckwheat, millet, canola, sugar beets and potatoes. Sunflowers may also be treated pre-harvest with glyphosate, according to the National Sunflower Association." – EcoWatch*

Quinoa, amaranth, wild rice, sorghum, and spelt are also likely candidates for glyphosate desiccation, but we don't see any testing be done on them. Regardless, contamination from drift is likely a problem for all grains, and pretty much all foods grown outside.

Related: *Stop Eating Like That and Start Eating Like This – Your Guide to Homeostasis Through Diet*

Legumes

Like grains, beans pods aren't all dried and ready at the same time, a serious inefficiency if you're selling large quantities of beans like chickpeas, lentils, peas, and white beans. But the need for uniform drying at the same time has also made legumes a target for glyphosate desiccation. Monsanto (now Bayer) recommends using Roundup as a desiccant for lentils and dry beans, and the CFIA found that roughly 47% of beans, lentil, and pea products tested had glyphosate residues.

Nuts

Technically, peanuts should be in the legumes category. From an eating standpoint, they're more like nuts. They're also one of the most heavily herbicide/pesticide-treated crops, and a study of the popular Skippy brand natural peanut butter found that the product contained 11.7ppb (parts per billion) of glyphosate.

Almonds are another potential source of glyphosate exposure, especially once they're processed into almond milk. A screening of glyphosate usage levels released in 2015 by the Environmental Protection Agency reported that 85% of almonds farmed in the U.S. were treated with glyphosate.

Must Read: ***Best Supplements To Kill Candida and Everything Else You Ever Wanted To Know About Fungal Infections***

Canola

Canola seeds are harvested and crushed to create canola oil and canola meal. Canola crops are almost always genetically modified and contain high levels of glyphosate.

Sugar

This section could easily be titled sugar beets. After all, 95% of sugar beets grown in the U.S. are genetically modified to withstand Roundup. Glyphosate is used on both sugarbeets and sugarcane extensively. Sugarcane is hit with a double dose of the chemical, both as an herbicide and as a ripening method. Glyphosate is the only sugarcane ripener approved for use in the United States, so any sugarcane grown in the U.S. likely comes with glyphosate residue.

Wine

10 out of 10 wines tested positive for glyphosate

> *An anonymous supporter of advocacy group Moms Across America sent 10 wine samples to be tested for glyphosate. All of the samples tested positive for glyphosate – even organic wines, although their levels were significantly lower." – Healthy Holsitc Living*

What About Bob's Red Mill?

On their website Bob's Red Mill addressed the concerns on January 6, 2015:

> *The majority of our conventional wheat is grown close to home in the Pacific Northwest, where growing seasons are typically longer and the practice of desiccation is as such rarely used. We've been told desiccation is not a practice used by our individual farmers."*

But on September 5th of this year, Sustainable Pulse reported:

> *Bob's Red Mill is facing a federal class action, filed in San Francisco Friday, after the world's most used weedkiller, glyphosate, was discovered in both its organic and non-organic oats.*

Related: *How to Detox From Plastics and Other Endocrine Disruptors*

Avoiding Glyphosate

There is no bubble strong enough to protect you from glyphosate in 2018. Even a diet consisting entirely of organic products will have considerable levels of glyphosate residue due to pesticide/herbicide drift. Not all of us are able to

dedicate the time and money needed to extensively research every single thing we eat. Other options include growing all of your own food or getting really good at detoxing. We also recommend shopping at your local farmer's markets and finding farmers that care as much about this issue as you do.

More Sources:

- *Which of Your Foods are Sprayed with Round Up Just 3 Days Before Harvest?* – Natural Society
- *Grim reaping: Many food crops sprayed with weed killer before harvest* – The Organic and Non-GMO Report
- *DOZENS of Food Crops Treated with Pre-Harvest Roundup (it's not just wheat!)* – The Healthy Home Economist
- *Got Monsanto's Glyphosate in Your Lunch?* – Moms Across America
- *The Terrible 10 Foods that Contain Monsanto's Roundup* – Care2
- *Safeguarding with Science: Glyphosate Testing in 2015-2016* – Canadian Food Inspection Agency
- *Herbicides as Ripeners for Sugarcane* – BioOne Complete
- *Glyphosate Found in Urine of 93 Percent of Americans Tested*
- *Canola* – Non-GMO Project

Genetically Modified Salmon

Sold As Sushi In Canada, Coming to the U.S. Soon.

The Cornucopia Institute reports that GMO salmon is being sold as sushi and sashimi in Canada. AquaBounty Technologies is a Massachusetts-based biotechnology company that produces genetically modified fish called "AquAdvantage," that they say is "The World's Most Sustainable Salmon."

AquaBounty is the first and only company selling genetically engineered salmon. Scientists inserted a growth-hormone gene from Chinook salmon and genetic regulatory elements from the ocean pout into Atlantic salmon.

> *Although AquaBounty, the makers of engineered fast-growing salmon, have refused to tell the public where their product is being sold, their CEO recently bragged to investors that it is being used in the Canadian buyer's "high-end sashimi lines, not their frozen prepared foods." Consumers must continue to be wary of the origin of their food: know your farmer!" – The Cornucopia Institute*

Ron Stotish, AquaBounty's CEO, told investors last Thursday that they have sold 4.5 tonnes of it in Canada so far this year, and that,

> *The people who bought our fish were very happy with it. They put it in their high-end sashimi lines, not their frozen prepared foods."*

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In Canada, GM fish does not have to be labeled as such. Consequently, customers may not know if the salmon they ordered is genetically modified.

AquaAdvantage Salmon is engineered to grow at twice the rate of regular salmon while consuming up to 2 percent less feed than regular farmed salmon.

> *This is an untenable situation. The fact that, once again, the company has let slip a piece of information to investors – but is information Canadian consumers need and don't have – exposes how much it is that Canadians need labelling." – Lucy Sharratt of the Canadian Biotechnology Action Network*

Recommended: *How to Heal Your Gut*

The FDA has approved AquAdvantage salmon for human consumption, but wild salmon is big business for Alaska, so Senator Lisa Murkowski and other Alaskan officials in Congress got the FDA to block AquAdvantage imports until new GMO labeling regulations are in effect for food labels. Senator Lisa Murkowski introduced the amendment prohibiting the import of the GM eggs needed to produce AquaBounty's salmon, and she co-sponsored legislation mandating the labeling of genetically engineered salmon.

Calling Meat Alternatives "Meat" Illegal in Missouri – First State To Pass Law

Missouri is the first state in the U.S. to ban the word "meat" on faux meat products like garden burgers and Tofurky. Using the term "plant-based meats," and "vegan faux-meat" can find the business owner in jail for up to a year. This law was brought to you by The Missouri Cattlemen's Association.

> *The legislation defines meat as 'any edible portion of livestock or poultry carcass or part thereof' and requires that any labeled meat product is derived 'in whole or in part, from livestock or poultry.' Violators of this definition will henceforth be subject to up to one year in prison and fines of up to $1,000." – Forbe's*

Must Read: *Meat and Dairy Industry On Course To Contribute More Global pollution Than OIL Companies*

The law will also apply to "clean meat" which is produced by growing and multiplying cells in a lab. Animal rights organizations and environmental groups aren't keen on the new law. It's estimated that if we switched to eating lab-grown meat, we would cut agriculture emissions by 96%.

Must Read: *FDA Commissioner to Issue New Non-Dairy Milk Guidelines*

Missouri is the first state but not likely the last. The American beef industry has been lobbying to get "meat" banned from vegetable-based products for years, and meat industries want the ban to be nationwide.

The industry has cause for concern. TreeHugger says,

> *Americans ate 20 percent less beef in 2014 than they did in 2005. Veggie meat substitutes, by contrast, are a growing industry. And who knows what'll happen when lab-based meats start making it into grocery stores."*

Myth of Moderate Alcohol Benefits Debunked, and How Science Gets Corrupted

We've all heard many times that a glass of wine a day is good for you. Improbable, considering what alcohol does to the gut, but study after study seemed to verify alcohol's heart-health benefits. The only problem was that the studies never actually said that moderate alcohol consumption is healthy. In fact, most studies simply pointed to potential benefits of red wine, and the studies were flawed in many ways, but the news ran with the idea that a regular drink is good for us because this is what most of us wanted to believe.

How Industry Corrupts Science

One recent study was attempting to lay the doubts to rest and confirm that a drink or two a day was, in fact, beneficial to our health. The problem is that this study was funded by the alcohol industry.

One of the many problems with previous alcohol studies is that if you compare a group of people who only drink a moderate amount to people who don't drink you're comparing people with restraint to people who may or may not have restraint with other lifestyle choices. A person who only has one glass of wine a day is likely going to have more willpower than the average person. For instance, maybe many members of the non-drinking control group don't like alcohol but instead smokes and eats junk food all day.

A proper study on the effects of alcohol would randomly assign one group of people to drink a moderate amount while they assign another group of people to abstain. This is tough to do with a large enough control group, but in 2013 the National

Institute on Alcohol Abuse and Alcoholism, a division of the National Institutes of Health (NIH), set out to do just that. The *Moderate Alcohol and Cardiovascular Health* study was poised to be a breakthrough in public health. The 10-year, $100 million government trial is now underway.

The NIH is said to be one of the world's foremost medical research centers. it's a federal agency that invests more than $30 billion of taxpayer money into health research yearly. The National Institute on Alcohol Abuse and Alcoholism is an agency under NIH that oversees the alcohol industry.

The idea is to pay thousands of people to drink in four continents. This amounted to 3,500 daily drinks for six years. The math proved to be incredibly expensive. NIH decided to rely on the alcohol industry to foot the bill. In October of 2017 Wired reported that,

> *Five corporations—Anheuser-Busch InBev, Diageo, Pernod Ricard, Heineken, and Carlsberg—have since provided a total of $67 million. The foundation is seeking another $23 million, according to its director of development, Julie Wolf-Rodda."*

In May of 2018, The New York Times published a scathing report that showed the NIH's ties to the alcohol industry. The article opens with:

> *It was going to be a study that could change the American diet, a huge clinical trial that might well deliver all the medical evidence needed to recommend a daily alcoholic drink as part of a healthy lifestyle.*
>
> *That was how two prominent scientists and a senior federal health official pitched the project during a presentation at the luxurious Breakers Hotel in Palm Beach, Fla., in 2014. And the audience members who were being asked to help pay for the $100 million study seemed receptive: They were all liquor*

> *company executives.*

The Times article reported that documents and interviews proved that the NIH courted the alcohol industry with a plan to endorse moderate drinking as healthy. The alcohol industry previewed the trial design and was allowed to vet the researchers.

Besides the industry influence, two other major problems with the study include the fact that the study is too short to see increases in cancers and other health issues that could be linked to alcohol consumption and too many people are excluded from the study. People are not allowed to partake in the study if they have never had a drink or have a history of addiction, psychiatric care, liver problems, kidney problems, and certain cancers.

> *You're picking off the people who are most likely to have the harms." – Dr. Richard Saitz, chair of the Department of Community Health Sciences at Boston University*

Incidentally, research has shown that alcohol consumption in any amount increases the risk of breast cancer.

A month after the Times article was published Stat News published an article titled, *NIH rejected a study of alcohol advertising while pursuing industry funding for other research*.

> *…at the 2015 meeting the director, George Koob, would leap out of his seat and scream at the scientists after their PowerPoint presentation on research the agency had eagerly funded on the association between alcohol marketing and underage drinking. 'I don't fucking care!' Koob yelled, referring to alcohol advertising, according to the scientists.*

Fortunately, thanks to all of the journalist reporting on this corrupt clinical trial, NIH terminated it last June.

A New Study Not Funded By Big Alcohol

It may not be wise to put any credence into a vaccination study funded by the Bill & Melinda Gates Foundation, but they aren't tied to the alcohol industry. The Lancet has just published a study stating that all alcohol consumption is a health risk, moderate or not.

The Global Burden of Disease study looked at alcohol consumption in 195 countries between 1990 and 2016 and analyzed data or people ranging in age from 15 to 95. Researchers compared people who completely abstained from alcohol to those who had one alcoholic drink per day and to people who drank more.

With the non-drinking group, 914 people out of 100,000 developed an alcohol-related health problem such as cancer or suffered an injury. An extra four people would suffer an alcohol-related health problem or injury if they drank one alcoholic drink a day.

For people who had two alcoholic drinks a day, 63 more developed a condition within a year and for those who consumed five drinks every day, there was an increase of 338 people, who developed a health problem. Two alcoholic drinks a day equated to 63 more people developing a health condition, and five drinks every day increased the number of people who developed a health problem to 338.

The study reports:

> *Alcohol use is a leading risk factor for global disease burden and causes substantial health loss. We found that the risk of all-cause mortality, and of cancers specifically,*

> *rises with increasing levels of consumption, and the level of consumption that minimises health loss is zero."*

To an individual, the one drink a day idea doesn't look like much statistically but keep in mind, the study is looking at one year. It's taking into account people's drinking habits and health within one year's time. This does not represent the likelihood that one may be diagnosed with cancer after drinking a glass of wine every day for a decade. It's near certain that the longer one drinks regularly the greater the risk of adverse health effects. In addition, Prof Sonia Saxena points out that while, "One drink a day does represent a small increased risk but adjust that to the UK population as a whole and it represents a far bigger number, and most people are not drinking just one drink a day."

Conclusion

Alcohol has a few health benefits, but this doesn't make it healthy. Every health benefit alcohol can provide is better achieved through diet and exercise. To put it bluntly, nobody who suffers from chronic disease can get well while consuming alcohol.

Our biggest concern with alcohol consumption is that it severely disrupts the gut flora. Beneficial bacteria gets killed and washed away, as well as pathogenic microbes, but guess what gets left behind. Yeast. It's incredibly difficult to kill Candida spores. Alcohol irritates the gut lining and harms the healthy gut microbiome. Then it raises blood sugar, and Candida is left to flourish in its wake. For more on how this works, check out *Best Supplements To Kill Candida and Everything Else You Ever Wanted To Know About Fungal Infections*.