Heroes Against Cancer Newsletter

The TRUTH About CANCER™
educate • expose • eradicate

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Can Diabetes Drugs Actually Worsen Diabetes, Shorten Lifespan, and Lead to Cancer and Other Illnesses?

By Tony Isaacs

There's more bad news for diabetes sufferers. As if it were not bad enough that the drugs prescribed cannot actually cure diabetes, do a poor job of controlling diabetes, and ultimately make diabetes worse… there's mounting evidence proving that the already dangerous side effects of diabetes medications also include greater cancer risk.

The good news, however, is that both type 1 diabetes (early onset diabetes) and type 2 diabetes (adult onset diabetes) **can be controlled naturally**. Type 2 diabetes, the most common form of diabetes, can even be reversed naturally – perhaps in as little as 30 days! Plus, as readers of *The Heroes Against Cancer newsletter* already know, cancers of all kinds can also be prevented and healed naturally.

While diabetes medications and conventional treatment don't cure diabetes, type 2 diabetes can be controlled and even reversed

What is Diabetes? An Overview

Diabetes mellitus, or diabetes, is a group of metabolic diseases in which blood sugar levels are elevated over a prolonged period. Symptoms of high blood sugar include frequent urination, increased thirst, and increased hunger.

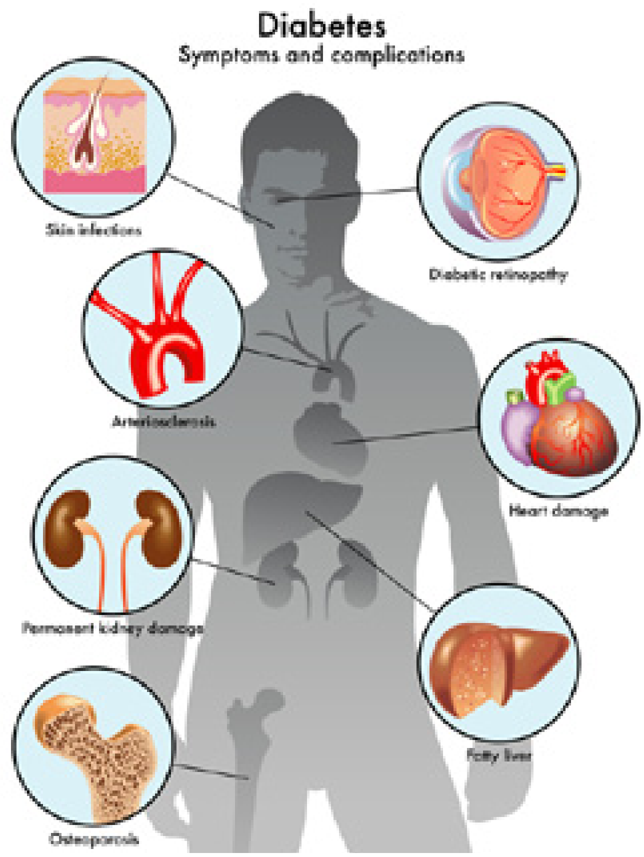
In This Issue:

Diabetes inevitably leads to a shorter lifespan unless it is properly managed or eliminated. Among the often tragic complications of diabetes and diabetes medications are:

- **Heart disease** – patients with diabetes have three times the risk of death from heart disease and stroke, relative to people of the same age without diabetes.
- **High blood pressure** – 75 percent of people with diabetes have high blood pressure (BP).
- **Blindness** – diabetes is the leading cause of blindness among adults.
- **Kidney disease** – diabetes is the leading cause of kidney failure.
- **Nervous system disease** – most diabetics develop nervous system damage and impairment such as reduced feeling and shooting pains in the feet, as well as erectile dysfunction.
- **Amputation** – diabetes is the leading reason for digit and limb amputations.
- **Cancer** – diabetes increases the risk of cancers, especially dangerous pancreatic cancer.

Type 1 Diabetes

Most of us are familiar with type 1 diabetes,which is usually considered a genetically transferred health condition; one that requires diabetics to inject themselves with the hormone insulin. Type 1 diabetes (formerly called juvenile-onset or insulin-dependent diabetes) accounts for 5 to 10 percent of all diabetes cases, although the incidence of type 1 diabetes in children is rising. It is usually detected early in life and forces patients into a lifestyle of monitoring their blood glucose levels, adhering to strict diets, and self-administering insulin.

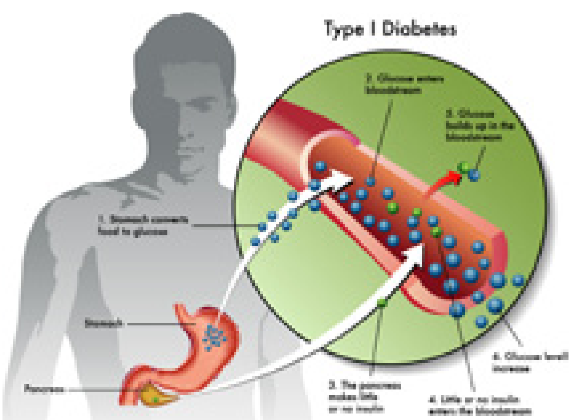


In type 1 diabetes the pancreas does not make enough insulin which leads to high blood sugar

In type 1 diabetes, the body's immune system destroys the pancreatic cells that release insulin, eventually eliminating the body's insulin production. Insulin is a natural hormone that is made by the pancreas. It controls the level of the sugar glucose in the blood and permits cells to use glucose for energy. Without insulin, cells cannot absorb and utilize glucose.

Type 1 diabetes is considered by many to be an autoimmune disease. Autoimmune diseases are conditions where the immune system attacks a particular organ or specific cells instead of protecting them. Food and other allergies are examples of autoimmune diseases, where the immune system mistakes food and other items as pathogens. The result is an inflammatory cytokine reaction that can manifest chronically or happens upon being triggered by normally benign substances such as pollen or peanuts.

In type 1 diabetes, the cytokine reaction attacks the pancreas and destroys the cells that release insulin, eventually eliminating the body's natural insulin production. The result is insufficient insulin production, which leads to high blood sugar (known as "hyperglycemia"). High blood sugar means that muscle, brain, and other cells are not getting sufficient nourishment from glucose. Too much glucose is remaining in the blood because there is not enough insulin to usher glucose into the body's cells.



In type 1 diabetes the pancreas does not make enough insulin which leads to high blood sugar

Type 2 Diabetes

Unlike type 1 diabetes, type2 diabetes is not a result of bad genes or bad luck. Instead, it's typically a result of bad lifestyle habits, especially bad diet. Type 2 diabetes (formerly called adult-onset, late onset, or non-insulin-dependent diabetes) usually becomes apparent during adulthood, but can develop at any age. The vast majority of people who have diabetes – 90 to 95 percent – have type 2 diabetes.

In type 2 diabetes, the body is unable toutilize insulin the right way, a condition known as insulin resistance. As type 2 diabetes gets worse, the pancreas often makes less and less insulin, which is called insulin deficiency. Also, the metabolism goes awry and even when pancreatic beta-cells are normal and produce insulin, the inability to absorb that insulin produces the same end results as type 1 diabetes.

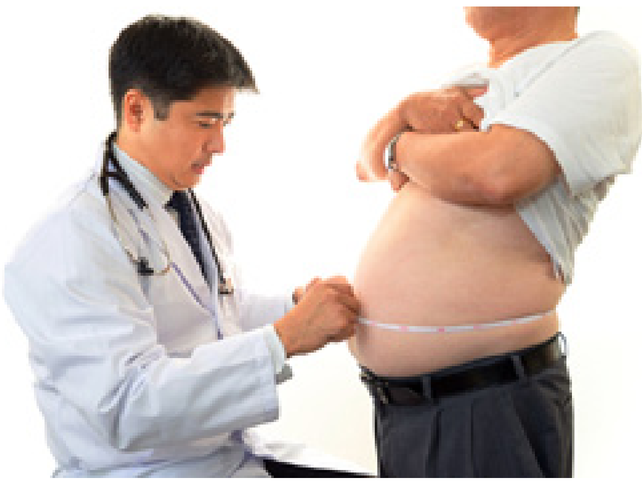
The main reason for the alarming increase in type 2 diabetes cases is no secret: America's rapidly expanding waistline, as well as the poor quality and toxicity of our foods. The relationship between excess weight and diabetes is openly recognized and yet doctors, dietitians, and even the American Diabetes Association (ADA) have all but given up on promoting weight loss as a primary treatment for diabetes.

The Scope of the American Diabetes Epidemic

According to the American Diabetes Association (ADA), as of 2012 there were 29.1 million diabetics in the U.S.; 21.0 million of which were diagnosed, and 8.1 million were undiagnosed. In Americans aged 65 and older, over 25 percent are diabetic, almost all with type 2 diabetes.

Diabetes remains the seventh leading cause of death in the U.S. In 2010, a total of 234,051 death certificates were issued that listed diabetes as an underlying or contributing cause of death. The average type 2 diabetic incurs $6,649 in health care costs directly attributable to diabetes each year.

It has been estimated that in 2012, 86 million Americans age 20 and older had prediabetes, an increase of 7 million in just two years. Prediabetes is the precursor stage before diabetes mellitus in which not all of the symptoms required to diagnose diabetes are present, but blood sugar is abnormally high.



The main causes of type 2 diabetes include excess weight as well as poor quality and toxic foods

According to a study published in the *Journal of the American Medical Association* (JAMA) in 2015, **nearly 50 percent of adults living in the U.S. have either diabetes or prediabetes**. It has been predicted that by 2020 more than half of all Americans will have diabetes or prediabetes – at a cost of $3.35 trillion to the U.S. healthcare system.

With all the cheap, addictive, and heavily advertised junk food we have available to us, there appears to be no end in sight.

The Dangers and Ineffectiveness of Mainstream Diabetes Drugs

Unlike natural items such as vitamins and minerals and the healthy natural compounds found in plants and other foods which mankind has developed alongside for eons, mainstream drugs are unnatural compounds created in laboratories and are not found in nature. In many instances, prescription and over-the-counter drugs may be modeled after nature, but they are nevertheless unnatural synthetic versions or else purified isolates which do not contain vital supporting compounds.

Over 95 percent of the FDA-approved prescription and over-the-counter drugs have side effects. That is largely due to the body recognizing these unnatural compounds as toxins, which results in disease-causing inflammation.

In addition, mainstream drugs typically manage and mask symptoms instead of actually healing the underlying condition. As a result, people who take mainstream medications often see an ever-increasing number of health issues which result in ever-increasing doctor visits and an ever-increasing number of medications. As this author has often said, it is a great model for profits but a horrible one for healing and humanity.

Anti-diabetes drugs are designed primarily to control symptoms instead of actually healing the underlying problem. The main purpose of the drugs is to control blood sugar instead of actually eliminating diabetes.

Thus, we see mainstream diabetes treatment which consists of glucose monitoring, HbA1C (hemoglobin A1c) measurements, regular doctor visits, and adjustments in medication. The problem with such a treatment program is that even if you achieve adequate glucose control you will remain diabetic unless you actually reverse the diabetes – and the illness will age you prematurely and shorten your life.

Even if you achieve adequate glucose control you will remain diabetic unless you actually reverse the diabetes

The medications may lead to other conditions, including cancer. Mainstream treatments and medications which focus only on the numbers instead of removing the causes of diabetes are likely to worsen your diabetes in the long run.

As Dr. Joel Fuhrman explains in his book "The End of Diabetes": *"The majority of medications used to lower blood sugar place stress on your already failing pancreas. The probability of your diabetes getting worse under conventional medical care is especially likely since medications used to control blood sugar, such as sulfonylureas and insulin, also cause weight gain. The dangerous combination of pushing the pancreas to produce insulin and gaining more weight with medication actually results in the need for additional medication as you become increasingly diabetic. This common and yet failed approach shortens life span and increases the risk of heart attacks."*

Diabetes Drugs and Their Links to Cancer

It has been known for some time that diabetics have an increased risk for colorectal cancer. In recent years, a mounting body of evidence has found strong links between diabetes medications and other cancers as well.

In the scientific review *Diabetes Medications and Cancer Risk: Review of the Literature* published in July 2012, researchers reviewed the current literature on potential links between diabetes medications and the risk for cancer. They found that, in addition to colorectal cancer, **diabetic medications are strongly linked to increased risks for pancreatic, kidney, endometrial, colorectal, bladder, and breast cancers and non-Hodgkin lymphoma (NHL)**. Other studies have also linked diabetes drugs to melanoma and still other cancers.

Incretin mimetic drugs, or incretin training drugs, are a class of drugs which increase the release of pancreatic insulin according to the amount of food one consumes by increasing the hormone incretin into the gut, which stimulates more insulin to be released.

Another mechanism of these incretin mimetic drugs is dipeptidyl peptidase-4 inhibitors (DPP-4 inhibitors). In addition to mimicking incretin hormones and reducing glucagon (a peptide hormone produced by alpha cells of the pancreas), DPP-4 inhibitors inhibit the enzyme called DPP-4. The medication also slows the rate at which your stomach empties after you've eaten a meal, which may reduce feelings of hunger and dampen the rate at which your blood sugar rises after eating. The problem is that DPP-4 is an enzyme that is capable of cutting up long chain proteins and breaking open cancer cells, thus inhibiting tumors.

The first drug in the incretin mimicking class was Sitagliptin, manufactured by Merck and sold under the name Januvia. It received FDA approval in 2006. In 2007, the FDA approved a variation of Januvia called Janumet, which is a combination of sitagliptin and metformin, also made by Merck.

Diabetic medications are strongly linked to increased risk of a number of types of cancer

Both Januvia and Janumet can have serious side effects. Januvia is one of the most commonly prescribed drugs and it is the top-selling brand in its class. The drug allows Merck to dominate the competition by cornering a large portion of the DPP-4 inhibitor global market share with Januvia alone. When two million prescriptions were written in 2011, analysts predicted the drug to eventually produce multi-billion dollar sales numbers. The analysts were right: Januvia raked in about $6 billion in 2014.

In clinical trials Januvia proved to be effective in controlling blood sugar levels. However, there are also reports of serious side effects, including acute pancreatitis, pancreatic cancer, and thyroid cancer, which resulted in Januvia users filing lawsuits against Merck. In legal proceedings, plaintiffs accused Merck of negligence and concealing the risks of significant side effects. Such lawsuits and claims are common for numerous drugs marketed by Merck, most notoriously the deadly anti-inflammatory drug Vioxx.

Merck stands to benefit from the patent on the drug until 2022 and is developing a potentially disastrous once-a-week version of Januvia. Another DPP-4 inhibitor, Saxagliptin (Onglyza), was approved in July 2009, and in 2011, Linagliptin (Trajenta) was approved. Numerous other DPP-4 inhibitors are currently under development.

The fact that this class of drugs could have a damaging effect on your pancreas has been known for some time. In fact, **acute pancreatitis is one of the known side effects listed on the "Warnings and Precautions" section of the drug label**.

According to a study published in February 2016 in the journal JAMA, exenatide or sitagliptin doubled the risk of developing acute pancreatitis. Pancreatitis is an inflammation of the pancreas. It can cause the body's digestive enzymes to attack the pancreas. In severe cases, the disease can cause tissue damage, infection, cyst formation, and bleeding. The damage can spread to other organs like the heart, kidneys, and lungs, and the mortality rate is 10 to 30 percent.

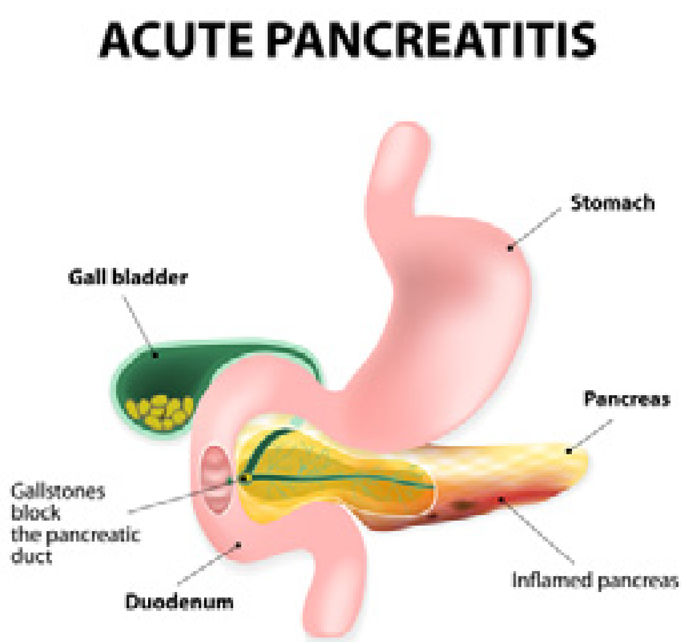
The symptoms of pancreatitis include:
Abdominal pain that may radiate to the back
Increased pain while eating or bending forward

- Nausea
- Vomiting
- Fever
- Rapid heartbeat

Cases of pancreatitis associated with Januvia and Janumet tend to be acute, meaning the disease occurs quickly and over a short period of time, and it can be fatal.

A 2009 UCLA clinical study published in the journal *Gastroenterology* linked Januvia with increased risks of both pancreatitis and pancreatic cancer. The study found that that taking Januvia increases the risk of pancreatitis six-fold, and cases usually develop in less than two months.

Between 2006 and 2009, almost 100 cases of acute pancreatitis caused by Januvia, including necrotizing pancreatitis, were reported to the FDA. Necrotizing pancreatitis can be fatal and it occurs when digestive hormones produced by the pancreas begin digesting the pancreatic tissue.



Acute pancreatitis is one of the known side effects of popular diabetes drugs Januvia and Janumet

Januvia and Janumet are also linked to pancreatic cancer. Since pancreatic tumors can grow without symptoms, they may not be detected until the cancer has progressed to a late stage. According to the aforementioned UCLA study, people who take sitagliptin have more than double the risk of developing pancreatic cancer and the risk of developing cancer increases the longer someone takes Januvia or Janumet.

In the UCLA study, lead researcher Dr. Peter Butler said it can be difficult to discover the extent of the damage done to the pancreas without removing it and examining it. As a result, pancreatic cancer may be diagnosed late. The American Cancer Society said the average rate of survival is 18 to 20 months, and the overall five-year survival rate is four percent.

The reason why incretin mimetic drugs appear to be associated with increased risk for cancer might be because DPP-4 is a tumor suppressor. Thus, by inhibiting DPP-4 – which these drugs do – you are continuously inhibiting one of your body's natural cancer suppressing mechanisms.

According to Januvia's drug information, the drug inhibits the DPP-4 enzyme for 24 hours. **Since you take it daily, you are effectively permanently blocking the activity of a tumor suppressor gene**.

In 2009, the FDA issued a safety alert that linked sitagliptin, the active ingredient in Januvia and Janumet, to acute pancreatitis. Then, in March of 2013, the FDA issued the following notice:
"Evaluating unpublished new findings by a group of academic researchers that suggest an increased risk of pancreatitis, or inflammation of the pancreas, and pre-cancerous cellular changes called pancreatic duct metaplasia in patients with type 2 diabetes treated with a class of drugs called incretin mimetics."

In a 2015 review of current literature and FDA adverse event reports, researchers summarized that they found a high incidence of pancreatic cancer in patients who took DPP-4 inhibitors like Januvia and Janumet. However, the researchers fell back on the standard hedge for mainstream drugs when they concluded that further studies were needed because the benefits of the drugs might outweigh the risks.

Despite the safety alerts and notices and the 2015 review, the FDA has been reluctant to conclude that there is a definite link between diabetes drugs and pancreatic and other cancers. Numerous other studies, however, have given plenty of indication of that such links are there, particularly when it comes to pancreatic cancer.

Note: diabetes drugs have been linked to various other cancers, but in this article, we have concentrated mainly on pancreatic cancer and damage to the pancreas because pancreatic cancer is such an acute and deadly cancer and because a healthy pancreas can be a key in beating and warding off cancers of many kinds.

A cancer patient needs all the help they can muster from the pancreas. The pancreas produces proteolytic or protease enzymes that can break down cancer cells along with whole proteinsfound in meats, to free up protein's make-up of amino acids and make them bioavailable to cells. That is why cancer patients are advised against eating most meats when they are being treated holistically.

The enzymatic system of curing cancer, advocated by the late Dr. Nicholas Gonzalez, used potent proteolytic or pancreatic enzymes that Dr. William Donald Kelley, DDS, discovered to successfully cure his own pancreatic cancer.

The late Dr. Nicholas Gonzalez, featured in The Truth About Cancer's docu-series, was a proponent of Dr. W. Donald Kelley's enzyme therapy

An inflamed pancreas is like having a military unit's weapons armory on fire while being attacked. Fortunately, diabetics have the option of disobeying doctors' orders and Big Pharma drugs to avoid further more adverse health complications.

Managing and Reversing Diabetes

Type 1 and type 2 diabetes can both be managed. Type 2 diabetes can even be reversed with proper diet, wise supplementation, and at least a modest amount of exercise.

Diet is key. Avoid processed foods, most meats, regular cow dairy, refined sugar, gluten containing grains, alcohol, and GMO corn, soy, and canola. Include high fiber and low glycemic-index foods, such as vegetables and berries and high omega-3 foods such as avocados, nuts, seeds, and wild-caught cold water fish.

Key supplements for diabetes include GTF Chromium, cinnamon, krill or fish oil, alpha-lipoic acid, and fiber powder.

In a future article in this newsletter we will take an in-depth look at managing and reversing diabetes naturally. In the meanwhile, here are 4 excellent resources:

1. The article "How to Reverse Diabetes Naturally in 30 Days or Less" by Dr. Josh Axe

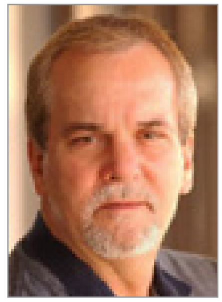
2. The article "How to Help Your Body Reverse Diabetes" from Wellness Mama

3. The article "5 Best Foods for Diabetes" by Joel Furhman, MD

4. And the wonderful book, *The End of Diabetes* by Joel Fuhrman M.D., available widely at bookstores, Amazon, etc.*

**Two quibbles with the book: Dr. Fuhrman recommends microwaved meals in some of his recipes as well as recipes which contain soy – both of which this author consider to be dangerously unhealthy. Otherwise, it is an outstanding non-mainstream book written by someone who has years of experience helping thousands of people beat diabetes.*

About Tony Isaacs



Tony Isaacs is a member of the National Health Federation and the American Botanical Council. He is a natural health advocate and researcher and the author of numerous articles and books about natural health including *Cancer's Natural Enemy*.

Tony's articles are featured on The Truth About Cancer, the Health Science Institute's Healthiertalk website, CureZone, the Crusador, Health Secrets, the Cancer Tutor, the Silver Bulletin, the New Zealand Journal of Natural Health and several other venues.

He also runs The Best Years in Life website which helps people avoid prescription drugs and mainstream managed illness and live longer, healthier, and happier lives naturally. In addition, he hosts the Yahoo Oleandersoup Health group of over 3,500 members and the CureZone Ask Tony Isaacs - Featuring Luella May forum.

Tony and his partner Luella May host The Best Years in Life Radio Show every Wednesday evening on BlogTalk Radio.

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Lung Cancer: Causes and Promising Natural Solutions

By Suresh Nair

Lung cancer is the second most commonly diagnosed cancer in the U.S. in both men and women and is one of the hardest cancers to treat. It is also the leading cause of cancer death among both men and women, responsible for one out of every four cancer-related deaths. The American Cancer Society estimates that over 200,000 new cases of lung cancer will be diagnosed in 2016, with nearly 160,000 deaths likely as a result.

Lung cancer typically affects older people, with roughly 2 out of 3 patients being 65 years or older. Most cases are caused by smoking, but lung cancer risk also increases with exposure to radon, workplace toxins such as asbestos, and air pollution. It follows that lung cancer risk can be lowered by quitting smoking and by eliminating or reducing exposure to other risk factors.

Lung cancer is the second most commonly diagnosed cancer in both men and women in the U.S. with 2/3 of patients aged 65 or older

The chance that a man will develop lung cancer in his lifetime is about 1 in 14. For a woman, the risk is about 1 in 17. These numbers include both smokers and non-smokers, although the risk is obviously higher for smokers.

What is Lung Cancer?

Your lungs are a pair of spongy breathing organs located inside the chest that extract oxygen from the air and transfer it into blood, from where it is transported to your body's cells and used to make energy – while simultaneously also expelling carbon dioxide from blood into the air.

Lung cancer starts when lung cells grow out of control. As these cancer cells divide and grow to form a tumor, some of them can break off and spread to other areas of the body, known as metastasis. In general, metastatic cancers are incurable and usually fatal.

The two main types of lung cancer are "non-small cell" lung cancer and "small cell" lung cancer, based on the way these cancer cells look under a microscope. **Non-small cell lung cancer makes up about 85 percent of all cases**. Squamous cell carcinoma, adenocarcinoma, and large cell carcinoma are all different types of non-small cell lung cancer.

Adenocarcinoma occurs mainly in current and former smokers, but it is also the most common type of lung cancer seen in non-smokers. It is more common in women than in men and is more likely to occur in younger people than other types of lung cancer.

Squamous cell carcinomas are linked to a history of smoking and tend to be found in the central part of the lungs, near a main airway.

Roughly 10-15 percent of all lung cancers are small cell lung cancers, which are dangerous and spread quickly. Fewer than 5 percent of all lung cancers are so-called carcinoid or neuroendocrine tumors, which typically grow slowly and rarely spread.

Despite the very serious outlook usually associated with a diagnosis of lung cancer, some patients in the earlier stages of this disease can be cured. Unfortunately, symptoms typically only occur when the disease is fairly well advanced.

Symptoms of lung cancer can include:

- A new cough that doesn't go away
- Chronic or "smoker's cough"
- Coughing up blood, even in small amounts
- Shortness of breath
- Chest pain
- Wheezing
- Hoarseness
- Losing weight without trying
- Loss of appetite

Let's take a more in-depth look at some of the causes known to underlie lung cancer.

The Primary Causes of Lung Cancer

Smoking

Smoking is the main cause of 80-90 percent of all lung cancer cases. Cigarette smokers die at a significantly younger age than non-smokers. In fact, smoking cigarettes still kills more Americans than alcohol, car accidents, HIV, guns, and illegal drugs combined.

Smoking is believed to cause lung cancer by damaging the cells lining the lungs. Cigarette smoke contains over 70 known cancer-causing substances, or carcinogens that damage lung cells almost immediately when you smoke. With each repeated exposure, they become more damaged – and eventually, after years of exposure, some of these damaged cells grow out of control and become cancer cells.

Smoking is the main cause of 80-90% of all lung cancer. Quitting offers the single best way to reduce your risk and the health benefits begin immediately

Along with lung cancer, smoking also increases risk for cancers of the mouth, larynx (voice box), throat, esophagus, kidneys, cervix, liver, bladder, stomach, and colon/rectum.

Cigarettes, cigars, pipes, and smokeless tobacco all cause cancer. In other words, **there is simply no safe way to use tobacco**. To make things worse, many chemicals are added to dried tobacco leaves for flavor and to make smoking more pleasant. Smoke from these products is a complex, toxic mixture of more than 7,000 chemicals, including over 70 known carcinogens.

Cigar smoke has even higher concentrations of some of these toxic carcinogenic compounds relative to cigarettes, because of the aging process used to make cigars. **Smokeless tobacco products and e-cigarettes also contain carcinogens**.

Smoking Causes More Than Just Cancer

Along with cancer, smoking also damages the lungs, heart, blood vessels, reproductive organs, mouth, skin, eyes, and bones.

In the lungs, smoking damages the airways and small air sacs – so it's no surprise that smoking makes pneumonia and asthma worse. It also causes chronic obstructive pulmonary disease (COPD), the third leading cause of death in the U.S.; chronic bronchitis; and emphysema, which cannot be reversed or cured and slowly destroys the ability to breathe by reducing how much oxygen reaches the blood.

Smoking tobacco also damages the heart and blood vessels, increasing the risk of heart disease and stroke.

Benefits of Quitting the Smoking Habit

It's literally never too late to quit using tobacco. The sooner you quit, the more you can reduce your chances of getting cancer and many other debilitating diseases.

Within 20 minutes of smoking your last cigarette, your heart rate and blood pressure will return to normal levels. Both your blood circulation and lung function will improve anywhere from two weeks to three months after quitting.

One year later, your risk of coronary heart disease will have become half that of someone who still smokes, while your heart attack risk will also drop dramatically.

Five years after quitting, your risk of cancers of the mouth, throat, esophagus, and bladder will be cut in half. Cervical cancer risk falls to that of a non-smoker. Your stroke risk will fall to that of a non-smoker after two to five years.

Ten years after quitting, your risk of dying from lung cancer will be about half that of a person who still smokes. And finally, 15 years after quitting, your risk of coronary heart disease will be identical to that of a non-smoker's.

Vitamins Offer Some Protection Against Damage From Smoking

A long-term smoking habit can deplete vitamin C in the body. Vitamin C is a powerful antioxidant that helps protect lung cells from the massive free radical damage caused by smoking – which might explain why vitamin C is usually depleted in people who smoke regularly.

Increasing consumption of vitamin C-rich foods such as citrus fruits, strawberries, tomatoes, broccoli, cabbage, kiwi fruit, and sweet red and yellow peppers will help to protect against lung damage caused both by smoking and other known risk factors.

Foods rich in vitamin C can provide some protection against lung damage from smoking and other risks

Similarly, vitamin A can also help to protect against smoking-induced lung damage. Supplementing your diet with vitamin A-rich foods such as beef liver, pumpkin, carrots, and sweet potatoes is **a simple and effective way to ensure extra protection against lung cancer**.

However, adding foods or supplements containing these nutrients to your diet can only go so far and will not help to lower your risk of lung cancer nearly as much as quitting smoking will.

Radon and Lung Cancer

Radon is a colorless, odorless, radioactive gas that forms naturally because of the breakdown of radioactive elements – such as uranium – found in soil and rock, from where it can move into the air and into underground and surface water.

Radon is present both outdoors and indoors. Normally it is found at very low levels in outdoor air and in drinking water from rivers and lakes. It occurs at higher levels in the air in buildings, as well as in water from underground sources such as well water.

Scientific evidence shows that **being exposed to radon can increase lung cancer risk over time**. Radon breaks down into solid radioactive elements called *radon progeny*, which can attach to dust and other particles that can be breathed into the lungs. As radon and radon progeny break down, they give off radiation that can damage DNA inside lung cells, leading eventually to cancer.

The International Agency for Research on Cancer (IARC) classifies radon and its progeny as "carcinogenic to humans." **Radon is the second most common cause of lung cancer in the U.S. after smoking** – the U.S. Environmental Protection Agency (EPA) estimates that 21,000 Americans die each year from radon-induced lung cancer.

Elevated radon levels have been found in nearly every U.S. state. According to the EPA, 1 out of every 15 American homes has elevated levels of radon. Most exposure comes from being indoors in homes, offices, schools, and other buildings. Levels are usually highest in the basement or crawl space of a building. Also, building materials such as concrete and wallboard, as well as some granite countertops, may emit radon.

Common entry points for radon to enter your home are cracks between concrete (usually found in the floor-to-wall junctions), gaps in tiles or the floor, small pores found in hollow-block walls, drains, and sump-pumps

According to the EPA, the average indoor radon level is about 1.3 picocuries per liter (pCi/L), while average outdoor levels are about 0.4 pCi/L. The EPA recommends homeowners take action to lower radon levels if the level in their home is 4.0 pCi/L or higher.

People working underground (e.g. miners), are most likely to be exposed to high levels of radon. Higher radon exposure is also likely in people who work in uranium processing factories or come into contact with phosphate fertilizers, which may have high levels of radium – which can break down into radon.

Being exposed to both radon and cigarette smoke creates a greater risk for lung cancer than either risk factor alone. Most radon-related lung cancers develop in smokers. However, radon is also thought to cause many lung cancer deaths in non-smokers every year.

If you're concerned about your radon exposure and would like to consult a professional, there are a number of resources you can turn to for assessing radon levels in your home or workplace, including:

- The EPA
- The American Association of Radon Scientists and Technologists
- The National Radon Program Services at Kansas State University (Kansas State University also maintains national radon hotlines)
- The National Radon Safety Board (NRSB)

Asbestos and Lung Cancer

Asbestos is the name for a group of minerals that occur naturally as bundles of fibers in soil and rocks in many parts of the world. **There are two main types of asbestos, both of which have been linked with cancer**.

Asbestos fibers are strong, resistant to heat and to many chemicals, and don't conduct electricity – which is why asbestos has traditionally been used as an insulating material. Since the industrial revolution, asbestos has been used to insulate factories, schools, homes, and ships as well as to make automobile brake and clutch parts, roofing shingles, ceiling and floor tiles, cement, textiles, and hundreds of other products.

When asbestos was confirmed to be a carcinogen, safe exposure standards were established in the U.S. and laws were passed that banned the use of asbestos in construction materials. As a result, there has been a dramatic decrease in asbestos exposure since the mid-70s to 80s, even though it is still present in older buildings, water pipes, and other locations.

Most exposures happen because of inhaling asbestos fibers from the air – for example, during mining and processing, when making asbestos-containing products, or when installing asbestos insulation. It can also occur when older buildings are demolished or renovated, or when asbestos-containing materials break down.

In such situations, asbestos fibers create a dust cloud of tiny particles that can float in the air. Asbestos fibers can also be swallowed when people consume contaminated food or water that flows through asbestos cement pipes

The heaviest exposure occurs in asbestos industries such as shipbuilding and insulation. Family members of asbestos workers can themselves be exposed when asbestos fibers are carried home on workers' clothing. Maintenance workers who dispose of asbestos dust or handle damaged asbestos-containing materials also risk being exposed to higher levels.

The U.S. Occupational Health and Safety Administration (OSHA) estimates that **over a million American employees in construction and general industries still face significant asbestos exposures on the job**. In 2005, the World Health Organization (WHO) estimated that roughly 125 million people worldwide were still exposed to asbestos at work, despite proven links to cancer and other lung diseases.

While asbestos use has dramatically decreased since the 1970s, many workers still face significant asbestos exposure on the job

When asbestos fibers are inhaled, they can stick to mucus in the throat, trachea or windpipe, and to bronchi, which are the large breathing tubes of the lungs. Fibers that reach the ends of the small airways or penetrate into the outer lining of the lung and chest wall can irritate lung cells and eventually cause lung cancer or a related disease condition known as mesothelioma (more on this later).

Many studies have linked inhalation of asbestos fibers to an increased risk of lung cancer. The greater the level or duration of exposure, the higher the risk. The IARC classifies asbestos as "carcinogenic to humans," based on its ability to cause mesothelioma as well as cancers of the lung, larynx (voice box), and ovaries. **In workers exposed to asbestos who also smoke, lung cancer risk is even greater**.

Mesothelioma is a rare form of cancer that develops when malignant cells are formed in the mesothelium, which is the protective lining that covers most of the body's internal organs. This condition usually affects the outer lining of the lungs and internal chest cavity. Similar to lung cancer, most cases of mesothelioma result from exposure to asbestos at work and among family members of workers and people living in neighborhoods near asbestos factories and mines.

Mesotheliomas take a long time to develop. The time between first exposure to asbestos and diagnosis can be 30 years or more. Unfortunately, the risk of mesothelioma after exposure to asbestos is lifelong. Unlike lung cancer, mesothelioma risk is not higher among smokers.

Go here to read the EPA's guidelines on how to identify asbestos in your home or workplace and what you can do to get rid of it.

Air Pollution and Lung Cancer

More and more people across the world are moving to cities. The U.N. predicts that roughly 64 percent of the developing world and 86 percent of the developed world will be living in cities or satellite cities by 2050. However, most major cities are already crowded, with significant resource, infrastructure, and congestion problems.

The high levels of air pollution typically seen in cities has been shown to lead to many serious health issues

– including lung cancer. For instance, a study that assessed the health of 500,000 adults relative to air pollution in the cities they lived in, concluded that lung cancer deaths increased 8 percent for every increase of 10 micrograms of pollution. **When people who are exposed to air pollution also smoke, their risk for lung cancer becomes even higher**.

Air pollution in cities increases lung cancer risk – especially in smokers

Exposure to diesel exhaust is widespread in the modern world – especially among truck drivers, toll booth workers, miners, heavy machinery operators, railroad and dock workers, and garage workers and mechanics.

The gas and soot in diesel exhaust contain potentially carcinogenic pollutants including carbon monoxide, nitrogen dioxide, sulfur oxides, traces of metallic compounds, and polycyclic aromatic hydrocarbons (PAHs).

Several studies of workers exposed to diesel exhaust have shown small but significant increases in their risk for developing lung cancer. The IARC classifies diesel engine exhaust as "carcinogenic to humans," based on sufficient evidence that it is linked to an increased risk of lung cancer.

Promising Natural Solutions for Lung Cancer

While reducing or minimizing your exposure to known carcinogens is your best step in preventing lung cancer, there are also some natural ways to boost your body's defenses.

Spices have been widely used as condiments in several cultures for thousands of years because of their flavor, taste, and color. Several of these spices have also been used in therapies for treating various diseases, because they contain many potent bioactive compounds with beneficial health effects.

For example, the bioactive ingredients in turmeric (curcumin), clove (eugenol), and chili peppers (capsaicin) have been shown to counter oxidative stress due to their antioxidant properties and their ability to block production of harmful reactive oxygen species. Some plant compounds such as curcumin and thymoquinone (present in black cumin) are also known to have potent anti-inflammatory properties.

Turmeric: Benefits Against Lung Cancer

Most South Asian curry preparations contain the bright yellow root spice turmeric, believed to have been used in India both as a spice and as a medicinal component for at least 5,000 years.

The list of turmeric's health benefits is growing – specifically its more than 300 bioactive components known as "curcuminoids" including curcumin, which have beneficial biological actions in our body.

Thousands of scientific studies have shown that curcumin has powerful anti-inflammatory and antioxidant properties, contributing to its many health benefits, including its anti-cancer activities.

Specifically, **curcumin stops many different types of cancer cells from growing** by switching off multiple molecular mechanisms inside them that otherwise allow them to grow uncontrollably.

Excitingly, curcumin has reported anti-cancer activity against leukemia, melanomas, sarcomas, and lymphomas as well as against gastrointestinal, breast, ovarian, head and neck, and lung cancers.

Thousands of scientific studies have examined the anti-cancer benefits that are derived from turmeric and its bioactive compounds

For instance, in a 2012 laboratory study, curcumin was shown to induce apoptosis (also known as "programmed cell suicide") in small cell lung cancer cells. This is a promising result because this type of lung cancer is very aggressive and spreads quickly to other areas of the body, leading to poor outcomes and a high likelihood of death.

Similarly, another laboratory study looked at the effects of curcumin on DNA damage and the expression of proteins that repair and protect DNA in human lung cancer cells. Not only did curcumin damage lung cancer DNA, it also prevented the cancer cells from making proteins that could repair the DNA damage. In other words, curcumin-induced damage of lung cancer DNA was irreversible.

Yet another promising study examined curcumin's ability to affect growth and metastatic ability of non-small cell lung cancer cells implanted in mice. During the treatment period, these mice were either treated with curcumin alone, or in combination with standard anti-cancer drugs. Curcumin was seen to enhance the effects of anti-cancer drugs, while simultaneously also increasing survival of the treated animals.

Other studies have shown that curcumin potently blocks lung cancer stem cells from growing, indicating that it may turn out to be a powerful therapy for lung cancer on its own. Curcumin also prevents the formation of new blood vessels that feed lung cancer cells with nutrients and oxygen. Clearly, curcumin exerts its anti-cancer activities in multiple, powerful ways.

How to Receive the Benefits of Curcumin

If you'd like to incorporate curcumin into your diet, remember that it is not soluble in water, but only in fats and oils. Therefore, it's best to combine turmeric with healthy oils such as extra virgin olive or coconut oil for efficient absorption.

It's also a good idea to add black pepper to dishes that contain turmeric, since the main bioactive ingredient in black pepper seeds – known as piperine – can increase curcumin absorption by as much as 2,000 percent.

Grated or chopped turmeric lends both color and flavor to soups and sauces. Turmeric powder can also be added to vegetables along with a little olive oil, black pepper, and other spices before roasting or baking them.

Using turmeric liberally in your cooking along with a very high quality supplement such as [Turmeric 3D from Epigenetic Labs], is probably your best bet to ensure you're receiving sufficient quantities of bioavailable curcumin.

Black Cumin: Benefits Against Lung Cancer

The seeds of black cumin, also known as black caraway (scientific name *Nigella Sativa*) are relatively unknown in the west. They have a pungent, bitter taste and smell and are commonly used as a spice in Indian and Middle Eastern cuisines.

Black cumin seeds are credited with remarkable healing properties for many centuries in the Middle East, the Mediterranean, and India. In fact, black cumin oil was found in the tomb of the Egyptian boy-king Tutankhamen, suggesting that Egyptians believed it was important for the afterlife.

Black cumin seeds are now known to contain over 100 compounds including crystalline nigellone, thymoquinone, beta-sitosterol, and many others. They also contain many of the B vitamins and essential trace minerals.

Multiple studies have shown that black cumin seed extracts and oil boost production of bone marrow cells and immune cells, suggesting that they could be used to treat autoimmune disorders and even fight cancer. Indeed, thymoquinone has been shown to have powerful antioxidant, anti-inflammatory, anti-diabetic, and antitumor properties.

Specifically, it has been shown to stop various types of cancer cells from growing, via multiple mechanisms – including lowering inflammation, inducing cell cycle arrest and apoptosis ("programmed cell suicide") in tumor cells, preventing new blood vessels that feed tumor cells from forming, and stopping cancer cells from migrating to other areas of the body. Thymoquinone also complements standard anti-cancer drugs without any added toxicity.

Black cumin seeds (Nigella sativa) are being studied for their antioxidant, anti-inflammatory, anti-diabetic, and antitumor properties

In laboratory studies, both black cumin seed extract and seed oil have been shown to kill human lung cancer cells. Similarly, thymoquinone has been shown to stop human lung cancer cells (both small cell and non-small cell types) from growing and migrating.

Black cumin seeds are somewhat of an acquired taste, but you can try adding small amounts to soups, stews, and salads – for example, in combination with honey or royal jelly, according to your taste preferences. Black cumin seed oil or capsule supplements can also be consumed daily in the quantities recommended on the label.

Note: If you watched Dr. Bradford Weeks' presentation from TTAC's Ultimate Live Symposium, black cumin seeds were what he credited with turning some of his father's white hair black at the age of 92. Dr. Weeks also recommends a product called Soul that includes black cumin seed extract.

Don't Forget About Second-Hand Smoke

Lung cancer is a serious disease and prevention really is critical. As difficult as quitting smoking is, you can see how it elevates the risk from other causes of lung cancer, in addition to being the primary cause all by itself.

Nearly everything that applies to smokers also applies to those who live, work, or socialize with smokers. If you are exposed to second-hand smoke you are also at an increased risk of lung cancer. Do everything in your power to eliminate or at least minimize your exposure to all of the lung cancer risk factors shared in this article.

About Suresh Nair, PhD

Suresh Nair is a health writer with more than 15 years of experience as a practicing laboratory scientist. He is also a former copy-editor and project manager at a medical communications company.

Suresh is a regular contributor to The Truth About Cancer, and has also written hundreds of articles for other websites and publications on health, alternative health, fitness, and nutrition as well as various other medical and clinical topics.

As a scientist with a PhD in Molecular Biology from UPenn, his articles are always thoroughly researched and have a sound scientific basis.

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Apple Collard Spice Juice: Rejuvenating Energy Drink

This surprisingly delicious green juice is packed full of energizing protein, antioxidants, anti-cancer and anti-inflammatory components. It is rich in hydrating minerals which helps in absorption of the vital nutrients that build the immune system and protect the nervous system.

This juice should be consumed immediately after preparation for maximum nutritional benefits.

Yield: Two 12-ounce servings
Preparation time: 15 minutes

For all recipes, please use fresh, organic, locally-grown ingredients whenever possible, including organic, non-irradiated spices. This will give you the maximum cancer fighting benefits.

Ingredients:

- 2 cups of fresh organic apples (your choice of type)
- ½ cup collard greens
- 1 small handful of cilantro leaves
- 2 stalks fresh celery with leaves
- 1 teaspoon of fresh ginger
- ½ inch fresh turmeric root, chopped OR ½ teaspoon powdered turmeric
- Juice of half a lemon
- 1½ cups spring OR filtered water

Spices:

- ½ teaspoon freshly ground cinnamon
- ½ teaspoon of freshly grated nutmeg
- Pinch of pink or sea salt and freshly ground black pepper

Directions:

1. Place all ingredients except dry powdered spices in a blender and process on high speed for one minute.
2. Strain through a stainless steel fine strainer.
3. Add dry spices to a large measuring cup or bowl and whisk gently. Then add the strained juice and whisk again to evenly distribute the spices.
4. Pour juice into two glasses and garnish with cilantro and an apple slice. Enjoy!

Cauliflower "Couscous"

Ingredients:

- 2½ cups cauliflower florets
- ½ cup walnuts
- 1 tablespoon pumpkin seeds (optional)
- 1-2 cloves garlic
- ¾ teaspoon turmeric powder
- 1 tablespoon cold pressed coconut oil
- 1½ tablespoons fresh lemon juice
- Handful of fresh herbs: dill, parsley, basil or other
- Pink or sea salt and pepper to taste

Directions:

1. Place all ingredients into a food processor except the pumpkin seeds and coconut oil. Pulse until the ingredients are very small pieces.

2. At this point heat a large skillet until a drop of water sizzles on it. When the pan is hot enough, add the coconut oil and turn the heat to medium low.

3. Add the cauliflower mixture and cook for 1 minute with the lid on.

4. Then continue to cook on medium low while stirring frequently. Do this for about 3-5 minutes, or until the cauliflower is just tender.

5. Stir in the pumpkin seeds and add salt and pepper to taste. Enjoy!

Cauliflower is a powerful cancer fighting vegetable from the Brassica family, better known as cruciferous plants. It contains glucosinolates that prevent cancer recurrence, heal damaged tissue, and protect DNA. Cauliflower is also rich in antioxidants, anti-inflammatories, and balances the hormones which aids in weight loss.

This vegetable delivers a powerful dose of nutrient rich ingredients in just one cup. But this tasty dish will have you consuming two or more servings which will double the benefits. Combined with fresh herbs and spices you have a delightfully healthy side or main dish.

Yield: Two 8-ounce portions
Preparation time: 15 minutes

Gluten-Free Pumpkin Pie

What's the most sought after desert for autumn? Pumpkin pie immediately comes to mind, but this healthier version blends pumpkin and butternut squash for its nutrients and flavor. Pumpkin and squash are loaded with carotenoids that are powerful cancer fighting nutrients with many other benefits.

The cashews add creaminess and are also concentrated with protein, digestive enzymes, magnesium, and antioxidants. They are especially good for fighting colon cancer.

This pie is gluten- and dairy-free with healthy omega-3 fatty acids so you can enjoy this desert on special occasions without the guilt.

Yield: 8 slices
Preparation time: 30 minutes

Filling Ingredients:

- ½ small pumpkin (1 cup puree)
- ½ butternut squash (1 cup puree)
- ½ cup cashews
- ¼ cup golden flax seeds, freshly ground (grind in a coffee grinder)
- ⅓ cup raw honey OR pure maple syrup OR coconut sugar
- ¾ cup spring OR filtered water (add slowly to help it blend smoothly)

Spices:

- 1½ teaspoons Ceylon Cinnamon
- 1 teaspoon freshly grated nutmeg
- ¾ teaspoon turmeric powder
- ¾ teaspoon ginger powder OR 1 tablespoon fresh ginger, finely chopped
- ½ teaspoon clove, freshly ground (in coffee grinder)
- ¼ teaspoon pink or sea salt

Crust Ingredients:

- ¾ cup raw organic buckwheat flour (can substitute raw buckwheat groats and grind in blender)
- ¼ cup flax seeds, freshly ground
- 1 tablespoon cold pressed coconut oil
- 1 tablespoon raw honey
- 1 cup pecans
- ¼ cup pumpkin seeds
- ½ teaspoon cinnamon

Directions:

1. Grease the pie pan by placing a few drops of coconut oil in the bottom of a 9 inch glass pie

Gluten-Free Pumpkin Pie *(continued)*

plate and spreading it around including the sides. Set aside.

2. Put all the dry crust ingredients in a food processor or high speed blender. Blend until fine crumbs form. Add the coconut oil and honey. Pulse until a dough ball begins to form.

3. Put the dough in the pie plate and spread it evenly on the bottom and up the sides. Place in the oven at 300º F for five minutes.

4. Meanwhile, slice the pumpkin and squash. Carefully cut away the peel and chop it into cubes.

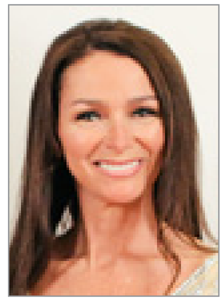
5. Place the pumpkin and squash cubes in a steamer for 10 minutes until a fork can penetrate them easily. Remove from heat.

6. Place all the filling ingredients in the blender or food processor. Process until smooth.

7. Add the filling to the pie crust and bake at 300º F for 25 to 30 minutes. Filling should be firm but moist.

8. Allow to cool before slicing. Garnish with a walnut and a sprinkle of coconut sugar if desired. Enjoy!

About Charlene Bollinger



Charlene Bollinger is a devoted Christian, happily married wife, joyful mother of 4 beautiful home-educated children, health freedom advocate, co-founder of CancerTruth.net, former model/actress/fitness buff, and lover of healthy food and healthy living.

After losing various family members to conventional cancer treatments, she and her husband, Ty, learned the truth about cancer and the cancer industry and together work tirelessly helping others learn and live free, healthy lives.

Currently, Charlene is working on compiling a cookbook to help families learn that they can indeed cook healthy, delicious food in this toxic world. Along with her husband, Ty, she is also the co-owner of Infinity 510 Squared Partners Publishing Company.

Natural Approaches for Treating Pet Cancer

By Ty Bollinger

For many of us, our pets are just as much an integral part of the familial clan as our parents or children. So when it comes to taking care of our families, we mustn't forget the health of our furry friends.

Cats and dogs develop cancer at nearly the same rate as humans. There are roughly 12 million new cases of the disease between the two species every single year in the U.S. Yet many pet owners fail to consider cancer prevention in the same precautionary terms for their cuddly companions as they do for themselves and other loved ones.

There are approximately 12 million diagnosed cases of canine and feline cancer in the U.S. every year

Proper diet, supplementation, and regular exercise are now widely recognized as vital components of a well-rounded, cancer-preventative lifestyle for people. But how many pet owners know how to engage the same standards for their pets?

How many people know how to hand-select quality, toxin-free food for their feline and canine friends, for instance? How many of them know which herbs and nutritive compounds best help pets avoid developing tumors? Or how about what to do in the unfortunate event that your cat or dog develops cancer… what then?

These are all considerations which my family has had to grapple with concerning our own pets, and perhaps you're in the same boat. After poring over the available scientific data to determine how best to care for our beloved companion animals, I've determined that there are a number of things we can all do to help our pets avoid that much-feared diagnosis. I've also dug up some of the best natural remedies for treating pet cancer after it's been diagnosed. I hope you'll never have to use it, but at least you'll have the information at your disposal in case you do.

Common Types of Feline and Canine Cancers

According to "Fetch A Cure," a non-profit organization devoted to teaching pet owners the ins and outs of how to avoid and deal with pet cancer, **dogs are more prone to developing cancer than cats**. In fact, cancer is currently the leading cause of death in dogs (excluding euthanasia by humans for various reasons). The number of feline deaths due to cancer is lower than with dogs, but not far behind. There are nearly 100 types of animal cancers, including many of the common culprits in humans: cancers of the skin, bones, head, neck, lymph, abdomen, and testicles, as well as both blood and mammary cancers.

Skin tumors are the most common form of cancer in dogs, accounting for roughly one-third of all cases. Among these, as many as 20 percent manifest as mast cell tumors, while the rest show up in the spleen, liver, and bone marrow. Roughly half of all skin tumors in dogs show up on the central parts of their bodies, while approximately 40 percent emerge on the limbs. The remaining 10 percent or so show up on the head or neck.

Oddly enough, skin cancer in dogs is usually benign, while in cats it's typically malignant – though cats are considerably less prone to developing skin cancer than dogs. What cats and dogs have in common, however, is that both animals become much more prone to developing cancer the older they get – something that can't be avoided. But as you'll see throughout this article, there are a number of contributing disease factors that can be averted.

The Good, the Bad, and the Ugly of Pet Food Products

The first and perhaps most obvious cancer risk factor is pet food. Most commercially available pet food is loaded with ingredients that run contrary to what cats and dogs need for proper nutrition. These packaged pet foods includes things like genetically modified corn and wheat gluten that aren't easily digested, and that in many cases go against the grain of proper animal nutrition.

Heavy processing combined with the use of added preservatives, fillers, and food dyes makes the situation even worse – contributing to chronic health problems like obesity, periodontal disease, diabetes, arthritis, and of course cancer.

Many pet foods are made with ingredients that do not promote optimal health

While convenient, much of the commercial animal food sold as either dried kibble or "wet" food in cans is toxic for pets. Generally speaking, animals both domesticated and wild perform their best on a raw food diet composed of primarily meat and vegetables, not processed grains, rendered fat, and chemical preservatives which are commonly found in many commercial animal food products.

Dr. Patrick Mahaney, a Los Angeles-based veterinarian and veterinary acupuncturist, warns that nearly all commercial pet food is made from substandard "feed-grade" ingredients as opposed to human-grade. Feed-grade ingredients are legally allowed to contain all sorts of questionable contaminants that, if many pet owners knew they were present, would likely switch to other forms of nourishment. These offending substances include:

- **Mycotoxins**, a poisonous byproduct of fungal mold growth that often forms on grains and seeds. The Food and Agriculture Organization of the United Nations (FAO) says exposure to mycotoxins like aflatoxins and fumonisins represents a serious health risk in animals that can lead to the formation of both acute and chronic diseases, including immune disorders and cancer.

- **Animal byproducts**, or the parts of slaughtered animals left over after the parts for human consumption have been removed. Besides the ick factor of many of these remains (e.g. hooves, heads, and manure), animal byproducts often contain residues of pharmaceuticals like pentobarbital, an anesthetic drug used to euthanize animals.

- **Synthetic chemical preservatives**, including substances like Butylated Hydroxyanisole (BHA), Butylated Hydroxytoluene (BHT), Propylene Glycol (PG), and Ethoxyquin. BHA and BHT are both known carcinogens and reproductive toxicants that are added to pet food to keep it "fresh." Ethoxyquin is so harmful that it's illegal to use in human food, but it's a common ingredient used in dried pet food, especially varieties that contain "fish meal."

- **Artificial colors**, which are typically petroleum derivatives. Dyes like Yellow #5 and Red #40 are known contributors to hypersensitivity, behavioral problems, and cancer. Caramel color is likewise problematic, especially in animals because it contains a chemical known as 4-methylimidazole (4-MIE) that's a scientifically-proven animal carcinogen.

- **Rendered fat**, a flavor-enhancer that's often contaminated with microorganisms, heavy metals, and other toxins. Rendered fat is also a common source of mycotoxins, which forms when too much moisture is present.

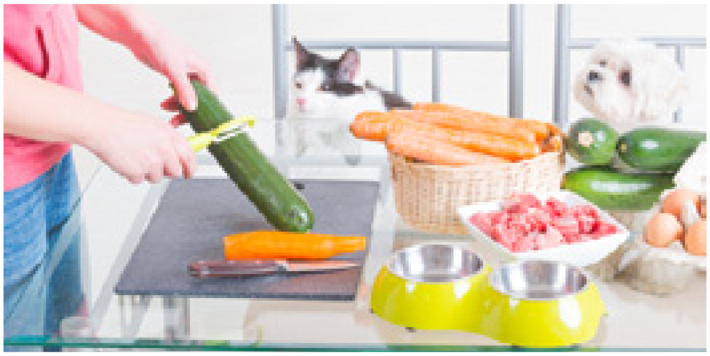
- **Carrageenan**, a common additive in "wet" pet food that's been shown to provoke an inflammatory response in animals. The International Agency for Research on Cancer (IARC) admits that carrageenan is a "possible human carcinogen," and recent research conducted by The Cornucopia Institute (CI) identified this likely cancer-causing ingredientin roughly 70 percent of canned pet food products.

- **Pea protein meal**, a cheap replacement for actual meat that lacks the complete spectrum of health-promoting amino acids. Unless a pet food product containing this ingredient also contains either meat, rice protein, or some other source of all 20 amino acids, pets that eat it will likely develop nutrient deficiencies that could eventually lead to chronic disease and cancer.

Certified organic pet food products are preferable to most conventional and commercial options, though even some of these contain questionable ingredients like carrageenan. You need to always read the ingredients label. At the same time, **certified organic pet food cannot legally contain genetically-modified organisms (GMOs), synthetic chemicals, pesticides and herbicides, and other toxic ingredients that are commonly added to non-organic pet foods**.

Functional Anti-Cancer Meal Plan for Pets

Since diet is probably the biggest determining factor in animal cancer risk, it's important to feed your pets the types of foods that support their immune systems and jive with what their bodies need nutritionally. Many experts who've studied animal dietary patterns in the wild agree that a whole food diet composed of mostly meats, organs, and bones, supplemented to a much lesser extent with vegetables, is the way to go for both cats and dogs. Preparing this type of food at home from fresh ingredients can be both efficient and cost-effective.



A whole food diet of mostly meats, organs, and bones, supplemented with appropriate vegetables, is optimal for both cats and dogs

Generally speaking, the proper nutrient ratio for dogs is about 75 percent meats, fats, organs, and bones, and 25 percent vegetables. For more active dog breeds, the ratio of protein to carbohydrates can be adjusted to include more veggies – these being complex carbs that will provide extra energy. It's important to remember, though, that all dogs do best with complex carbohydrates in the form of fresh produce rather than simple carbohydrates in the form of cheap grains and starches.

Cats are slightly more carnivorous. Their ratio leans more heavily on the protein end of the spectrum, ideally constituting about 88 percent meats, fats, and organs (bones are bad for cats) and 12 percent vegetables. For both cats and dogs, it's important to **always serve them the freshest meats and produce for maximum health benefits**, though dogs can get away with eating meat products that are slightly less-than-fresh. Within the confines of affordability and accessibility, it's best to stick with grass-fed, chemical-free, and organic varieties whenever possible.

It's also important to avoid feeding your pets certain problematic foods that might be healthy for people, but that aren't good for them based on their respective species. For cats, these problematic foods include onions, garlic, and chives, all of which deplete feline red blood cell counts and possibly lead to anemia. Dog food, grapes, raisins, tuna, dairy products, raw eggs, xylitol, bread, and chocolate, are also on the no-no list for cats.

For dogs, the list is much the same with the addition of apple seeds, avocado, cooked bones (raw bones are just fine), candy, cat food, coffee, raw fish – other forms of clean, raw meat are fine for dogs – hops, macadamia nuts, mushrooms, rhubarb, tomato leaves, and sugar.

If making your own pet food at home isn't feasible, prepared frozen, freeze dried, and dehydrated whole food meals are now widely available, as are high-quality canned and bagged food options that are free of offending ingredients. The Cornucopia Institute has created an official "Pet Food Guide" to help pet owners make the best choices when buying packaged or prepared pet foods.

Turmeric and Other Herbs for Keeping Pets Healthy

In addition to a whole food diet, you can also feed your pets supplemental nutrients to better their chances of living a long, disease-free life. One of these nutrients is turmeric, which is both anti-inflammatory and anti-tumoral. Adding turmeric to your dog or cat's diet can be as simple as sprinkling a spoonful or two of powdered turmeric onto their food, or mixing it into their meat and vegetables.

How to Make "Golden Paste"

Australian veterinarian Dr. Doug English of Turmeric Life recommends making what's known as "Golden Paste." This is a blended combination of black peppercorns, turmeric, water, and a healthy fat. Some dogs will eat this mixture right off of a spoon, while others will prefer it to be more "hidden" as part of their meal regimen.

The black pepper and healthy oil help boost the efficacy of turmeric by acting as synergistic co-factors in the healing process. Both cats and dogs (and humans!) can benefit from consuming this mixture as either a paste or a "gravy," whether for preventative or treatment purposes.

Ingredients:

- 2–3 teaspoons of freshly cracked black peppercorns
- 1/3 cup of healthy fat such as coconut oil or olive oil
- 1/2 cup of turmeric powder
- 1–2 cups of water.

Directions:

1. Place turmeric and water in a pan, stirring over gentle heat until you have a thick paste. This should take about 7–10 minutes. You may need to add additional water along the way.

2. Add the freshly ground pepper and oil at the end of cooking.

3. Stir well (a whisk is ideal) to incorporate the oil.

4. Allow to cool before giving to pet.

Dosage:

Dr. English recommends starting with doses of 1/4 teaspoon of golden paste administered 2–3 times per day for both cats and dogs, and gradually increasing this dose incrementally once per week.

Because turmeric is a powerful detoxifier, some animals will experience loose stools when given this amount, in which case Dr. English recommends reducing the dose to 1/8 teaspoon several times per day, and working up from there.

Paste can be stored in the fridge for up to 2 weeks and extra paste frozen.

It's important to note, too, that commercial turmeric supplements high in curcumin (sometimes over 95 percent) aren't the best choice for pets. Dr. English recommends opting for the whole form of turmeric (turmeric root), or the Golden paste when administering turmeric to your pets as these forms contains less curcumin which has never been safety tested in animals at unnaturally high levels.

Dr. English's own successes with administering turmeric to sick animals at his clinic are numerous, and include effectively treating inflammatory conditions of the skin, allergies, atopy (tendency to develop allergic diseases), arthritis, infections, age degeneration, and many different types of cancer. Dr. English also points to evidence in the scientific literature that backs turmeric as an effective treatment for immune disorders, neuro-degeneration, irritable bowel conditions, liver disease, and uveitis in equine.

Additional beneficial, anti-cancer nutrients for pets include:

- **Milk thistle**, a powerful liver-cleansing tonic that studies show is effective at preventing hepatitis, jaundice, parvovirus, and leptospirosis.

- **Dandelion root**, a nutrient-dense "weed" that supports healthy digestion, kidney function, and immunity. Research shows that dandelion root is also helpful in preventing and treating arthritis, kidney stones, congestive heart failure, and gallbladder inflammation.

- **Echinacea**, a potent immune tonic that functions as a natural antibiotic to kill harmful viruses, bacteria, fungi, and protozoa. It also boosts the immune systems of animals so they're less prone to catching "bugs" like kennel cough. Just be sure to cycle echinacea on and off to avoid creating resistance.

- **Astragalus**, another powerful immune tonic with strong antiviral properties. A strong antioxidant with antibacterial and anti-inflammatory properties, astragalus works well with other immune-boosting herbs like calendula to promote healing.

It's also vitally important that your pets always have access to clean, purified water, and that they spend quality time each day playing fetch, playing with toys, running, or otherwise getting regular exercise. Avoid using plastic containers when feeding or watering your pets; minimize the number of vaccinations they receive; and avoid the use of pesticides, herbicides, and other chemicals in and around your property to lessen their toxic load.

Regular physical activity has numerous health benefits for pets… and their people!

Natural Remedies for Treating Pet Cancer

Even in the event that an animal already has cancer, the aforementioned dietary and lifestyle recommendations are still highly relevant. But sometimes these methods aren't enough on their own to completely dissolve a tumor or bring a very sick animal back to optimal health – especially if the cancer is already too far along or has metastasized. In cases like this, more intense treatment methods may be necessary.

The good news is that **chemotherapy and radiation aren't your only treatment options**. The following methods, many of which are also effective in treating human cancers, are among the safest and most efficacious protocols for reversing pet cancer and producing a clean bill of health:

- **The Kelmun Protocol**
  This simple anti-cancer remedy involves administering just two ingredients: aluminum-

free baking soda and grade B maple syrup. This highly alkaline protocol (cancer cells thrive on acidity) has been shown to shrink tumors by luring sugar-loving cancer cells towards the maple syrup, only to send in the sodium bicarbonate "Trojan Horse" to destroy them.

Preparation for Kelmun involves mixing one part baking soda to four parts maple syrup and heating it to a high enough temperature to completely emulsify the two ingredients without burning them – typically around 120 degrees Fahrenheit. Kelmun works well on its own, and can also be combined with other natural treatment methods that require an "alkaline protocol," though you should only use one alkaline protocol at a time.

The proper dosage of Kelmun for pets over 60 pounds is one teaspoon of baking soda (four teaspoons of mixture). For pets under 60 pounds, reduce dosage proportionally.

- **Essiac Tea**

This medicinal tea blend is commonly used to treat human cancers, but it's also beneficial in pets. A combination of burdock root (Arctium lappa), slippery elm bark (Ulmus Fulva), sheep sorrel (Rumex Acetosella), and Indian rhubarb root (Rheum Officinale), Essiac tea can be safety administered to animals with cancer in the following doses:

- In pets between 15 and 40 pounds: 1/2 ounce of tea, twice/day
- Between 40 and 80 pounds: 1 ounce of tea, twice/day
- Over 80 pounds: 2-3 ounces of tea, twice/day

You can find the recipe and instructions for making Essiac tea on The Truth About Cancer website. You can also purchase the tea online. Starwest Botanicals is a good source for purchasing organic, wildcrafted Essiac tea in bulk. Another great source is through the store on the Cancer Crackdown website.

- **Cannabis Oil**

Many pet owners are turning to potent extracts of cannabis, usually in the form of oil to treat their sick animals. Canadian researcher Rick Simpson's "Phoenix Tears" cannabis formulation is one example of this. The late Dr. Douglas Kramer, a Los Angeles-based "mobile" veterinarian who helped pioneer the use of medical marijuana as a treatment for ailing pets, saw many of his animal patients recover from all sorts of conditions after being administered medical marijuana – including in the eradication of cancer tumors.

Traditional cannabis oil is composed primarily of tetrahydrocannabinol, or THC, the psychoactive element in cannabis that many people use to treat pain or stimulate appetite. But there's also the cannabidiol, or CBD, component to cannabis that holistic veterinarians like Dr. Rob Silver believe are equally, if not more, beneficial for healing than just THC alone.

One such product high in healing CBD is Canna-Pet, an oil concentrate made from organic, chemical-free industrial hemp. It contains eight additional healing cannabinoids besides CBD, as well as over 20 different terpenes. Terpenes are the fragrant components of the plant that act synergistically with both each other and the full profile of cannabinoids to perform of host of therapeutic functions. Not the least of which include targeting cancer cells!

As with humans, the list of alternative pet cancer treatments is extensive. This list is far from exhaustive, and next year I'll be releasing a follow-up series to *The Truth About Cancer: A Global Quest* that will more fully explore these and many other emerging protocols as they pertain to treating pet cancers.

There's so much to cover, and I'm excited for the opportunity to share it all with you as we journey together to make cancer – both human and animal – a thing of the past.

About Ty Bollinger

After losing several family members to cancer (including his mother and father), Ty Bollinger refused to accept the notion that chemotherapy, radiation, and surgery were the most effective treatments available for cancer patients. He began a quest to learn all he possibly could about alternative cancer treatments and the medical industry.

Ty has now made it his life's mission to share the most remarkable discovery he made on his quest: the vast majority of all diseases (including cancer) can be easily prevented and even cured without drugs or surgery.

Ty is a happily married husband, the father of four wonderful children, devoted Christian, best-selling author, medical researcher, talk radio host, health freedom advocate, former competitive body-builder, and also a certified public accountant.

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It feels like we just got October's issue out the door and here we are mid-November already. I know it's a cliché… but that expression, "Where does the time fly?" couldn't be any truer. It feels like we were just ringing in 2016, and now it's almost Thanksgiving!

Speaking of giving thanks, while I do my best to practice gratitude on a daily basis, November is always a special time of reflection. Charlene and I are truly blessed to be doing work we love.

We are especially grateful for the way our message of hope and that cancer doesn't have to be a death sentence is getting out into the world. *The Truth About Cancer* book made it onto the New York Times Bestseller List (thanks to all of you), and our *Ultimate Live Symposium* (ULS) went off better than we ever could have hoped.

Whether you are a new reader of the *Heroes Against Cancer newsletter* or if you've been with us since the newsletter began (all the way back in June 2015 :-)), we are grateful for you too!

This newsletter is one of the best ways we have to keep you up-to-date on the latest and greatest cancer-fighting and prevention information from our experts and talented health researchers.

I hope you found great value in the articles this month. We've got lots more to come, so please stay tuned.

Until next month...

Ty Bollinger

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