LUNG CANCER: FACTS YOU NEED TO KNOW

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With all the conflicting information you may read concerning lung cancer, I wanted to tell you the real truth about this disease.

Lung cancer is a force to be reckoned with and is currently the leading cause of cancerrelated deaths for both men and women.¹ Over two million people were diagnosed with lung cancer last year in the US.

What is Lung Cancer?

Lung cancer is the uncontrolled growth of abnormal cells in one or both lungs.²

There are two basic types of lung cancer: One is *small cell lung cancer* (SCLC), and the other is *non-small cell lung cancer* (NSCLC).

There is also a third type, which is composed of both SCLC and NSCLC. This is called *mixed small cell/large cell carcinoma.*

The most common type is NSCLC, which accounts for approximately 87 percent of all cancers.



What are the Symptoms of Lung Cancer?

These are the most common lung cancer symptoms:

- A persistent cough that does not go away
- Shortness of breath
- Onset of wheezing
- Recurrent pneumonia or bronchitis
- Coughing up blood
- Hoarseness

• Weight loss or loss of appetite³

Unfortunately, none of these symptoms will alert you early enough to prevent the disease before it occurs. Symptoms usually do not appear nor is a diagnosis made until the disease is already at an advanced stage.⁴

This means that you need to be proactive concerning your health so you can prevent these symptoms from ever getting a chance to appear. I'll be giving you some tips later in this report that will help you improve your health and greatly reduce your risks.

What Causes Lung Cancer?

By far the biggest cause of lung cancer is smoking.

In the U.S. alone, there are an estimated 26.2 million men (23.5 percent) and 20.9 million women (18.1 percent) who smoke.⁵ These people are at increased risk for lung, breast, throat, stomach, and other cancers, as well as heart attacks, strokes, emphysema, asthma, and a variety of other illnesses.

A person who smokes more than one pack of cigarettes a day has a 20-25 times greater risk of developing lung cancer than someone who has never smoked.⁶

And while not all lung cancer is caused by smoking, about 85-90 percent is.⁷

Sadly, this is a disease that is easily preventable. If you don't smoke, please don't start. It is not only an expensive and



messy habit, but it is a dangerous one. There is nothing good that can be said about smoking. It is guaranteed to increase your risk of dying prematurely and suffering needlessly.

I will expand more on smoking and its connection to cancer at the end of this report, but for now I want to review the other less obvious causes.

Some people think only those who smoke can get lung cancer. While it is true that smoking is the greatest risk factor for lung cancer, there are a number of other ways that you can contract this disease.

If you are a smoker, the unfortunate fact is that you will always have a much higher risk of developing lung cancer from any other cause than a non-smoker, simply because you are already dealing with the greatest risk factor: smoking. Adding other risk factors on to that simply means you are even more at risk than you were before for developing the disease.

However, even if you don't smoke, you can be at significant risk for developing lung cancer if one or more of the following risk factors are present:

- Exposure to radon
- Exposure to asbestos
- Air pollution
- Exposure to other chemicals.⁸
- Increasing age⁹

Radon and Lung Cancer – How to Evaluate Your Risk

Radon is the second leading cause of lung cancer after smoking in America, and the leading cause of lung cancer among non-smokers. According to EPA statistics, it claims about 20,000 lives annually.

Your chances of getting lung cancer from radon depend mostly on:

- The level of radon in your home
- The amount of time you spend in your home
- Whether you are a smoker or have ever smoked



Logically, smokers are far worse off when it comes to radon raising their lung cancer risk as their lungs are already compromised. Children and developing fetuses are also especially vulnerable to radiation, as it can cause other forms of cancer as well.

According to the EPA, if 1,000 smokers were exposed to the "action" radon level of 4 pCi/L over a lifetime, about 62 of them would get lung cancer from the radiation, compared to only about 7 out of 1,000 non-smokers.

Radon Risk If You've Never Smoked

Radon Level	If 1,000 people who never smoked were exposed to this level over a lifetime*
20 pCi/L	About 36 people could get lung cancer
10 pCi/L	About 18 people could get lung cancer
8 pCi/L	About 15 people could get lung cancer
4 pCi/L	About 7 people could get lung cancer
2 pCi/L	About 4 person could get lung cancer
1.3 pCi/L	About 2 people could get lung cancer
0.4 pCi/L	

Radon Risk If You Smoke

Radon Level	If 1,000 people who smoked were exposed to this level over a lifetime*
20 pCi/L	About 260 people could get lung cancer
10 pCi/L	About 150 people could get lung cancer
8 pCi/L	About 120 people could get lung cancer
4 pCi/L	About 62 people could get lung cancer
2 pCi/L	About 32 people could get lung cancer
1.3 pCi/L	About 20 people could get lung cancer
0.4 pCi/L	About 3 people could get lung cancer

For more information on radon, please see my previous article on this topic.

Asbestos and Lung Cancer

Exposure to asbestos is also a risk factor for contracting lung cancer. Asbestos is a mineral that occurs as a long thin fiber, environmentally. Despite asbestos being banned in the1980s due to its health dangers, it was still used in many industrial and insulation materials as a fire retardant,¹⁰ and much of that construction is still around.

Many people came in contact with asbestos unknowingly, sometimes while working in their attic installing insulation, or perhaps by moving the insulation around during repairs

or renovations. Others become exposed to asbestos as factory workers, or possibly as part of a construction crew demolishing an old building or ship.

There are a number of jobs that may expose people to asbestos, directly or indirectly. These include:

- Factory work
- Demolition
- Insulation
- Shipbuilding
- Carpentry
- Installation of vehicle brake linings

For more a more detailed list of jobs where asbestos exposure might occur, please go to <u>http://www.mesothelioma-lung-cancer.org/risk-jobs.html</u>.



The danger of contracting this disease begins when you come in contact with asbestos and inhale some of its tiny fibers or particles. These particles can then become lodged in your lungs as irritants.

The disease that develops from chronic asbestos exposure, and occasionally from exposure to other environmental toxins, is called Mesothelioma.

Mesothelioma is a cancer of your lung lining, from which its name is taken.

Mesothelioma develops when malignant cells develop in your *mesothelium*, the protective lining that covers most of your body's internal organs. Its most common site is the *pleura*, or outer lining of your lungs and internal chest cavity.¹¹

Family members can also become exposed to asbestos from a worker's clothing, when handling the clothing, and dust is released and inhaled.

This means that protective face gear is a must if you work in an at-risk area, and you should also be extremely careful if you routinely work with clothing that has been worn in an at-risk area.

Air Pollution and Lung Cancer

While air pollution is a less frequent cause of lung cancer than the two previous causes I've discussed, there are instances where air pollution can lead to serious lung afflictions such as lung cancer.

One such study was conducted in 2003, when researchers from Brigham Young University and New York University studied 500,000 adults who had enrolled in 1982 in an American Cancer Society survey on cancer prevention.

The researchers examined the adults' health records for almost two decades, and analyzed data on annual air pollution averages in the cities in which the participants lived. They took into account other risk factors for heart and lung disease such as cigarettes, diet, weight, and occupation.

Lung cancer death rates were compared with average pollution levels, as measured in micrograms per cubic meter of air.



Their conclusions?

Researchers found that the number of lung cancer deaths increased 8 percent for every increase of 10 micrograms of pollution.

Researchers were able to determine that air pollution contributed to a "small but significant increase" in lung cancer risks.¹²

Air pollution, particularly when coupled with another risk factor, smoking, is a significant cause of lung cancer.

One solution is to seriously consider moving, if you live in a large, metropolitan city. Large cities invariably carry greater risks of air pollution simply due to more people per square mile, more companies creating air pollution, and certainly more pollution from automobiles, buses, and trains, which is highly carcinogenic.

I would also suggest that even if you don't live in a large city, find out what the air quality readings are in your community. If you're a U.S. resident, one way of assessing your level of exposure in the area you live is by checking out the U.S. Environmental Protection Agency (EPA) <u>TRI Explorer database</u>.

If your level exceeds the EPA standards, and you are concerned about lung cancer it might be appropriate to find a new place to live!

The fewer pollution-causing people, companies, and sources of transportation that are around you, obviously the lower risk you will have for contracting lung problems, including lung cancer. While I don't suggest you become a hermit, moving to a less polluted location is a good move for your health.

Again, if you smoke, which is the primary cause of lung cancer, you must address that before any of the other factors. It will do little good to move to the country if you simply bring your own pollution with you.

Exposure to Environmental Chemicals and Lung Cancer

Every day, more and more chemicals are being added to your total body burden. Is it any wonder that there has been such an increase in lung problems and lung disease?

One study highlighting the effects of environmental pollution showed that dry-cleaning workers had a 25 percent higher rate of cancer deaths when compared with the general population.

Those workers had an increased risk of tongue, lung, and cervical cancers, as well as pneumonia, when exposed only to perchloroethylene.¹³

Another study cited factory workers' exposure to berillium, a metal commonly used in the manufacture of sporting goods, dental equipment, and airplane parts, as being responsible for causing lung disease and lung cancer. As many as 30 percent of workers who became sensitized to the metal, died from chronic berillium disease, or its complications.



In addition, a recent study published in the *American Journal of Industrial Medicine* confirmed the connection between beryllium exposure and lung cancer.¹⁴

So, just how high is your exposure to toxic compounds in the air you breathe? The number we breathe in daily cannot really been numbered, but I believe being an informed and vigilant consumer can help you keep your toxic load as low as possible, even if it may be impossible to cut your exposure to zero.

Some of the toxic overload is within your control. Also, if you are able to, distance yourself from the source of some of the common risk factors I've mentioned.

I know it is not easy to change jobs, particularly in this economy, but if your job is contributing to your risk factors for lung cancer or for any disease, you should take serious steps to find a safer occupation.

And as I mentioned before, if you feel the community where you live is causing a toxic overload on your system, either from the air you breathe or from any other factor, look into moving to a less polluted location.

Should Quitting Smoking Be Your Number One Health Priority?

What I'm going to say here may shock you, but I do not place quitting smoking as the number one priority if you still have not addressed other lifestyle factors. Yes, your goal is to stop smoking, but first, you need to fix your diet.

Why?

Because cigarettes are made up of many drugs, such as nicotine, that speed up your metabolism, causing you to burn calories more quickly.¹⁵ When you stop smoking and these drugs are no longer in your system, your metabolism slows down. This increases your tendency to put on weight.

This, in conjunction with many behavioral components, causes people to reward themselves with sweets and desserts because they have accomplished such a great feat as quitting their smoking habit.

Well, the problem is, sugar is actually more damaging to your body than smoking!¹⁶



But all this does is cause you to gain a large amount of weight as a result of raising your insulin levels, which will likely increase your risk for disease more than continuing to smoke.

So my advice to anyone who wants to quit smoking is to first address your dietary issues. You can do this by:

- Eating healthy foods that will nourish your body, instead of contributing to weight gain.
- Determining your nutritional type^{™ 17}



- Reading through my nutrition plan¹⁸
- Restrict your intake of sugar and grains.¹⁹ This change alone will boost your energy and help you feel more calm and collected. And if you have any allergies, this will go a long way to addressing them as well.

In addition, it's vital that you exercise, sleep well, and address your emotional challenges.²⁰ Then, once you're feeling good and healthy, you will be better able to address the issue of quitting your smoking habit.

It would also be helpful to review my comprehensive health program.

What Foods Can Help Me Give Up Smoking?

I am sorry to say there are no magic foods that will stop your cigarette cravings or help you to easily give up cigarettes. What WILL help you to quit is the support of a balanced diet of high quality unprocessed foods, one rich in nutrients and live foods such as vegetables and fruits, all preferably organic and locally grown.²¹

Your body needs the vitamins, minerals, and other nutritive properties of a balanced diet to not only be healthy, but to make up the deficits that smoking has caused in your body.

The proper foods will provide a greater ability for you to quit because you will be giving your body the support it needs to work more efficiently, allowing you to no longer need an energy boost from nicotine or other harmful chemicals to get you through your day.



One big help would be to stock up on plenty of vitamin-C and folate-rich fruits and vegetables, because these vitamins can be depleted from your body by smoking.

If you are diabetic, you should limit your fruit intake, but there are plenty of vitamin Crich vegetables to choose from such as red peppers, tomatoes, broccoli, and cabbage, to name a few.

Smokers Have Shorter Life Spans

Now that we have covered the non-smoking related issues we will focus on smoking, as it is such a major issue in lung cancer.

Several studies show that smokers have shorter life spans than non-smokers by at least 10 years.²² In fact, one insurance company is offering a special insurance policy to some smokers because they die earlier!

A smoker on one of these special policies will end up with a pension 30-percent higher than that paid to a non-smoker because their pension fund has to last for a shorter time.²³ However, the good news is, if you quit smoking at any age, it can reduce your risks of dying prematurely from any smoking-related disease.

Good News If You Stop Smoking!

A 50-year study, whose findings were published in the *British Medical Journal*, followed over 34,000 men smokers.²⁴ It found that:

- Men who stopped smoking by the time they were 30 lived as long as those who never smoked.
- Those who quit at 40 lived just one year less than those who had never smoked.
- Those who stopped smoking at 50 added six years to their lives, while those who kicked the habit at 60 added an extra three years to their life.

Now I know smoking is an addiction and it's not always easy to stop. And you may think you are only harming yourself. While that should be more than enough reason for you to stop, the truth is, you are not just harming yourself.

You are, in fact, exposing all your loved ones, as well as friends and anyone who happens to be in the same room while you're smoking, to a risk of disease they shouldn't have to face.

The Dangers of Second-Hand Smoke

Remember if you are a smoker, your habit affects others as well as yourself. Don't let cigarette ads or misinformed fellow smokers tell you differently: Second-hand smoke is a real killer.

Reports show that second-hand smoke accounts for as many as one-quarter of lung cancer cases in non-smokers.²⁵

If you smoke around your children, they are not only at a higher risk for lung cancer, but they are also more likely to get asthma, pneumonia, bronchitis, and other lung-related diseases.

A 2006 study undertaken by Steven S. Hecht, Ph.D, a professor at The Cancer Center at the University of Minnesota, checked the effects of second-hand smoke by testing babies' urine.

Hecht looked at the level of a substance called NNAL in the urine of 144 infants exposed to environmental tobacco smoke by cigarette-smoking family members. NNAL is a carcinogen produced within the body when another cancer-causing chemical, NNK, unique to tobacco, is processed.

Hecht says NNAL cannot be found in urine unless that person was exposed to tobacco smoke, whether they are an adult, child, or infant.

The results of the study showed nearly half of the infants had detectable levels of NNAL in their urine.

The infants came from homes where, on average, 76 cigarettes were smoked on a weekly basis by family members, in the child's presence, whether at home or in the car.²⁶

This shows clearly how your smoking can seriously affect your family and others around you. Children may grow up with permanent lung problems, emphysema, and may later develop lung cancer because of such exposure.

And please, <u>never</u> smoke if you are pregnant. The risks to your baby are too great to enumerate, but studies show that mothers who smoke carry the risk of having a miscarriage, a deformed child,²⁷ or even a stillbirth.²⁸



So for these reasons, if you are a smoker, I urge you to stop, so you can protect the health of your loved ones, and your own health.

Smoking Can Cause Multiple Deficiencies

When your body becomes deficient in vitamins, minerals, antioxidants, or other needed substances that support your immune system and general health, it can leave you vulnerable to contracting many diseases.

Research has shown that smokers are often very deficient in a number of essential, protective nutrients, and a lack of any one of them could lead to various disease states, and in particular, lung cancer, because that area is being directly assaulted with poisonous chemicals on a second-by-second basis.

Vitamin C is one of these essential nutrients. Because your body can't make vitamin C on demand as with some other vitamins, this makes the problem all the more serious.

A study on vitamin C deficiency in smokers divided participants into three groups: those who smoked 20 cigarettes a day, those who smoked 1-19 cigarettes a day, and those who didn't smoke at all.

The researchers found that at least 35 percent of the smokers were either marginally or severely deficient in vitamin C. Even some of those supplementing with vitamin C were found to be deficient in vitamin C.²⁹

A more recent study, done in 2008, may explain at least one of the reasons behind such deficiencies. Researchers tested the protective effects of vitamin C on guinea pigs exposed to cigarette smoke. Exposure to the smoke resulted in progressive protein damage, inflammation, apoptosis (a form of cell death), and lung injury.

However, supplementing the guinea pigs with 15 milligrams of vitamin C per day prevented all of these damaging effects from occurring.³⁰

This shows clearly the protective effect vitamin C has on your lungs and surrounding tissues, and it also helps to explain why vitamin C would be more necessary—and thus more "used up"—in those who smoke.

Vitamin C, an antioxidant, helps protect your lungs from free radical damage, helps regenerate your vitamin E supplies, and improves iron absorption.³¹



This also indicates that increasing your intake of such vitamin-C-rich foods as citrus fruits, cantaloupe, strawberries, tomatoes, broccoli, cabbage, kiwi fruit, sweet red peppers, and potatoes may exert a protective effect against not only lung problems due to smoking, but against second-hand smoke as well.

Also, for smokers or those exposed to second-hand smoke, research suggests that vitamin A can protect you against the effects and damage caused by smoking. Richard Baybutt, an associate professor of nutrition at Kansas State University, made a surprising discovery: a common carcinogen in cigarette smoke, benzo(a)pyrene, induces vitamin A deficiency.

In some of his earlier research, Baybutt had shown that laboratory animals fed a vitamin A-deficient diet developed emphysema. His latest animal studies indicate that not only does the benzo(a)pyrene in cigarette smoke cause vitamin A deficiency, but that a diet rich in vitamin A can help counter this effect, thus greatly reducing emphysema.³²

And because emphysema is a known risk factor for lung cancer,³³ supplementing your diet with plenty of vitamin-A rich foods, including beef liver, pumpkin, carrots, and sweet

potatoes, is a wise way to ensure you are protected against many of the risk factors of lung cancer. If you already have lung cancer, vitamin A will strengthen and protect your lungs against further insults.

Other research has shown smokers are often deficient in glutathione, an important antioxidant and immune system booster. A lack of glutathione is associated with an increased lung cancer risk.³⁴

Keep in mind that my main recommendation is for you to quit smoking. None of these nutrients and no other thing you could do will help you more than quitting your smoking habit.

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