# Effect of cigarette smoke on mold growth | experiment



The effect of exposed cigarette smoke on the amount of mold growth on bread is analyzed. What exactly is cigarette smoke? What is bread and how do these elements or substances work together to produce such a bacteria? How does mold and cigarette effect its environment and all living things within it? Cigarette smoke, also known as environmental tobacco smoke, is made of tobacco. It is considered a mixture of two forms of smoke that come from burning tobacco. Bread is a food made of flour, water, and yeast mixed and baked together. Analyze the effects of dangerous substances such as mold and cigarette smoke in the environment. How does cigarette smoke affect the mold growth on bread?

## **Literary Discussion**

Cigarette smoke does halt the natural growth of the mold process. In humans, weight isn't necessarily gained for those who constantly smoke cigarettes. Bread will naturally mold overtime. It has been determined that overtime, mold doesn't grow on bread in an environment with cigarette smoke to the extent that it does with natural air.

Bread is composed of three main ingredients: grains, flour, water, and yeast. Grains are small, hard seeds, especially the seeds of food plants such as wheat or corn. Flour is the finely ground meal of grain. Water is a transparent, odorless, tasteless liquid and yeast comes from grain. It is used as ferment baked in bread. Yeast has three main requirements. Moisture is one of those requirements. Yeast also requires food and heat so it can develop, increase, and grow. The yeast grows after this process is complete and all requirements are met.

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Yeast has main functions in bread. It is supposed to produce carbon dioxide gas to enable the dough to rise. The entire process of bread rising is based off of yeast. Yeast is a fungus that is composed of one cell and sugar is a necessity to grow. This fungus breaks sugar down in to smaller components. Carbon dioxide is a naturally occurring chemical compound composed of two oxygen atoms. These atoms are the number of electron pairs that an atom can share with other atoms bonded to a single carbon atom. Yeast also aids in giving bread its characteristic flavor and aroma. Saccharomyces cerevisiae is a series of yeasts. To the right is an image of Saccharomyces cerevisiae yeast which is used to bake. It is the most common type of yeast used in the bread-baking process. Yeasts are considered eukaryotic model organisms in cell biology and molecular biology as well. Eukaryotic organisms have a nucleus unlike prokaryotic organisms. Most yeasts divide themselves through budding which is a characteristic used to perceive yeasts through a microscope. They appear to be shaped or formed like an 8.

High protein flour assist in bread rising. Bread flour isn't anything, but white flour made from hard, high-protein flour. This gives the bread a good texture. The texture of the bread, whether it is good or bad, all depends on the type of flour. Preferably bread flour would be the best type of flour to use when baking bread, but all-purpose flour could possibly give you good results as well. Self-rising flour contains baking powder. Baking powder is a substance used to produce fermentation in the bread dough. This type of flour would not be used if yeast is an ingredient used to make the bread.

Baking flour mostly comes from wheat. Every type of flour is suited to

different types of foods. All types of flours are different. If a recipe requires https://assignbuster.com/effect-of-cigarette-smoke-on-mold-growthexperiment/ one type of flour and a different type of flour is used, preparation is needed for the outcome. The recipe might not come out like it's supposed to because not all recipes use the same type of flour. It is imperative to know what type of flour is manipulated in the process of baking.

Bread flour differs from all purpose flour. Bread flour has more protein content and gluten strength than all-purpose flour. Unlike bread flour, allpurpose four may be unbleached or bleached and bread flour is unbleached. From time to time bread flour is conditioned with ascorbic acid. Ascorbic acid is a naturally occurring organic compound with antioxidant compounds which is an advocate for the volume increasing and better texture. Yeast products need as much protein as they can get and bread flour would be the best choice because it contains 12% to 14% of protein, also known as gluten. To the left is an image of bread flour. To the right is an image of all-purpose flour.

Water is one of the ingredients that make up bread. It is an enormous factor in the process of bread making. This is because it is used to form the dough or paste. Without the formation of dough, bread couldn't be made. The amount of liquid or water necessary for bread differs with different recipes. In baking, water serves as a solvent which means it has the power to dissolve other ingredients to produce a solution. Water is considered the dispersing agent and solvent for ingredients such as salt, sugar, and yeast. Bread dough is needed to be consistent and water is responsible for that consistency. In other words, a certain amount of water is needed to get the dough to be the right texture. Dry doughs won't ferment as fast as soft doughs. Water is necessary for yeast to reproduce and ferment. Water https://assignbuster.com/effect-of-cigarette-smoke-on-mold-growthexperiment/ hardness is the amount of calcium and magnesium ions in water. The expression that represents water hardness is parts per million (ppm). The best measurement suited for bread baking is around 100 to 150 (ppm) of minerals; medium hardness.

Flour, water, and yeast all work as a team to produce good, strong bread dough. There is a process of bread making. This process starts off with mixing, combining, stirring these ingredients. The yeast and flour have enzymes within them. The enzymes in both large starch molecules to break down into simple sugars. The yeast metabolizes these simple sugars. When something is metabolized, it goes through a process of metabolism. Metabolism is a process in an organism where its material substance is produced, maintained, and destroyed, and by which energy is made available. It is the process in which the internal environment adjusts and is maintained when there are external environmental changes taking place. The yeast also exudes a liquid. This liquid releases carbon dioxide similar to humans after they breathe in oxygen. It releases ethyl alcohol as well and they are both released into existing air bubbles in the dough. In the picture to the left, a visual demonstration of how yeast cells work is shown. It shows sugars metabolized. "Yeast cells thrive on simple sugars. As the sugars are metabolized, carbon dioxide and alcohol are released into the bread dough, making it rise" (Phillips, Scott). Carbon Dioxide will begin to inflate the bubble only if the dough has a strong and elastic gluten network. The more the tiny air cells fill with carbon dioxide, the more the dough rises. When making bread, it is best to develop as much gluten, a type of protein within flour, as you can because the gluten strengthens the dough. It also holds in

any gases to help the bread rise. The bread dough is then tucked and stretched into a round to give it a smooth outside. This smooth cover, outside, top, or shelter traps the gases produced by fermentation. The dough is then put aside for approximately ten to fifteen minutes. Sitting aside allows the gluten bonds relax. The process of shaping the dough at last is then made easier. This process isn't necessary and isn't taken by all bakers, but is very beneficial.

Fermentation starts off with the enzymes in the yeast breaking down starch into flavorful sugars. The sugar in the yeast is then used to produce carbon dioxide, alcohol, and a lot of byproducts. Amylose and maltose break down into glucose and proteins break down into amino acids. The dough becomes more acidic as the process of fermentation proceeds.

There are six main steps to the bread making process. These six main steps do not change if bread is made by hand. The first step is to accurately weigh the ingredients used to bake the bed. The second step includes mixing and kneading the dough. Now this step may change depending on how the dough is mixed. Dough can be mixed and knead by using a bread machine, mixer, or kneading by hand. After mixing and kneading, there's a test that is recommended to take called the window test. First, pinch off a piece of dough. Then, the dough is grasped on opposite sides with both hands. Next, the dough should be spread apart approximately three to five centimeters. The dough is supposed to look a certain way after this. It's supposed to look like a window with a window-like membrane in the center. The dough most likely will come out either two ways. If the dough tears or doesn't stretch easily, it needs to be kneaded more. If it forms a window-like membrane and https://assignbuster.com/effect-of-cigarette-smoke-on-mold-growthexperiment/ stretches easily, the process of kneading is over. The next main step is to proof the dough followed by dividing, knocking back the dough. The fifth step is to finally proof the dough. This step involves shaping the dough into the desired shape and leaving the dough to rise in an environment where it is warm and moist until the dough raises almost doubles in size. Last, but certainly not least, bake the dough so it can form into a loaf. When the bread is baked in a hot, preheated oven, the best way to check if the bread is completely done is by tapping it on the base with your knuckle. The bread is baked completely if it sounds hollow. The bread should then be put on a wire rack to cool.

A cigarette is a cylindrical roll of finely cut tobacco used for smoking. It is considerably smaller than most cigars and usually wrapped in thin white paper.

There are multiple brands of cigarettes. Other than tobacco, there are approximately 4, 000 ingredients within a cigarette. The cigarette would be considered to be made up of a cocktail of ingredients. There are quite a few ingredients that people wouldn't assume to be in a cigarette. Chocolate, beeswax, yeast, and wine are four of those additives. Today's cigarettes are definitely not healthy, not saying that they ever were. Cigarettes now a day's include ammonia (household cleaner), arsenic (used in rat poisons), butane (gas, used in lighter fluid), DDT (a banned insecticide), Naphthalene (ingredient in mothballs), etc. These ingredients are death threats. One ingredient that killed over 2, 000 people in Bhopal, India after being accidentally released is Methyl Isocyanate. Carbon monoxide (a gas in car exhausts), copper (electric wiring), tar (road surfaces), acetone (paint https://assignbuster.com/effect-of-cigarette-smoke-on-mold-growth-

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stripper), benzene (petrol fumes), formaldehyde (embalming fluid), methanol (rocket fluid), and radon (radioactive gas), etc make up a cigarette as well. These aren't all of the negative substances within a cigarette, but these are key ones.

Nicotine is composed of several chemicals. These chemicals have substantial effects on the human body. Together these chemicals can cause nicotine overdose. Nicotine gives a sense of relaxation and recovery because of the changing of the shape of the body and brain function. Nicotine is addictive. It is a depressant. It is nicotine that is the addictive substance in tobacco.

Over the past 100 years, the tobacco industry has been tweaked to get smokers hooked more effectively. Ammonia may not seem like it has anything to do with tobacco let along cigarettes, but the additive in cigarettes aids in the lungs absorbing cigarette smoke quicker. This explains why people get " higher" from cigarettes. Ammonia is also a substance used to clean toilets. Chocolate is an addition to cigarettes. The effect it has on the body isn't nowhere near the effect other things have. It is only in a cigarette to take away the bitter taste. It also potentially puts off the natural tobacco taste.

Cigarettes are a hundred percent legal and should be outlawed by many laws, but isn't. Not only do cigarettes affect the people that smoke them, but they affect the people and environment in the surrounding areas as well. The affect of other people is called second-hand smoking. Second-hand smoking is when someone who doesn't smoke ingests more than 4, 000 hazardous compounds as well as the smoker. Second-hand smoke is more dangerous than smoking.

Cigarette smoke contains small amounts of radioactive materials. These radioactive materials are inhaled by non-smokers and smoker into their lungs. They build up and overtime and as they increase they become a big dose of radiation. Cigarette smoke influences the atmosphere around big time. The actual cigarette bud and smoke affect the environment the most. Cigarette buds and smoke result in air, water and in addition land pollution. Cigarette smoke and buds are considered one of the number one contributors to the environmental pollution. They effect the environment in several of ways.

Cigarette buds affect the water because numerous amounts of them are left on the ground. Most of them end up pushed down into the lakes by wind, water, etc. A lot of animals such as fish eat these buds believing they are food. This eats away at the insides of these living organisms. The rest of the buds that don't go anywhere and stay on the ground are there for an extremely long time. Cigarette buds don't decompose fast. It takes them approximately twenty five to twenty six years to decompose. These buds left in the grass pollute the plants and soil by being leached into the soil. Cigarette buds can also contribute to the start of a fire. Especially during dry season fires are likely to happen.

Cigarette smoke affects the human body extremely. The cigarette smoke increases and accelerates the aging process in the human body. Smoking also causes dieses in nearly every organ in the human body. A hazardous disease such as lung cancer can kill you. Cigarettes contain tar and low-tar cigarettes do not reduce the risk of lung cancer. Smoking causes 90% of lung cancer deaths in men and 80% in women according to statistics. When you inhale smoke, it automatically affects your lungs. Another disease that is easily given than taken is Crohn's disease. Cigarette smoking for weight loss has widely been used as an appetite suppressant. Cigarette smoke has a negative effect on it. Patients with Crohn's disease have a higher risk at relapses and repeated surgeries. These patients need more treatment such as aggressive and immunosuppressive treatment. If a smoker stops smoking, the risk at having Crohn's disease is still there. Smokers have a higher risk at developing a peptic ulcer, a liver disease, heartburn, etc.

Nicotine affects the brain in major way. Eukaryotic organisms have a nucleus which is the brain of a cell. Nicotine affects the brain by decreasing the supply of blood to the brain and its cells. Blood is transferred to the brain by the carotid artery. There are many arteries that supply blood to the brain, but the main artery is the carotid artery.

The amount of diseases given with smoking to the human body varies. There are numerous fatal diseases associated with smoking; long term and also inhaling second-hand smoke. Some examples of these diseases are within the cancer family. Smoking causes cancer within the mouth, throat, larynx, lung, esophagus, pancreas, kidney, and bladder. It also causes cancers of the stomach acute myeloid leukemia, and cervix. Above is a graph with information that shows the estimated average and annual number of smoking-attributable deaths in the United States during 2000 through 2004

by specific causes.( Centers for Disease Control and Prevention, 2004,) https://assignbuster.com/effect-of-cigarette-smoke-on-mold-growthexperiment/ Bladder cancer may occur at any stage, but smoking cigarettes aid in the development of it in a human body. It is common for bladder cancer to take place in patients over fifty years of age. If bladder cancer is detected at an early stage and immediately treated, it could possibly be curable. Blood cancer is diagnosed during a cystoscopy when a biopsy is done. The process involves a certain instrument which is passed through the tube. The tube carries the urine from the bladder to the outside of the body also known as the urethra.

Esophageal cancer is animosity of the esophagus. Diagnosis of esophagus cancer has more than one way, but one way is by barium X-Ray of the esophagus. It is confirmed by the endoscopy with a biopsy of the cancer tissue. The esophagus is an approximately ten inch tube located in the chest. It can cause pain with swallowing food and can hinder the food from smoothly, gently, and easily going down. Treating esophageal cancer differs. It all depends on the age and health of the patient mainly. It also depends on the location, size, and extent of the cancer spread in the human body. The muscular tube has multiple of layers. These layers include the inner layer or lining. The inner layer of lining is called the mucosa. This part of the esophagus is moist to aid in the food passing to the stomach. Submucosa has glands that make mucus. The mucus is the liquid that keeps the esophagus moist. The next layer consists of the muscle layer. The muscles in the muscle layer push the food down to the stomach. The last layer, outer layer, covers the esophagus.

Kidney cancer is when cells within kidney tissue don't. These cells eventually create a tumor. There are different types of kidney cancers. Those different https://assignbuster.com/effect-of-cigarette-smoke-on-mold-growthexperiment/ types include Rena Cell Carcinoma (RCC), Transitional Cell Carcinoma, Renal Sarcoma, and Wilms' Tumor. RCC is the most common type of kidney cancer in adults. Transitional Cell Carcinoma usually begins in the renal pelvis. Renal Sarcoma is the least common form of kidney cancer. Wilms' tumor is the most common type of kidney cancer in children. Symptoms of kidney cancer consist of a condition called hematuria which is when blood is in the urine, a lump in the kidney area, bone pain, pain in the side, high blood pressure, etc. Kidney cancer overall isn't very common. There are four stages of kidney cancer and is mainly treated by surgery. Surgical options differ from simple nephrectomy, partial nephrectomy, and radical nephrectomy. The remainder kidney is usually able to perform the work of both kidneys if one is removed. (United States & National Center for Chronic Disease Prevention and Health Promotion, U. S.) To the left is an illustration of a kidney.

Laryngeal cancer is a disease in which cancer cells form in the tissues of the larynx. The larynx is the voice box in the human body. The pharynx is located right above the larynx. The pharynx is the throat in the neck. The voice box contains the vocal chords. Majority Laryngeal cancer form in squamous cells. There are three main parts of the larynx which are the supraglottis, glottis, and subglottis. The supraglottis is the upper part of the larynx located above the vocal chords. Glottis is the middle part in the same area where the vocal chords are. The lowest part of the larynx is the subglottis. The subglottis is located between the vocal chords and trachea. The trachea is also known as the windpipe. The use of all tobacco products can affect the risk of developing Laryngeal cancer. Ear pain and a sore throat are symptoms of Laryngeal cancer. Hoarseness within the voice and a lump

in the neck or throat are symptoms as well. A doctor should immediately be acknowledged if any of these symptoms take place especially a lump in the neck or throat. There are four stages to this disease and the stage affects the treatment options. When a certain stage is reached, treatment isn't guaranteed to prevent any tragedy such as death.

Oral cancer is a subtype of head and neck cancer. It is any cancerous tissue growth located in the mouth. Oral cancer can affect any are of the mouth. The mouth is also known as the oral cavity. This are includes the lips, gum tissues, tongue, cheek lining, and the hard and possible soft palate. According to statistics, oral cancer kills one person every five hours. This disease is greatly influenced by smoking cigarettes mainly because the cigarette is smoked used by lips and the chemicals travel throughout the mouth to the throat. Just like majority of other cancers, treating oral cancer depends on the size of the cancer and the stage that the cancer is in. Men have a higher risk of being diagnosed with oral cancer. Symptoms of oral cancer include tiny white or red spots, swelling of the jaw, a sore that doesn't heal within two weeks or bleeds immediately, etc. In oral cancers early stages, it is hard to detect the cancer because known of the symptoms take place. There's neither pain nor red and white bumps inside the mouth that can be related to oral cancer.

Pancreatic cancer is cancer in the pancreas which is a 6-inch long organ located behind the stomach in the back of the abdomen. The pancreas contains exocrine and endocrine glands. The classification of pancreatic cancer depends on whether it affects the exocrine or the endocrine functions

of the pancreas. A gland that secretes externally through a duct is an https://assignbuster.com/effect-of-cigarette-smoke-on-mold-growth-experiment/

exocrine gland. An endocrine gland is any of the glands of the endocrine system that secrete hormones directly into the bloodstream. The most common type of pancreatic cancer is tumors that affect the exocrine functions. These tumors are called either cystadenomas or adenocarcinomas. The uncommon tumors in pancreatic cancer are tumors that affect the endocrine functions. These tumors are called neuroendocrine or islet cell tumors. Symptoms of pancreatic cancer consists of pale or grey stool, excess fat in stool, pain in the upper abdomen, dark urine, yellowness in the skin or eyes, vomiting, nausea, loss of appetite, etc. Pain in the upper abdomen comes from the tumor pushing against nerves.

Mold is a fungus. Mold can be found indoors and outdoors. Mold is a living organism. It reproduces. Mold reproduces by creating mold spores. Mold spores can be thought of as seeds. Mold spores are necessary for mold to reproduce. They can form anywhere and can enter houses through cracks, windows, door-ways, etc. Four major elements contribute to mold growth indoors and three of those elements contribute to outdoor mold growth. The four elements that contribute to indoor mold growth are temperature, food source, oxygen, and water. Water, temperature, and oxygen are needed in order for outdoor mold to grow. Mold feeds off of all types of cellulose materials. For instance, mold feeds on wood, fabrics, wall paper, etc. Mold grows in temperatures that range between 40 and 110 degrees Fahrenheit. This fungus does need air to advance, but it grows best in area with poor ventilation. Mold needs water, moisture, or high humidity in order to develop.

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Mold travels by mold spores. They spread through air, water, or by hitching a ride on a host. The hosts that mold spores happen to latch on to are items such as clothing, insects, and humans. Mold spores will follow air currents. Mold is dangerous. Mold spore contain mycotoxins. Mycotoxins are secondary metabolites produced by micro fungi that are capable of causing disease and death in humans and other animals. These mycotoxins enter the body two ways. They are inhaled or absorbed through the skin. Mold is an

allergy for a lot of people. Mold can provide nasal congestion, eye or skin irritation, or wheezing. More severe reactions are possible if the human body can't take the fungus or fight off the bacteria. Shortness of breath and fevers are considered severe reactions to mold that may occur in a person whom has severe allergies. Some people may develop mold infections in their lungs like obstructive lung disease if they have chronic lung illnesses.

When high amounts of airborne toxic mold spores are inhaled deep into the lungs they can enter the bloodstream and affect so many different things. The immune system, nervous system, liver, kidneys, and blood can be affected. This can cause brain damage. The immune system is made up of organs, tissues, and cells that work together as a network. They work together to protect the body. The cells in the immune system, white blood cells or leukocytes, are divided into two main groups. The two basic types of leukocytes are phagocytes and lymphocytes. They combine together to seek out and destroy disease-causing substances and organisms. Phagocytes are cells that chew up invading organisms and lymphocytes are cells that allow the body to remember and recognize previous invaders. Lymphocytes help the body destroy them. Neutrophil is the most common type of phagocytes. Immunity is the ability to resist a particular toxin by the action of specific antibodies. The human body has three types of immunity. The three types include innate, adaptive, and passive. Innate is natural immunity and everyone is born with it. Adaptive immunity or active immunity develops throughout the life of a human. Passive immunity is borrowed from another source. It doesn't last long. The immune system does have problems. The disorders fall into four main categories. The first two categories are immunodeficiency disorders and autoimmune disorders the next two are allergic disorders and cancers of the immune system. Autoimmune disorders are when the immune system attacks its own tissue as foreign matter. Allergic disorders are when the immune system overreacts in response to an

antigen.

Mold as well as cigarette smoke has a huge effect on the nervous system in the human body. The nervous system is made up of the brain, spinal cord, and nerves. The nervous system is the human body's control system. The ability for the human body to see, feel, hear, smell, taste, and reproduce is controlled by the nervous system. Cigarette smoke and mold damages your brain the most. The brain and spinal cord are the only two organs a part of the nervous system. If the brain is damaged, the rest of the body doesn't operate the same because the job of the brain is to control everything. The forebrain, midbrain, and hind brain are the three segments that the brain is divided into. The brain, nerves, and the spinal cord are all connected by the brain stem. The spinal cord finds the association neuron. A sensory neuron informs the body of its environment. It serves as an integration or interpretation center of sensory neurons and motor neurons. The association neuron interprets the information and responds to the environment with the motor neuron.

In the circulatory system, blood vessels are the highways of the human body. When something molds, it's not in a good condition. Tobacco smoke has an uncountable amount of toxins within it. These toxins travel throughout the blood in the human body. There are two types of blood vessels. Arterial arteries are one and venous veins are the other ones. Capillaries are minute vessels. They allow oxygen and nutrients to traverse through their walls to all the body cells. The tissue of arteries has different textures. They are tough on the outside, muscular in the middle, and smooth on the inside. There are two venae cavae. They are the two largest veins in the body. They carry the deoxygenated blood to the right side of the heart. The tissues of the veins are thin, and not as flexible nor muscular than the arteries. The heart is the center of the circulatory system. It is located behind the breastbone and centered perpendicular to the midline of the chest. The heart receives oxygen from the lungs and has two parts. The heart has its own circulation network that is made up of arteries and veins. The upper chamber of the heart is called the atrium and the lower chamber of the heart is called the ventricle.

The picture on the right is an illustration of the upper chamber and the image on the left is a picture of the lower chamber of the heart. Both chambers have two parts. The atrium has two auricles, the left and right auricle. Both auricles hold cache for blood that enters the heart. The left ventricle is bigger and more muscular than the right ventricle because it pumps blood to the whole body. The left ventricle accomplishes this task https://assignbuster.com/effect-of-cigarette-smoke-on-mold-growthexperiment/

because it has an opening that blood flows through to the central artery also known as the aorta. The central artery is where the blood circulation originates throughout the human body.

Smoking cigarettes causes heart disease and strokes which are two types of cardiovascular diseases. Heart disease and stroke are considered to be the third main causes of death in the United States. Heart and blood vessels are harmed by tobacco smoke. A symptom of heart disease is heart palpitation which is a feeling that that the heart is beating too fast or too hard, skipping a beat, too slow, or fluttering. When the heart beat isn't consistent meaning the heart beat is irregular, heart disease could possibly be the outcome. Cardiovascular diseases in which include heart disease, is the number one killer of women.

There are different types of strokes. Ischemic strokes are the main kinds of strokes that occur. The other strokes are hemorrhagic strokes. Ischemic strokes are when there is a physical blockage of blood traveling to the brain. This causes the brain cells in the area to die. Hemorrhagic strokes are the sudden onset of neurological symptoms as a result of bleeding in the brain. This type of stroke can easily increase the pressure inside of the brain. This can lead to brain damage. There are some people that don't recover from brain damage and eventually become brain dead which means their body can't function anymore.

Specific items in tobacco smoke can damage important genes that control cell growth. If a cell doesn't grow completely and substantially correct, it doesn't function right. If tobacco smoke and mold can affect the human body

in such a way, it definitely can affect bread. Those whom smoke and are addicted to smoking crave the nicotine. They know the cigarettes are constantly harming the human body, but an addiction isn't easy to overcome.

When a smoker smokes, they usually don't gain a lot of weight. This is because the substances and chemicals in the cigarette stunt the growth and development. On bread, smoke stunts the growth of mold. This is explains why bread cigarette smoke does affect the mold growth on bread more than air does. This is very ironic because most people wouldn't think the air that humans breathe in could impact bread in such a negative way more than cigarette smoke. Chemicals that aren't needed to be absorbed in the human body take the body off balance as well as other things such as bread.

## Vocabulary

Nicotine- one of the most addictive substances known to a man. Nicotine is one of the components or substances that make up cigarettes.

Powerful- producing great physical effects and efforts.

Drugs- are extremely dangerous substances whether they are legal or illegal. Over-the-counter drugs can be as dangerous and effective because everyone's' tolerance for drugs differ.

Poisons- are substances that cause disturbances to organisms. Usually takes place by chemical reactions or other activity on the molecular scale, when a sufficient quantity or total is absorbed by an organism. Insecticides- made up of substances or mixture of substances intended for preventing, repelling or mitigating and pest.

Tobacco- causes a wide variety of dieses, cancer, and death. A carrier for the addictive drug called nicotine.

Volatile- is applied to a substance with a high vapour pressure that passes readily into a gaseous phase.

Biological Growth- the exponential growth of biological organisms.

Mold- a large and taxonomically diverse number of fungal species where their growth results in a moldy appearance of objects, especially foods.

Spores- a reproductive cell or structure produced by certain fungi, plants (moss, ferns), and some bacteria.

Contaminate- to make something impure, unclean, by exposure to or addition of, contact, a mixture, or polluting substance.

Loaf- a shaped or molded often symmetrical mass of food; bread baked in one piece.

Hygiene- a condition or practice conducive to the preservation of health, as cleanliness; keeping something in a substantial condition.

Moderate- root word of moderation. Keeping or when something is kept within reasonable or proper limits.

### Atmosphere- a buffer that