

# Cells Gone Wild?

By: Longnu Nhan

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### How Does It Start?

•Cells are either damaged or destroyed. This is called mutations

Cancer cells will divide whenever they please

Proteins are either too much or none at all

•Cancer cells would continue to divide and make copy of themselves

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# Angiogenesis

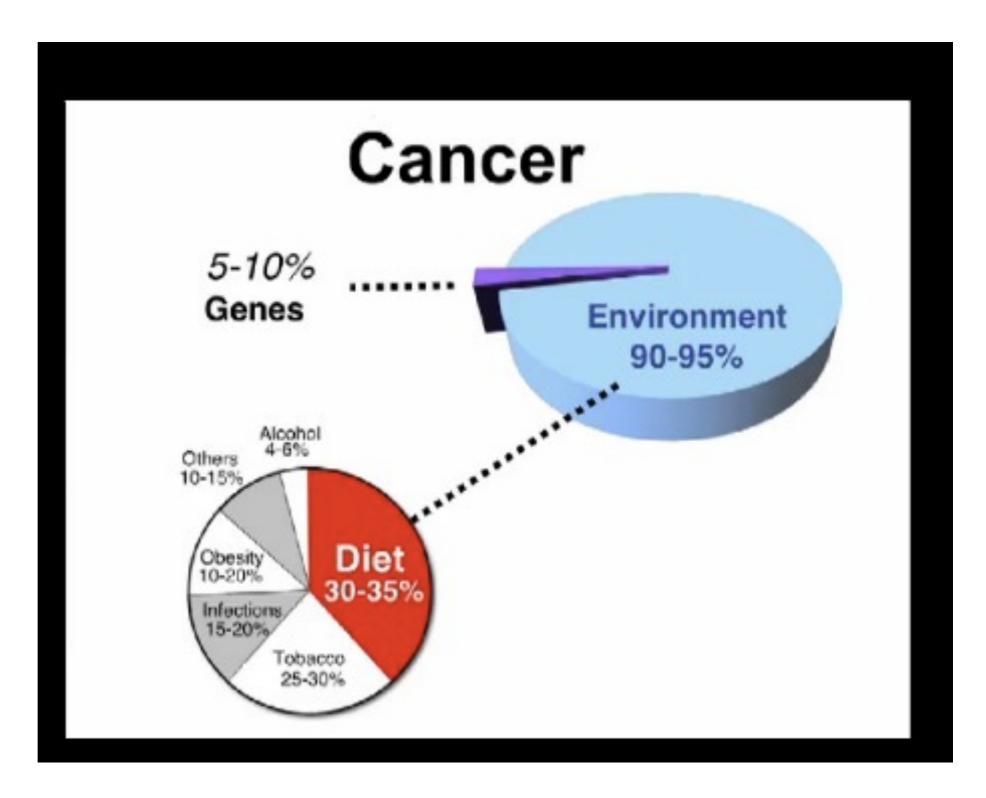
- •Definition: the development of new blood vessels.
- •The human body is packed with 60 thousand miles of blood vessels.
- •Capillaries-- it can be the vessels of life or it can be the vessels of death.
- •Blood vessels adapts to their environment.
- •What happens if angiogenesis is out of balance?
- •Angiogenesis can cause cancer is there's too much of it.
- •About 40% of women actually have microscopic cancer in their breast.
- •A new treatment call "Anti-angiogenesis therapy" was invented.

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Angiogenesis is made of 60 thousand miles of blood vessels and it makes up most of our body cells. We have a small cell called capillaries. We have about 19 billion of cells. Blood vessels, for women, grow every month and most time, when we are grown, our blood vessels does not grow that often. For certain situation, blood vessels can't form. Sometimes, it can be too much of blood vessels or too little. When blood vessel are not normal in growth, it's out of balance. When this happens, it means that blood vessels can cause different sicknesses like wounds that doesn't heal and nerve damage. Also, if there are too much, it can cause cancer. So the main point is to balance out the angiogenesis. Cancer can form anywhere and at anytime. It just all depends on how much blood vessels are formed in our body. Doctors and scientist tries to do whatever they can to block angiogenesis, but if they were to not stop it from increasing, then the disease can form faster. Cancer doesn't just happen out of nowhere. It starts off harmless and then it gradually become more dangerous because the cells mutate. Cells mutate all the time and if they see that the cells isn't normal, then it kills those cells. In order for the cells to cause cancer, it takes a really long time to do so. This is why most people get cancer when they're older. It doesn't magically appear out the blue moon. Angiogenesis can be harmless and it can also be harmful. It's somewhere in between. Doctors came up with this idea of "Anti-Angiogenesis Therapy." What this therapy does is that it cuts off blood supply. It aims for the blood vessels that is targeting cancer. It is found that this new therapy, it saved 70-100% people's life. I'm not saying everyone is alive, but I'm saying that it improved people's lives.



#### Can We Eat to Starve Cancer?



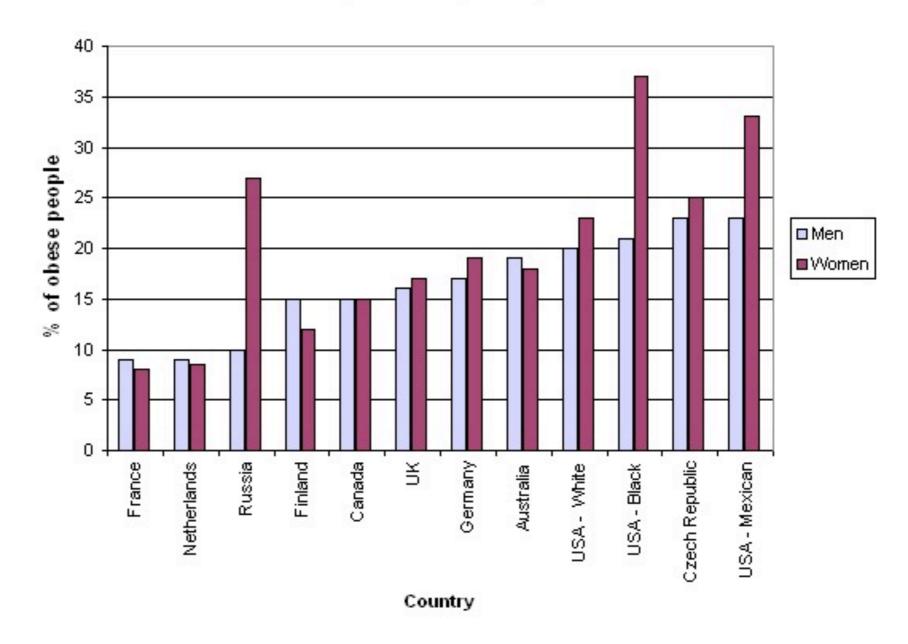
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When I research about the causes of cancer, one of the thing that I found really interesting is that diet was one the major causes. A lot of people take diet very seriously. In the back of my mind, I don't like to word diet. When I think or see the word diet, I think of DIEt. Mind you, there's a die in diet. I strongly believe in that because I know many teenagers who starve themselves to death because society wants everyone to look skinny and have a perfect body. Out of all the things to do to lose weight, people choose diet. What people don't know is that diet can cause cancer. It's not easy to cure certain cancer and the fact that people are willing to starve themselves to look skinny and can possibly die is ridiculous. Diet can make you die by starving yourself or it can create cancer and most time, cancer kills you too. Not all diets are bad. There's healthy diets which means that you eat healthier. In this way, you can beat those blood vessels that are feeding into cancer. There are certain food who can reduced the angiogenesis that feeds in to cancer. Tomatoes are a perfect example. "Men who consume 2-3 servings of cooked tomatoes per week have a reduced risk for developing prostate cancer by 40-50%"-Dr. Lorelei Mucci. So point is, if you're going to go on a diet, make it healthy. Mother nature offers us varieties of food to choose from, so be wise and don't die!



# Obesity

#### Obesity: Percentage of Population



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Another cause of cancer is obesity. When the fat grows, the blood vessels also grows. As I said before, if there's too much blood vessels, then it can cause cancer. This is where Anti-Angiogenesis Therapy comes into play. It helps cut the supply of too much blood. You have to get the blood vessels to balance out. The graph above clearly shows that United States have the most percentage of obesity. About 37-38% of women are obese and about 21% of men are obese. If you think about it, most women have cancer. The females have this disease more than the males. Not everyone has money to eat healthy because it's so expensive so they would go to fast food restaurants to east food that can be made faster and cheaper. But everyone has the opportunity to go to their local farms or grocery store and pick out some vegetables or fruits. Help yourself, but also help others.



#### Citations

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