



ELITE

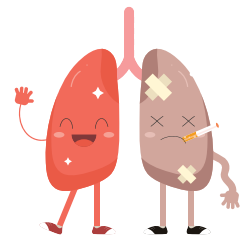
Personal Training and Fitness Solutions

# HEALTH TOPIC OF THE WEEK

## 2/6 - Effects of Smoking on the Body

### Introduction

We all have heard it a million times over, SMOKING IS BAD FOR YOU. Despite there being hard evidence why smoking is awful for you, it is estimated that nearly 12.5% of our population in the United States smokes multiple cigarettes per day. At first, 12.5% doesn't seem like that much. Take into consideration that our entire population is 31 million people, and that's a ton of people! This week you will read about the terrible effects habitual smoking has on your body.



### Smoking and Physical Activity

As fitness trainers, we know that smoking negatively affects exercise. Here are three areas of great concern:

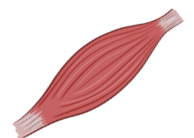
#### 1. Protein Synthesis

Protein synthesis is the process of creating protein molecules. These protein molecules keep cells functioning properly. They also help increase muscle mass. Smoking is known to decrease our body's protein synthesis by roughly 33%. In other words, smoking limits our maximum potential for strength gains by 33%. Imagine living life knowing you are at only 67% of what you could be!



#### 2. Myostatin Levels

Myostatin levels tell us how likely we are to build or lose muscle. Research shows that myostatin levels are higher for smokers. Here, more is not better. High levels of myostatin in the muscles is linked to muscle atrophy. Our goal should always be to have low myostatin levels so that we can build as much muscle as possible.

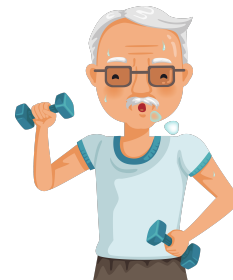


Elite Personal Training and Fitness Solutions does not provide medical treatment or intervention. We acknowledge scientific evidence that appropriately intensive exercise and sustainable nutritional intervention can have significant impact on chronic health disorders and obesity, dramatically improving symptoms when recommendations are followed. Please visit us at [Eliteptf.com](http://Eliteptf.com) for more information and to schedule your evaluation.

Can you still build muscle if you smoke? Not very easily. Increased myostatin levels reduce the strength of muscles and prevent muscular growth. Additionally, smoking contributes to insulin resistance, which can hugely impact your muscle-building goals.

### 3. Sarcopenia

Sarcopenia was our first health topic last year. It is something to avoid at all costs! Sarcopenia is an age-related, progressive muscle disorder that accelerates the loss of muscle mass and function. Physically inactive people can lose as much as 3% to 5% of their muscle mass each decade after age 30. Don't let this happen to you.



Loss of muscle matters because it lessens strength and mobility. The primary treatment for sarcopenia is EXERCISE, specifically resistance training or strength training. For more details on sarcopenia, please click [here](#).

## Potential Tragedies for Chronic Smokers

### Going Blind

Smoking increases the risk of age-related macular degeneration, the leading cause of blindness in adults over 65.



### Type 2 Diabetes

Smoking contributes to type 2 diabetes and increases the risk of complications from the disease, including poor blood flow to the legs and feet. This can lead to infections, which if severe enough, can result in the need to amputate a limb.



### Erectile Dysfunction

Male sexual function is affected by smoking. Tobacco causes narrowing of blood vessels all over your body, including those that supply blood to the penis.

### Ectopic Pregnancy

This life-threatening reproductive complication that is more likely to smokers. It occurs when a fertilized egg implants somewhere other than the uterus. The egg can't survive, thus endangering the pregnant woman's life.



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## Fractures

Smokers lose bone density at a faster rate than non-smokers. This puts you at risk for breaking body parts like your hip. Post-menopausal women, specifically over 50 years of age, have a higher incidence of decreased bone density as is, so doesn't it make sense for women over 50 to avoid smoking altogether? Absolutely!



## Colorectal Cancer

Colorectal cancer, which forms in your intestines (colon or rectum), is the second leading cause of cancer deaths in the United States. Smoking is linked to an increased risk of developing and dying from this type of cancer.



## Rheumatoid Arthritis

Rheumatoid arthritis is a chronic inflammatory disease more common in women. It affects the joints of the hands and feet. Rheumatoid Arthritis causes painful swelling that can eventually result in boneless and joint deformity.

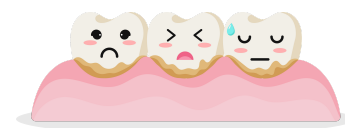
## Fertility Issues

Parents-to-be take note: smoking can affect your ability to conceive. It causes reduced fertility in women and can contribute to other problems during pregnancy.



## Gum Disease

Smoking contributes to periodontitis - a gum infection that destroys the bone that supports your teeth. It is a major cause of tooth loss in adults.



## Take Home Message

If you have read this far, you're most likely a smoker and have experienced the frustration of trying to quit on your own. Reach out to Elite Personal Training and let us partner in your health and wellness journey.



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This article was contributed by Justin Glose, MS, ATC, NSCA-CSCS, CFNP. He graduated from West Chester University with a degree in athletic training. In addition to his undergraduate studies, he obtained a Master's of Science in Sports Management and Athletic Administration from Southern New Hampshire University. Justin is also a certified personal trainer and functional nutritionist. For his bio, please see <https://www.elitepersonaltrainingandfitnessolutions.com/justin-glose>

## References

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