Striving to educate our members to be more ProActive towards a healthier lifestyle.

Every year, The American Cancer Society recognizes the month of November as smoking cessation month. In honor of that this year, this month’s ProActive newsletter will be focused on smoking, how it affects your health and how you make ProActive actions towards leading a smoke-free lifestyle. Smoking is a choice that many people make. However, many of these individuals do not take the time to educate themselves about the effects smoking can have on their body and those around them. Tobacco use is the leading preventable cause of death, disease, and disability. According to the CDC, nearly 40 million adults in the United States (about 1 in 5) still smoke cigarettes. More than 16 million are living with a disease that was caused by smoking, including: cancer, heart disease, stroke, various lung diseases, diabetes, and chronic obstructive pulmonary disorder (COPD). Each day, approximately 3,200 people less than 18 years of age smoke their first cigarette. Cigarette smoking is the cause of more than 480,000 deaths in the United States each year; 41,000 of which are non-smoking adults who have been exposed to secondhand smoke. Smoking tobacco is a devastating habit that harms almost every organ in the body, and can cause irreversible damage to yourself and others.

Effects on the Body

Brain:

Overcoming an addiction to nicotine is not an easy feat due to the changes that occur within the brain. The brain of a smoker develops extra nicotine receptors to accommodate for the substantial amounts of nicotine being consumed. When taking the steps to quit smoking, the brain remains used to the large influx of nicotine, making the quitting process much harder to overcome. Once the decision to quit has been made, be prepared for what is known as nicotine withdrawal. The brain will no longer be receiving the excess nicotine, resulting in a multitude of symptoms, such as anxiety and irritability.

Head and Face:

- Ears: Smokers can experience hearing loss due to a reduction in the supply of oxygen to the inner ear. This damage could be permanent and cause mild to moderate hearing loss.
- Eyes: Smoking can reduce night vision, and in some instances, cause blindness. Nicotine restricts the production of the chemical that is necessary to be able to see at night. There is also an increased risk of getting cataracts and macular degeneration, which could ultimately lead to blindness.
- Smoking can lead to a variety of oral diseases, such as the formation of cavities, gum disease, and cancers of the mouth and throat.
- Tobacco usage can lead to what is called “smoker’s face.” This term describes a condition in which the skin becomes dry and loses elasticity, resulting in the appearance of wrinkles around the mouth and eyes.
Heart:
Over time, smoking can cause stress and irreparable damage to the heart. Constant stress on the heart can result in the heart becoming weak and less effective at pumping blood to the rest of the body. Among others, smoking can lead to high blood pressure, thickening of the blood, formation of fatty deposits in the blood, and a lack of usable oxygen due to the inhalation of carbon monoxide. These changes within the blood and vessels can damage the entire cardiovascular system, which has direct effects on other organs and the whole body. The risk of heart disease and having a heart attack increases dramatically in those exposed to tobacco smoke.

Lungs:
Smoking has the most direct effect on the lungs. Over the long-term, it can cause the formation of scarred tissue due to chronic inflammation, emphysema, and respiratory infections. Inflammation in the airways and tissues of the lungs can make your chest feel tight and cause one to feel short of breath and/or wheeze. When you smoke, you are permanently destroying the alveoli (air sacs) that are responsible for exchanging oxygen into the blood. When those air sacs are destroyed, the lungs lose the ability to maintain elasticity, which is required for proper air exchange. Small “brooms”, known as cilia, are normally responsible for helping to keep the lungs clear by sweeping foreign particles out. Smoking can kill or paralyze the cilia, which leaves the smoker more prone to respiratory tract infections.

Muscles and Bones:
Smokers tend to have more muscle aches and pains than non-smokers. Smoking can cause muscle deterioration due to a lack of blood and oxygen flow to the muscles. The make-up of a cigarette also disrupts bone health. Your body is less likely to form new healthy bone tissue, which results in the thinning of bones and an increased risk of fractures.

Smoking tobacco also has major effects on one's immune system, stomach, hormones, and DNA. To learn more about how smoking tobacco affects the body, visit www.cdc.gov or www.lung.org. For help on quitting smoking, go to NYQUITS or cancer.org.

The Benefits of Quitting:
Deciding to quit may be one of the toughest decisions to make, but the health benefits of doing so are abundant. Within 1 to 2 years of quitting, your risk of heart disease will decrease. You will also see a reduced risk of lung cancer, as well as other types of cancer, stroke, and peripheral vascular disease. The progression of chronic lung diseases will slow down significantly, and you will also see a reduction in respiratory symptoms such as coughing, wheezing, and shortness of breath. Overall, both duration and quality of life will see improvements upon quitting the use of tobacco products.

Medications to Help Quit:

Nicotine-Replacement Products:
A lot of variation exists regarding dosage forms and methods of nicotine delivery, and personal preferences will vary on which form is most beneficial. These products are available as over-the-counter gums, lozenges, and patches, or as oral and nasal inhalers with a prescription. These products help you to gradually reduce nicotine consumption without using dangerous tobacco products. The intent is to slowly taper down your usage so that the body can down-regulate (reduce) the number of nicotine receptors contributing to withdrawal symptoms.

Prescription Oral Medications:
Prescription products such as bupropion (Zyban) or varenicline (Chantix) can help to stop the cravings caused by nicotine. Although bupropion can be used in combination with the nicotine-replacement therapies above, part of the mechanism of action of Chantix involves stimulating the nicotine receptors. For that reason, it is not recommended to use Chantix along with nicotine replacement, as they will both be competing for the same receptor sites and therapy would be less effective.

E-cigarettes:
An E-cigarette is a device that produces an aerosol by heating a liquid that can contain nicotine, flavorings, and other chemicals that help create the aerosol. They come in many shapes and sizes, but most are comprised of a battery, heating element, and a place to hold the liquid. E-cigarettes have the potential to benefit adult smokers who are not pregnant if used as a complete substitute for regular cigarettes. However, more research is needed to determine long-term health effects and whether they are both a safe and effective option. E-cigarettes are not safe to be used by children, young adults, pregnant women, or adults who do not currently use tobacco products. The nicotine found in these products is still addictive and carries the risks exhibited by nicotine in other tobacco products. The nicotine in these products can still be toxic to a developing fetus and can stunt adolescent brain development. Overall, E-cigarettes are less harmful than traditional cigarettes and tobacco products, but that doesn't mean that they are harmless.

As always, ProAct encourages you to be ProActive about your health by visiting your doctor for your annual checkup and making daily choices towards a healthier lifestyle. Wishing you a happy and healthy holiday season!

Sincerely,
Your ProAct Team