

Heart Health

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Disclaimer

We hope you enjoy reading this publication, however we do suggest you read our disclaimer. All the material written in this document is provided for informational purposes only and is general in nature.

Every person is a unique individual and what has worked for some or even many may not work for you. Any information perceived as advice by must be considered in light of your own particular set of circumstances.

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Every attempt has been made to provide well researched and up to date content at the time of writing. Now all the legalities have been taken care of, please enjoy the content.

Introduction

For decades we have been warned about the need for taking care of our heart. Our heart is the most critical muscle in our body. In spite of all the government and medical association initiatives, and media exposure, heart disease is still a leading killer.

The major tragedy is that in many or even most cases, it is largely preventable. Certainly, there are factors beyond control, such as genetics. But even that usually predisposes a person to an increased risk of heart disease, it is not in itself a confirmed diagnosis.

Public education has led to improvements in some areas, such as a reduction in cigarette smoking. Unfortunately, modern lifestyles have seen huge increases in behaviors that are strongly correlated to heart disease.

Although most are loathe to admit it, these behaviors are mostly elective, and include diet, exercise and alcohol and drug consumption. "Drug consumption" does not only mean illicit drugs, as many prescription and over-the-counter medications are implicated in coronary failures and ill-health.

This eBook details the effects of compromised heart health – the what and why – as well as proven ways to improve the health of the cardiovascular system. Some may seem "common-sense", yet they are still not followed as they should be. Others may surprise you, as they are not the same old mainstream solutions.

Stress and Heart Health

Every person's heart rate may decrease or increase depending on several factors, which may range from chemical reactions caused by alcohol and coffee intake, to physical demands and stressful situations.



Heart rate control refers to the balance between the body's two circuits – the Sympathetic Nervous System (SNS) and the Parasympathetic Nervous System (PSNS) The SNS is commonly referred to as the 'fight or flight response' and the PSNS as the 'rest and digest system'.

These two circuits work hand in hand with all the other systems of the body in order to help an individual act and react to whatever circumstances or situations arise, then also helping them recover from them. As for the human heart, the PSNS has primary control over a person's heart rate while at rest. But, the state of the entire circulatory system, such as heart rate, arterial dilation, blood pressure and more, will be a result of these two systems (i.e. the PSNS and SNS) working together simultaneously. In stressful periods, the SNS will dominate, at rest, the PSNS resumes control.

When the Body Experiences Stress

Although the activation of the SNS or the fight or flight response system is "natural", unfortunately there are regular circumstances in life that cause it to be engaged unnecessarily. This is made worse when its activation is prolonged.

This is the usual state of affairs when an individual is exposed to persistently high levels of stress (chronic stress) and this can have serious health consequences.

The human body responds to daily stress in a way that is very similar to how it reacts when faced with a fearful or exciting situation.

Once the SNS or fight or flight response is activated the body will also automatically release a batch of stress hormones. This will then cause an increase in an individual's heart rate, perspiration and respiratory rate.

When Stress Becomes Harmful

If the activation of the body's fight or flight response is normal, then why is it that stress, which is only one of the many factors that can activate it, is receiving such a bad rep these days? The real problem is not just isolated instances of stress, but the constant exposure to stress.

Our stress systems evolved to allow us to run from, or defeat predators. In an environment optimum to our brain's hard-wiring, we would experience a potentially dangerous situation, which we would overcome through increased physical output. This physical effort utilizes and dissipates the stress hormones, which is then followed by a period of rest, resolution and recovery, where our PSNS takes over.

Today, however, our days are far more likely to filled with repeated and persistent stress triggers.

Although they may be physically non-dangerous, they evoke the same stress response, but because of their back-to-back nature, *there is no essential recovery phase*.

Unfortunately, chronic stress makes it hard for the SNS to "return to safety" and allow the PSNS to resume control. The PSNS is supposed to take over once the "battle" or the stressful situation is over and this is the reason why it is called the "rest and digest" system.

Exposure to constant stress is like never allowing the battle to be over. The influence of PSNS eventually decreases and the stress response is constantly engaged.

Effects of Stress on Heart Health

Unfortunately, diminished activity of the PSNS due to the increased activity of the SNS will usually lead to many health issues such as digestive problems, difficulty sleeping, weight gain, depression and anxiety.

As for heart health, chronic stress can cause an increased heart rate which, if left unrelieved, can lead to irregular heart rhythms, high blood pressure, coronary artery disease and higher cholesterol levels.

If a person's heart rate is elevated their breathing or respiration rate will be as well. A consequence of this is prolonged periods of shallow and faster breathing. This causes further problems, one of which is rapid breathing is in itself a stress trigger. When this occurs your SNS activates again, repeating the cycle of fight or flight response, leading to worsened feelings of fear and anxiety, putting more stress on your mind and body.

Stress management techniques are a vital tool to reduce the impact of chronic stress on not only the cardiovascular system, but the whole body.



Heart Health For Women

Many factors influence heart health. Some we can control - such as the food we eat, the habits we adopt and the exercise we take part in. Others we cannot. For some women, a predisposition to higher blood cholesterol levels and other heart problems are part of their genetic inheritance.

Studies have shown that heart disease tends to run in families. Statistically, if a parent or sibling has suffered a heart attack before the age of 55, the risk to their immediate relatives is ten times greater than it is for the members of families with no history of cardiovascular disease.

Cholesterol

There are two sources of cholesterol, the first is in the food we eat, and this is called 'dietary cholesterol', the other source is made by the liver and is found in the blood. This is called 'blood cholesterol'. The major risks of heart disease caused by high levels of blood cholesterol begin in genetic makeup, although diet, smoking and obesity are also important factors.

While you cannot alter heredity, you can change your eating habits and lifestyle. Fatty deposits containing cholesterol may collect on the inner walls of the arteries, resulting in atherosclerosis (hardening of the arteries).

These deposits narrow the blood vessels and may deprive organs of energy and oxygen. Blood clots can easily block such narrow vessels. A clot that blocks an artery of the heart causes a heart attack.

Research shows that women tend to develop symptoms of heart disease at a much later stage in their lives than men, and also that women can experience different symptoms of heart attack than men.

During their reproductive years, while oestrogen keeps their blood cholesterol level low, women are less prone than men to atherosclerosis and heart attacks.

As a woman's oestrogen levels decline after menopause, her cholesterol levels rise and she becomes increasingly vulnerable to cardiovascular disease.



Hypertension

Because hypertension (high blood pressure) is considered to be the most important risk factor for both stroke and heart failure, busy women need to be reminded that hypertension may not cause any symptoms. This being the case, the importance of ensuring you have regular blood pressure checks can easily be overlooked.

Studies have shown that hypertension is two to three times more common in women than men, and becomes much more common with age. Widely known as the silent killer because of its lack of symptoms, high blood pressure is a

recognized factor in strokes. It is also known to increase the risk of kidney and heart disease.

When combined with a high blood cholesterol level, hypertension will often accelerate the development of atherosclerosis.

Maintaining Heart Health

The essential, controllable ingredient for maintaining a healthy heart is living a healthy lifestyle. Experts in the field of heart health for women recommend that a woman should get at least 20 to 30 minutes of exercise a day.

This along with a diet of fresh fruit, vegetables and whole grains goes a long way towards retaining a healthy body weight, and avoiding the risk of obesity and diabetes.

Avoiding foods high in sodium, sugar and saturated fats, cutting down on alcoholic drinks and eliminating smoking can only have positive results for cardiovascular and overall health.

It has been found that women who smoke are much more at risk of blood clotting related diseases, such as stroke and heart attack, compared to men. The risk increases for women who smoke if they are also using birth control pills.

The nervous system plays an integral role in the function of the heart, so women need to balance the stress and tension in their busy lives with adequate sleep and relaxation.

Eat healthy, stay active, be smoke free, limit the use of alcohol and be rewarded with a healthy heart.

Heart Palpitations

A heartbeat is one complete contraction and relaxation of the heart muscle and in a healthy person it beats with a regular rhythm. Heart palpitations are an awareness of extra heartbeats that may be faster or more forceful than normal. It can be unnerving and scary for those who suddenly notice a fluttering sensation in their chests; almost like their heart is skipping beats.

Some describe a pounding heartbeat that seemingly arises out of nowhere for a few seconds, others feel the irregularity for up to a few minutes. At times, the change in heart rhythm may be felt in the neck or throat region.

Most people have had an occasional bout of palpitations - the experience of having their hearts suddenly beat faster or irregularly during physical exertion, or when they are particularly angry, anxious or scared.

Some people can experience this situation happening after they ingest caffeine or during periods of stress. Others can see no association and it just happens randomly. Thankfully, the majority of heart palpitations are relatively harmless and do not mean there is any significant heart problem.

However, when additional cardiac symptoms such as dizziness and chest tightening are present with the palpitations, it is possible that a heart problem is present. It is important to consult your doctor immediately if you are experiencing any of these related issues. When it comes to heart disease, early treatment and detection are paramount.

The Causes of Heart Palpitations

Unhealthy Lifestyle Habits

If your lifestyle is very stressful, and your diet consists of an excessive intake of caffeine, alcoholic beverages and energy drinks, the risk of you suffering heart palpitations is far greater than it is for someone who enjoys a balanced diet,

relaxes more on a daily basis and finds ways to avoid stress or to deal with it in a more productive way.



Medications

Certain medications such as asthma inhalers and thyroid medications can cause heart palpitations as a side effect. If you are using these and feel changes to your heart rhythm, it is best to consult your healthcare provider immediately. Also, discuss your symptoms with your doctor prior to abruptly stopping any prescription medications.

Panic Attacks

Some individuals are fighting with anxious feelings almost continually. Commonly, they experience heart palpitations. When emotions of apprehension, fear and

anxiety take over and are left untreated for extended periods of time, a person is at a higher risk of experiencing a panic attack.

Often mistaken for a heart attack, panic attacks can cause heart palpitations accompanied with trembling, profuse sweating and chest pains.

Pregnancy, Menopause and Menstrual Periods

Hormonal changes that occur during different phases of a woman's life including menstruation, pregnancy and menopause may cause heart palpitations to occur on a temporary basis.

Illnesses

A host of different health conditions may be the underlying cause for making the heart beat faster. For instance, low blood pressure, low blood sugar, dehydration, overactive thyroid, high body temperature and heart issues can be responsible.

Undergoing Assessments for Heart Palpitations

It is common to have to undergo certain blood tests after consulting your doctor about heart palpitations. These tests may signify certain electrolyte issues, anemia, or abnormal thyroid levels which could be causing the palpitations to happen.

- The stress ECG or ECG is another test that is common to be undertaken for individuals who are trying to determine the root cause of their palpitations. The regular ECG is conducted when you are at rest, while the stress ECG is completed during exercise. These tests check for any abnormalities in the heart rhythm by recording the electrical signals within your heart.
- A Holter Monitor test for 24 to 48 hours may be suggested a well. This is a device worn that records the electrical signals of your heart for a period of time. Typically, abnormalities in the heart rhythm that were not picked up via the ECG will be detected with the Holter Monitor.

Echocardiogram and chest X-rays can additionally be used to check for any heart problems. An event recording device may be prescribed by the doctor to determine issues as well.

This device is worn on the chest and a handheld recording button is pressed whenever heart symptoms are felt. It then takes a recording of the immediate timeframe surrounding when the button was pushed and records the heart symptoms.

Don't be afraid to request a second opinion or request a referral to a cardiologist once you receive the assessment results from your tests. Be proactive and keep a journal of when these irregularities in your heart beat occur so that you can notice a potential pattern.

Foods for Heart Health

What you have in your kitchen can either help save and extend your life, or weaken your health. Think of those foods that you put in your kitchen. Does your cupboards and fridge contain lots of packaged, canned and other heart disease-causing foods?

Or is your kitchen filled with whole foods that help prevent the onset of heart attack? Do not wait to be diagnosed with a heart disease before you start clearing your kitchen of all those junk foods. Now is a good time to make sure that your kitchen contains some if not all of the following heart healthy foods.



Salmon

Eating salmon provides you with omega 3 fatty acids which are considered by many to be the stars of heart health. Increased intake of foods rich in omega 3

has been linked to reduced risk of stroke, heart attack, arrhythmia, high triglycerides and high blood pressure.

Eating omega-3 rich fish two or three times a week can significantly improve the metabolic markers of cardiovascular disease.

Walnuts

When they say that nuts are good for your heart, don't just think about any kinds of nuts but opt for walnuts. Research reveals that walnuts contain more and better antioxidants than pistachios, almonds or peanuts. This was determined by a study conducted by the American Chemical Society.

These antioxidants play a significant role in protecting the human cells against any damage caused by free radical formation. The havoc caused by these free radicals has been commonly associated with heart disease.

Asparagus

Asparagus is an excellent source of vitamin B6, vitamin B2, niacin, pantothenic acid, folic acid and choline. Its B vitamin content plays an important part in regulating an individual's homocysteine levels.

Homocysteine is an amino acid that is known to be a precursor to heart disease and this is why having high amounts of it in the blood could mean an increased risk of heart disease.

Blueberries

The antioxidant content of blueberries has been shown to help reduce lipid oxidation. Improved antioxidant defense from eating blueberries may also inhibit hardening of the arteries. These findings were based on the results of the study published in "The Journal of Nutrition". Although further research is still needed a lot of experts are convinced that increased blueberry consumption can lead to decreased levels of total serum cholesterol and LDL or low density lipoprotein cholesterol and these results are associated with lowered risk for heart problems.

Spinach

Spinach is a good source of folate which is also beneficial for regulating homocysteine levels in the blood. Recent studies also suggest that spinach can benefit heart attack survivors and help speed up their recovery.

This outcome can be attributed to the nitrite content of spinach which has been found to help open up clogged arteries, which are common among people who have just suffered a heart attack. This widening of arteries translates to an increased supply of oxygen in the blood.

Potatoes

Potatoes aren't the first thing you think of for heart health, however they are rich in potassium, vitamins B and C, plus calcium and other minerals. The skins contain plenty of fiber and phytochemicals. For the benefit of your heart and overall health, cook the whole potato, including the skin, and lay off the sauces and cream!

Green Tea and Your Heart Health

Among the many types of drinks, the light pleasantly flavored green variety of tea has become a favorite beverage for many. According to studies of people who drink green tea as an integral part of their daily diet, all have reportedly found it to be extremely beneficial to good health.



Originating in China, green tea has been used as a medicine for thousands of years, and is now considered to be one of the world's healthiest drinks and contains one of the highest amounts of antioxidants of any tea.

Helps Fight Lifestyle Diseases

Extensive research and studies have found that the beneficial health properties found in green tea have proven effective in helping to protect against heart

disease, the onset of diabetes, fighting cancer and reducing the level of bad cholesterol in the blood, which is beneficial to the heart.

Many people benefit from drinking green tea, and most of them realize how this improves their health and wellbeing. Green tea is rich in antioxidants called catechins. These antioxidants search for DNA damaging free radicals which can result in the development of cancer.

Effective Against Cancer and Dementia

Green tea has been found to help reduce the risk of cancer and stroke and delay the onset of dementia. It also contains antioxidants called EGCG or Epigallocatechin Gallate. This is an extremely powerful antioxidant which helps in minimizing growth of the cancer cells, and can kill them without damaging the healthy tissue.

Topical Applications

Studies have shown that green tea applied to the skin regularly can reduce the appearance of sun damage, wrinkles and other signs of aging. Because of its antioxidant and anti-inflammatory properties green tea has proven to be an effective treatment for skin conditions.

Using green tea to bathe the area will help reduce the swelling and itching associated with insect bites, and has a soothing effect when applied to sunburn, scrapes, cuts and other skin ailments.

Green tea undergoes minimal processing, ensuring the beneficial substances that are naturally present in the plant stay more concentrated. Retaining the maximum amount of antioxidants and Poly-phenols the substance that give green tea its benefits is the reason for green tea having more health benefits than black tea. The Poly-phenol found in green tea has also been found to aid in weight loss by increasing metabolism, and therefore the rate at which the body turns food into usable calories. Being overweight has a strong correlation to heart disease.

Many people enjoy the maximum heart health benefit from green tea by drinking the recommended three to six cups a day.

Other Health Benefits of Green Tea

Although green tea contains a relatively small amount of caffeine it has enough to help keep you alert and improve brain function.

Other studies have found that green tea is helpful in preventing dental cavities, reducing stress and chronic fatigue, and is also able to improve arthritis by reducing inflammation.

With all the well documented health benefits of green tea it is little wonder that there is no shortage of people ready to sing praises and encourage others to experience the health benefits for themselves.

Vitamin C and Heart Health

Vitamin C is known as a major protective element against many aspects of cardiovascular disease. Numerous experts are studying vitamin C for its ability to improve heart health.



It has been shown to be helpful in protecting against blood vessel changes, high blood pressure, and is proving beneficial in combating risk factors of endothelial dysfunction and other problems relating to heart disease.

Vitamin C for the Prevention of Plaque Build-Up

Many experts across the globe have acknowledged the power of this super antioxidant in helping to prevent degenerative heart disease. We have all heard about the dangers of plaque buildup within our arteries which can contribute to heart attack and strokes.

Evidence suggests that Vitamin C can be a helpful preventative to the development of atherosclerosis. During the early stages, white blood cells are transported via the bloodstream and adhere to the arterial walls.

Once adhesion occurs, the blood vessel walls begin to thicken. Over time this process causes the elasticity of the vessels to diminish. It is this situation that enables atherosclerosis to take place.

Vitamin C Helps Prevent Atherosclerosis

Research has found that the body does not need and cannot use one large dose of vitamin C a day. The vitamin C foundation recommends around 3,000 mg of vitamin C per day taken in divided doses of 500 mg every four hours, as a protection against cardiovascular disease.

Vitamin C Needed for Collagen Production

Collagen is one of the most abundant proteins within the human body. It is responsible for forming strong fibers that provide strength and stability to the skin, arteries, joints and muscles. Vitamin C plays a vital role in the production of collagen.

It has been discovered that the amount of Vitamin C that many people ingest is sufficient to prevent scurvy; however it is not enough to provide stability and strength to the arterial walls. Vitamin C repairs and produces collagen; during this process it is 'used up', often then leaving insufficient to perform some of its other vital roles.

Regular Intake Essential for Health

These findings show that individuals need to have a regular, abundant supply of Vitamin C in order to keep their tissues and arteries healthy and strong. It has been noted that the arteries situated around the heart are continually being exposed to large amounts of stress due to the fact the heart is constantly beating.

These continuous motions can enable tiny lesions and cracks to occur due to the continuous stretching, and arterial walls may be exposed to inflammation on a regular basis. Some experts believe that ingesting a steady amount of Vitamin C can enable the body to heal itself and begin repairing the arteries.

This will help prevent heart diseases and atherosclerosis from setting in. Additional studies show that if a person does not have enough Vitamin C in their system, their body will attempt to complete the repair of damaged arteries by using cholesterol and fatty substances to adhere to the arterial walls as an alternative to Vitamin C.

Dietary Sources of Vitamin C

Essential for healthy tissue development, the entire body uses Vitamin C. Natural sources high in vitamin C include citrus fruit, strawberries, kiwifruit, blackcurrants, capsicums, and potatoes.

Increased intake of foods rich in vitamin C will be beneficial to the health of the whole family, and is the best way to obtain it. If sufficient dietary intake is impractical, the addition of vitamin C supplements is advisable to obtain this essential dietary element.

Vitamin C is recognized as a beneficial source in cancer prevention, and helpful in managing the symptoms of diabetes and asthma.

Skipping Breakfast and Your Heart Health

Many people have the habit of skipping breakfast for one reason or another. One common reason is that they do not want to be late for work. Others claim that they just want to lose some weight.

Unfortunately, not many people are aware of the possible negative effects on our heart health when we skip the most important meal of the day.



Skipping Breakfast Can Have Negative Impacts on Metabolism

Research reveals that skipping your breakfast can contribute to obesity, high blood pressure and other serious health problems. Researchers were surprised to

learn that these health problems do not arise only because those who skip breakfast have an increased tendency to compensate and binge during lunchtime.

The negative effects of skipping breakfast emerge not only because of increased calorie consumption as people indulge in "make-up meals", but also because this longer period of fasting brought about by skipping breakfast can significantly impact metabolism.

Also, the stress that the body is being subjected to while the state of fasting is prolonged may contribute to other health-threatening effects.

Skipping Breakfast as Risk Factor for Heart Illnesses

These findings were derived from a study conducted at Harvard, which examined the health records of about 27,000 male health care professionals, with ages between 45-82 years old. The health effects of their lifestyle habits were studied for a period of 16 years.

Researchers found out that those men who have the habit of not eating breakfast were 27%, more at risk of having a heart attack and coronary heart disease. The study also revealed that skipping breakfast correlated with an individual's being smokers, alcohol drinkers and living a sedentary lifestyle.

The study's author, Leah Cahill, further explained that one of the reasons why skipping breakfast is linked to heart diseases is because prolonged fasting can increase an individual's systolic and diastolic blood pressure.

In addition, prolonged fasting also increases the levels of triglycerides, LDL cholesterol, blood concentrations of insulin and free-fatty acids while lowering the levels of HDL or good cholesterol. Unfortunately, all these have been deemed by experts as risk factors for major heart diseases.

Skipping Breakfast Means More Stress On the Body

Leah Cahill explained that fasting places stress on the human body. Therefore, if a person has the habit of prolonging the fasting period by skipping breakfast they will exacerbate the stress levels that their body is already subjected to.

While a person is sleeping, they are in fasting mode, and skipping places even more stress on the body. If done on a regular basis it will contribute to the cumulative effects of stress.

In turn, an individual will be more likely to suffer from hypercholesterolemia, blood pressure problems and insulin resistance which can also result to heart diseases.

Breakfast resets your body's metabolism which can vary depending on how, what and when you feed your body. Eating a healthy breakfast will help to maintain healthy levels of insulin, blood pressure, hormones and cholesterol.

Conclusion

As far as improving your own health in any area, there are two big steps – education, or gaining knowledge, and application of that knowledge. Truly, when it comes to health, knowledge is power!

This publication has presented some of the ways that heart health can be improved, and why it so important to do so. The implementation is up to you.

Too many of us are consciously aware of the need to make better choices for our health, but at the same time think "it can't happen to me", which is right until it does, and then it often too late.

Heart disease can be very unforgiving, and final. It is not the sort of thing anyone should put off until later; it is never too soon to make positive choices.

These choices do not selfishly affect only you, but also your loved ones, family and friends. There is no doubt that you should 'take care of your heart, it's the only one you've got!'