

RICHARD A. WYCKOFF, PHD
ADULT & GERIATRIC
BEHAVIORAL MEDICINE
&
GENERAL PSYCHOLOGY

Dr. Wyckoff accepts most insurance plans
including Premera, Regence, and Medicare.

Office Locations & Contact Information

Woodinville City Center
17311 135th Avenue NE
Building B • Suite 800
Woodinville, WA 98072
Telephone: 425-765-0475
Info@DrWyckoff.org

Bellevue / Redmond
Unigard Park
2018 156th Avenue NE
Centris Building - Suite 257
Bellevue, WA 98007
Telephone: 425-765-0475
Info@DrWyckoff.org

Dr. Richard A. Wyckoff
17311 135th Ave. NE B800
Woodinville, WA 98072

HYPERTENSION & BEHAVIORAL MEDICINE



DR. RICHARD A. WYCKOFF
& ASSOCIATES

BLOOD PRESSURE

When your heart pumps blood through your body, it creates pressure in your arteries. Ideally this pressure should be slightly lower than 120/80. The first number (120) is the pressure created by the beating of the heart or the systolic blood pressure. The second number (80) is the pressure between beats or the diastolic blood pressure. Both numbers refer to millimeters of mercury displaced by old fashioned blood pressure measurement devices. Chronic high blood pressure is a major risk factor for heart attacks, stroke, kidney or heart failure.

We don't really know what causes high blood pressure but 25% of all adults have it and may not even know it because there are generally no symptoms.

Doctors will usually prescribe lifestyle changes like increased exercise, weight loss and dietary restriction. Medications are also prescribed to help reduce blood pressure. Many people are not compliant with medications because of undesired side effects.

Fortunately there is now an approach that can lower your blood pressure that is easy to learn, painless and totally natural. Many people are able to learn to reduce or even eliminate the need for medication and maintain healthy blood pressure at any age. This is accomplished with a simple breathing exercise and a form of biofeedback called **heart rate variability feedback**.

WHAT IS BIOFEEDBACK?

Biofeedback is the process of learning to control biological functions. This is done by watching and listening to the function changing moment by moment. A medical instrument measures the biological function and converts that information to a signal that can be understood such as a meter or graph or sound. Some biofeedback changes the signal into a computer game to make the process more enjoyable.

Over time the person learns to control the biological function even when not being monitored by the medical instrument. This has been used to treat and manage many medical concerns successfully.

High blood pressure is now being added to the list of conditions and diseases that can be effectively managed with biofeedback and other medical interventions.

HEART RATE VARIABILITY

How this discovery occurred is an interesting story in modern medicine. It involves what happens to our heart rate when we breathe in and out very slowly. Scientists studying the heart noticed that when we inhale our heart rate goes up slightly and when we exhale it goes down.

They later learned that each of us has a special rate of breathing which when coordinated or synchronized with our heart beat causes blood pressure to lower. They called this the **resonant frequency** and it is usually around six breaths per minute. Many studies confirmed that breathing at this resonant frequency causes the aorta to stretch and relax in a way that regulated blood pressure through a process they called the baroreflex.

Later they studied the effect of training this breathing strategy to people with high blood pressure and found that it did produce lower blood pressure in many people when they practiced it regularly after learning it in the biofeedback laboratory. We also have learned that this causes relaxation of the airways and eases asthma symptoms as well as reducing high blood pressure. This same form of biofeedback may even help reduce depression in people who have had heart attacks.

WHAT IS IT LIKE?

Heart rate variability feedback uses a special elastic belt you wear around your belly. The belt measures respirations per minute by sending a signal to the biofeedback computer as it expands and contracts with your breathing. Sensors attached to your wrists and ankle with elastic bands measure your heart rhythm just as when you have an electrocardiogram.

After these are set up, you lie back in a comfortable chair and watch a color monitor. What you see is a yellow line going up and down across the screen. This is a pacer set by the doctor to find your personal resonant frequency.

You are instructed to breath in and out as the yellow line goes up and down. Soon you see a blue line which is your actual breathing pattern following the yellow pacer signal. A red line shows your heart rate variability and it soon starts going up and down in synchrony with your breathing.

As the Doctor slows the yellow line gradually, you discover your resonant frequency. This feels really good. You feel relaxed and pleasant all over like you do when you are waking up from a deep satisfying sleep.

The session lasts about 45-60 minutes. Most people require six to ten training sessions. As you learn, you are asked to practice at home on a daily basis. Many people like to practice as part of their daily work breaks. Instead of a coffee break they take a five minute breathing vacation. Many people lower their blood pressure 10-15% and some are able to reduce or even eliminate medication with their doctor's approval.

WHAT IS BEHAVIORAL MEDICINE?

Behavioral Medicine is the art and science of helping you to take control of your health and well being through learning how lifestyle, your emotions and stress management impact your health and quality of life. This is a specialty in the practice of psychology, social work and medicine.

WHAT ABOUT INSURANCE?

Many insurance companies cover new procedures as part of a code called health and behavior interventions. Call your insurance company and ask if they cover the health and behavior intervention codes "16151" through "16154." These codes allow a licensed health provider in Psychology to treat certain medical conditions without requiring a psychiatric diagnosis. Helping you lower your blood pressure through HRV biofeedback, relaxation training and lifestyle support is one example of why these codes were developed.

CALL DR. WYCKOFF

If you have any questions, call for a free telephone consultation.

425 - 765- 0475