



# BETTERSAFE

WELCOA'S ONLINE BULLETIN FOR YOUR FAMILY'S SAFETY

## Colorectal Cancer

### THE IMPORTANCE OF SCREENINGS

The term “Colorectal cancer” refers to where a particular cancer originates—either in the colon or rectum—and is a combination of the two words because the cancers present very similarly.

#### POLYPS

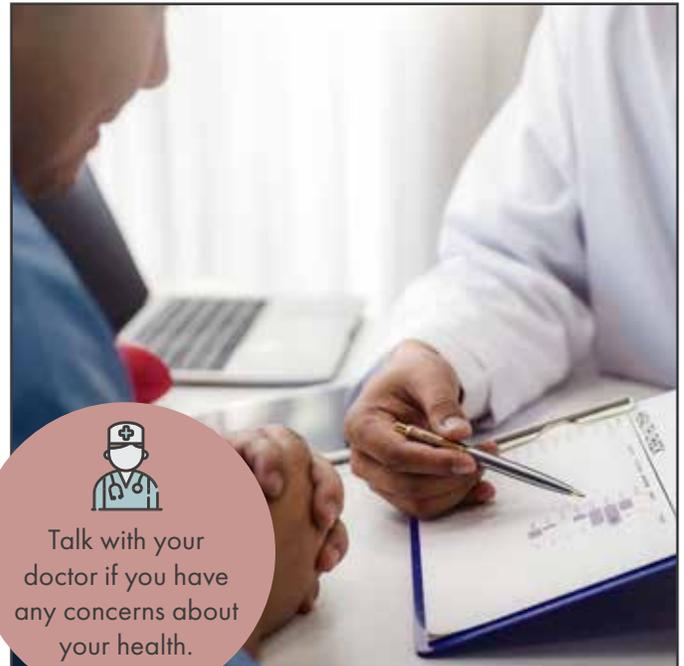
Most cases of colorectal cancer begin with clumps of cells, called polyps, forming on the inside lining of the colon or rectum. These are not always cancerous but some of them do turn into cancer cells, depending on which type of polyp it is. There are two main types of polyps:

- » Adenomatous polyps, or Adenomas: these types of polyps are considered pre-cancerous because they do often change into cancer.
- » Hyperplastic polyps and inflammatory polyps: these are generally not cancerous and are much more common.

Other risk factors making a polyp more concerning for cancer are:

- » Finding more than 2 polyps
- » Finding a polyp larger than 1 centimeter
- » Finding dysplasia within the polyp once it is removed to be tested for cancer. Dysplasia is considered pre-cancerous; the cells are not true cancer cells yet but they are abnormal.

Once a polyp becomes cancerous, it grows into the



Talk with your doctor if you have any concerns about your health.

many layers of the wall of the colon or rectum. From there, it grows into the blood vessels or lymph vessels, and this is when it can spread (or metastasize) to other parts of the body.

#### SIGNS AND SYMPTOMS

Colorectal cancer does not show signs and symptoms early on, unfortunately. Sometimes the first sign of trouble is having a low red blood cell count (anemia) when routine blood work is done. This is because colorectal cancer can cause bleeding in the digestive tract. Sometimes this is visible in the stool but not always.

If signs and symptoms do appear, they may be:

- » Blood in the stool. This may look like fresh blood or just make the stool look much darker.
- » Rectal bleeding
- » Cramping or abdominal pain
- » Unintended weight loss
- » Fatigue and weakness
- » A change in stool—either diarrhea or constipation that carries on longer than a few days.
- » Pressure as if you need to have a bowel movement even if you don't or already had one.

## RISK FACTORS

Scientists aren't sure what causes colorectal cancer, but they have identified some risk factors:

- » Age >50 years old
- » Chronic inflammatory diseases, such as Crohn's or ulcerative colitis
- » Having had colon polyps removed already
- » Family history
- » African-Americans
- » Diabetes
- » Smoking
- » Heavy alcohol use
- » Obesity
- » Radiation therapy used to treat cancer previously
- » Lack of physical activity
- » Possibly a low-fiber, high-fat diet

## PREVENTION

Colorectal cancer cannot completely be prevented. But a lot of those risk factors are in your control! Clean up your diet, try to exercise at least 30 minutes per day, and avoid bad habits. As a general rule, these things help prevent most health problems down the road.

Also, colorectal cancer screening begins at the age of

50 for most people. Screening tests are great for those who don't show symptoms of anything, but can catch problems as early as possible. If you have a family history of colon cancer or are considered high-risk, your doctor will recommend you start screenings sooner.

## TREATMENT

Treatment depends on how advanced the colorectal cancer is when it is found. There are medications, radiation, chemotherapy, and a multitude of surgeries available as options. Sometimes just polyps or lymph nodes need to be removed, other times part of the colon might need to be removed. There are unique options for each unique individual.

The Centers for Disease Control and Prevention (CDC) has a Colorectal Cancer Control Program, with the goal of decreasing the number of people diagnosed with colorectal cancer and moreover, decreasing deaths related to this type of cancer. They provide funding to state health departments and universities to increase the amount of people getting screened and they have numerous research studies in progress.

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## QUICK FACTS:

- » Colorectal cancer is the 3rd most common cancer among both men and women.
- » It is the 3rd leading cause of cancer-related deaths in the U.S.
- » 90% of those with colorectal cancer are 50 years old or older.
- » Regular screenings should be done between the ages of 50 and 75 years old.
- » Screening leads to finding it early. Finding and treating it early often leads to a cure.



# DAY IN DAY OUT

WELCOA'S ONLINE BULLETIN FOR YOUR LIFESTYLE

## World Sleep Day

As adults, most of us welcome sleeping with open arms. Long gone are the days where we fight off naps or wish we could stay up all night with our friends. Instead, we wish our bosses would implement mandatory napping hour each day at work.

### HOW IS SLEEP IMPORTANT?

Sleeping is crucial to our health—physically and mentally. Our brains are recharging during sleep and for babies, children, and teens, sleep supports growth and development.

A good night's sleep improves learning and focus, and helps with decision making and creativity. Not getting enough sleep actually alters activity in parts of the brain making things more difficult, such as problem-solving and controlling your emotions. Sleep deficiency has been linked to depression and suicidal thoughts. In children and teens, sleep deficiency can lead to stress, lower grades, mood swings, and not getting along well with others.

Our physical well-being depends heavily on getting enough sleep. Fertility and puberty rely on good sleep, as well as our immune system which prevents us from getting sick too often. Safety is also compromised if we don't get enough sleep, affecting our job performance, reaction time, and ability to drive.

Sleep deficiency is linked to:

- » Heart disease
- » Diabetes
- » Obesity



Talk with your doctor if you have any concerns about your health.

- » Kidney disease
- » High blood pressure
- » Stroke

### THE SLEEP CYCLE

The circadian rhythm is a 24 hour cycle that our internal body clock follows. There are many hormones that help our body follow that important rhythm.

- » Adenosine: a hormone that rises throughout the day that eventually signals your body to go to sleep as the levels peak. Adenosine is broken down during sleep to start the cycle over.
- » Melatonin: your body releases this hormone when it starts getting dark and begins making you drowsy.
- » Cortisol: this hormone is released as the sun comes up, preparing your body to wake up.

Other factors affect how in sync our bodies remain with our internal clock, such as artificial light. Our body clock is constantly receiving cues from the environment and reacts strongly to light and darkness. Artificial light, such as television or phones, can disrupt our natural transition to sleep each night.

Our work schedules can also affect our sleep cycle, especially for those who work overnight. Special measures are needed to help your body find its circadian rhythm, such as getting blackout curtains for your bedroom during the day.

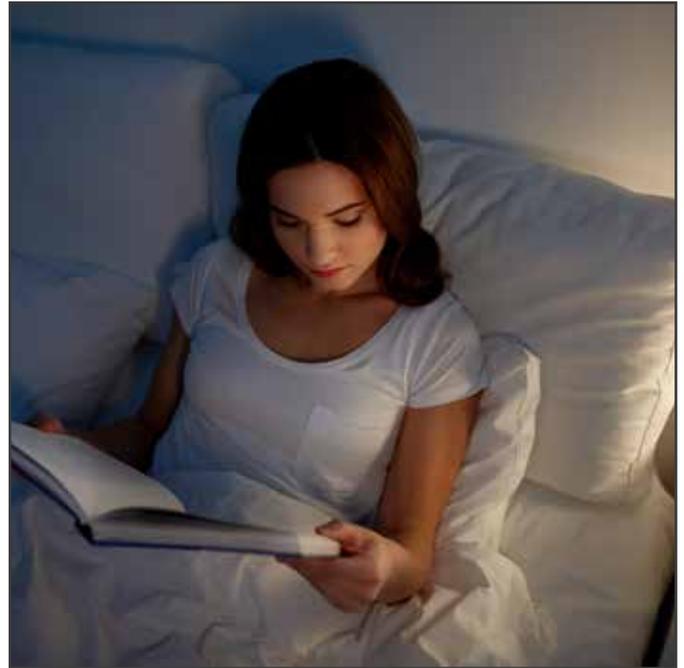
Those with chronic health issues often struggle to get a good night's sleep. These conditions include but are not limited to heart disease, diabetes, sleep apnea, attention-deficit hyperactivity disorder (ADHD), stress, and anxiety.

The rhythm of the body clock changes with age, as well. As babies and children are growing, they need more sleep. Studies have shown that teenagers tend to go to sleep later and wake up later, because melatonin levels peak later in the 24 hour cycle.

## IMPROVE YOUR SLEEP HABITS

There are steps we can take to improve our sleep patterns, resulting in improvements in health, productivity, and overall happiness.

- » Go to bed and wake up at the same time each day, even on the weekends. Try to keep changes to your schedule within one hour.
- » Allow yourself one hour before bedtime to unwind and relax, avoiding exercise and artificial light.
- » Avoid heavy meals within a couple hours of bedtime.
- » Avoid alcoholic drinks and nicotine before bedtime.
- » Avoid consuming caffeine after 12 pm. Effects of caffeine can last up to 8 hours.
- » Keep your bedroom dark, cool, and quiet.
- » Try relaxation techniques before bed, such as a hot bath.



- » Spend time outside every day if you can; be physically active.
- » If you nap, limit it to 20 minutes and try to nap earlier in the afternoon as opposed to too close to bedtime.

If you're concerned you aren't getting quality sleep or enough sleep, please talk to your doctor about options. Keep a sleep diary for a couple of weeks, noting when you go to bed, how often you wake up, how well you're sleeping, how rested you feel, etc. Include naps, caffeine and alcohol use, and medications you take.

Sleeping is one of the basic human needs and it is essential for living a healthy life. Take this opportunity to become aware of your own sleeping habits and take the necessary steps to improve the quality of your life.



# TAKECHARGE

WELCOA'S SELF-CARE BULLETIN

## Multiple Sclerosis

### MYELIN SHEATH BREAKDOWN

Myelin is a mixture of proteins and phospholipids that create a protective coating on nerve fibers along our brain and spinal cord. This protective coating is referred to as a myelin sheath. Not only does the myelin sheath offer protection but it also enhances the transmission of electrical impulses.

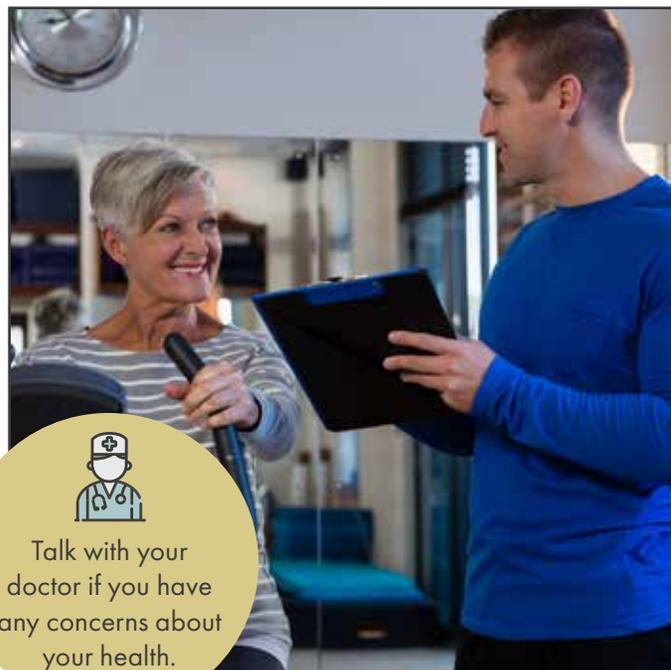
Multiple sclerosis (MS) is an autoimmune disease that causes your immune system to attack and damage the myelin sheath. Once exposed, the nerves underneath get damaged, leaving scars on your nerves which is known as sclerosis. This disrupts the communication between the brain and the rest of the body leading to multiple complications and dysfunction.

#### WHAT CAUSES MULTIPLE SCLEROSIS?

As with many autoimmune disorders, scientists are not sure what causes some of us to get multiple sclerosis. Genetics and environment play a role, but beyond that, the knowledge is limited.

Known risk factors seem to be:

- » Women, who are 2-3 times more likely to get MS over men.
- » It can occur at any age but is most likely to affect those ranging from 20-50 years old.
- » Caucasians are at highest risk of developing MS.
- » Family history.
- » Low levels of Vitamin D and less sun-exposure.



Talk with your doctor if you have any concerns about your health.

- » Smoking.
- » Those who already suffer from type 1 diabetes, thyroid disease, or irritable bowel disease.

Types of multiple sclerosis

- » **Primary-progressive MS** affects the fewest number of people, but does not have any relapses. A relapse is considered a flare-up of symptoms. In primary-progressive MS, the onset is gradual and steadily progresses in a more linear pattern.
- » **Relapsing-remitting MS** affects most people diagnosed with MS. They experience new symptoms or have a relapse of symptoms, then they improve either partially or completely. These quiet moments with no symptoms are called remissions. Remission can last months or years for some people before they have another relapse.

- » **Secondary-progressive MS** affects 60-70% of those with relapsing-remitting MS. This is when the disease begins to progress more regularly. They may still have episodes of relapse and remission, but they are less likely and less frequent.

## SIGNS AND SYMPTOMS OF MULTIPLE SCLEROSIS

Signs and symptoms vary for each person because it depends on which nerves have been damaged, how severe the damage is, and the progression of the disease. Some people may go for years without noticing any symptoms, where other people are unable to walk almost immediately.

Symptoms often affect movement and vision. More specifically, you may experience:

- » Numbness or weakness in legs, arms, or trunk. It typically affects one side of the body first.
- » Tingling or electric-shock sensations
- » Unsteady gait (way of walking)
- » Tremor or lack of coordination
- » Blurry vision
- » Double vision
- » Loss of vision. Again, this usually affects one eye first.
- » Slurred speech
- » Dizziness
- » Bowel and bladder dysfunction

Complications from multiple sclerosis:

- » Paralysis, usually in the legs
- » Muscle stiffness or spasms
- » Forgetfulness
- » Mood swings
- » Depression
- » Seizures or epilepsy

## TREATMENT FOR MULTIPLE SCLEROSIS

There is no cure for MS. Treatment focuses on slowing the progression of the disease and managing symptoms. There are numerous medications on the market that help reduce relapses. These can be discussed in detail with your doctor.

Other medications may be needed to help treat side effects or complications from MS, such as antidepressants or muscle relaxers. Again, speak with your doctor for further information.

Physical therapy or occupational therapy may be helpful in using assistive devices to perform your normal activities or strengthen your legs if you're struggling to walk.

Lifestyle tips that help lessen MS symptoms include getting enough sleep, eating a well-balanced diet, and managing stress. If symptoms are not too severe, it's a great idea to try some light exercise such as swimming, stationary bicycling, or yoga. Symptoms worsen for some people if their body gets too warm, so keep that in mind as you exercise, or try a cooling towel or vest.

A diagnosis of multiple sclerosis is a very tough one. Keep your friends and family close, join support groups, discuss your feelings with your doctor and loved ones. There are many options available to increase your abilities, especially early in the disease process. Clinical research and studies are constantly being done to improve the future for those suffering from MS.



# TO YOUR HEALTH

WELCOA'S ONLINE GENERAL WELLNESS BULLETIN

## Down Syndrome

### CELEBRATING AN EXTRA CHROMOSOME

Down syndrome is a birth defect that affects 1 out of every 700 babies. It is the most commonly diagnosed chromosomal abnormality in the United States. In short, Down syndrome is a condition where a baby has an extra chromosome. There are some screening and diagnostic tests that can tell a mother while she is pregnant that her baby may have or definitely has Down syndrome. However, some women do not know until after their baby is born.

#### MORE ABOUT CHROMOSOMES

Chromosomes are small groups of genes in the body, responsible for how a baby's body forms, grows, and functions, both inside the womb and once born. A baby is typically born with 46 chromosomes, 23 from each parent. Babies with Down syndrome have a partial or full extra copy of chromosome number 21. This changes how the baby's body and brain develops, causing both physical and mental challenges.

#### TYPES OF DOWN SYNDROME

There are three types of Down syndrome, all having similar behavioral and physical characteristics.

**Mosaic Down syndrome:** This affects 2% of those with Down syndrome. While some of their cells have the extra copy of chromosome 21, other cells do not. For this reason, their challenges may be less noticeable.

**Translocation Down syndrome:** This affects 3% of those with Down syndrome. An extra part or whole part of



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chromosome 21 is present, but it is attached in a different place.

**Trisomy 21:** This covers the remaining 95% of those with Down syndrome. Each cell in the body has the extra chromosome.

#### SIGNS AND SYMPTOMS

People with Down syndrome often have similar characteristics but their abilities vary greatly. Some of those characteristics may include:

- » Slower to speak than others
- » Lower IQ
- » Flattened bridge of the nose
- » Short neck
- » Small ears
- » Almond shaped eyes that slant upward

- » Small hands and feet
- » Large tongue
- » Poor muscle tone
- » Loose joints
- » Shorter stature
- » Palmer crease (a single line/crease across the palm of the hand)

### ADDITIONAL HEALTH CONCERNS

Some babies born with Down syndrome also have other congenital birth defects or health problems, either as a child or as they age. Some of the common challenges they face are:

- » Heart defects
- » Ear infections
- » Hearing loss
- » Eye diseases
- » Obstructive sleep apnea (breathing temporarily stops while sleeping)
- » Obesity
- » Gastrointestinal disorders
- » Autoimmune disorders
- » Dementia

### RISK FACTORS

Although we know the extra chromosome is the cause of Down syndrome, we don't know why certain babies develop the extra chromosome. A mother's age at pregnancy is a known risk factor - women over 35 years old are more likely to have a baby born with Down syndrome. Researchers do not believe any environmental or behavioral factors play a role.

Most of the time, Down syndrome is not inherited. But there is a gene that parents can pass down that increases the chances of Translocation Down syndrome, as discussed above. Also, having one child with Down

syndrome does increase the chances that the parents will have another child with it. A genetic counselor is a great resource for discussing this possibility or likelihood.

### TREATMENT

- » Down syndrome is a lifelong condition and there is no treatment to 'cure' it. But there are many options available to help those with Down syndrome reach their full potential. Speech, physical, and occupational therapy are extremely helpful in improving physical and intellectual abilities.
- » Specialty doctors may be involved, depending on other health problems that may be present.
- » Those with Down syndrome are often included in regular classrooms but they may also need special education classes. It is important to find teachers that you trust.
- » There are state and federal programs available for children and adults with disabilities.
- » It is very important for people with Down syndrome to get routine medical care. Early intervention is key to help them maintain a healthy lifestyle.

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### INTERESTING FACT

In 1866, an English physician named John Langdon Down, published an accurate description of the condition now known as Down syndrome.

It is important to note that it is 'Down syndrome,' not 'Down's syndrome'. Adding the apostrophe adds ownership to the syndrome, as if Dr. John Langdon Down had the condition himself, which he did not. The condition is simply named after him.