

# H-3 Monthly Newsletter

#### November:

- Diabetes Awareness Month
- Lung Cancer Awareness Month
- Influenza Vaccinations
- Veterans' Day, November 11
- World Kindness Day, November 13
- World Diabetes Day, November 14
- World Peace Day, November 17
- Thanksgiving Holiday, November 25



The main idea from these education topics are prevention. Prevention from diabetes complications, prevention of lung cancer and prevention from influenza complications. Remember, God is our protector - as it says in Psalm 119:114, "You are my hiding place and my shield; I hope in your word."

> In His Service, H-3 Ministry



# MAJOR COMPLICATIONS OF DIABETES

# Microvascular

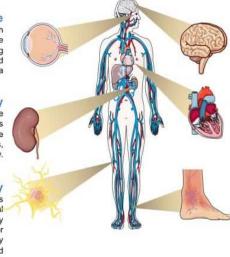
Eye High blood glucose and high blood pressure can damage eye blood vessels, causing retinopathy, cataracts and glaucoma

#### Kidney

High blood pressure damages small blood vessels and excess blood glucose overworks the kidneys, resulting in nephropathy.

#### Neuropathy

Hyperglycemia damages nerves in the peripheral nervous system. This may result in pain and/or numbness. Feet wounds may go undetected, get infected and lead to gangrene.



# Macrovascular

#### Brain

Increased risk of stroke and cerebrovascular disease, including transient ischemic attack, cognitive impairment, etc.

#### Heart

High blood pressure and insulin resistance increase risk of coronary heart disease

#### Extremities

Peripheral vascular disease results from narrowing of blood vessels increasing the risk for reduced or lack of blood flow in legs. Feet wounds are likely to heal slowly contributing to gangrene and other complications.

## DIABETES COMPLICATIONS

Numerous factors, in addition to diabetes-associated complications, contribute to the impact of diabetes on quality of life and health care costs.

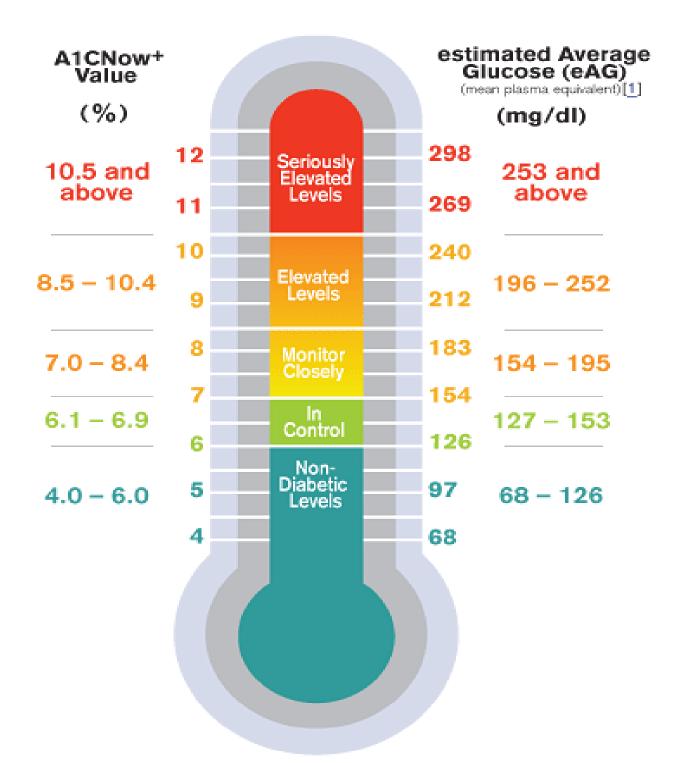
Diabetes is associated with a high prevalence of depression and adversely impacts employment, absenteeism, and work productivity.

Myocardial infarction (MI), aka "Heart attack", stroke, amputations, and end-stage kidney disease ending up in dialysis.

Patients with diabetes are at increased risk for vision loss, related both to refractive errors (correctable visual impairment), cataracts and glaucoma (which are more prevalent in persons with diabetes).

Patients may also have these complications, either present at diagnosis or may develop over time, include hearing impairment, sleep apnea, fatty liver disease, periodontal disease, cognitive impairment, depression, eating disorders, anxiety, and fractures.

There is also increased risk of death associated specifically with cancers of the liver, pancreas, ovary, colorectum, lung, bladder, and breast.

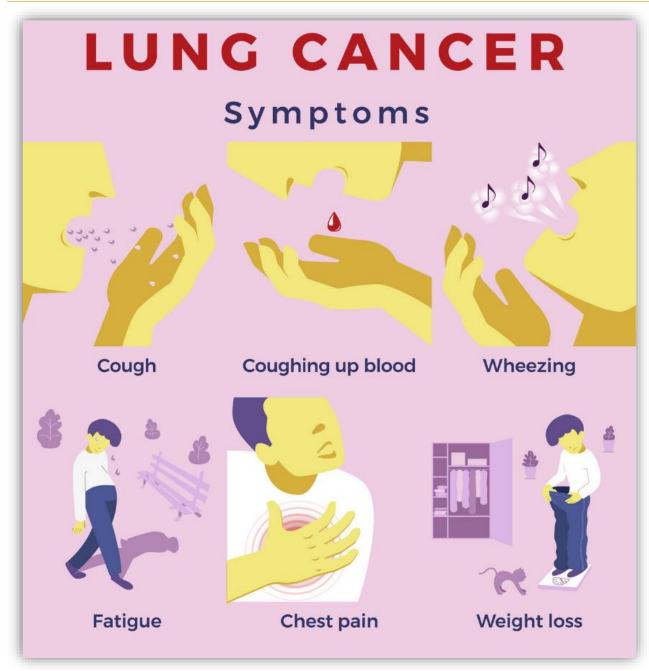


**Blood glucose monitoring and target A1C** – All patients with diabetes mellitus who use insulin and some patients who take other glucose-lowering medications that can cause hypoglycemia (low blood sugar) should self-monitor their glucose concentrations to help maintain safe, target-driven glucose control.

A1c goal is 7 or below- in order to avoid above complications, especially heart disease/heart attack and atherosclerosis in addition to lowering risk of above mentioned cancers.

# LUNG CANCER

### COMMON SYMPTOMS OF LUNG CANCER CAN INCLUDE:



- Cough
- Trouble breathing, or wheezing
- Spitting or coughing up blood
- Chest pain that can be dull, sharp, or stabbing
- Hoarse voice

• Headache and swelling of the face, arms, or neck

If the cancer is growing in the top part of the lungs, it can also cause:

- Pain in the arm, shoulder, or neck
- Droopy eyelid or blurred vision
- Weakness of the hand muscles

All of these symptoms can also be caused by conditions that are not lung cancer. But if you have these symptoms, you should let your doctor or nurse know.

#### IS THERE A TEST FOR LUNG CANCER?

Yes. If your doctor suspects that you have lung cancer, they will do an exam and a chest X-ray. If the chest X-ray shows a spot that looks like it could be cancer, they will probably follow up with other tests. These can include:

- Blood tests
- CT or PET scan These imaging tests create pictures of the inside of your body. They can show abnormal growths.
- Biopsy A doctor will remove a small sample of tissue from the lung. They will look at the sample under a microscope to see if it has cancer.

#### HOW IS LUNG CANCER TREATED?

Most people with lung cancer have 1 or more of the following treatments:

- Surgery Lung cancer can sometimes be treated with surgery to remove the cancer.
- Radiation therapy Radiation kills cancer cells.
- **Chemotherapy** Chemotherapy is the medical term for medicines that kills cancer cells or stop them from growing.
- Targeted therapy Some medicines work only for cancers that have certain characteristics. Your doctor might test your tumor to see if you have a kind of lung cancer that would respond to these medicines.
- Immunotherapy This is the term doctors use for medicines that work with the body's infectionfighting system (the "immune system") to stop cancer growth.

People with lung cancer also receive treatment for any symptoms they have. For example, if you have trouble breathing because fluid has collected around your lungs, your doctor can drain the fluid to help you breathe more easily.

#### CAN LUNG CANCER BE PREVENTED?

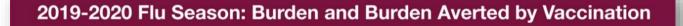
Maybe. The best way to avoid getting lung cancer is to **not smoke**. People who smoke have a much higher chance than those who don't smoke of getting lung cancer. If you smoke, you can reduce your chance of getting lung cancer by quitting smoking.

# INFLUENZA VACCINE



National Influenza Vaccination Week (NIVW) is an annual observance in December to remind everyone 6 months and older that there's still time to get vaccinated against flu to be protected during the upcoming season. Vaccination is particularly important for people who are most vulnerable to developing serious flu complications, including people with certain chronic conditions such as asthma, diabetes and heart disease. In fact, last flu season 9 out of 10 adults hospitalized for flu had at least one reported underlying medical condition.

Influenza is an acute respiratory illness caused by influenza A or B viruses. It occurs in epidemics nearly every year, mainly during the winter season in temperate climates. Influenza viruses change their antigenic characteristics frequently, and their subsequent spread depends upon the susceptibility of the population to viruses with novel antigens. Annual influenza vaccination is an important public health measure for preventing influenza infection



# During the 2019-2020 season, CDC estimates flu caused:







flu deaths

It could have been even worse without flu vaccines.

Nearly 52% of the U.S. population 6 months and older got a flu vaccine during the 2019-2020 flu season, and this prevented an estimated:



Imagine the impact if more Americans chose to get a flu vaccine. Many more flu illnesses, flu hospitalizations, and flu deaths could be prevented. The estimates for the 2019-2020 influenza season are preliminary pending additional data from the season.

https://www.cdc.gov/flu/about/burden/index.html



get vaccinated

This year that message is more important than ever, especially given the possibility that both flu viruses and the virus that causes COVID-19 will spread this winter. This could place a tremendous burden on the health care system and result in many more illnesses, hospitalizations and deaths than during a regular flu season — especially among people managing chronic conditions because many of them also are at higher risk from COVID-19. The good news is that there is a flu vaccine that is tried and true; proven to reduce the risk of flu illness, hospitalizations and death.

Individuals who are at increased risk for influenza complications include those at the extremes of age, pregnant women, immunocompromised hosts, those with certain chronic diseases, and others; the groups at high risk for influenza complications are:

- Asthma
- Neurologic and neurodevelopmental conditions (including disorders of the brain, spinal cord, and peripheral nerve and muscle such as cerebral palsy, epilepsy, stroke, intellectual disability, moderate-to-severe developmental delay, muscular dystrophy, and spinal cord injury)
- Chronic lung disease (eg, chronic obstructive pulmonary disease, cystic fibrosis)
- Heart disease (eg, congenital heart disease, congestive heart failure, coronary artery disease)
- Blood disorders (eg, sickle cell disease)
- Endocrine disorders (eg, diabetes mellitus)
- Kidney disorders
- Liver disorders
- Metabolic disorders (eg, inherited metabolic disorders and mitochondrial disorders)
- Weakened immune system due to disease (eg, HIV, AIDS, cancer) or medication (eg, chemotherapy or radiation therapy, chronic glucocorticoids)
- Children <19 years of age who are receiving long-term aspirin therapy
- People with Class III obesity (body mass index [BMI]  $\geq$ 40 or  $\geq$ 140% of the 95th percentile value)

For individuals  $\geq$ 65 years of age, the high-dose IIV (Fluzone High-Dose) where available, rather than a standard-dose IIV, several studies have shown that the high-dose vaccine is more effective than the standard-dose vaccine in older adults (including a mortality benefit).

# WORLD DIABETES DAY 2021-23

### THEME - "ACCESS TO DIABETES CARE"

- Millions of people with diabetes around the world do not have access to diabetic care.
- People with diabetes require ongoing care and support to manage their condition and avoid complications.

We cannot wait any longer for:

- Medicine, technologies, support and care to be made available to all people with diabetes that require them.
- Governments to increase investment in diabetes care and prevention.



### FACTS & FIGURES

The International Diabetes Federation (IDF) Diabetes Atlas provides the latest figures, information and projections on the global impact of diabetes.

### DIABETES

- 463 million adults (1-in-11) were living with diabetes in 2019 The number of people living with diabetes is expected rise to 578 million by 2030.
- > 1 in 2 adults with diabetes remain undiagnosed (232 million). The majority have type 2 diabetes.
- S More than 3 in 4 people with diabetes live in low and middle-income countries.
- > 1 in 6 live births (20 million) are affected by high blood glucose (hyperglycaemia) in pregnancy.
- > Two-thirds of people with diabetes live in urban areas and three-quarters are of working age.
- > 1 in 5 people with diabetes (136 million) are above 65 years old.
- > Diabetes caused 4.2 million deaths in 2019.
- > Diabetes was responsible for at least \$760 billion in health expenditure in 2019 10% of the global total spent on healthcare.

# WORLD KINDNESS DAY

### Kindness is a CHOICE!



matter what you look like. World Kindness Day is a global day that promotes the importance of being kind to each other, to yourself, and to the world. The purpose of this day, celebrated on November 13 of each year, is to help everyone understand that compassion for others is what binds us all together.

### WHAT DOES KINDNESS LOOK LIKE?

It's being selfless, caring, compassionate, and unconditionally kind. Like love, it takes practice to understand and feel it. We share love with others through kind acts such as a smile, a nice word, an unexpected deed, or a planned surprise.

# 7 LIFE-CHANGING BENEFITS OF BEING KIND

### BEING KIND IS GOOD FOR YOU AND EVERYONE ELSE.

Science is finding more and more ways our mental and physical health impact each other. Here are a few science-backed benefits of being kind.

These are some benefits of kindness that you may have already predicted (or maybe not). But did you know that when you are kind, you boost your body's levels of serotonin production and lower inflammation?

#### 1. KINDNESS BOOSTS YOUR IMMUNE SYSTEM.

Oxytocin, our brain's feel-good hormone, reduces inflammation. Inflammation is linked to all kinds of diseases in the body, including diabetes, cancer, chronic pain, obesity, and migraines. Even a little kindness boosts our body's natural oxytocin levels. So don't wait for someone else to show kindness to you; you can boost your own oxytocin by being kind to others.

### 2. BEING KIND IS ALSO GOOD FOR YOUR HEART.

Oxytocin, which we now know is boosted by being kind, also expands blood vessels, which reduces blood pressure. That's why it's sometimes known as the cardioprotective hormone.

Just like damaging behaviors can be addictive, positive habits can be addictive, too. Once our body finds a source of oxytocin, it doesn't forget it. Kindness is one addictive habit you can start that will be appreciated by your heart, immune system, and more!

### 3. KINDNESS CAN REDUCE ANXIETY.

Social anxiety can feel debilitating or even paralyzing. Even as we try to learn social skills and the right way to make small talk, anxiety can jump in at the last minute with reasons why what we're about to say will be the wrong thing.

So we clam up.

Instead of thinking about how you feel, think about how someone else might be feeling and try to brighten their day. Let the knowledge that you're treating others the way you'd want to be treated calm your social fears. One way to let kind acts garner your self-confidence is to plan something out ahead of time that won't require you to think on the spot.

#### 4. BEING KIND HELPS YOU BUILD YOUR VILLAGE.

Kindness always comes back, just like other emotions and characteristics, like hate, love, friendliness, spite, maliciousness, humor, and generosity.

Kindness comes back in a way that helps you build a network of humans that all of us are bound to need at some point. It's the people who become our village. We all go through hard times when we don't feel like we're doing enough for the challenges around us. If you're lucky enough to have a strong network of friends, you're less likely to bear your burdens alone.

#### 5. KINDNESS GIVES YOU A SENSE OF CONTROL.

We instinctively feel resentful of people who push our buttons and cause us to lose our temper or our calm nature.

Whether we acknowledge it or not, we start to feel a loss of control or mental stability around these people. Deep down, we know nobody else should be able to control our mood. When we find the resolve to act with kindness, we gain the self-respect that comes from not letting other people rattle us.

Sometimes certain people put us in impossible psychological binds, and there's no right way to respond to these people. It's best to avoid these people but still continue being kind on your way out.

#### 6. KINDNESS GIVES YOU A BREAK.

One of the biggest problems with anxiety and stress is that they don't give our brains a break. When we focus on the joy we are bringing to someone else, we give our brains a much-needed break from figuring out our own problems. This is one of the amazing benefits of being kind.

This break is similar to the kind of brain break we gain from meditation, a good cardio session, a healthy sleep, or engaging in relaxation or art. We give the analytical, thinking, or "left" side of our brain a rest, and we instead engage the creative and feeling side of our brain. In doing this, we find that our consciousness is eased, and our "thinking" brain can operate with a little more ease.

By focusing on someone else's happiness, we forget about our problems for a while. And that alone is enough to give us a little boost. This is truly one of the "secret" benefits of being kind not many people realize.

### 7. KINDNESS IS WHAT WE ALL NEED.

We all need as much kindness as we can get. We all need to be extended grace for our shortcomings. We all need thoughtfulness in our times of need. And no matter how many friends we might have, we can always use another.

Be on the lookout for ways you can show a little kindness. And remember to notice and show gratitude when others do the same for you.

# 6 HEALTHY THANKSGIVING TIPS

The holidays are the hardest time of year to eat healthily. Luckily, a Thanksgiving turkey means you'll be eating lean white meat, which is a great start toward better eating. These six tips will help you enjoy your meal without increasing your cholesterol-or your waistline.



# HEALTHY THANKSGIVING TIPS: TOSS THE TURKEY SKIN

Here's a helpful and healthy Thanksgiving tip: As soon as you grab a slice of turkey, trim off the skin. Though delicious, the skin is very high in fat - and not the good kind. Toss the skin before you even start eating. If you leave it on your plate, you may eventually be tempted to nibble.

# HEALTHY THANKSGIVING TIPS: EAT BEFORE DINNER

This healthy Thanksgiving tip will best prepare you for the table! Don't deprive yourself before your Thanksgiving dinner. Eat a hearty breakfast and lunch complete with inbetween snacks throughout the day. If you show up at dinner starving, you'll be more likely to overeat and your body will have a harder time digesting the heavy meal.





### HEALTHY THANKSGIVING TIPS: EAT PLENTY OF VEGETABLES

Before reaching for turkey and potatoes, fill two-thirds of your plate with a rainbow of vegetables. Healthy holiday veggies will fill you up and keep you from indulging in unhealthy food.

#### HEALTHY THANKSGIVING TIPS: DRINK LOTS OF WATER

A quick festive season suggestion: Drink plenty of water before and during your meal! Not only does your mind often interpret thirst as hunger, but water will help your stomach stay full and keep you from overeating. Plus, you won't pack on any of the additional calories soft drinks and other beverages can add to your meal.





#### HEALTHY THANKSGIVING TIPS: LIMIT SWEETS

Our healthy holiday advice? Limit the sweets! Aim for a teaspoon or two of cranberry sauce instead of drowning your turkey in it. This yummy treat is high in sugar so you should eat it in moderation. When it comes to dessert, you don't have to avoid it altogether. If you've eaten a healthy meal, you can indulge yourself in a sliver of pie or small portion of ice cream. If you're still craving more, continue eating fruit to satisfy your sweet tooth in a healthier way.

#### HEALTHY THANKSGIVING TIPS: LEAVE THE DINNER TABLE AFTER EATING

The simplest pieces of healthy Thanksgiving advice? Once you're done eating, leave the table. The entire dinner party should move to another room to chat and spend time together. Hanging out around the table may tempt you to snack on some leftovers.



#### Resources:

https://inspirekindness.com/blog/kindness-101 7 Life-Changing Benefits of Being Kind - Graham E. Farless, DDS, PA (gsodentist.com) https://worlddiabetesday.org/about/theme www.uptodate.com www.cdc.gov