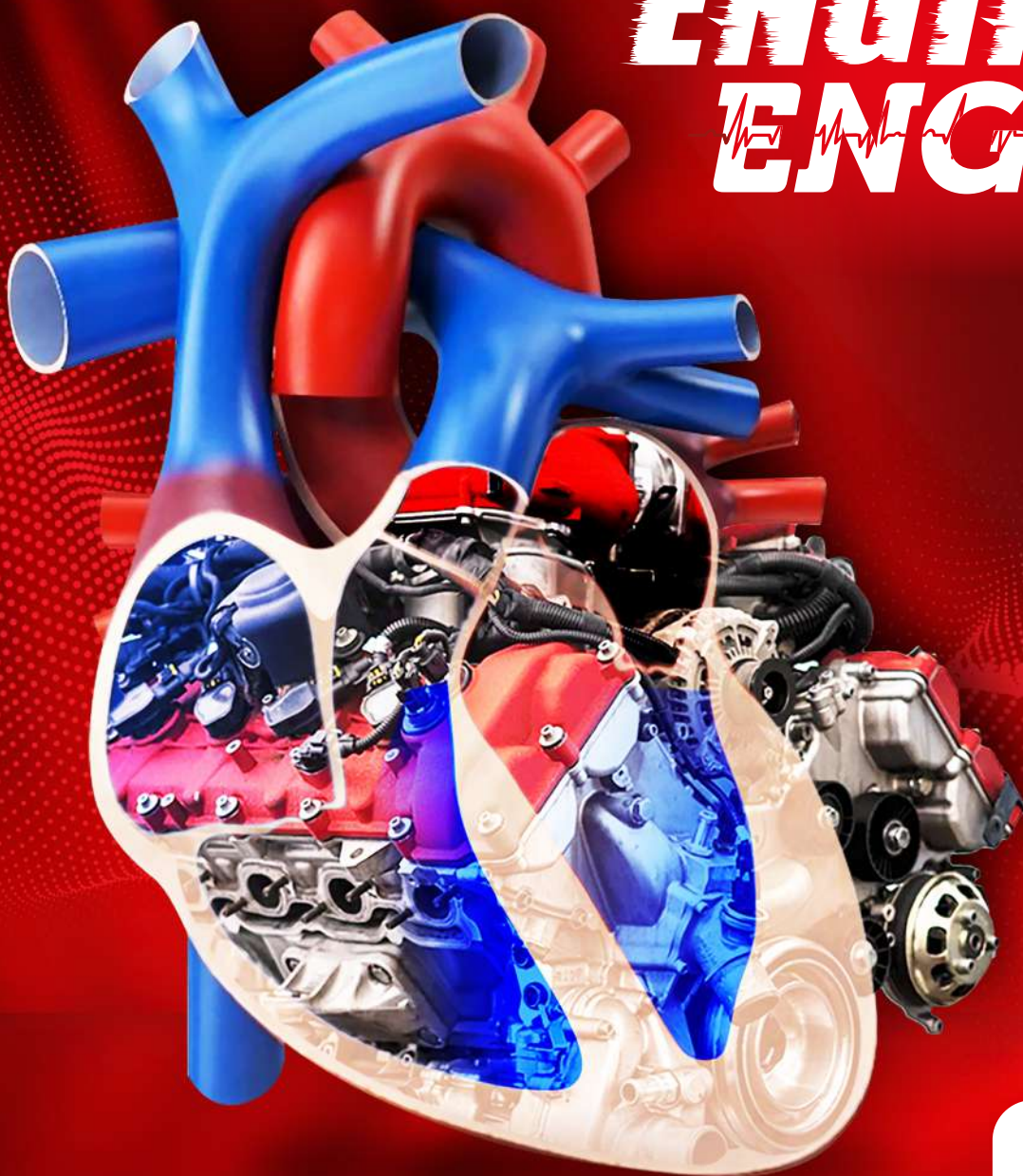


SPRING 2019

# DILWALK

FROM OUR HEART TO YOURS

## ENGINE<sup>2</sup> ENGINE *Edition*



**DIL Walk**  
*from our heart to yours*

[www.dilwalk.ca](http://www.dilwalk.ca)

The DIL Walk Foundation (DWF) is a Registered Charity dedicated to increasing the awareness of heart disease.

welcome from  
**Dilwalk**  
FOUNDATION

DIL Walk Foundation (DWF) recognizes that prevention is better than cure, and keeps consistent efforts to lower the risk of heart disease across all ages, beginning with children, to youth and the progression into adulthood. DIL Walk's principles are Wellness, Access, Linkages, and Knowledge (WALK). In order for these values to be met, the DIL Walk Foundation has partnered with the University of Calgary to establish a Heart Research Chair to concentrate efforts on heart research, the very first Research Chair of its kind globally. DWF holds education in high regard and demonstrates this by hosting various events throughout the year. In 2016, DIL Walk hosted Western Canada's largest CPR training.

DWF supports the CHARM Clinic, Alberta's only outpatient chronic disease clinic. The CHARM Clinic is a leader in heart failure care in the community that is actively engaged in ongoing clinical research, and 250 hospital stays have been prevented since its conception, adding up to an average of 2,500 "bed days" saved by the clinic alone. This unique initiative frees up a hospital bed for other Albertans, and uses your support to run as this is not a government-supported program. Through the support you have provided, the Foundation has been able to:

- Embrace the needs of over 25,000 people in Alberta, and numerous more around the world
- Saved the health care system over \$15 million
- Establish the very first Heart Research Chair of its kind in the World at the U of C
- Donate \$21,414 to the Mosaic PCN Refugee Clinic to help Canadian Refugees access medications
- Support the province's only community based chronic disease clinic – CHARM Clinic

The charitable nature of the DIL organization means that 100% of the funds go directly towards furthering medical and research necessities in our community. We thank you sincerely in advance for your support and ongoing commitment. From our heart to yours...

Kind Regards,



Raman Kapoor BSc, RD

President

DIL Walk Foundation



www.dilwalk.ca





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## OUR BACKGROUND

Mosaic Primary Care Network (PCN) is a group of family doctors and healthcare professionals that provide primary health care, in partnership with Alberta Health Services. Mosaic PCN member clinics are located in northeast and southeast Calgary.

Created in 2008 as part of the Primary Care Initiative of Alberta, Mosaic PCN's mission is "Better Health for All". Primary care is the care patients receive at their first point of contact with the health care system, usually provided by family physicians or allied health care providers. Patients receive care for their everyday health needs, including health promotion and prevention, diagnosis and treatment of health conditions. DIL Walk Magazine is a partnership between Mosaic PCN and DIL Walk Foundation that creates a publication aimed at educating patients of member physicians on new programs and initiatives available to them and their families.

The DIL Walk Foundation (DWF) is a volunteer run charity, and an acronym for Do It for Life (DIL). DWF focuses on Wellness, Access, Linkages and Knowledge. Since its inception, DIL Walk Foundation has touched the lives of over 25000 people through educational activities, and has saved the health care system over \$15 million (this number is a rough estimate, based on the number of DIL Walk participant seen by specialists, GP's, Dentists, and Allied Health professionals, not billed to AHS, over the past 7 years).

DWF is committed to increasing the awareness of heart disease across the life continuum. With a focus starting on children, where prevention begins, to youth and into adulthood, the Foundation focuses on primary care prevention strategies to help individuals, lower their risk of heart disease.

\* All articles reference available upon request

\* The information provided in this magazine is for informational purposes only and is not intended as a substitute for advice from your physician or other health care professional. You should consult with a healthcare professional before starting any diet, exercise or supplementation program, before taking any medication, or if you have or suspect you might have a health problem.



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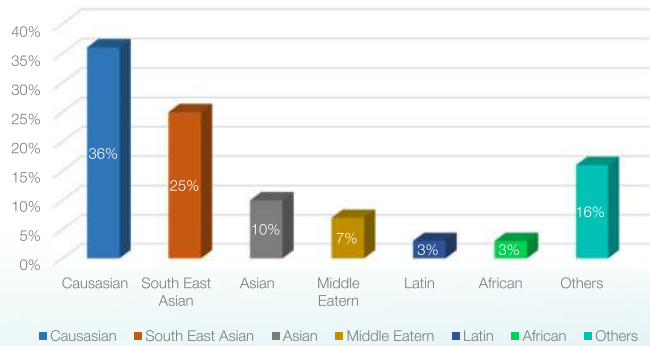
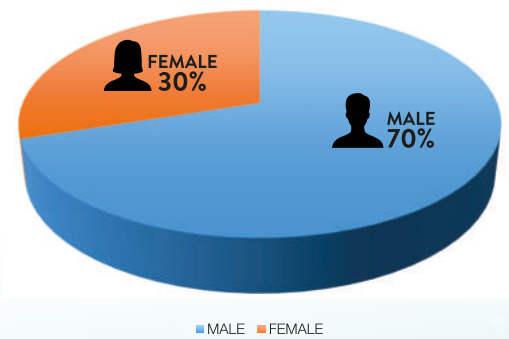


DIL Walk E-Magazine version is available at mosaicpcn.ca, dilwalk.ca and by free subscription at dilwalk@gmail.com All rights reserved ©2017. DIL Walk is a registered charity (BN: 848225439RR0001) and is dependant on the donations made by community members, organizations and businesses. DIL Walk is unique in that it is 100% volunteer run, with no paid positions.



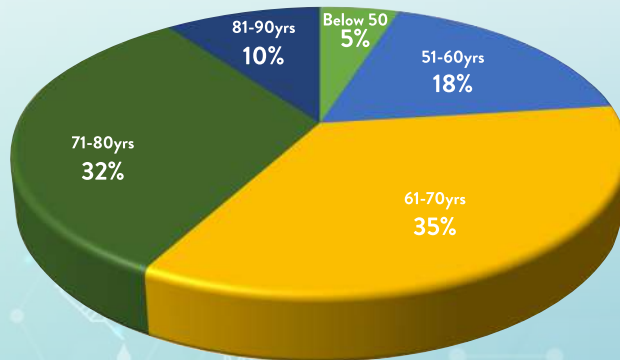
CHARM clinic is Alberta's only community-based outpatient clinic which is run on a charitable basis with support and donations from DIL WALK Foundation and Advanced Cardiology. The CHARM clinic's goal is to keep patients out of the hospital by employing preventative heart failure care. Since its inception in 2015, the clinic has prevented over 250 hospital stays which is approximately proportional to 2,500 "bed days". The total cost saved in terms of hospitalization by the clinic is ~\$4,740,000. This unique initiative frees up a hospital bed for other Albertans, and uses your support to run, as this is not a government supported program.

### (A) CLINIC DEMOGRAPHICS



### (B) AGE GROUP DISTRIBUTION IN CLINIC POPULATION

• Below 50yrs	5%
• 51-60yrs	18%
• 61-70yrs	35%
• 71-80yrs	32%
• 81-90yrs	10%



### (C) During period of Jan 2015- March 2018

- Over 250 Hospital stays prevented
- 2,500 "bed days" saved by clinic alone - on the basis of an average of 8-10 day hospital stay
- \$4,740,000 approx. hospitalization savings - on the basis that an average hospital stay costs \$18,000-\$20,000 per stay.

**(D) Health care cost saved \$1,560,000/yr VS cost on hiring LPN and overhead expenses \$100,000**





# INSOMNIA, OBESITY AND THE INTERNET

## IS THERE A CONNECTION?

### IS THERE A CONNECTION BETWEEN USING THE INTERNET, SLEEP DISTURBANCES AND OBESITY?

Internet use has rapidly increased since the early 2000s leading to an increase in the usage of social media platforms such as Facebook, Instagram etc. The internet provides many benefits, however the health impacts of extended use have been proven to be detrimental to one's health. For example, it is found that there is a strong relationship between insomnia (difficulty falling asleep) and continual internet use. In addition, due to the inactive nature of chronic internet users the prevalence of obesity is on the rise. Therefore, it is important to know the signs of problematic internet use to better our well-being and overall health.

### WHAT ARE SOME SIGNS OF PROBLEMATIC INTERNET USE?

- Having difficulty completing important tasks or maintaining commitments
- Becoming absorbed online and losing track of time
- Replacing real-time relationships (ex. friends from school, family) with online social media groups
- Feeling bad or guilty after spending long periods of time online
- Withdrawing or limiting everyday activities (ex. sports, school) to spend time online
- Only feeling happy and/or satisfied when connected to the internet
- Experiencing physical symptoms like headaches, body aches, eye strain, poor sleep, and weight gain, etc.

### WHY DOES CHRONIC INTERNET USE CAUSE INSOMNIA AND POOR DAY FUNCTIONING?

- Individuals are giving up sleep to compulsively browse the net
- Surfing the internet, looking at social media channels, especially right before bed, stimulates the brain, and increases the neural brain activity, leading to difficulty falling asleep.
- Some internet content can cause the release of the stress hormone, cortisol, this causes our nervous system to shift out of our "rest & digest" (parasympathetic) state
- At night, the light reflected from electronics can affect melatonin, a sleep-inducing hormone that signals the body to wind down and get ready to sleep
- Less sleep and sleep disturbances may lead to fatigue and increased irritability, lowering work efficiency and stamina
- This may also lead to low self-esteem and poor mood

### HOW DOES CHRONIC INTERNET USE AND SLEEP DEPRIVATION LEAD TO OBESITY?

- An increase in inactivity due to the high number of hours spent sitting
- Lack of sleep can lead to hormonal changes and sugar cravings
- Insomnia can result in consumption of more calories at night, thus leading to weight gain
- Poor sleep overpowers the immune system increasing the risk of disease

### HOW TO LIMIT INTERNET USE TO IMPROVE SLEEP HYGIENE AND HEALTH?

- Relax before bedtime (ex. read, have soothing sleep-time tea, take a hot shower) and be technology free for at least 30 minutes prior to sleep
- Do not bring internet, inducing electronics into the bedroom
- Monitor leisurely usage and impose limits
- Include 30 minutes of activity a day (ex. jogging, weights, dance, etc.) since it promotes good sleep and health (always check with your physician before starting any physical activity)
- Be active with family and friends
- Manage your time and schedule activities. Follow a schedule.
- Limit eating heavy foods/meals before bedtime, leads to sleep disturbances and weight gain

The benefits of internet emergence and high-tech developments are noteworthy, however the overexposure is proven to compromise health and sleep. It is important to raise awareness and create responsible users. Thus, enjoy the internet to cultivate knowledge and socially connect without jeopardizing mental and physical health.

# CardioHF *Your Heart's Health in Your Hands*

## CardioHF: Patient based Mobile Application that connects with CardioEMR:

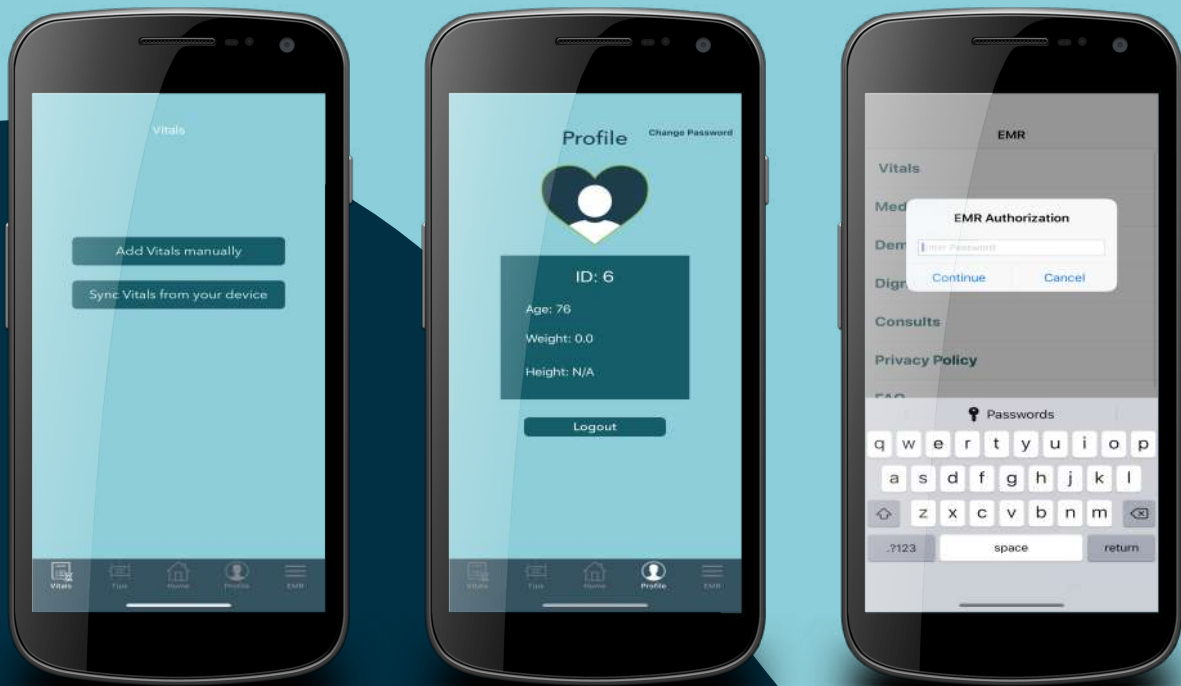
- Questionnaire based self assessment tool helps health professionals understand patient symptoms.
- Allows the health care professional to triage patients before the condition gets worse.
- Connects with wearable devices, such as FitBit and Apple watch, seamlessly and transmits data to the CardioEMR
- Provides patients access to their own health records. Patients can save and print their records, anywhere in Canada.
- Patients get "Tips of the Day" to keep them engaged and aware of their health condition.
- Patients can manually enter their vitals, if needed, to help health care professionals understand their condition at home.
- Patients can send secure text messages to the health care professional informing them of any concerns, or change in symptoms
- Patients call 911 (emergency number) directly from the App.
- Patients can have consultation with the health care professional via a secure Video Call.
- Patients can enter a list of medications they are taking, and reminders to take the medications can be set.
- Text messages will auto deleted after the health care provider reads them to ensure privacy and confidentiality.

## CardioHF Doc : Health Professional based Mobile Application that connects with CardioEMR

- Health Professionals can review patient sent data: symptoms, vitals, wearable device data.
- Review patient records: medications, allergies, diagnostics, consult notes, etc.
- Initiate a video call, audio call or send text messages securely to patients or other health care professionals.
- Health professionals can create progress notes and they get immediately updated in CardioEMR.

## CardioEMR is Cloud based EMR.

- Stores all data securely in Canada, which can be accessed by desktop computers and/or tablets.



**DOWNLOAD NOW!**

CardiA

CardioHF





Heart failure (HF), also known as congestive heart failure (CHF), is a condition where the heart's ability to pump blood is decreased thus leading to insufficient blood flow to meet the body's needs. HF patients often suffer from variety of signs and symptoms which commonly include shortness of breath, excessive tiredness, and swelling of legs. These sign and symptoms may get worse upon certain activity or exercise.

Many known causes of heart failure include coronary artery disease including a previous heart attack, high blood pressure, or conditions affecting heart rhythm or valves. Additionally, excess alcohol use, infection, and cardiomyopathy of an unknown cause may also lead to heart failure by changing either the structure or the functioning of the heart.

DIL Walk Foundation's funded CHARM (Community Heart Failure Assessment, Rehabilitation and Management) clinic houses the outstanding clinical mobile application development team to serve and educate patients living with this chronic disease. CardioHF is one of the first mobile application developed by CardiAI, Inc in conjunction with the CHARM clinic to further their goal of serving and improving the patient's life.

CardioHF App is designed to deliver patient centered care so caregivers and specialists can collaborate across clinical settings to deliver efficient, unparalleled patient care and education. The CardioHF app will expand point of access to patient's data, so that patient progress, collaborations with other health professionals and review of patient data (charts and images) can be followed outside hospital walls, thus providing faster, effective and efficient patient care.

CardioHF is a strategically designed mobile application for congestive heart failure patients. The CardioHF App is intended to put self-care in the hands of patients. Moreover, Patients are also updated regularly about lifestyle tips that can improve overall quality of life. CardioHF app provides patients the ability to securely message CHF clinic and seek consultation along with the ability to access their own health records.

In addition to self-assessment and lifestyle tips, CardioHF app will also provide the following vital clinical data for patient's health evaluation through manual input or wearable devices.

- 1) Heart rate readings
- 2) Blood pressure readings
- 3) Body weight changes
- 4) Sleep quality
- 5) Activity levels

This data will allow CHF patients and professionals to help identify key behavioral indicators influencing the chronic condition and allow for evidence-based care planning.

The CardioHF app consists of a multiple-choice questionnaire which patients can answer and submit anytime, particularly when they feel a change in their health. The questions are tailored to heart failure symptoms and signs of deterioration of health which will be analyzed by health care professionals. The objective of CardioHF app is to monitor, predict, and prevent patient health from worsening. The integration of CardioHF app will benefit the treatment plan and prove to be vital in reducing/avoiding hospitalization as well as maintain a good quality of life.



# SCREEN TIME AND OUR CHILDREN



## WHAT'S THE BIG DEAL?

I remember watching hours of television as a young child. I recall that mornings before school meant Spider Man, lunchtime was Inspector Gadget and afterschool there was usually Hercules or Fresh Prince of Bel Air. Saturday mornings meant hours of cartoons. Eventually home gaming systems like Atari and Nintendo made their debut and if you didn't have one you could rent one to use. There was one shared television in the main family area where all television was viewed and video games were played. Movies were definitely available and offered to us. We would head out to the video rental store to pick out our movie choices that would then be available to us for the next 24 (sometimes 48) hours. For most people of my generation it can seem like all the focus on effects of screen time for today's youth is unnecessary. After all, we watched hours of television and turned out just fine. What's the big deal?

Screen time today is a HUGE deal and the focus and attention on this topic is absolutely necessary.

The context and community in which screens are viewed today is completely different than 40 years ago. Screens are ubiquitous from multiple televisions in most homes to computer screens (desktop and laptops, tablets) as well as mobile devices that are literally portable. The imagery and content available on all of these devices can be very realistic and even has elements of virtual reality. These devices are not just for pleasure but rather a necessity to aid with professional and school work and an integral part of how we communicate with one another. Having to wait my turn and share the family television to watch my show or play my video game is a thing of the past.

The impact of excessive screen time on youth is being noticed across the world. There are the obvious detriments to physical health that come with excessive sedentary behaviors including obesity and increased blood pressure. But there are also many well established emotional and developmental negative impacts. The links between excessive screen time and increased anxiety, impairment of motor skills and social skill development cannot be denied. Diminished communication skills, loss of focus and attention spans are all associated with excessive screen exposure. There is no substitute for direct human interaction when it comes to communication, social skill development and learning. Anyone with children will attest to the fact that screens are an amazing and powerful babysitter but screens without limits are harmful and addictive. We need to allow our children to experience and work through negative feelings and powerful emotions as opposed to quieting or distracting them with a screen. Children and youth need to experience free play, boredom, introspection and conversation for innovation and problem solving.



The 2017 Canadian Pediatric Society position statement on screen time and youth suggests parents of children and youth approach screen time exposures with the four 'M's: Minimize, Mitigate, be Mindful and Model appropriately (see table below).

<b>MINIMIZE</b>	Less than 2 years old zero screen time. Between 2-5 years old less than 1 hour day routine use
<b>MITIGATE</b>	Watch or use together, discuss what was viewed or watched
<b>MINDFUL</b>	Actively enhance or limit exposures, prioritize social interactions, select high quality content when/if using screens
<b>MODEL</b>	Adults should also choose healthy alternatives, turn off devices during family time, avoid background TV

In the end my childhood experience of what I recall as “hours of television” was actually relatively limited exposure compared to today’s context. We had one shared television in our home and I did not have to worry about communicating with my friends via a mobile device or email or completing my homework on the laptop. I did not have to make a conscious effort to “disconnect” or go “offline” as there were natural barriers in my environment that aided me in doing so. I may have watched “hours of television” but I was also often bored. And that was a good thing.



A recent study by a University of Calgary nursing researcher shows that South Asians may be in jeopardy of suffering more severe consequences from a heart attack than their white or Chinese\* counterparts because of the difference in symptom presentation.

Guru Nanak Dev, DIL Research Chair, Dr Kathryn King-Shier, PhD, RN, and her research team recently published in BMJ Open. The findings of their study aimed to determine if there were differences in heart attack symptoms and the quickness in seeking emergency care in white, South Asian and Chinese heart attack patients residing in Canada.

“We found that the most common symptom in each of these groups were typical — mid-chest discomfort or pain — often accompanied by radiating pain/discomfort into the left jaw, shoulder or arm,” explains King-Shier.

“While South Asians were most likely to have these when compared to the other two groups, they also had atypical symptoms that can include nausea, dizziness, sweating, weakness and pain across the shoulders. And unfortunately, these patients took much longer to go to the emergency department and were less likely to receive certain procedures to treat their disease (angioplasty or coronary artery bypass graft surgery) than the other two groups.”

More than 1,330 patients from 12 Canadian hospitals participated in the research, the majority of whom experienced this pain mid-chest.

“It is so important that people recognize heart attack symptoms early and act by seeking emergency treatment; that ensures they are eligible to get the best treatment options available,” King-Shier says.

**Dr. Anmol Kapoor, MD, cardiologist and DIL Walk Foundation founder, says the findings are not a surprise.**

“South Asians particularly, especially those who have high blood pressure, glucose intolerance, diabetes or kidney disease, need to be aware of the typical and atypical symptoms of heart attack, and this study emphasizes how critical this awareness is to achieve the best long-term outcomes,” he says.

“If feeling unwell with any of these symptoms, this population must ensure they seek emergency care immediately to then be eligible to receive the best procedures to treat their disease.”

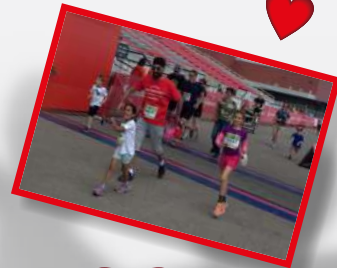
*By University of Calgary, Faculty of Nursing*



## **GURU NANAK DEV JI DIL RESEARCH CHAIR**



# DIL WALK IN THE COMMUNITY



When our daughter Sofia was first diagnosed with a brain tumor at the age of 5 we were devastated for her and thrust into a world of unknowns. As a result of her tumor, and the treatments associated with it, she now has significant physical and cognitive disabilities. Like so many other children with developmental delays, Sofia had a rare condition and we initially struggled to find a place where she could participate in activities with other children like her.

However, Dubasov Dance was the perfect fit for her and our family. She has thrived with volunteers who help her dance and the friends she has made. In addition, the parent community has been an amazing support for us and many families, as there is an unspoken compassion for each other as we watch our beautiful children through that glass window in the studio each week.

When we thought of starting a scholarship fund in Sofia's name we wanted to support a local institution that helped children with both physical and cognitive challenges across a wide range of needs - and Dubasov Dance is one of the few places we encountered that did so in such a fun and compassionate way. Now as a family we would like to support other families join the Dubasov community as words cannot express what a difference it has made in our daughter's life.

The DIL Walk Foundation is a strong supporter of community ventures and understands the importance and connection between physical health and overall well being. Everything the Foundation does, we Do It For Life - DIL. Helping Sofia remain active in an environment that supports her physical and cognitive abilities not only helps keep her heart healthy, but it keeps her engaged in the community around her, and that is what DIL Walk does, one heart at a time. We hope this scholarship will help other individuals in the community achieve health.

## HOW MUCH IS TOO MUCH SCREEN TIME FOR YOUTH?

Screen time can add positives to our lives like, staying connected with family and loved ones that live far away or learning about new things; however too much screen time can lead to poor health. There are two types of screen time, academic/work screen time that we have limited control over and recreational screen time where we choose to use screens for fun. Screen time includes smartphone, tablet, computer, streaming, video gaming, and television.

### SCREEN LIMITS FOR YOUTH

- 0-2 years old: screen time is not recommended.
- 2-4 years old: 1 hour of recreational screen time/day – less is better.
- 76% of Canadian 3-4 year olds use more than 1 hour of recreational screen time/day.<sup>2</sup>
- 5-17 years old: 2 hours of recreational screen time/day – less is better.
- 51% of Canadian 5-17 year olds use more than 2 hours of recreational screen time/day.<sup>2</sup>

### HEALTH EFFECTS OF TOO MUCH SCREEN TIME (EVEN IF YOU ARE REALLY ACTIVE):

- Increase in weight and waist measurement.
- Increase risk of high blood pressure, blood sugar, cholesterol, and fatty liver.
- Increase in stress and anxiety symptoms.
- Decrease in focus and attention.
- Decreased grades in school – every additional 1 hour spent on recreational screens/day = decrease in 1-2 letter grade(s).
- Decrease in sleep amount and quality.
- Decreased fitness - poor strength and cardio.
- Lower self-confidence and self-esteem.
- Poor mood and less face to face time with friends/children their age.



# SCREEN TIME AND YOUTH





# UNDERSTANDING THE NEW CANADIAN FOOD GUIDE

Have plenty of vegetables and fruits

Newly developed diet trends and diet related diseases have raised awareness amongst healthcare authorities. Doctors, nurses, dietitians and other healthcare professionals believe that what we eat heavily influences our health. Thus, revisions have been made to the Canadian Food Guide to help individuals embrace the importance of healthy living and diet. The new guide is a simplified version that promotes more plant-based eating and lessens the importance of meat and dairy<sup>1</sup>. The old model of the four food groups against a rainbow background has been replaced with a plate icon that includes greens, fruits, whole grains and proteins.

## WHAT IS THE REFINED FOOD GUIDE SAYING?

The new food guide is now encouraging Canadians to add more colorful plants to every meal. For examples, half your plate should be filled with fruits and vegetables like spinach, squash, peas, carrots, broccoli, yams, potatoes, apples, berries, tomatoes, etc. This is a way to inspire individuals to eat more “alive” or plant-based foods that are loaded with nutrients.

A quarter of the food guide plate is covered with protein foods like eggs, beef, chicken and fish. Nevertheless, an emphasis is also placed on plant-based proteins like beans, lentils, tofu and nuts. Dairy is also shown in limited quantities.

The remaining quarter of the food guide plate is filled with whole grain foods that promote long-term energy and feelings of fullness. Whole grains that are shown include wild rice, multi-grain breads and quinoa.





## Eat protein foods



## Choose whole grain foods



## Make water your drink of choice

### WHAT DOES THIS MEAN FOR MY HEALTH?

The new Canadian Food Guide is an evidence based source that can help promote wellness and longevity. Some of the findings that led to these refinements include:

- decreased cardiovascular disease risk with increased vegetable, nut and fruit intake
- lowered cardiovascular disease risk with increased soy-protein consumption
- decreased risk of cardiovascular disease, colon cancer and type 2 diabetes with increased consumption of dietary fibre
- lowered risk of cardiovascular disease with the replacement of saturated fats (ex.butter) with unsaturated fats like olive or avocado oil

The Canadian Food Guide is an excellent source to rely on when deciding what to eat and what is deemed as nutritious. However, eating and living well is more than just the foods you eat. It encompasses cooking at home more often, using food labels, eating meals with others, drinking more water and being aware of your eating habits.

*Photo Credit : <https://food-guide.canada.ca>*





# GET YOUR HEART CHECKED

Know your numbers - Blood Pressure, BMI, Cholesterol and Glucose. Prevention begins with knowing your risk



[www.dilwalk.ca](http://www.dilwalk.ca)