

# UNDERSTANDING DIABETES

*Education, to protect tomorrow.*



This public awareness initiative is brought you by the South African Medical Research Council (SAMRC), with the aim to raise awareness about diabetes, while sharing the work by the Biomedical Research and Innovation Platform (BRIP) and Non-Communicable Research Unit (NCDRU).

[www.samrc.ac.za](http://www.samrc.ac.za)



world diabetes day

14 November



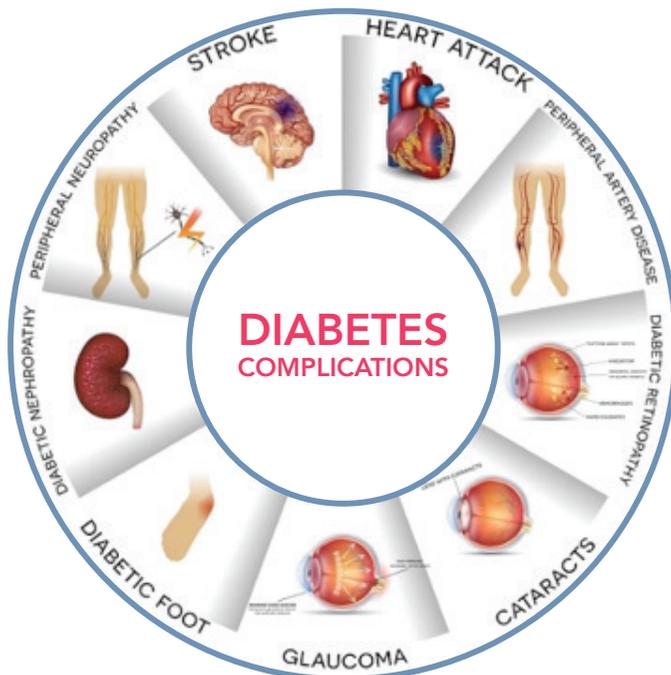
# DID YOU KNOW?

MORE THAN **90%** OF DIABETES CARE IS SELF-CARE

That's right, not your doctor, or the clinic, or your spouse, but **SELF**.

Modern technology has given us vast access to resource, but it is not just about knowing, we also need to take action. You cannot go to war without a weapon. The fight against diabetes is not just about lowering your blood glucose levels, it is also about reducing your risk of complications associated with diabetes.

Several health risks associated with diabetes are depicted in the image below.



# WHAT IS DIABETES?



**With diabetes, your body either does not make enough insulin or can't use it as well as it should.**

Diabetes is a chronic (long-lasting) health condition that affects how your body turns food into energy.

Your body breaks down most of the food you eat into sugar (glucose) and releases it into your bloodstream. When your blood sugar goes up, it signals your pancreas to release insulin. Insulin acts like a key to let the blood sugar into your body's cells for use as energy or for storage.

With diabetes, your body does not make enough insulin or can not use it as well as it should. When there is not enough insulin or cells stop responding to insulin, too much sugar stays in your bloodstream. Over time, that can cause serious health problems, such as heart disease, vision loss, and kidney disease.

## HOW CAN DIABETES BE PREVENTED OR MANAGED?



Take medicine as prescribed.



Get diabetes self-management education and support.



Make and keep health care appointments.



Achieve and maintain a healthy body weight.



Be physically active – doing at least 30 mins of regular, moderate intensity activity on most days. More activity is required for weight control.



Eat a healthy diet, avoiding excessive refined sugar and saturated fat.



Avoid tobacco use – smoking increases the risk of diabetes and cardiovascular disease.



Know your status - take the online risk assessment or screening of glucose levels by blood tests. [www.idf.org/type-2-diabetes-risk-assessment](http://www.idf.org/type-2-diabetes-risk-assessment)

The SAMRC is mandated to improve the health of our nation through research, development and technology transfer. The scope of the organisation's research projects includes tuberculosis, HIV/AIDS, cardiovascular and non-communicable diseases, gender and health and alcohol and other drug abuse. The SAMRC has a strategic objective to help strengthen the health systems of the country. In line with that of the Department of Health, the SAMRC constantly identifies the main causes of death in South Africa.

Below we expand on the work of the SAMRC's Biomedical Research and Innovation Platform (BRIP) and the Non-Communicable Research Unit (NCDRU), who collectively contribute to Diabetes Research.

## **THE BIOMEDICAL RESEARCH AND INNOVATION PLATFORM**

With 1 in 9 people predicted to develop diabetes by the year 2030, it is of utmost importance to take gallant steps to reduce the incidence of diabetes and its associated cardiovascular complications, in order to improve quality of life of the patient.

In 2006, BRIP was established with a key focus to conduct diabetes-related research. In recent years, research has expanded to include other associated metabolic health challenges that are pertinent to South Africa. BRIP promotes research that generates new knowledge and contributes to the development of Intellectual Property that addresses both national and international health challenges.

## **THE NON-COMMUNICABLE DISEASE RESEARCH UNIT**

The overall purpose of NCDRU is to formulate and apply an integrated programme of research and capacity development to improve the understanding, detection, prevention and management of NCDs, with a major initial focus on cardiovascular and metabolic disorders in South Africa.

The key focus areas of the unit include: to foster greater understanding of the burden, mechanisms and determinants of NCDs; to develop, apply and evaluate interventions for the detection, prevention and management of NCDs; to address conditions and challenges that are unique to the South African environment; to develop and adopt new health technological approaches to NCDs; translate new and existing knowledge into policy and practice, and to develop research capacity and interdisciplinary collaboration and maximize the output of existing research efforts.

