

# 1055C SENTINEL



## WORLD DIABETES DAY



Anniversary of the birth of Dr. Frederick Banting who, with scientist Charles Best, in 1921 discovered how to extract insulin from the pancreas.

**THURSDAY  
14 NOVEMBER**

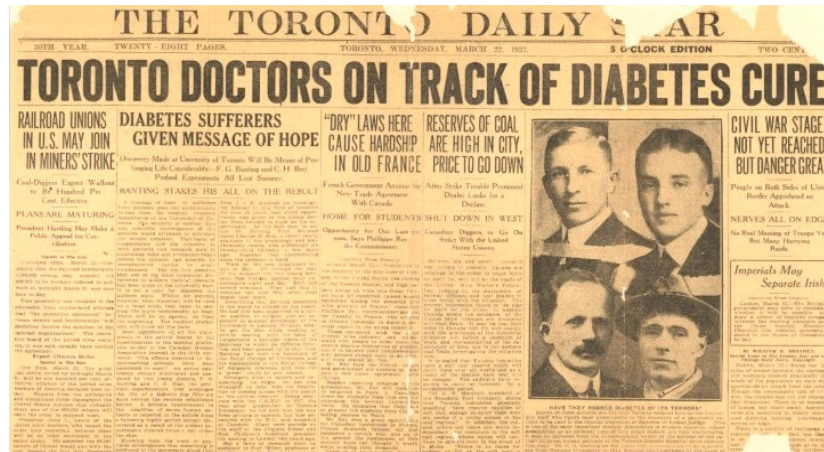


**Dr Frederick Banting and Charles Best with one of the ten dogs from whose pancreas they extracted insulin.**

**Combatting diabetes is one of the Lions' global causes**

NOVEMBER 2024 SPECIAL EDITION

# Banting and Best changed lives



**WORLD DIABETES DAY** commemorates the birthday of Canadian Dr Frederick Banting who, with medical student Charles Best, in July 1921 successfully isolated the hormone insulin for the first time. The breakthrough research took place at the University of Toronto where Banting and Best successfully isolated insulin from dogs. The pair joined forces with Professor John Macleod to produce insulin suitable for injecting into people with diabetes. Using insulin from the pancreases of cattle at slaughterhouses and purified, in January 1922 14-year-old Leonard Thompson became the first person to receive an insulin injection. That first injection caused an allergic reaction. A refined process was quickly developed to improve the insulin and Thompson's second dosage was delivered 12 days later. The teenager's condition improved dramatically and diabetes, which had always been regarded as a fatal disease, could finally be managed. By 1923, insulin had become widely available in mass production and Banting and Macleod were awarded the Nobel Prize for Medicine. Charles Best, being a graduate student was not included. Dr Banting recognised Best's involvement by sharing the award money with him.

# Living with diabetes

**Statistically of every 100,000 people in Britain at least 5,000 will already have diabetes and at least another 500 will have acquired it by the end of this year.**

**Today managing Type 1 diabetes with insulin injections is commonplace, but diabetes itself still remains something of an enigma. It is a condition which, as far as Type 1 is concerned, is not preventable and occurs when the pancreas ceases to produce the insulin we all rely upon to manage the level of sugar in our blood. Type 2 diabetes, which can often be managed by diet and medication, occurs as the pancreas progressively produces less insulin, while itself not totally preventable, the risk of acquiring it can be managed and diminished, particularly by the way in which we live.**

**Diabetes is all about sugar in the blood and occurs when the body becomes incapable of controlling how much sugar our blood is prepared to accept. Sugar in some shape or form exists in almost everything we consume, e.g., fructose in fruit, lactose in dairy products and glucose generally.**

**Fortunately for most of us our pancreas (a large gland behind the stomach) produces the hormone insulin which regulates glucose levels in the blood.**

**At the moment, why diabetes occurs is not known and Type 1 can strike children as young as two or three years old. However, many elements of our adult lifestyle can increase the risk of acquiring Type 2 diabetes, e.g., being overweight, not exercising, drinking to excess and smoking. What's more, already having diabetes in the family also increases that risk.**

**While there is no early detection for Type 1 diabetes, Type 2 can be detected with a blood test and if detected early enough, can be managed, and even reversed. While the seriousness of diabetes can never be underestimated, modern means of detection and monitoring of sugar levels has meant that those with diabetes, whether Type 1 or Type 2, can and do live long, full and fulfilling lives.**

**And this is entirely due to the efforts of Messrs Banting and Best.**

**If you are peeing a lot, if you always feel thirsty, you may have Type 2 diabetes and not know it. Ask your GP for a blood test.**

# Living with diabetes

A poem by Juliette Hart who lives with Type 1

## 24/7 Plus

You will be tested every day.  
The test will last for 24 hours.  
You will be permitted food,  
drink, medication and  
exercise.

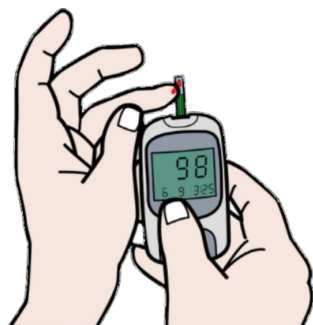
The amount of each will be  
your choice

But note that too much,  
or too little,

Can result in coma or  
complications.

The pass mark is above 3  
and below 9.

Turn over now  
and begin.



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**Juliette says the title is a play on the old Eleven Plus exam.**