

THE GIANTS - - WEEK OF DEC. 27-JAN. 1

THE GIANTS

— Dr. Frederick Banting

FREDERICK BANTING
IN SEARCH OF INSULIN

IN 1900, A 9-YEAR-OLD BOY PLAYS IN THE FIELDS NEAR ALLISTON, ONT., WITH A PRETTY LITTLE TOMBOY.

CATCH ME IF YOU CAN, JANE!

12-27



WALT MC CARTER
NORMAN DREW

BUT CAREFREE DAYS END WHEN THAT PLAYMATE SUDDENLY GROWS ILL.

DIABETES...



WALT MC CARTER
NORMAN DREW

AND JUST AS SUDDENLY, LITTLE JANE IS DEAD!

THE SUGAR SICKNESS! WON'T SOMEONE EVER FIND A WAY TO STOP IT?



WALT MC CARTER
NORMAN DREW

SHE COULD NOT KNOW THE ANSWER TO HER QUESTION STOOD ONLY A FEW FEET AWAY...

... IN THE SHAPE OF THAT LITTLE BOY, WHOSE NAME IS **FREDERICK G. BANTING!**



WALT MC CARTER
NORMAN DREW

THE GIANTS

— Dr. Frederick Banting

THE DEATH OF A PLAYMATE THROUGH DIABETES GREATLY INFLUENCES FREDERICK BANTING'S DECISION TO STUDY MEDICINE AT U.O.F.T.

AND WITH THIS TRAINING, HE SERVES IN WWI IN THE MEDICAL CORPS.



WALT MC CARTER
NORMAN DREW

AT WAR'S END, IN LONDON, ONT., HE TEACHES AT WESTERN UNIVERSITY, BUT IN HIS LEISURE STUDIES DIABETES.

WE DO KNOW THAT DIABETES IS CAUSED BY THE FAILURE OF THE BODY TO ASSIMILATE SUGAR IN THE BLOOD STREAM.



WALT MC CARTER
NORMAN DREW

BUT WHAT CAUSES THAT FAILURE? THE SECRET IS LOCKED SOMEWHERE IN THE **PANCREAS...** AND I MUST FIND THE KEY TO UNLOCK THAT SECRET!



12-28

WALT MC CARTER
NORMAN DREW

THE GIANTS

— Dr. Frederick Banting

WHILE TEACHING IN LONDON, ONT., DR. FREDERICK BANTING EVOLVES A THEORY ABOUT DIABETES.

I'M CONVINCED THAT CERTAIN CELLS IN THE PANCREAS, CALLED **ISLANDS OF LANGERHANS**, SECRETE A HORMONE WHICH ACTS ON THE SUGAR IN OUR BODY.



WALT MC CARTER
NORMAN DREW

BUT THE CELLS ARE SO SMALL, THEY'RE IMPOSSIBLE TO CUT OUT. HOW CAN I OBTAIN A SAMPLE TO TEST MY THEORY?



12-29

WALT MC CARTER
NORMAN DREW

THEN, ON OCT. 30, 1920, THE YOUNG DOCTOR CHANCES UPON A CERTAIN MEDICAL JOURNAL IN A LIBRARY.

WHAT'S THIS? THIS ARTICLE SHOULD PROVE INTERESTING...

RELATION OF ISLETS OF LANGERHANS TO DIABETES
by DR. MOSES BARRON



WALT MC CARTER
NORMAN DREW

THE GIANTS - - WEEK OF JAN. 3-8, 1966

THE GIANTS



— Dr. Frederick Banting



THE GIANTS



— Dr. Frederick Banting



THE GIANTS



— Dr. Frederick Banting



THE GIANTS

DR. FREDERICK BANTING'S RESEARCH IN DIABETES BRINGS HIM TO A MACABRE SITE... A SLAUGHTERHOUSE !

ONLY HERE CAN WE HOPE TO OBTAIN ENOUGH PANCREASES TO PROVIDE A PERPETUAL SUPPLY OF OUR ISLETIN .



IN HIS UNIVERSITY OF TORONTO LAB, HE USES ALCOHOL AND ACID TO CREATE A BATCH OF THE NECESSARY HORMONES FROM CATTLE PANCREASES.



WALT SPOTTER
NORMAN DREW

— Dr. Frederick Banting

AND IN JANUARY, 1922, BANTING AND BEST MAKE A DANGEROUS DECISION, TO INJECT THE ISLETIN (INSULIN) INTO THEIR OWN ARMS...



... NOT KNOWING WHETHER IT WOULD ACT IN THE HUMAN BLOOD STREAM AS A HEALER, OR KILLER !

THE GIANTS

HAVING INJECTED ISLETIN (INSULIN) INTO THEIR OWN BLOODSTREAMS, DR. FREDERICK BANTING AND CHARLES BEST WAIT TO LEARN IF IT WILL CAUSE ANY TOXIC REACTION !



BUT THE SCIENTISTS FEEL NO ILL EFFECTS !

WELL, DR. BANTING, WE'VE AT LEAST PROVED THE HORMONE WON'T DO ANY HARM WHEN INJECTED INTO A HEALTHY HUMAN BODY...



— Dr. Frederick Banting

AND NOW WE MUST FIND OUT IF IT WILL DO ANY GOOD WHEN INJECTED INTO A BODY SICK WITH DIABETES ! BUT WE MUST FIND A DIABETIC WILLING TO SUBMIT TO THIS EXPERIMENT !

WALT SPOTTER
NORMAN DREW

Toronto Telegram News Service

THE GIANTS

AT TORONTO GENERAL HOSPITAL, DR. FREDERICK BANTING LEARNS OF A YOUTH, LEONARD THOMPSON, WHO IS DYING OF DIABETES.



HE'S WASTED AWAY TO 65 LBS. AND HAS A FEW DAYS TO LIVE AT BEST...

KNOWING THE BOY HAS NOTHING TO LOSE, BANTING AND BEST GET PERMISSION TO USE HIM TO GIVE ISLETIN ITS FIRST REAL TEST.



WALT SPOTTER
NORMAN DREW

— Dr. Frederick Banting

ON JAN. 11, 1922, A 14-YEAR-OLD BOY WATCHES A HYPODERMIC NEEDLE PLUNGE TOWARD HIM...



... PRAYING THAT IT WILL RETURN TO HIM A LIFE HE HAS ALREADY CONSIDERED LOST !

NEXT WEEK: THE VERDICT !

THE GIANTS

ON OCT. 30, 1920, IN A LONDON LIBRARY, DR. FREDERICK BANTING STUMBLES UPON VITAL INFORMATION...



...BUT THE ISLANDS OF LANGERHANS WILL REMAIN INTACT!



— Dr. Frederick Banting

NOW I CAN OBTAIN SAMPLES, OF THAT HORMONE, TO TEST!



THE GIANTS

IN NOVEMBER, 1920, DR. FREDERICK BANTING GOES TO PROF. J.J.R. MACLEOD IN TORONTO, TO ASK HIS AID IN HIS DIABETES EXPERIMENT.



BUT THE HEAD PHYSIOLOGIST OF THE UNIVERSITY OF TORONTO IS UNIMPRESSED.



— Dr. Frederick Banting

THEY FAILED! WHAT MAKES YOU SO SURE YOU'LL SUCCEED?



THE GIANTS

SKETCHILY, PROF. J.J.R. MACLEOD AGREES TO LET DR. FREDERICK BANTING USE LIMITED FACILITIES AT U. OF T. FOR HIS DIABETES RESEARCH.



PROF. MACLEOD, I WAS RATHER HOPING...UH... YOU MIGHT BE WILLING TO ASSIST ME IN THIS EXPERIMENT?



CHOOSE SOME YOUNG STUDENT TO ASSIST YOU IF YOU WISH.



NEXT WEEK: BANTING GETS AN ASSISTANT.



THE GIANTS

DR. FREDERICK BANTING EVER STRIVES TO SEE THAT CHARLES BEST SHARES EQUAL HONORS FOR THE **DISCOVERY** OF INSULIN...



...IN 1923, HE PERSONALLY ADDS BEST'S NAME TO THE TITLE, "**BANTING AND BEST** CHAIR OF MEDICAL RESEARCH!"

AND WHEN BANTING WINS THE NOBEL PRIZE THAT YEAR, HE IS **INFURIATED** THAT BEST IS NOT ALSO NAMED!

THEY'VE GIVEN THE PRIZE TO MYSELF AND PROFESSOR **MACLEOD**... BUT IT WAS **BEST** WHO WORKED WITH ME!



PUBLICLY, BANTING CREDITS BEST AS THE TRUE **CO-DISCOVERER** OF INSULIN...

I WILL SHARE **EQUALLY** WITH MR. BEST THE \$20,000 I SHALL RECEIVE WITH THE NOBEL PRIZE.



J.J.R. MACLEOD, HEAD PHYSIOLOGIST AT THE UOFT, FOLLOWS BANTING'S EXAMPLE:

AND I WILL SHARE MY \$20,000 WITH DR. J.B. COLLIP, WHO PERFECTED THE **PURIFICATION** OF INSULIN...



THE GIANTS

AFTER INSULIN, DR. FREDERICK BANTING MOVES ON TO **OTHER** PROJECTS...



...IN 1927 LEADING A RESEARCH TEAM WHICH CONQUERS **SILICOSIS**, A LUNG-DISEASE WHICH HAS KILLED MANY A MINER!

IN WORLD WAR II, HE'S IN THE CANADIAN ARMY, AND DEVELOPS A FLYING SUIT TO END PILOT **BLACKOUTS**.

THE RAF HAS INSTRUCTED ME TO **RUSH** THIS SUIT TO ENGLAND FOR TESTS.



BUT AS HE BOARDS A PLANE FOR ENGLAND ON FEB. 21, 1941, AT MONTREAL, HE **CONFIDES** TO DR. J.B. COLLIP.

YOU KNOW, I'VE A CURIOUS FEELING - A FEELING THAT **SOMETHING** IS GOING TO HAPPEN TO ME ON THIS FLIGHT...



THE GIANTS

THE PLANE CARRYING DR. FREDERICK BANTING TO ENGLAND MAKES A STOP AT GANDER, Nfld., AND HERE BANTING AGAIN EXPRESSES A FEAR:

A **PREMONITION** IS HAUNTING ME... THAT I SHOULDN'T TAKE THIS FLIGHT!



AND JUST 12 MINUTES AFTER THIS AIRPLANE TAKES OFF, WITH BANTING ABOARD...

CAN'T CONTROL IT! HAVE TO **FORCE LAND**!



AND THE PLANE CRASHES!

IN THE HOUSE OF COMMONS, FEB. 24, 1941, THE TRAGIC NEWS IS ANNOUNCED!

SIR FREDERICK BANTING... IS **DEAD**!

...AND NO ONE MOURNED THIS GREAT CANADIAN'S DEATH MORE THAN THE THOUSANDS OF DIABETICS THE WORLD OVER WHO WERE ALIVE THAT DAY ONLY BECAUSE OF BANTING'S DISCOVERY OF INSULIN!



NEXT WEEK:
THE BIRDMAN
OF CANADA.

THE GIANTS - - WEEK OF JAN. 10-15, 1966

THE GIANTS

— Dr. Frederick Banting

AS THOUGH BY SOME MIRACLE, CONTINUOUS INJECTIONS OF DR. FREDERICK BANTING'S ISLETIN RESTORES LEONARD THOMPSON, PREVIOUSLY DYING OF DIABETES, TO RADIANT HEALTH!

EAT HEARTY, LAD. THE ISLETIN WILL BURN THE SUGAR TO FEED AND REBUILD YOUR BODY.



AND LEARNING OF THIS SUCCESS, PROF. J. J. R. MACLEOD AT THE U. OF T., ONCE LUKEWARM TO THE BANTING AND BEST EXPERIMENT, NOW SAYS...

"I-IO. THE UNIVERSITY WILL PROVIDE YOU WITH BETTER FACILITIES, ASSISTANTS, MORE FUNDS...!"



BUT, DR. BANTING, I DO THINK THE WORD ISLETIN IS TOO DIFFICULT FOR THE TONGUE...



INSTEAD, LET'S CALL IT... INSULIN!



THE GIANTS

— Dr. Frederick Banting

ONCE INSULIN'S EFFECTIVENESS IS PROVEN ON LEONARD THOMPSON, CHARLES BEST IS CHOSEN TO MASS PRODUCE THE HORMONE AT U. OF T.'S CONNAUGHT LABORATORY.



J. B. COLLIP, A BIOCHEMIST FROM UNIVERSITY OF ALBERTA, IS ENLISTED TO DEVELOP A PURIFICATION PROCESS FOR INSULIN.

BUT MEANWHILE, DR. BANTING, HOW DO WE TEST OUR SUPPLY FOR PURITY?



AN ASSOCIATE, DR. JOSEPH GILCHRIST, PROVIDES AN ANSWER.

I'LL BE YOUR GUINEA PIG. TEST EACH BATCH ON ME.



I HAVE NOTHING TO LOSE! IF I DON'T GET INJECTIONS OF YOUR INSULIN, I'LL DIE SOON, ANYWAY... FOR I HAVE DIABETES!



THE GIANTS

— Dr. Frederick Banting

EXHAUSTIVE TESTS ARE MADE ON DR. JOSEPH GILCHRIST UNTIL...

WE'VE PROVEN INSULIN IS SAFE ENOUGH FOR DISTRIBUTION TO DIABETICS THROUGHOUT THE WORLD!



YOU REALIZE, DR. BANTING, THIS INSULIN IS BOUND TO BRING YOU FAME AND FORTUNE!



FORTUNE? NO, I WON'T ACCEPT A CENT OF IT. I'M GIVING THE FORMULA TO THE WORLD, SO THAT INSULIN CAN BE PROVIDED CHEAPLY ENOUGH FOR EVEN THE POOREST MAN.



AS FOR THE FAME... WELL, THAT I MUST SHARE WITH MY ASSOCIATE, MR. BEST.

...BUT FATE IS TO ROB CHARLES BEST OF MUCH OF THE FAME HE DESERVES.

