

CAROL

5 WEEK EXPERIMENT RESULTS  
CONDUCTED BY BBC1 FOR LIVE TV



# 6 VOLUNTEERS IN A REAL-LIFE WORK ENVIRONMENT



CHARLIE, JACOB, IGOR, ELISE, SUNIR AND DANIELLE



# RESULTS OF VO2MAX BEFORE

VO2Max is considered by scientists and doctors to be the best indicator of your future health. The higher, it is, the better your body uses oxygen and the less likely you are of getting disease.

VO2Max measures the maximum amount of oxygen that an individual can utilize during intense, or maximal exercise. It is measured as millilitres of oxygen used in one minute per kilogram of body weight (ml/kg/min).



**POOR**

**FAIR**

**GOOD**

**EXCELLENT**

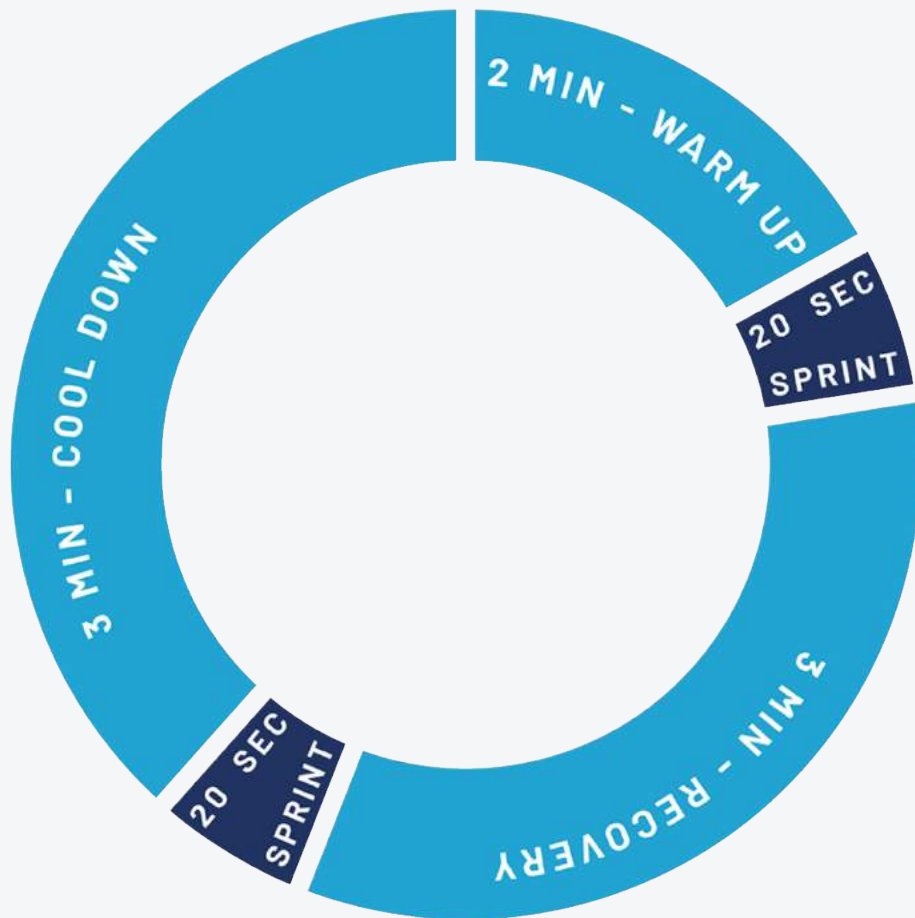
**5 OUT OF 6** VOLUNTEERS TESTED **POOR** FOR VO2MAX  
**1** TESTED **GOOD** FOR VO2MAX

C A R . O . L

INTENSE PROTOCOL

WAS PRESCRIBED 3 TIMES  
A WEEK FOR 5 WEEKS

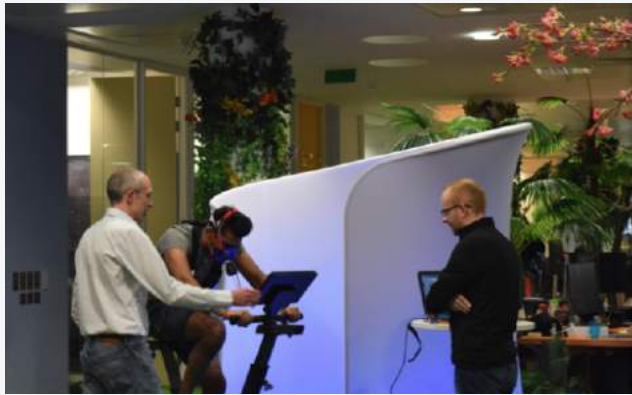
# VOLUNTEERS COMPLETED 15 CAR.O.L RIDES OVER 5 WEEKS



The CAR.O.L Intense Protocol is based on the Wingate principle, named after the Wingate Institute where it was developed.

Until CAR.O.L, it has only been used in medical or laboratory settings.

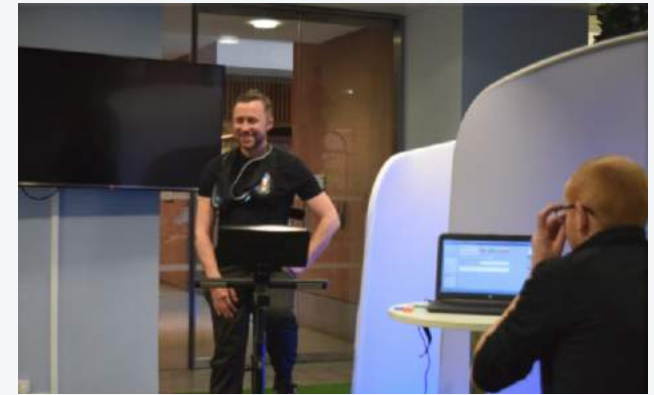
# RESULTS OF VO2MAX AFTER



Poor to Good



Poor to Fair/Good



Good to Excellent

**POOR**

**FAIR**

**GOOD**

**EXCELLENT**

4 VOLUNTEERS WENT FROM **POOR** TO **GOOD** AND SKIPPED **FAIR**

1 VOLUNTEER WENT FROM **POOR** TO **FAIR/GOOD**

1 VOLUNTEER WENT FROM **GOOD** TO **EXCELLENT**

# CLINICAL RESULTS WERE REPRODUCED IN THE REAL-WORLD



11% improvement in VO2MAX in 5 Weeks  
10.6% improvement in the CAROL Octane Score

CAR.O.L's on board metrics (Octane Score) matched the independent VO2Max testing.

This was exactly in line with lab results

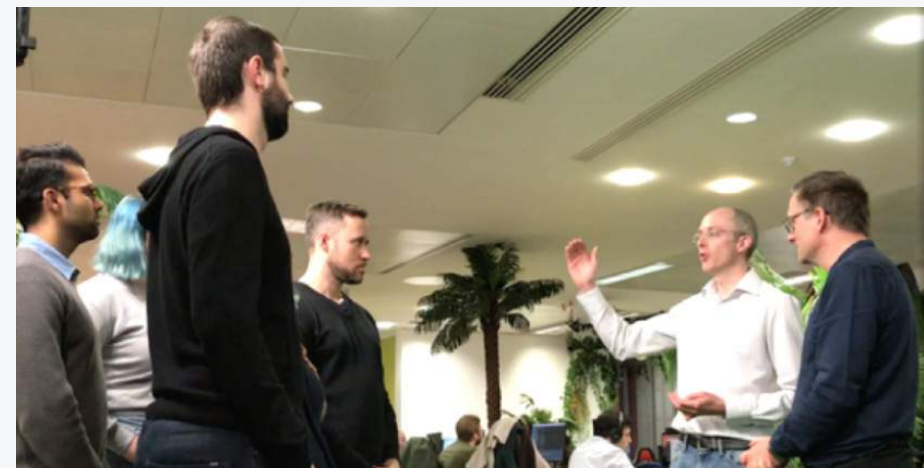
This 11% increase would double to 22% in 10 weeks.

## WHAT DOES THIS IMPROVEMENT MEAN?

Dr Neils Vollaard explains - 11% improvement reduces the risk of getting inactivity-related diseases (like heart disease, diabetes and others ) by 20%.

A 22% improvement would slash these risks by 40%.

This is significant improvement in health by just investing 30 mins a week.



# WHY DOES IT WORK?

High-Intensity sprints are designed to force your body to use its sugar stores in muscle (known as glycogen) to supply you with energy, very fast.

“Muscle glycogen stores are depleted by 20-25% during a REHIT session”

“Insulin sensitivity increases in average by 28%”

Neils B.J. Vollaard



## GLYCOGEN DEPLETION TEST RESULT



Igor's test result showed 24% glycogen depletion just after 2x20 min sprints. This matched lab results and took his fuel status from high to low.

Dr Vollaard says that in the first sprint, your body breaks down sugar and floods muscles for energy. Signalling molecules attached to sugar molecules are released.

In the second sprint these signalling molecules are activated that help stimulate growth of muscle including heart muscle and improve sugar uptake by your body.



TO GET THE SAME RESULT  
YOU WOULD NEED  
**45 MINS OR MORE**  
**OF MODERATE EXERCISE**  
**THREE TIMES A WEEK**

C A R . O . L