



Rotary Club of Christchurch South Inc.

P O Box 12-243, Christchurch 8023, NZ.

SERVICE ABOVE SELF



Bulletin

37 for 09 April 2025

Speaker Report 9 April 2025

Our speaker this evening was Dr Charles Simpson who has a PhD from the School of Medicine at the University of New South Wales and is currently a postdoctoral fellow at both Lincoln and Canterbury Universities.



Charles is a clinical exercise physiologist focusing on cardiovascular disease risk. He started our journey by telling us that when we exercise our bodies respond by increasing cardiovascular activity, muscular activity, lung activity and metabolic activity. We have evolved this way, because when we are in a “flight or fight” situation, all of these physiological responses are required to work together, coordinated by our brains

Charles then told us about some experimental work he had carried out looking at how athletes respond to repeated exercise testing with both normal oxygen intake and when the air they are breathing contains a reduced percentage of oxygen. This is of course relevant to the performance of athletes from high altitude environments, or the adaptation of athletes when playing games at high altitude venues such as rugby at Johannesburg. However, it is worth noting that these cases are slightly different in that at high altitude athletes are breathing air that is less dense but contains the same proportion of oxygen as at sea level whereas in Charles’ experiments, the percentage of oxygen in the air was reduced although the density of the air was normal – presumably it had extra nitrogen to make up for the reduction in oxygen. In any case, what his experiments showed was that under these conditions, different muscle fibres (so-called type 2 or “fast twitch” fibres) predominate over the type 1 more fatigue-resistant fibre which may explain the improved short term athlete performance under these circumstances. The type 2 fibres apparently become activated because of increased blood flow relative to the type 1 fibres and increased neurological muscle “firing”.

This work is significant because cardiovascular disease is the leading cause of death in the world. In New Zealand, lost income due to cardiovascular disease is estimated at \$700M per year. Exercise testing, such as in Charles' work, gives more detailed insight into the cardiac status of each individual person and offers the opportunity to create a personalized exercise regime that best suits each person's situation. As he quoted: "exercise is medicine".

Charles also showed us results from other experimental work related to the relationship between kidney performance and cardiac function which is particularly relevant for people with chronic kidney disease. Previously little was known about this relationship, and it is hoped that Charles' work will help to identify simple tests that can help in the management kidney disease which ultimately causes death due to cardiac failure.

We are fortunate to have this sort of work going on in our research institutions as it provides more insight and more tools for clinicians to use in the management of modern day illnesses.

Rotary Tonight.



Thanks to Alan McK. for the report and Viv for the photograph.

Upcoming Meetings

16/04/2025	David Broderick – Chairman SPCA New Zealand	The SPCA - Protecting New Zealand's animals for over 150 years
23/04/2025	Mark Christensen	New Zealand Nature Fund - Leading the fight against the extinction of our most endangered species.
30/04/2025	Kase Craig – Partners & Friends Night	A life of Ballet – From Christchurch to Ballet de l'Opera National de Bordeaux, France **Partners Night & Friends Night**

Mother of all Clean Ups – River Clean Up Saturday 10 May. Meet 10am beside the Beckenham Scout Den Centaurus Rd (by the Brickworks)
Finish by 12:00 and meet at The Brickworks for a drink or lunch.

Thanks to those who indicated that they could help.

Viv

- **Save the Dates**

23 April Hornby Rotary Club are visiting us.

4 June we are visiting Hornby Rotary Club. Meal is \$25 with a choice of 3 mains.

Speaker: Geoff Butler, Horologist - Ilam Watchmakers More details nearer the time.

- **John Taylor Walkway**

Saturday 03 May 2025

10 -12pm BBQ lunch afterwards.

Street Appeal Dates:

- **Aviva**

Saturday

May 24th.

New World, St. Martin's.

This date will all be confirmed nearer the time of the appeals.

- **Ranui House- Vocational visit**

Wednesday 1st October

@ 6pm for a tour of the new apartments and then the Sugar Horse Pub for dinner afterwards.

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Dates for the Pink Ribbon Street Appeal for 2025 – 17-18 October 2025.

- **April Walk**

Come join us on our walk and/or lunch on Thursday 17 April

Date: Thursday 17 April

Park/Meet: Halswell Quarry Park, Cashmere Road

Time: 10.30am

Walk: Halswell Quarry

continued:

Lunch: 12 noon at The Old Vicarage, Halswell Road

Organisers: Andrew & Rosalia

If you are unable to join the walk, then come and have lunch with us.

If the weather is unsuitable for walking, we will still meet for lunch at 12:00 noon

Please let David (david.buist@xtra.co.nz) know if you are walking, lunching or both.

Duties:

Duty	16-Apr-25	23-Apr-25	30-Apr-25
Cash Desk	M Bruce	H Garlick	A Airay
Cash Desk	A McCully	A Kim	D Peterson
Reception	D Buist	R McKinney	M Opie
Speaker's Host	D Peterson	A McCully	S Mackenzie
Grace	D Peterson	A McCully	S Mackenzie
International Toast	D Buist	R McKinney	M Opie
Thanks to Speaker	A McCully	H Garlick	D Peterson
Quote for the Week	M Bruce	A Kim	A Airay
Speaker Reporter	M Opie	A Airay	V Ellis
Sergeant	G Bailey	D Buist	M Bruce

The link for the club web pages is www.churchsouthrotary.org.nz

The link to club Facebook pages is <https://www.facebook.com/ChristchurchSouthRotary/>

Reminders:

APOLOGIES

Record your apology at the Reception Desk at a prior meeting, OR
email: chcsouthrotary@gmail.com before 11.00am Wednesday.

You will get a reminder a couple of days before the meeting re apologising and to advise if bringing a guest.

Emergency apologies to Alan McKinnon (021 142 7668)

OR, Club Secretary Viv Ellis (027 490 3161)

DUTIES If you are unable to carry out your allocated duty, it is YOUR responsibility to arrange a substitute.

LEAVE OF ABSENCE

Please advise all leave of absence of 3 or more weeks to the Secretary, by email or in writing.