

Welcome!!!




Breathing and Blood Pressure!

SIT, Invercargill, Women's Health & Wellness Research 2020/21



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The background features a stylized illustration of several people of various ethnicities and ages, with their arms raised in a gesture of celebration or agreement. The colors used for the figures are muted tones of pink, blue, and orange.

Topics:
Meet the researchers
Women's Wellbeing, problems and solutions
What your role will involve
C19 Strategy
The benefits to you and other women
Questions

www.breatheinvercargill.weebly.com

Meet the Researchers!

Claire Winzar BScH, 0204 1234567, breatheinvercargill@gmail.com

- Healthy Lifestyles Advisor, Integrative Health and Nutrition Coach, teacher of Breathing for a Better Life.
- Interest in breathing for >25 years old (CBT/anxiety), own experiences of chronic physical illness
- Professional learning and collaborations in heart health since 2008, mentored in autonomic research since 2017
- Keen meditator, health investigator, lover of fresh air, walks the wellbeing talk!

Dr. Jo Smith PhD, 0800 403337 ext. 8803, jo.smith@sit.ac.nz

Programme Managers at SIT Therapeutic and Sports Massage

- Primary academic supervisor

Dr. Donna Smith PhD

- Programme Managers at SIT Therapeutic and Sports Massage
- Secondary academic supervisor



Women's Wellbeing

A healthy lifestyle isn't only about correct breathing and healthy blood pressure, but considering the proven and profound effects of correct breathing on physical, mental, social, and spiritual wellbeing, we think it has been under utilised and want to know if we should make it more accessible to all women!

After all, women influence communities from within, so their wellbeing and happiness is that of their families and connections.

There is a current global surge in breathing and nervous system research, and now we all have the opportunity to be a part of it!!

What is the problem with blood pressure and women's wellbeing?

Cardiovascular disease (CVD) e.g., strokes and heart attacks, are the number one killer of women globally and in NZ.

CVD is associated with altered nervous system function, as is high blood pressure. High blood pressure is the number one contributor to CVD.

Before high blood pressure (>140/90) comes raised blood pressure (120/80 to 139/89). Once you have raised blood pressure, it is highly likely to increase to high blood pressure over time, putting you at greater risk of CVD.

Its not just the heart itself, CVD in women is associated with the presence of: depression, polycystic ovarian syndrome (PCOS), pre-eclampsia, menopause, diabetes, mental unwellness, excess weight, smoking, excess sodium intake, higher alcohol consumption, lower quality of diet, and sleep disordered breathing (e.g., sleep apnea).

Do we have a solution?

Breathing techniques are known to influence the nervous system in a beneficial way. This can be measured by heart rate variability (HRV).

Improved HRV is associated with lower blood pressure, lower CVD risk, less pain, better blood sugar regulation, better decision making, lower anxiety and depression, better emotional regulation, optimal sleep, spiritual wellbeing (e.g. meaningful practices, beliefs, purpose), and higher general wellbeing and happiness scores.

In this research, we will assess your blood pressure, HRV, breathing symptoms and patterns, and general wellbeing scores, before and after four weeks of a simple breathing technique (up to ten minutes twice a day). We will also ask you about things you have tried to manage blood pressure and other wellbeing concerns. Correct breathing does not fix everything, but it's benefit to our local women is what we want to know.

February

- Online Screening Questionnaire (10 min)
- Read Participant Information and Informed Consent (10 min)

Feb/March

- Pre-breathing online questionnaire online (10 min)
- Pre-breathing private assessment in person (40 min) see next slide for details

March/April

- Breathing lesson – in person with group or privately. Online if necessary (60 min)
- Practice four weeks, up to 2 x 10 minutes a day. Fill a notebook with daily comments

April

- Post-breathing assessment – in person (40 min) see next slide for details
- Post breathing questionnaire (10 min)

What your role will involve

2 Private Assessments

Will take place at a private residence or meeting room.

Two hours after exercise, caffeine, nicotine, or food. 24 hours after any alcohol

Pee on arrival if needed as full bladder affects results

Height, weight, neck size measured

3 questionnaires completed with a computer: Nijmegen, self evaluated breathing, sleep breathing

Measure blood pressure, heart rate variability

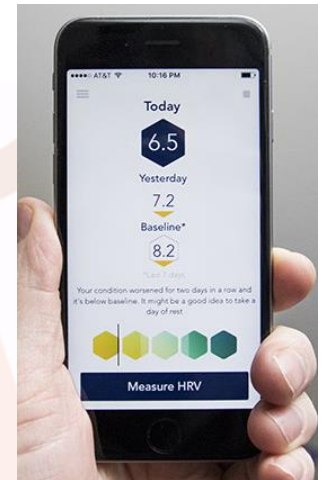
Assess breathing patterns and rate

	0 - Never/Not true at all	1 - Occasionally/a bit true	2 - frequently mostly true;	3 - very frequently/very true
I get easily breathless out of proportion to my fitness	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I notice myself breathing shallowly	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I get short of breath reading and talking	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I notice myself sighing	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I notice myself yawning	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I feel I cannot take a deep or satisfying breath	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I notice that I am breathing irregularly	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
My breathing feels stuck or restricted	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

How a questionnaire looks



Hand placement for breathing patterns



A disinfected android is held to measure HRV

Covid19

If any of us are feeling poorly:

- Report illness and rearrange appointment!
- We will do the same for you
- Text 0204 1234567 Email breatheinvercargill@gmail.com
 - ✓ a new or worsening cough
 - ✓ fever
 - ✓ shortness of breath
 - ✓ sore throat
 - ✓ sneezing and runny nose
 - ✓ loss of smell.

If we have a lock down or you are unable to attend

- Take part online using video instruction (live or pre-recorded)
- Type or photograph your notes
- Won't be able to collect all measures
- Collect meaningful data on experiences

Alcohol wiped cleaned equipment – Computer, smartphone, blood pressure monitor

Health, Safety, & Privacy

Adverse events

Report to us: 0204 1234567
breatheinvercargill@gmail.com

Concerns: SIT Health Nurse
Your GP

Possible reactions to breathing technique:

- ❖ Drowsy, lightheaded, dizzy
- ❖ Important to follow the technique!
- ❖ We can make appropriate alterations

- Ethics approval has been granted by the SIT Human Research Ethics Committee
- You will be anonymous in data and reporting by having a unique code ID!
- Data will be kept in locked digital accounts or physical cabinet
- Anonymous data kept in locked digital files for five years by SIT supervisor
- If you enter a group, you are asked to keep identities **CONFIDENTIAL**
- You must signed an informed consent before we start
- You have the right to withdraw

The background features a stylized illustration of several people of various ethnicities and ages, shown from the chest up with their arms raised in a gesture of celebration or triumph. The colors used for the figures are muted and pastel-like, including shades of pink, blue, and orange. The overall tone is positive and inclusive.

The benefits to you and other women

Learn about your own breathing patterns – can they be improved?

Be professionally guided to learn a new tool for managing your health and wellbeing

Share your experiences and be heard!

Remove the stigma of beneficial breathing as hippy-ish!_____

Contribute to the global surge of interest in breathing, the nervous system, health, and wellbeing

A background graphic showing several hands of different colors (pink, blue, orange) raised in a circle, symbolizing unity and participation.

Questions?

Thank you for viewing.

If you have any questions please contact Claire. Her phone is often off, so if you don't get through first time, just flick a text or email, and she will get back to you ASAP 😊

Next Steps:

Go to the website to fill the screening questionnaire, read the Participant Information _____ and Informed Consent

www.breatheinvercargill.weebly.com