

THE FLOOR TO YOUR CORE: THE PELVIC FLOOR AND WHY IT IS IMPORTANT

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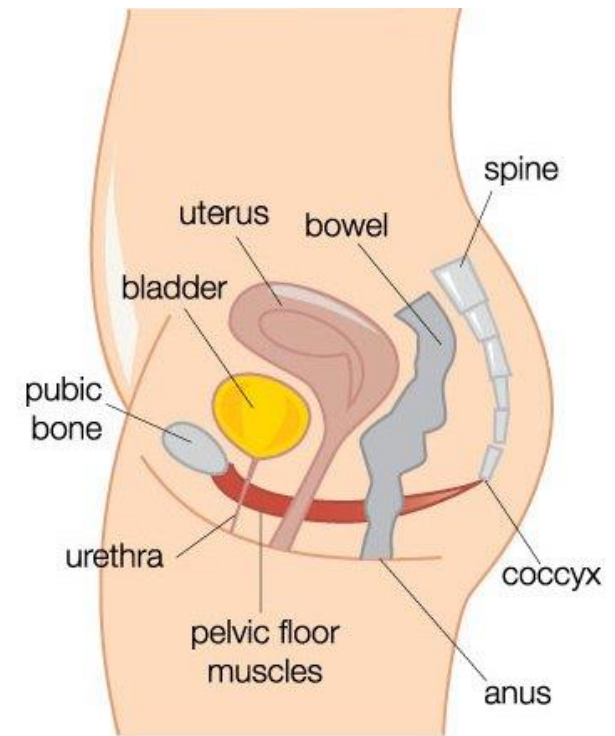
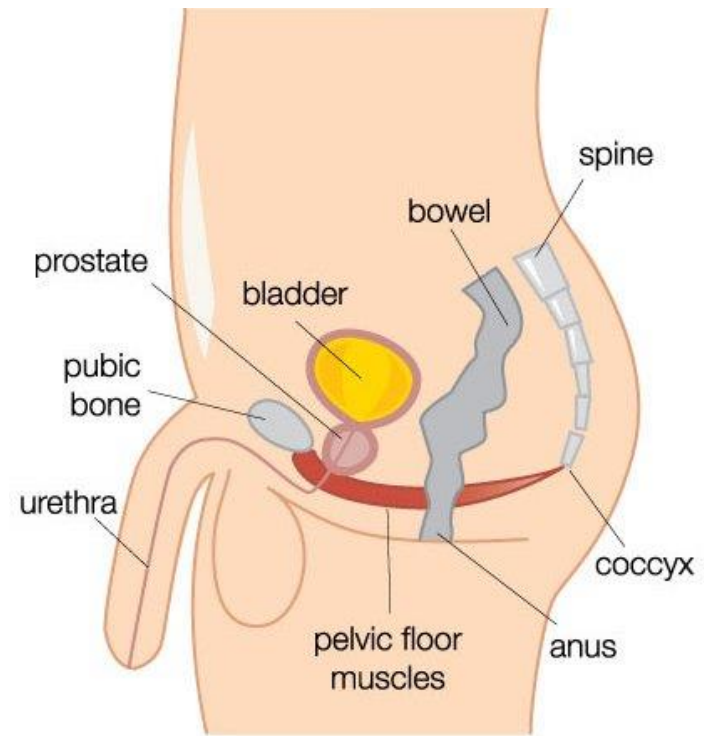
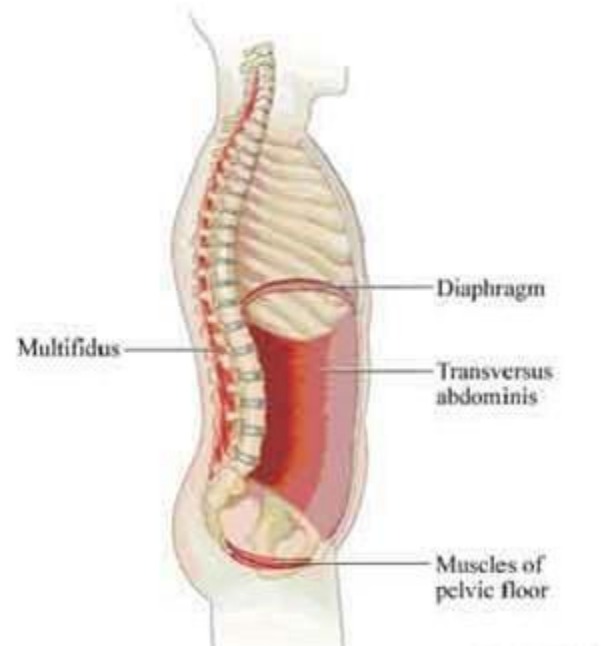


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Overview

- What is the pelvic floor
- Risk factors
- Pelvic floor dysfunctions
- Self-testing/screening
- Education
- Strengthening
- Where can I get help

*I LAUGHED
SO HARD
TEARS,
RAN DOWN
MY LEGS*
~



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What is the Pelvic Floor

- Group of muscles, ligaments and fascia that form the base of your core.
- Acts like a hammock to support- bladder, bowel, uterus
- Has a superficial and deep layer.
- Works synergistically with other core muscles- diaphragm, transverse abdominus, and back musculature (multifidus) to provide core/ pelvic stability, supports your pelvic organs and contributes to managing intra abdominal pressure.
- Important to maintain urinary and anal continence and control as well as important for sexual function.
- Both males and females have a pelvic floor, although dysfunction is more common in females.

Crossfit do you Pee?

- <https://www.youtube.com/watch?v=UKzq1upNlgU>
- Common not Normal!
- Meta-analysis (2022) found prevalence of UI 44.5% among female cross fitters (1).
- Train to the weakest link- often the pelvic floor.
- Easily treatable- >80% improve or fully resolve with PFM training.

Risk Factors for pelvic floor dysfunction

- Parity (pregnancy)- increases each subsequent pregnancy, exponential increase 3 or more.
- Vaginal delivery
- Long second stage labour >60mins
- Large baby >4kg
- Obesity
- Chronic cough (allergies, asthma, smoking)
- Regular heavy lifting, both occupational and recreationally
- High impact exercise- running, gymnastics, CrossFit style. (1,2)
- Pelvic surgery e.g hysterectomy
- Prostate cancer
- Post menopause
- Assisted delivery
- History of trauma- sexual assault, fall onto tailbone
- Chronic constipation
- Family history

Pelvic Floor Dysfunction

- Stress Urinary Incontinence
- Urge Incontinence
- Mixed Incontinence
- Anal Incontinence- faecal/flatus
- Sexual Dysfunction
 - Pain
 - Erectile dysfunction
 - Premature ejaculation
- Pregnancy
- Persistent pelvic pain
- Chronic Low Back/hip/groin pain.
- Dyssynergy/ uncoordinated
- Pelvic Organ Prolapse (POP)

Management strategies for Pelvic floor Dysfunction

- ID if you have a dysfunction- self screen, visit a pelvic health physio for an assessment.
- Loose weight- if your BMI is >26
- Strengthen Pelvic floor muscles- remember fully relaxing PFM is as important as strengthening them.
- Correct toileting technique
- Diet- fibre, bladder/bowel irritants, fluids
- Regular exercise (noting some exercises aren't PF friendly).
- Address chronic constipation/chronic cough by talking to your GP.



Pelvic Floor Screening Tool

Name of Fitness Centre: _____

Did you know that bladder and bowel control problems are a common issue, affecting over 1.1 million New Zealanders? Did you know that women are at higher risk of these problems because of pregnancy, childbirth and menopause – and that certain exercises can cause or worsen these problems?

This survey has been designed to see if you are at risk of pelvic floor problems, and if so, to make sure your exercise program is pelvic floor safe. The survey will take 5 minutes to complete and your answers will be confidential.

About you...	Yes	No
Are you currently pregnant?		
Have you recently (or ever) had a baby?		
Are you going through or have been through menopause?		
Have you ever undergone gynaecological surgery (e.g. a hysterectomy)?		
Are you an elite athlete (e.g. a runner, Gymnast or trampolinist)?		
Do you have a history of lower back pain?		
Have you ever injured your pelvic region (e.g. through a fall or pelvic radiotherapy)?		
Do you suffer from constipation or regularly strain on the toilet?		
Do you have a chronic cough or sneeze (e.g. because of asthma, smoking or hayfever)?		
Are you overweight, obese or having a BMI over 25?		
Do you frequently lift heavy weights (e.g. at work or at the gym)?		

Do you...	Yes	No
Accidentally leak urine when you exercise, play sport, laugh, cough or sneeze?		
Need to get to the toilet in a hurry or not make it there in time?		
Constantly need to go to the toilet?		
Find it difficult to empty your bladder or bowel?		
Accidentally lose control of your bowel or accidentally pass wind?		
Have a prolapse (e.g. a bulge or feeling of heaviness, discomfort, pulling, dragging or dropping in the vagina)?		
Suffer from pelvic pain or experience pain during or after intercourse?		

If you answered 'Yes' to any of these questions it is important to discuss a pelvic floor safe program with your fitness professional. If you experience any of the symptoms outlined in the second part of the survey, it is also important to speak to your doctor or a continence professional as many of these symptoms can be treated, and in many cases cured.

For further information, including free brochures and the details of local continence professionals, contact 0800 650 659. Protect your pelvic floor and stay in control. Visit www.continence.org.nz

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[Pelvic Floor Screening Tool for Women.jpg \(724×1024\)](#)
continence.org.nz



Pelvic Floor Screening Tool

Name of Fitness Centre: _____

Did you know that bladder and bowel control problems are a common issue, affecting over 1.1 million New Zealanders? Did you know that some people are at higher risk of these problems because of their pelvic floor fitness – and that certain exercises can cause or worsen these problems?

This screening tool has been designed to see if you are at risk of pelvic floor problems, and if so, to make sure your exercise program is pelvic floor safe. This is as important for men as it is for women. The survey will take 5 minutes to complete and your answers will be confidential.

Do You...	Yes	No
Accidentally leak urine when you exercise, play sport, laugh, cough or sneeze?		
Need to get to the toilet in a hurry – or not make it there in time?		
Constantly need to go to the toilet?		
Find it difficult to empty your bladder or bowel?		
Accidentally lose control of your bowel – or accidentally pass wind?		
Have a prolapse (e.g. a bulge in your rectum or a feeling of needing to use your bowels but not actually needing to go)?		
Suffer from pelvic pain or experience pain during or after intercourse?		

About You...	Yes	No
Are you an elite athlete (e.g. a runner, gymnast or trampolinist)?		
Do you have a history of lower back pain?		
Have you ever injured your pelvic region (e.g. through a fall or pelvic radiotherapy)?		
Do you suffer from constipation or regularly strain on the toilet?		
Do you have a chronic cough or sneeze (e.g. because of asthma, smoking or hayfever)?		
Are you overweight, obese or having a BMI over 25?		
Do you frequently lift heavy weights (e.g. at work or at the gym)?		

If you answered 'Yes' to any of these questions it is important to discuss a pelvic floor safe exercise program with your exercise professional. If you experience any of the symptoms outlined in the second part of the survey, it is also important to speak to your doctor or a continence professional – as many of these symptoms can be treated, and in many cases cured.

For further information, including free brochures and the details of local continence professionals, contact 0800 650 659. Protect your pelvic floor and stay in control. Visit www.continence.org.nz

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[Pelvic Floor Screening Tool for Men.jpg \(724×1024\)](#)
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Self test- female








- Self examination with a mirror.
 - Easiest position is reclined sitting with your back supported and hip and knees bent.
 - looking for a closing and tightening of the anus and vagina and lifting of the perineum (the bit of skin between the vagina and anus) as the muscles draw inwards and upwards.
 - Ensure the perineum does not drop down/ stretch. This could mean you are bearing down.
- Internal vaginal palpation
 - adopt a comfortable position- ideally lying on your back or side
 - using a small amount of lubricant insert index finger into your vagina, only need to go approx. 2 cm (upto middle finger joint), press into the side wall of your vagina (not front or back).
 - Contract your pelvic floor muscles.
- Holding a fart in.
- Stopping the flow of urine- no more than once per week.

Self test- male

- Self examination with a mirror
 - Standing in front of a mirror without pants/ undies.
 - Contract pelvic floor (think “ nuts to guts” or visualise walking into very cold water and it is getting to groin height.
 - When contracting testicles should lift a dip appears above the penis.
- Self palpation of perineal muscles.
- Practice holding a fart in.
- Stopping the flow of urine- no more than once per week.

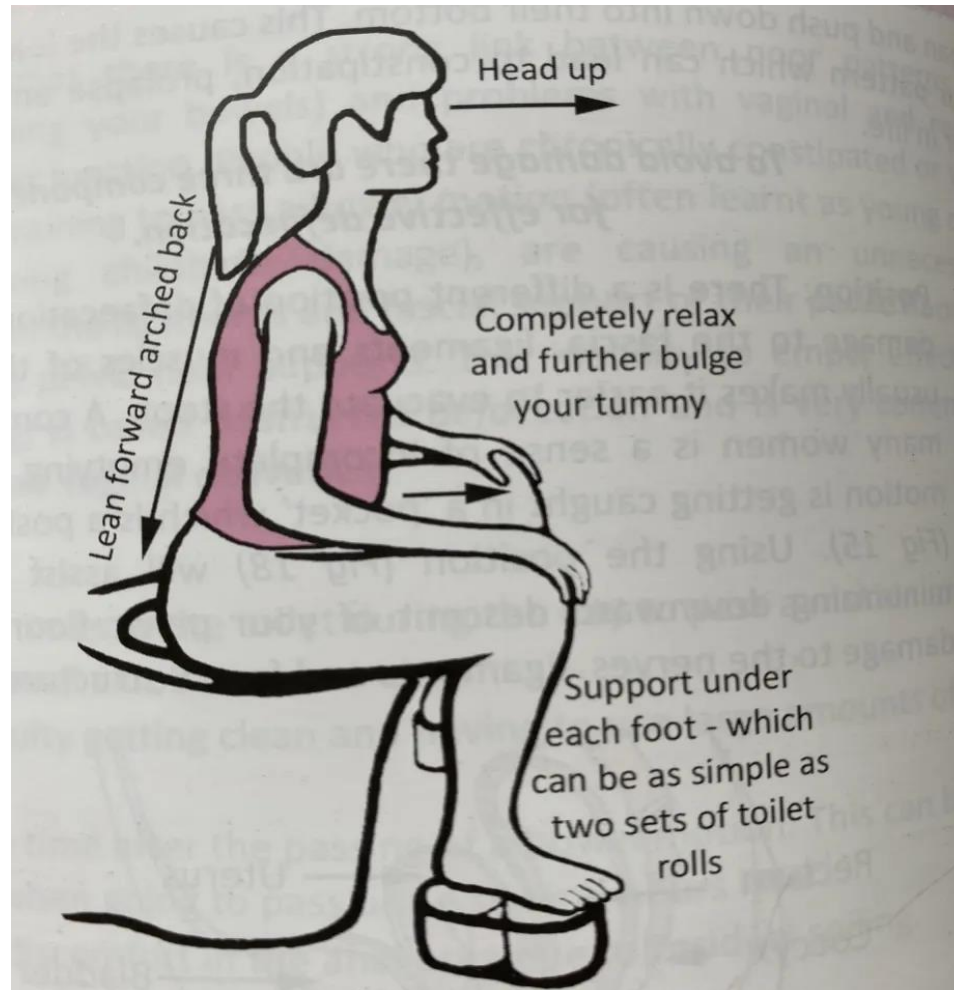
Toileting education

Bristol Stool Chart

Type 1		Separate hard lumps, like nuts (hard to pass)
Type 2		Sausage-shaped but lumpy
Type 3		Like a sausage but with cracks on its surface
Type 4		Like a sausage or snake, smooth and soft
Type 5		Soft blobs with clear-cut edges (passed easily)
Type 6		Fluffy pieces with ragged edges, a mushy stool
Type 7		Watery, no solid pieces. Entirely Liquid

- Strong links between poor toileting (bladder/ bowel) and PFM dysfunction.
- “Normal” bowel function anywhere between 3x day-3x per week; consistent pattern.
- Type 3-4 stool ideal
- Diet (fibre)/ fluid intake, exercise.
- Technique

Pooping technique



- Don't hold on, go when you first feel the urge.
- Position:
 - Seated with whole foot supported
 - Knees higher than hips (30° hip flexion), may need to elevate feet to achieve (toilets rolls, "squatty potty").
 - Feet apart
 - Maintain neutral spine position (slight inwards curve)
 - Relax and bulge belly
 - Do not bear down.
 - Support prolapse if required.

Comedic relief!

- [This Unicorn Changed the Way I Poop - #SquattyPotty - YouTube](#)

Strengthening

- PFM training is the gold standard treatment for most pelvic floor dysfunctions.
- Responds to standard muscle strengthening principles, such as overload and progression.
- Important to start with isolated strengthening first, before moving to functional activities.
- Progress upto training in the position that causes symptoms- e,g standing, jumping, deadlifting.
- Initially start with pelvic floor contraction linked to exhale breath, but need to progress upto contracting throughout the breath cycle.

**“When you strengthen the Core
remember the floor”**

How to strengthen pelvic floor muscles (kegals)

- The easiest way to start pelvic floor exercises is lying on your back.
- Start by lying on your back on the floor or firm surface. You may want to place a pillow under your pelvis if this is comfortable.
- Visualise a marble at the opening of your vagina and squeeze and lift (using your vagina and anus).
- Keep working to maintain “maximum effort” for 10 seconds (or as long as you can hold initially) Don’t hold it if you have lost the contraction.
- Rest for 10 seconds and repeat 10 times.
- Do this 3x per day
- Try not to use your glutes or abdominal muscles.
- Keep breathing normally.

How to strengthen pelvic floor muscles- fast twitch

- In addition to these slow contractions it is also important to train the fast twitch fibres.
- Adopting a comfortable position as per previous slide.
- Activate your pelvic floor for a fast maximal contraction.
- Relax immediately after hitting maximum force.
- Repeat x 10 times, ensuring you fully relax between each contraction. Short fast contractions is the main aim here.
- Repeat 3x pers day

Key points

- To progress increase duration of hold
- Change positions/ functional positions
- **Relaxing the pelvic floor-** the ability for the PFM to relax is as important as strength.
- In order for a muscle to have the ability to generate the required force it needs when required it is important that it has a chance to relax.
- Keeping your pelvic floor muscles contracted all day constantly is just as bad for them as them not working them at all.
- Really important to have rest/ relaxation when doing the strengthening.
Let them go!

Were to from here

- Talk to your GP about management for chronic constipation/ cough.
- If pregnant/ post partum/ had prostate treatment- recommend getting an assessment by a Pelvic health physio.
- If no improvement in 4-6 weeks doing strengthening review by pelvic floor physio/ referral onto specialists.
- Majority of PFD can be managed by conservative treatment if muscle/ nerves intact.
- Do not suffer in silence! Get help, common not normal.
- Train to the weakest link- often the pelvic floor.

Resources

- Easy to follow info sheet on the pelvic floor.
 - [Cléry Presentation \(continence.org.nz\)](http://continence.org.nz)
- Self screen for women Continence NZ
 - [Pelvic Floor Screening Tool for Women.jpg \(724×1024\) \(continence.org.nz\)](http://continence.org.nz)
- Self Screen for Men Continence NZ
 - [Pelvic Floor Screening Tool for Men.jpg \(724×1024\) \(continence.org.nz\)](http://continence.org.nz)
- Useful easy to follow info:
 - <https://www.continence.org.nz/>
 - [Incontinence prevention, management & support | Continence Foundation of Australia](http://continence.org.au)
- Pelvic floor comedian at Edinburgh fringe festival- entertaining and informative
 - <https://m.youtube.com/watch?v=VdL4U39J0ao>

References

- 1. Dominguez-Antuña, E., Diz, J.C., Suárez-Iglesias, D. *et al.* Prevalence of urinary incontinence in female CrossFit athletes: a systematic review with meta-analysis. *Int Urogynecol J* (2022). [https://doi-org.ezproxy.massey.ac.nz/10.1007/s00192-022-05244-z](https://doi.org.ezproxy.massey.ac.nz/10.1007/s00192-022-05244-z)
- 2. Forner, L.B., Beckman, E.M. & Smith, M.D. Do women runners report more pelvic floor symptoms than women in CrossFit®? A cross-sectional survey. *Int Urogynecol J* 32, 295–302 (2021). <https://doi.org/10.1007/s00192-020-04531-x>
- Dakic, J. G., J. Hay-Smith, J. Cook, K.-Y. Lin, M. Calo and H. Frawley (2021). "Effect of Pelvic Floor Symptoms on Women's Participation in Exercise: A Mixed-Methods Systematic Review With Meta-analysis." *Journal of Orthopaedic & Sports Physical Therapy* 51(7): 345-361.
- Laura Faye Gephart, Karen M. Doersch, Michelle Reyes, Thomas J. Kuehl & Jill M. Danford (2018) Intraabdominal pressure in women during CrossFit exercises and the effect of age and parity, *Baylor University Medical Center Proceedings*, 31:3, 289-293
- Heather, A. K., H. Thorpe, M. Ogilvie, S. T. Sims, S. Beable, S. Milsom, K. L. Schofield, L. Coleman and B. Hamilton (2021). "Biological and socio-cultural factors have the potential to influence the health and performance of elite female athletes: A cross sectional survey of 219 elite female athletes in aotearoanew zealand." *Frontiers in sports and active living*: 27.