The role of physio in pregnancy and post natal care

Tory Toogood
Women's Men's and Pelvic Health Physiotherapist



Learning outcomes

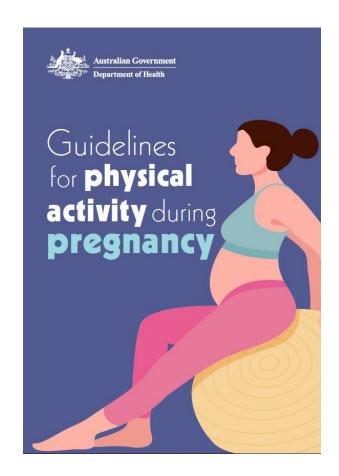
 Participants will be aware of current guidelines around physical activity in pregnancy, and the role of physios in helping patients achieve this

 Participants will be aware of the importance of pelvic floor rehab after pregnancy and delivery, and its lifelong pelvic health consequences



Exercise in Pregnancy

2022





Exercise

Physical activity for pregnant women



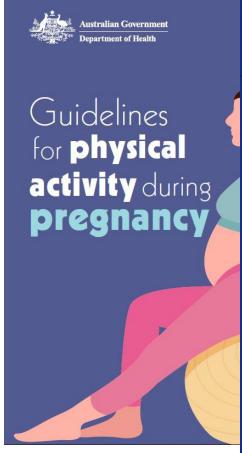
Guidelines for physical activity during pregnancy

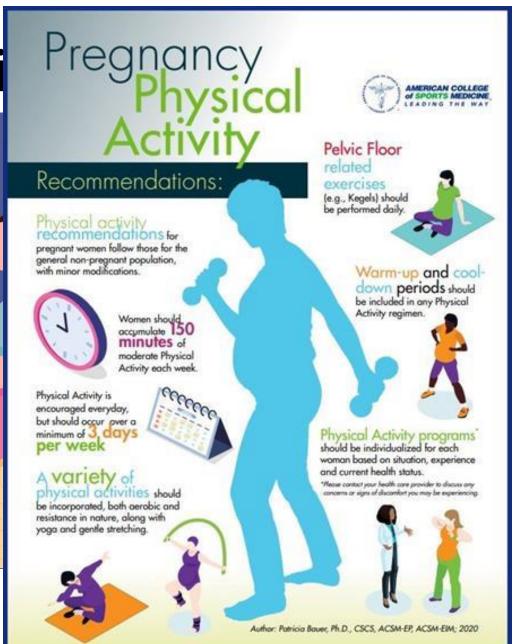


UK Chief Medical Officers Recommendations 2017: Physical Activity in Pregnancy. bit.ly/startactiveinfo 2017



Exercise





2020







CATEGORY: USEFUL GUIDANCE

Exercise during pregnancy

This statement has been developed and reviewed by the Women's Health Committee and approved by the RANZCOG Board and Council.

A list of Women's Health Committee Members can be found in <u>Appendix A.</u>

The committee acknowledges the contribution of Dr Kym Guelfi to this document.

Disclosure statements have been received from all members of this committee.

Objectives: To provide guidelines for the prescription of exercise during pregnancy.

Target audience: Health professionals providing antenatal care, accredited exercise physiologists and pregnant women.

Values: The evidence was reviewed by the Women's Health Committee (RANZCOG), and applied to local factors relating to Australia and New Zealand.

Background: This statement was first developed in July 2016 and most recently reviewed in March 2020.



Exercise in Pregnancy

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Australian guidelines for physical activity in pregnancy and postpartum

Wendy J. Brown ^{a,*}, Melanie Hayman ^b, Lene A.H. Haakstad ^c, Tayla Lamerton ^a, Gabriela P. Mena ^a, Anita Green ^d, Shelley E. Keating ^a, Grace A.O. Gomes ^e, Jeff S. Coombes ^a, Gregore I. Mielke ^a

- ^a School of Human Movement and Nutrition Sciences, The University of Queensland, Australia
- ^b Appleton Institute, School of Health, Medical and Applied Sciences, Central Queensland University, Australia
- ^c Department of Sport Medicine, Norwegian School of Sport Science, Norway
- ^d Brisbane North Public Health Network and School of Human Movement and Nutrition Sciences, The University of Queensland, Australia
- ^e Gerontology Department, Federal University of São Carlos, Brazil

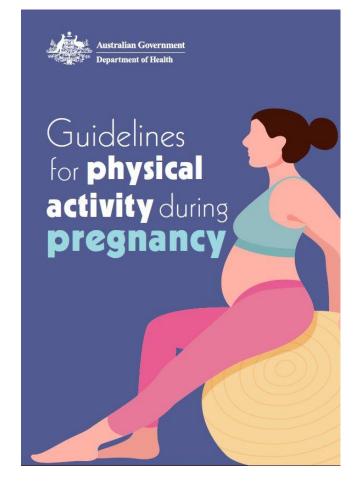


Fxercise in Pregnancy

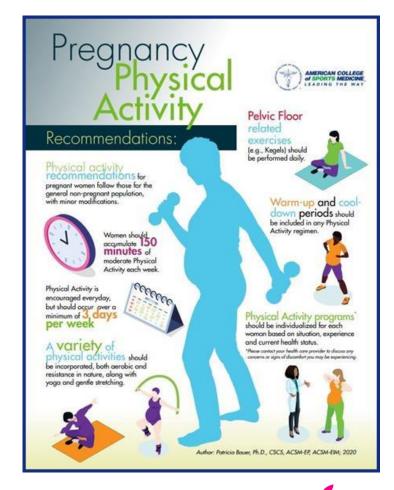
Canadian Guidelines 2019 ²⁰	American College of Obstetricians and Gyne- cologists 2015 ¹⁵	USA Physical Activity Guidelines 2018 ²²	Royal Australian and NZ College of Obstetrics and Gynaecologists 2016 ¹⁶	Swiss Guidelines 2018 ¹⁹	Sports Medicine Australia Position State- ment 2016 ¹⁸	Wolters Kluwer UpToDate® 2019 ²¹
A. General recommendation						
All women without contraindication should be physically active throughout pregnancy.	Physical activity in pregnancy has minimal risks and has been shown to benefit most women, although some modification to exercise routines may be necessary because of normal anatomic and physiologic changes and foetal requirements.		Women without contraindications should participate in regular aerobic and strength conditioning exercise during pregnancy. Women should be advised that there is no evidence that regular exercise during an uncomplicated pregnancy is detrimental to the woman or fetus.	For women who have been previously active prior to their pregnancy: usual activities can be maintained to the same extent as long as comfortable. If necessary, style/mode and technique can be adjusted and duration and intensity can be reduced.	For healthy women, physical activity/exercise during pregnancy is safe and is associated with numerous benefits to the mother and unborn child/fetus.	Women with uncomplicated pregnancies should be encouraged to exercise as part of a healthy lifestyle before, during and after pregnancy.
B. Dose						
At least 150 min/week.	≥20-30 min/day.	≥150 min/week.		At least 2.5 h/week.		30 min daily.
A minimum of 2	Most or all days of the	UK Chief Medical Office	cers Recommendations 2017: Physical Activity in Pregnancy.	-Ideally the physical	Author: Patricia Bouer, Ph.D., C	SCS, ACSM-EP, ACSM-EIM; 2020



Exercise in Pregnancy









Exercise in Pregnancy



How active should I be?

During your pregnancy aim to:

- be active on most, if not all, days of the week
- do moderate intensity activities for 2½ to 5 hours each week;
 or vigorous intensity activities for 1¼ to 2½ hours each week
 - this means do 30 to 60 minutes of moderate intensity activity
 or do 15 to 30 minutes of vigorous intensity activity most days
- do muscle strengthening activities at least 2 days each week
- break up long periods of sitting and standing still
- do pelvic floor exercises.









Exerc

Type of activities

Do a combination of both aerobic and strengthening activities.





Aerobic activities help improve your cardiorespiratory fitness and help avoid excess weight gain.





Aim to do aerobic activities that use large muscle groups – such as brisk walking, cycling, swimming, dancing, and exercise classes.



Aim to do strengthening activities such as light resistance training or bodyweight exercises.



Pelvic floor exercises help strengthen and tone your pelvic floor muscles and other tissues.

A strong pelvic floor can reduce your chance of having problems (such as incontinence) after giving birth and later in life, so it is important to learn how to do these correctly.





Exe



Guio for plactive pres

) TIP (

Try to do pelvic floor exercises every day before and during your pregnancy, and then start again as soon as possible after birth.





Exercise



Guidelines for physical activity duri pregnance



UK Chief Medical Officers Recommendations 2017: Physical Activity in Pregnancy bit.lv/startactive info



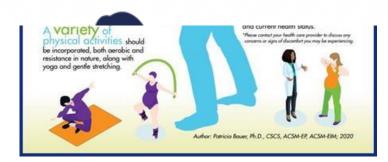
Exercise in Pregnancy

Avoid activities that involve

- risk of contact/collision
- risk of falling (i.e. activities that require high levels of balance, coordination and agility)
- significant changes in pressure (e.g. sky diving, scuba diving)
- heavy lifting.









Pregnancy complications

If you have any of the following you are advised not to exercise until you get individual advice from your health professional:

- incompetent cervix
- ruptured membranes, preterm labour
- persistent bleeding in the second or third trimester
- placenta previa
- pre-eclampsia
- evidence of intrauterine growth restriction
- multiple gestation (triplets or higher)
- poorly controlled type 1 diabetes,
 hypertension or thyroid disease
- other serious cardiovascular, respiratory or systemic disorders.







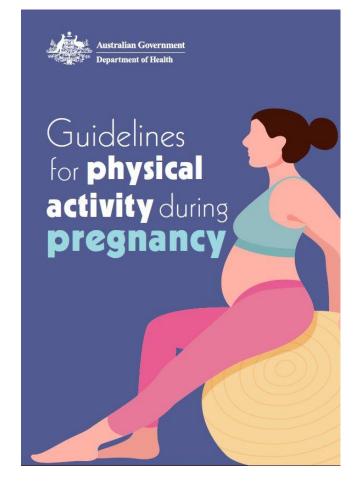
Get expert advice from a health professional before starting or continuing physical activity if you have a history of, or develop, any of the following:

- spontaneous miscarriage, preterm labour or fetal growth restriction
- mild/moderate cardiovascular or chronic respiratory disease
- pregnancy induced hypertension
- poorly controlled seizure disorder
- type 1 diabetes
- symptomatic anaemia
- mainutrition, significantly underweight or eating disorder
- twin pregnancy after the 28th week
- other significant medical conditions.

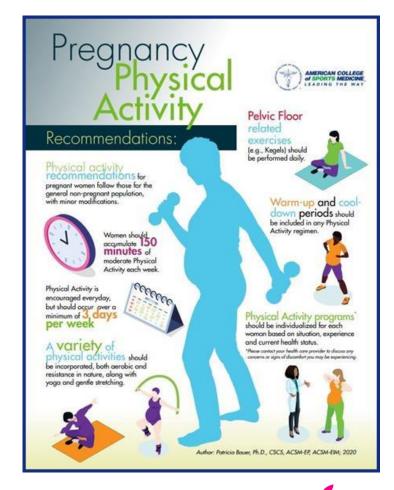




Exercise in Pregnancy









Exercise for GDM, GHT, Pre-eclampsia

- Moderate intensity exercise, 25', 3x pw
 - GDM ↓38%
 - GHT ↓39%
 - PE ↓41%
- Davenport et al 2018
- No exercise from 1st trimester is associated with increased risk, so there must be very good medical reasons to not encourage PA - equivalent to smoking for CVD
 - SOGC (Canada) Mottola et al 2018



Exercise classes - what to recommend



- Structured classes
 - PFMT
 - Strength
 - Coordination
 - Relaxation
 - Aerobic
 - Ability to modify easier or harder



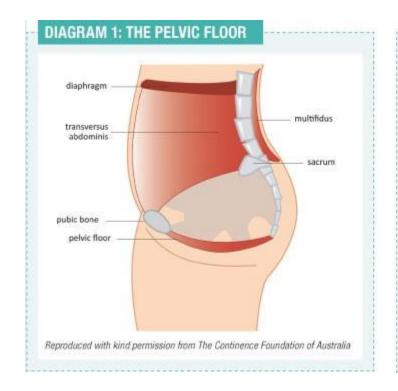
Pelvic Floor Muscle Training in pregnancy

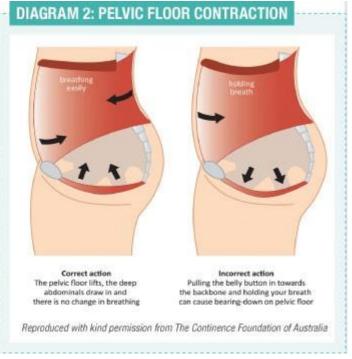
- PFMT like any exercise treatment should be assessed for need, for technique, and programmed according to goals for strength, endurance and/or coordination
- Antenatal PFMT women were 62% less likely to report urinary incontinence in both late pregnancy and early postpartum compared to controls
 - Level 1 evidence, Grade A recommendation
 - Woodley et al 2020 Cochrane
 - ICI7, 2023



Cues for PF

- Bony landmarks
- Squeeze and lift





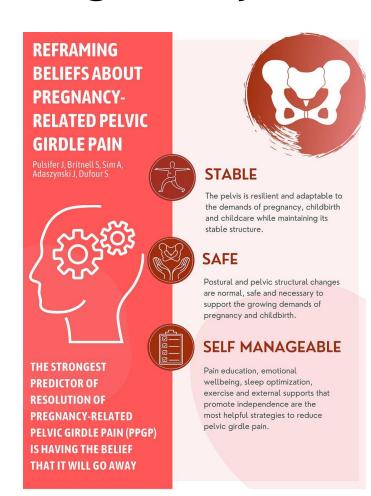


LBP, PGP

- Prevalence of up to 80%, depending on studies, depending on definitions.
- Most often presents in 2nd trimester
- Hormonal changes mostly oestrogen, probably; not relaxin
- Beware DDx transient OP of pregnancy, #NOF
- Refer for medical Ix if any trauma, systemically unwell, weight loss etc
 - Chidi and Barr 2019, Walters et al 2018, Vleeming et al 2008



Pregnancy Related Pelvic Girdle Pain







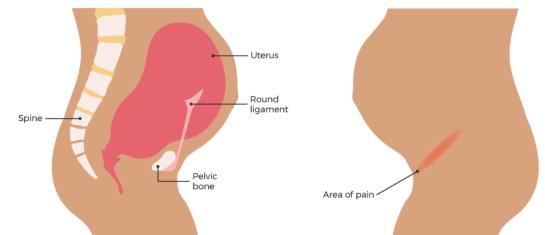




Other MSK pains







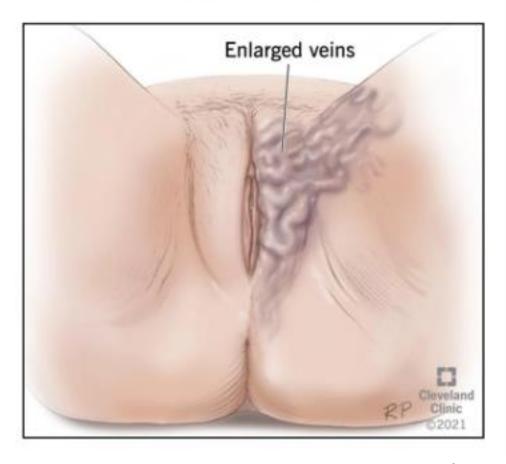




Other pregnancy conditions

Vulvar varicosities







Other

SRCHEALTH SHOP SALE ABOUT

Vulvar Varicosities Bundle

Femme Eze Ice & Heat Pack Pregnancy Leggings







Pelvic pain



BIOPSYCHOSOCIAL APPROACH TO UNDERSTANDING HEALTH

Physical Illness
Sex
Disability
Genetic
predisposition
Immune Function
Neurochemistry
Stress Reactivity
Medication Effects

BIOLOGY PSYCHOLOGY
HEALTH

Attitudes/Beliefs
Personality
Behaviours
Emotions
Coping Skills
Past Trauma





Age

Gender Cultural influences Socioeconomic Status

> Support system Education







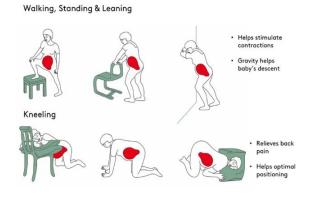


Preparation for labour







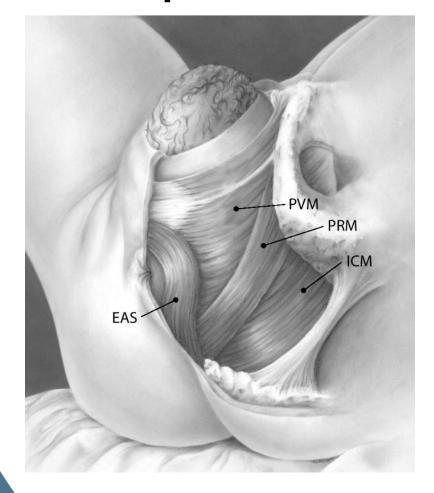


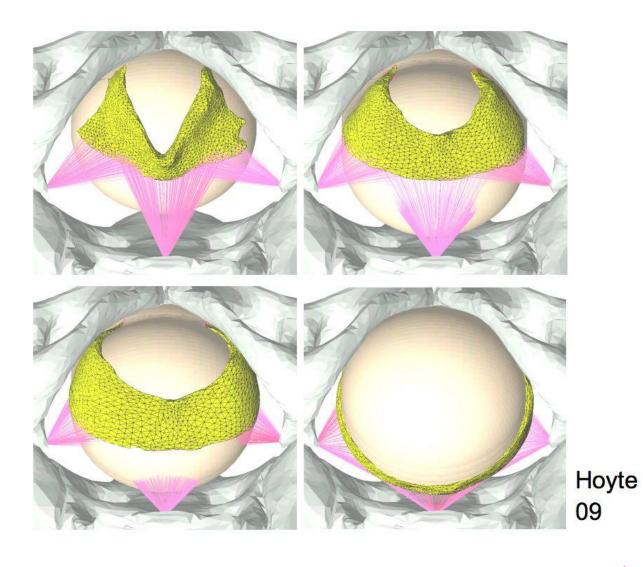






Post partum













EBOOK

MASTITIS

REST AND PACING



Early post nat



EBOOK



Early post natal care guide





REST AND PACING





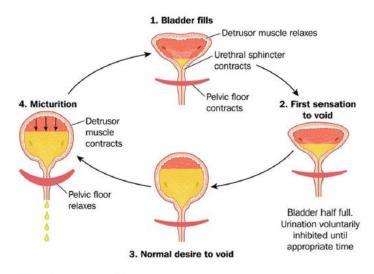
The squatty potty can help you poo easier www.squattypotty.com

Bowel function

Using your bowels for the first time after delivery can be quite a daunting process. This can be minimised by;

 Supporting the perineum with a wad of toilet paper or a pad if you've had a vaginal delivery.
 Hold the wad of toilet paper over the urethra and **Z**

ГΙΤ



Bladder habits

You may initially have difficulty emptying the bladder due to perineal swelling, pain from a tear or episiotomy, or after bladder catheterisation.

The following can be helpful:

- · Pour warm water over the perineal area.
- Rock forwards, backwards and sideways, breathe







Perineal Care

Following a vaginal delivery there is likely to be tenderness or pain of the perineum due to the stretch and trauma experienced during delivery.

This may be accompanied by swelling, bruising and sometimes tearing of the perineum. There may be some stitiches that you need to take care of.

You can relieve perineal pain and promote healing by doing your pelvic floor exercises and following the **P.R.I.C.E** regime:

DPOTECT



MASTITIS



REST AND PACING





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DPOTECT





Breast Care

The breasts undergo enormous changes during this time. Managing them, as well as learning how to feed your baby can be a challenge. With practice, time, guidance and support, your skills and comfort should improve.

These tips will help prevent inflammatory conditions of the lactating breast (mastitis):

 Ensure that any clothing you wear doesn't leave any marks or creases on your skin as the milk ducts are very easily compressed and damaged. Avoid tight clothing, ill-fitting bras or bras with under







Baby wearing

In order to optimise healing, it's best to avoid putting any extra load on the pelvic floor, perineum or C-section incision. Therefore, limit baby wearing/baby carriers to short periods at a time for the first 4-6 weeks and make sure to carry your baby close. The extra weight of even a small baby can be very fatiguing!

Remember the **T.I.C.K.S** rule for safe baby wearing:

T- Tight – slings and carriers should be tight enough to hug your baby close to you as this will be most comfortable for you both. Any slack/loose fabric will allow your baby to slump down in the carrier which can hinder their breathing and pull on your back.

Exercise

Return to exercise is important but the type and intensity of exercise must be carefully considered. We have so much evidence now to support a very slow return to exercise.

For the first 2 weeks post birth, make taking care of your baby, pelvic floor recovery and complete rest your priority. You must physically heal from the birth whether it was a C-Section or vaginal birth.

When you feel ready after 2 weeks, add some walking, starting with 10 minutes or so at a time. Build this as tolerated, preferrably adding two or three walks per day rather than increasing the time on your feet each time. Avoid using a carrier and pushing a heavy pram initially.

Avoid prolonged exercise sessions (>45-60mins)



MASTITIS

REST AND PACING





Baby wearing

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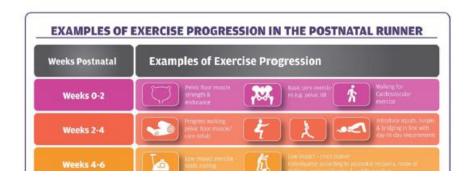
Remember the T.I.C.K.S rule

T-Tight – slings and carriers to hug your baby close to yo comfortable for you both. Ar allow your baby to slump do can hinder their breathing a

But when can I return to ...

The most common question we are asked by new mums who have always been fit and active is "when can I return to running/ sport?"

It is so very important that you delay the return to impact activities for at least 3 months. It takes at least this amount of time for your pelvic floor to have made any return to normal function. In reality this can take up to 12 months so the more respect you pay it in the beginning the better you are likely to be. Below is an excellent infographic put out in 2019 by a collaboration of world experts in both pelvic health and running





AND PACING



The 6 week check

- Advice about gradually building ADL / Physical activity
- Sleep, stretching, pacing
- Stage of healing
- TAUS, TPUS, VE if symptomatic, desired



Pelvic floor muscle relaxation



Contraction : Displaced from black to white



The 6 week check

- Advice
- Sleep
- Stage
- TAUS,





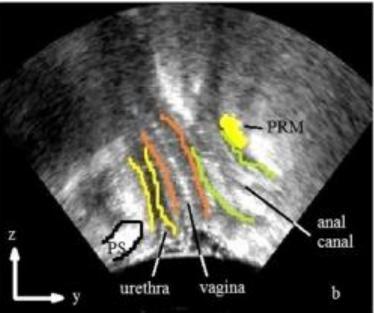
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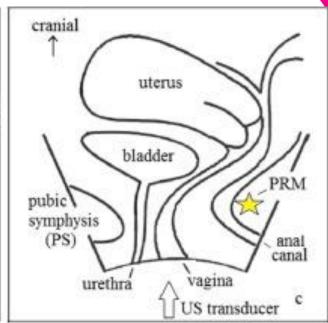


















Contraction: Displaced from black to white

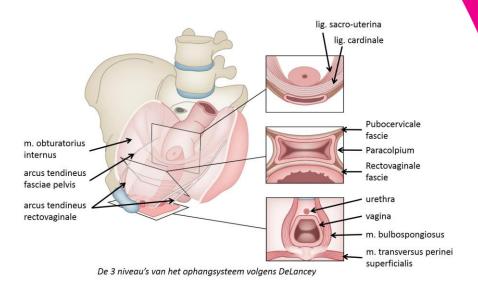


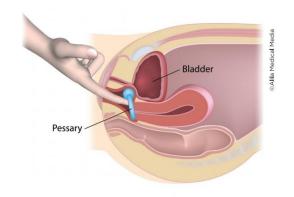
Pelvic Floor Dysfunction

- Urinary incontinence, POP, pessaries
- Tearing, faecal incontinence
- Pain











The 12 week check

- Appropriate for a vaginal assessment at this time
 - TAUS
 - TPUS
 - Visual / external measurement, sensation +/- external palpation
 - Internal exam
 - tone of muscles
 - Size / Width of levator hiatus
 - Ability to close and lift
 - Strength, coordination, endurance, reflex activity
 - POPQ simple or full, quantify status of vaginal walls

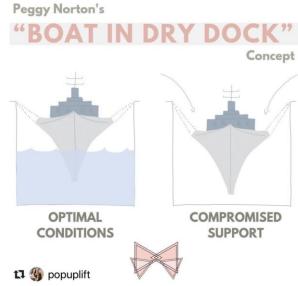


Stress Urinary Incontinence and POP

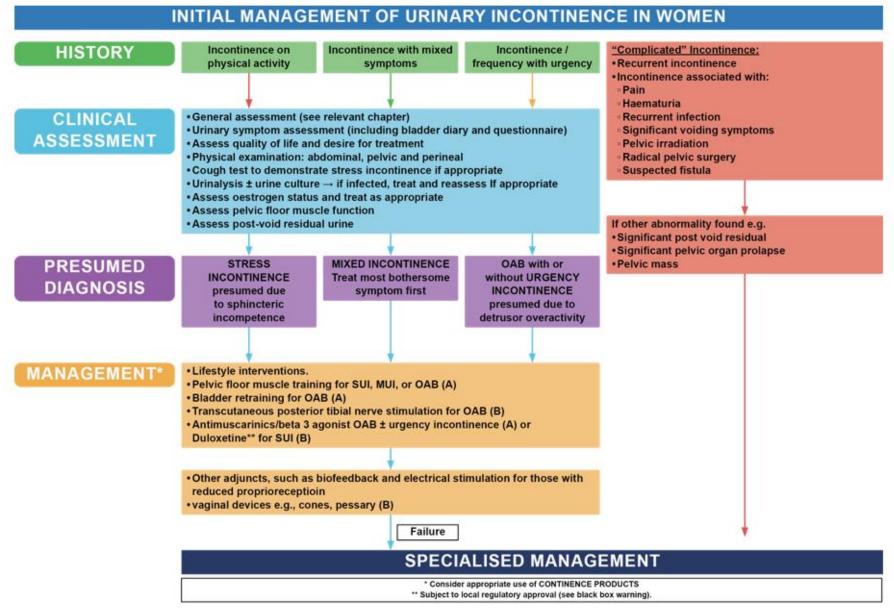
- Similar aetiology
- Failure of connective tissue / fascia vs PFM / contractile deficits
- PFMT vs pessary support, vs both
- Sleep, healing, loading as a mother













Role of support pessaries for post natal women



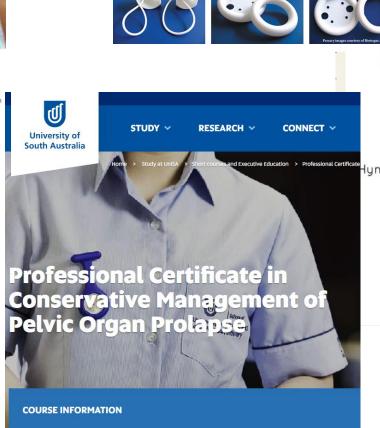


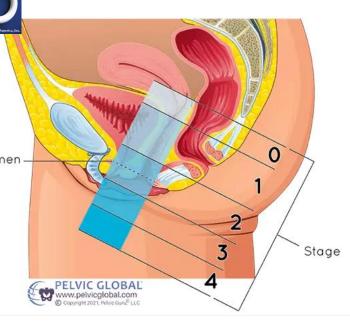
Rebecca's story: Pelvic Floor physiotherapy

Rebecca has been in recently after the birth of her first baby. From the earliest days after his birth, she felt a dragging and heaviness in her vagina and was diagnosed with a prolapse. Here is her story:

"At our first hospital visit they gave us a handout of a prenatal exercises. I did these daily, along with calm birth meditations and acupuncture. I read books by midwives, hired a birth attendant, continued my hobby of Latin dance (performed twice while pregnant).









- Identify her individual risks, including general health, occupation, bladder and bowel function, physical assessment
- Accurate evaluation / diagnosis of her capacity and deficits with an individualised program to return to good function / meet her goals

Physical activity for women after childbirth (birth to 12 months)



vour body and

start gently

for post partum

women

while

breastfeeding

Urinary incontinence in sport







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	Chiropractor	10964		Occupational Therapist	10958		Psychologist	10968
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Reframing Return-to-Sport Postpartum: the 6 Rs Framework

This framework is underpinned by a multidisciplinary, whole-systems, biopsychosocial approach that requires the safety of the mother and baby to be the overarching consideration.



Return to exercise







Is the mother at least 3 months postnatal?

Yes

Continue screen - potential to return to running if recommended tests are passed but screening may highlight she isn't ready

No

Continue screen if >6 weeks postnatal informing that the minimum recommended recovery prior to return to running is 3 months Australian pelvic floor questionnaire

Objective Screening



a Specialist Physio







DRA including functional

dynamic/load tests









No

Load and impact screening +/- video analysis

RED-S screen

Additional considerations Psychological screen (breastfeeding/scar tissue/ for PND

Screening passed?

Yes

e.g. couch to 5K

Rehabilitation programme to address dysfunctional areas or signposting to relevant professionals e.g. physio, GP or Uro-gynae consultant

Source - Goom T, Donnelly G & Brockwell E. Returning to running postnatal - Guidelines for medical, health and fitness professionals managing this population. March 2019





CONSIDERATIONS TO GUIDE RETURN TO POSTNATAL RUNNING

L



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EXAMPLES OF EXERCISE PROGRESSION IN THE POSTNATAL RUNNER

Weeks Postnatal

Examples of Exercise Progression

Weeks 0-2







Weeks 2-4









Weeks 4-6



static cycling



Weeks 6-8







Add dead lift



Add resistance to lower limb & core

Weeks 8-12







Week 12 & Beyond











Modify according to signs &

Source - Goom T, Donnelly G & Brockwell E. Returning to running postnatal - Guidelines for medical, health and fitness professionals managing this population. March 2019



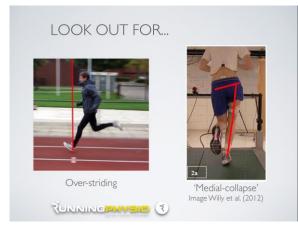
Further role in RTSport













Multidisciplinary, biopsychosocial factors contributing to return to running and running related stress urinary incontinence in postpartum women



881 Postpartum Women Online questionnaire





12 weeks

Average time to return-to-running



Postpartum return-to-running



36%

of those returned to pre-pregnancy levels of running



84%

Running related musculoskeletal pain. Most common area was the lower limbs



29%

Prevalence of running related stress urinary incontinence

Factors influencing return-to-running postpartum



Running during pregnancy



Lower fear of movement



High running volume



Vaginal heaviness

Factors influencing running related stress urinary incontinence

There is increased likelihood of stress urinary incontinence (SUI) with...



return-to-running



vaginal delivery



previous SUI pre or during pregnancy

Key take home messages



Encourage women to engage in running & address pelvic floor dysfunction



Sensation of vaginal heaviness, rather than a perineal tear is a barrier to running



Assess fear of movement and consider ways to reduce this to aid return-to-running



Consider exercise-related pain and advise about exercise re-engagement

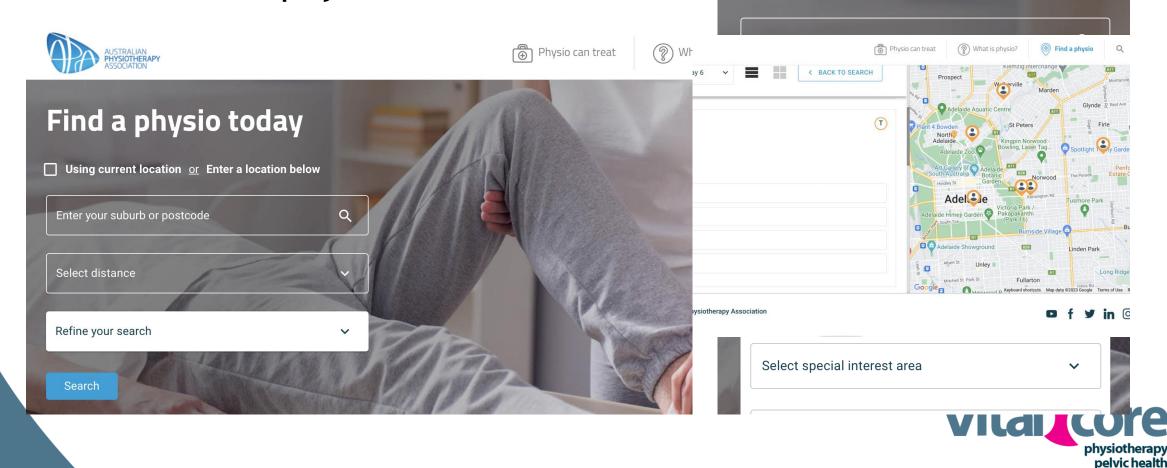
Moore, I. S., James, M. L., Brockwell, E., Perkins, J., Jones, A., & Donnelly, G. M. Multidisciplinary, biopsychosocial factors contributing to return to running and running related stress urinary incontinence in postpartum women. BJSM, 2021





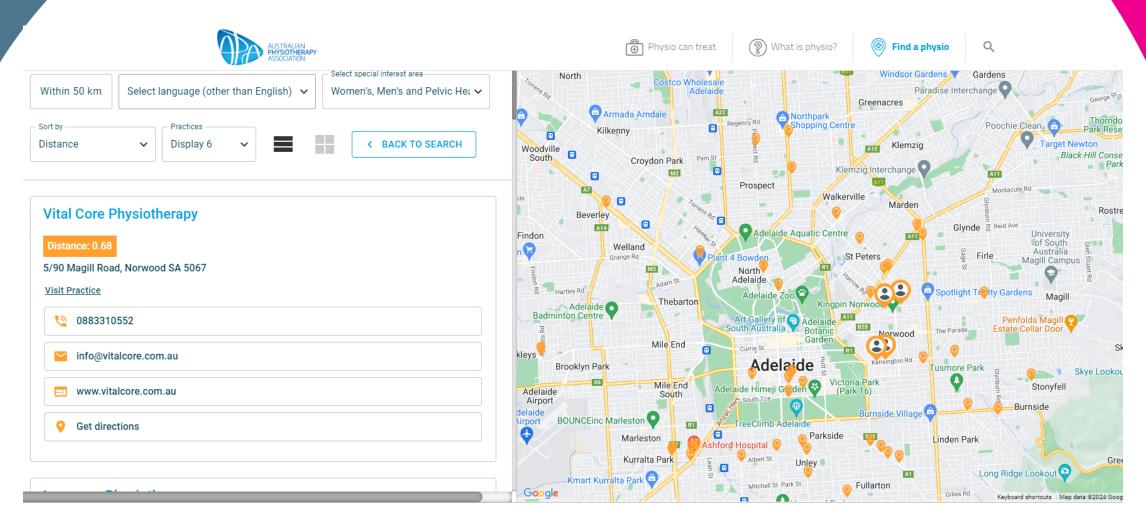
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www.choose.physio



Find a physio today

Using current location or Enter a location below

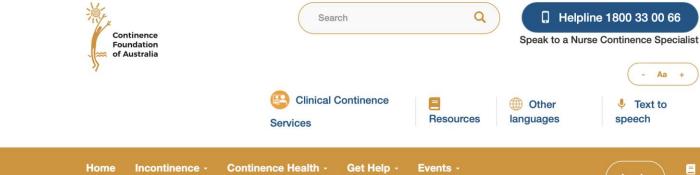


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www.continence.org.au







Important resources

- 2022 RANZCOG online
- 2019 Canadian Guidelines (SOCG), Mottola et al
- ACOG 2020, SMA 2016 exercise in pregnancy
- Cochrane Library
- https://www.health.gov.au/topics/physical-activity-andexercise/pregnancy?language=en





