



Momentum Health

EVIDENCE

SPORT AND SPINE

Understanding **Pelvic Health**

Table of Contents

Introduction: 1

Chapter 1: Understanding Pelvic Anatomy and Function 2

Chapter 2: Common Pelvic Health Issues 5

Chapter 3: The Role of Physiotherapy in Pelvic Health 14

Chapter 4: Preparing for Your Pelvic Health Appointment 15

Chapter 5: Pelvic Floor Exercises and Training 18

Chapter 6: Lifestyle and Habits for a Healthy Pelvic Floor 21

Chapter 7: Pregnancy and Postpartum Pelvic Health 26

Chapter 8: Men's Pelvic Health 28

Chapter 9: Pelvic Health Across the Lifespan 30

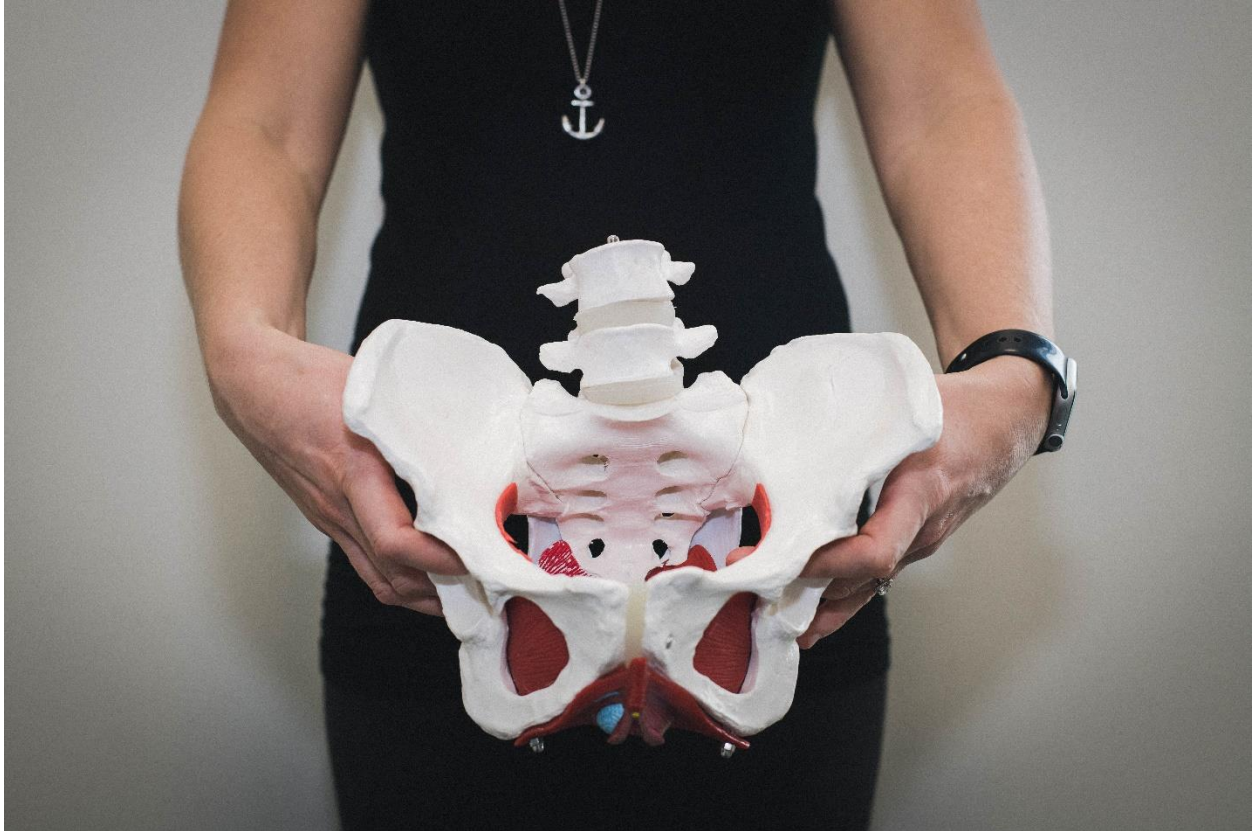
Chapter 10: Additional Resources and Support 32



Introduction:

Welcome to "A Guide to Pelvic Health: Empowering Your Well-being." Your pelvic health is an essential aspect of your overall well-being, and this e-book aims to provide you with the knowledge and tools to take control of it.

Pelvic health issues are very common amongst people of all ages, but many people suffer alone and often with shame without realizing there are many effective treatment options available. This e-book aims to provide you with some of the knowledge and tools to take control of your pelvic health. Through educating people on pelvic health dysfunction and physiotherapy, we hope to guide you to find safe and effective solutions for pelvic health issues such as pelvic pain, painful intercourse, bladder and bowel incontinence and pelvic organ prolapse.



Chapter 1: Understanding Pelvic Anatomy and Function

The pelvic region is a complex network of bones, muscles, and organs that play a vital role in various bodily functions. At the center of it all are the pelvic floor muscles, a group of muscles that form a supportive hammock-like structure at the base of the pelvis. They also wrap around your urethra (where urine comes out), rectum and vagina. These muscles must be able to contract to maintain continence (keep urine and stool in) and relax to allow for urination, bowel movements and sexual intercourse. They also provide support to the pelvic organs, including the bladder, uterus, and rectum.

The human pelvis is an intricate and crucial region of the body, playing a vital role in supporting various bodily functions. To ensure a comprehensive understanding of pelvic health, it is essential to delve into the detailed anatomy and the functions that the pelvis serves.

1.1 Anatomy of the Pelvis

Bony Pelvis: The pelvic region is primarily composed of bones. It's divided into two main parts: the greater pelvis (or false pelvis) and the lesser pelvis (or true pelvis). The greater pelvis encompasses the space between the top of the hipbones, while the lesser pelvis is the lower, narrower space within the hipbones.

Pelvic Girdle: The pelvic girdle is made up of two hipbones, the ilium, ischium, and pubis. These bones are fused and connected by ligaments, forming a sturdy ring-like structure. This girdle forms the foundation for the pelvic region.

Pelvic Floor: The pelvic floor is a group of muscles and ligaments that form a supportive platform at the base of the pelvis. It is essential in maintaining pelvic organ support and controlling urinary and fecal continence. The pelvic floor consists of the pubococcygeus, iliococcygeus, and puborectalis muscles.

1.2 Functions of the Pelvic Region

Urinary Control: The pelvic floor muscles have a primary role in controlling urination. When these muscles contract, they prevent the release of urine. They relax to allow for urination. Dysfunction in these muscles can lead to urinary incontinence.

Fecal Continence: The pelvic floor muscles also play a crucial role in controlling bowel movements. They help in maintaining continence and preventing unwanted leakage.

Support for Pelvic Organs: The pelvic floor acts like a hammock, providing support for the pelvic organs, including the bladder, uterus (in women), and rectum. A strong, healthy pelvic floor is essential for the proper positioning and functioning of these organs.

Postural Stability: The pelvic floor muscles work with your deep abdominal, back muscles and diaphragm to help stabilize and support your spine.

Childbirth: For women, the pelvis is of particular significance during childbirth. It provides a passage for the baby during delivery. The flexibility of the pelvic bones allows for the baby to move through the birth canal.

Sexual Function: The pelvic floor also contributes to sexual function, and its health can impact sexual satisfaction.

1.3 Pelvic Variations

It's important to note that pelvic anatomy can vary from person to person. These variations can be influenced by genetics, gender, and individual factors. Understanding these variations is critical for healthcare professionals when assessing pelvic health.

Gender Differences: The male and female pelvises differ due to the unique requirements of reproduction. Female pelvises tend to be wider and shallower, while male pelvises are narrower and deeper.

Anatomical Variations: Beyond gender differences, there can be anatomical variations in the pelvis itself. Some individuals might have a wider or narrower pelvis, which can impact how the pelvic floor functions.

1.4 When the Pelvic Floor is not Functioning Optimally

Pelvic Floor Dysfunction – Causes:

- 1) Weakness (Underactivity) of the pelvic floor muscles – contributes to incontinence and symptoms of pelvic organ prolapse
- 2) Tightness (Overactivity) of the pelvic floor muscles – contributes to symptoms of urinary and fecal urgency, urge incontinence, dyspareunia (painful intercourse), vaginismus, vulvodynia, pudendal neuralgia, interstitial cystitis (IC)/bladder pain syndrome (BPS), endometriosis, chronic prostatitis as well as pelvic and unexplained pain in your low back, pelvis hips, genital area or rectum.

You may also experience a combination of muscles that are tight and weak. The tension must be addressed prior to beginning a strengthening program (Kegel's for example).

In conclusion, a solid understanding of the intricate anatomy and functions of the pelvis is the foundation for comprehending pelvic health. In the subsequent chapters, we will explore common pelvic health issues, the role of physiotherapy in addressing these issues, and how to maintain a healthy pelvic floor throughout your life.



Chapter 2: Common Pelvic Health Issues

Facts & Misconceptions About Pelvic Floor Dysfunction

Occurrence of Incontinence in Canada

- 1 in 3 women and 1 in 9 men experience incontinence
- 1 in 6 children under the age of 17 suffer from incontinence
- 1 in 12 people seek out treatment because of the shame and embarrassment associated with incontinence, or don't realize there is help available

Risk Factors for Developing Pelvic Floor Dysfunction:

- Obesity
- Post-menopause
- Pregnancy & childbirth (Having more than 1 child and obstetric trauma from childbirth)
- Chronic illness
- Gynecological or urinary surgery
- Side effects from Medication
- Smoking
- Chronic straining from constipation or heavy lifting
- Prostatectomy and prostate enlargement in males

Facts & Misconceptions

Myth: It is normal to have urinary leakage

Fact: It is COMMON but not NORMAL. The prevalence of incontinence increases with age and with pregnancy and childbirth, but there is something you can do about it

Myth: Only older adults and women who have had children experience incontinence

Fact: Children, young adults and men may experience incontinence as well. You do not have to have given birth to have urinary leakage. Even elite athletes experience urinary leakage

Myth: Incontinence will improve with time and there is nothing I can do about it anyway

Fact: Urinary leakage likely will worsen over time. This resource will provide you with the knowledge and understanding of what you can do and how physiotherapy can improve and in many cases resolve your symptoms

Incontinence is a prevalent pelvic health issue, affecting both men and women. Stress incontinence, urge incontinence, and mixed incontinence are common types. Causes can range from pregnancy and childbirth to aging and certain medical conditions. Treatment options, including pelvic floor exercises and lifestyle modifications, will be explored.

Pelvic organ prolapse occurs when the pelvic organs shift from their normal position, causing discomfort and other symptoms. We will discuss the causes, risk factors, and management strategies, which may include pelvic floor exercises, pessaries, and surgical options.

Bowel Dysfunction can have many causes and has a wide variety of symptoms including constipation, diarrhea, pain, bleeding and difficulty emptying the bowels.

Pelvic health issues can affect individuals of all ages and genders. In this chapter, we will explore some of the most prevalent pelvic health problems, shedding light on their causes, symptoms, and available treatment options. Understanding these issues is the first step toward effective management and prevention.

2.1 Incontinence: Urinary and Fecal – Types & Causes

Urinary Incontinence: Urinary incontinence is a condition characterized by involuntary urine leakage. It affects millions of people worldwide, and there are several types:

1) Stress Urinary Incontinence (SUI):

- Involuntary loss of urine after an increase in intra-abdominal pressure (coughing, sneezing, laughing, lifting, jumping or transitional movements such as getting up from a chair)
- Usually only a small amount of urine loss
- Generally caused by a weak pelvic floor
- Pelvic floor muscle training has been shown to be a very effective treatment method of treatment

2) Urge Urinary Incontinence (UUI):

- Sudden, intense urge to urinate secondary to an overwhelming urge to go to the washroom
- Usually results in urine loss before you are able to make it to the toilet (inability to hold your urine in)
- It can be a small amount of urine loss or a complete emptying of your bladder
- May be caused by weak or tight pelvic floor muscles, bladder muscle instability or an up-regulated sympathetic nervous system (stress, anxiety etc.)
- Urge inhibition techniques can be helpful
- Bladder irritants must be considered
- Pelvic floor muscle training can be effective in managing this type of incontinence

3) Overflow Incontinence:

- You feel the urge to urinate but can only empty a small amount
- The bladder doesn't empty completely, and the bladder becomes distended or full
- Leads to constant dribbling or leakage of small amounts of urine
- Often seen with conditions such as Parkinsons, diabetes, nerve damage, a blockage in the urinary tract or as a side effect of some medications and radiation therapy to the pelvis

4) Mixed Incontinence:

- Involuntary urine loss associated with increased intra-abdominal pressure (SUI) and with an intense urge to void (urge incontinence)
- This is a very common form of incontinence

Fecal Incontinence: Fecal incontinence (FI) involves the unintentional passage of stool. Causes can include muscle or nerve damage, chronic constipation, or conditions like irritable bowel syndrome (IBS).

Fecal Incontinence

- An inability to control your bowel movements causing involuntary leakage of stool from your rectum
- May have occasional leakage when passing gas
- Can be partial or a complete loss of bowel control
- Treatment is often aimed at lifestyle modifications (diet, increased water intake etc.) and pelvic floor muscle training

2.1 (a) Overactive Bladder (OAB): Is the name used for urinary symptoms that are characterized by a strong, sudden urge to urinate that is difficult to postpone which may or may not be associated with leakage.

Typical symptoms of OAB:

- Urgency - The urge to urinate is sudden, strong and almost impossible to postpone
- Frequency – voiding (urinating) more frequently than what is considered normal (more than 8 times per day)
- Urinary incontinence – leakage of urine associated with the overwhelming urge to urinate
- Nocturia – waking up at night due to the urge to urinate

Urinary and fecal incontinence is treatable and responds well to conservative treatment. A pelvic health physiotherapist can provide an individualised treatment plan based on your symptoms to help you manage your symptoms and regain control of your life.

2.2 Pelvic Organ Prolapse: Causes and Symptoms

Pelvic organ prolapse (POP) is a condition where one or more pelvic organs, such as the bladder, urethra, uterus (in women), rectum or small intestines, descend into the vaginal or rectal opening.

Symptoms of POP:

- Pressure or Heaviness: A feeling of pressure or fullness in the pelvic region
- Bulging: that can be seen or felt bulging at the vaginal or rectal opening. It may change based on position and daily activity. Typically worsens with coughing, lifting, straining during a bowel movement and being on your feet all day – prolonged walking, standing etc.)
- Urinary Issues: difficulty initiating urination, incontinence, frequent urination, and incomplete/difficulty emptying the bladder
- Bowel Issues: It may also lead to constipation, difficulty evacuating the bowels or fecal incontinence
- Sexual: discomfort during intercourse. Pain is not usually a symptom but some women may have pain with intercourse

Types of Prolapse:

- Cystocele – prolapse of the bladder
- Rectocele – prolapse of the rectum
- Hysterocele – prolapse of the uterus
- Urethrocele – prolapse of the urethra
- Vaginal Vault Prolapse – the top of the vagina descends toward the vaginal opening after a hysterectomy
- Enterocele – prolapse of the small intestine

The causes of POP are multifaceted and can include factors such as pregnancy and childbirth, obesity, chronic coughing, and genetic predisposition.

Management of POP

Physiotherapy can be very effective in helping to minimize or manage symptoms. A pelvic health physiotherapist will advise you on symptom management and education, core and pelvic floor strengthening, how to exercise safely with POP and constipation/toileting education. Some physiotherapists may recommend a pessary. If management with physiotherapy and/or a pessary is not satisfactory to the person with POP, surgical options may be explored but are usually considered as a last resort option.

2.3 Bowel Dysfunction

Types of Bowel Dysfunction:

- Irritable Bowel Syndrome
- Inflammatory Bowel Disease (Crohn's Disease and Ulcerative Colitis)
- Other Types – driven by neurological conditions and muscle/soft tissue dysfunction

Signs & Symptoms of Bowel Dysfunction:

- Constipation
- Diarrhea
- Abdominal pain due to bowel dysfunction – cramping, bloating and muscle tension
- Hemorrhoids – swollen veins in the anal or rectal area that may be itchy and bleed during a bowel movement
- Anal fissures – a small tear causing rectal pain or bleeding with a bowel movement
- Fecal Incontinence
- Dyssynergia – lack of coordination of muscles that contract instead of relax during bowel evacuation
- Difficulty evacuating bowels
- Pain during or after a bowel movement

Treatment for Bowel Dysfunction

Pelvic health physiotherapy may help in the treatment of symptoms associated with bowel issues. A physiotherapist will provide bowel and bladder education, information on toileting positions, self care for hemorrhoids/fissures, diet modification and exercise including pelvic floor muscle training. Internal and external myofascial techniques may be used as well. This is all in conjunction with a team approach with your medical team.

2.3 Pelvic Pain: Types and Management

Pelvic pain is a complex and often debilitating condition that can manifest in various forms:

- Pelvic Girdle Pain: Symphysis Pubis Pain (SPD) and Sacroiliac Joint Pain (SIJ Pain)
- Tailbone (Coccyx) Pain
- Dysmenorrhea: Pain associated with menstruation, often caused by uterine contractions.

- Interstitial Cystitis & Bladder Pain Syndrome (BPS): Characterized by chronic bladder pain and urinary urgency
- Endometriosis: A condition where tissue similar to the uterine lining grows outside the uterus, causing significant pain and sometimes infertility
- Pudendal Nerve Irritation/Neuralgia

Pelvic Girdle Pain (PGP):

Is a term used to describe pain around the ring of bones that make up the bony pelvis. There is a joint in the front called the pubic symphysis joint as well as two joints along the back called the sacroiliac joints (SI joints). Pain may be experienced at these joints, the hips, the groin, the buttocks and down the thighs.

Causes of PGP - Multiple Factors Including:

- Mechanical (Joints)
- Motor control of the muscles (strength, weakness, imbalance)
- Hormones

Symptoms of PGP:

- Pain and/or difficulty with walking
- Pain with standing on one leg (putting on pants, climbing stairs)
- Pain with side-lying or rolling over in bed
- Pain with getting in and out of a car or bathtub
- Pain with walking after sitting

Treatment for PGP:

- Debunking the myth that the pelvis is 'unstable' or 'out of alignment' (in the absence of severe force to the pelvis) as well as the hormone 'relaxin' causing or perpetuating pelvic pain
- External and Internal soft tissue techniques
- Pain education and treatment of the nervous system
- Therapeutic exercise

Tailbone (Coccyx) Pain:

The tailbone (coccyx) is located at the bottom of your spine. Many muscles of the pelvic floor attach here.

Causes of Coccyx Pain - Multiple Factors Including:

- Trauma from a fall or surgery
- Vaginal delivery
- Direct pressure from cycling, horseback riding or prolonged sitting on a hard surface
- Chronic straining

Symptoms of Coccyx Pain:

- Pain with sitting
- Pain with transitional movements (sitting to standing)
- Pain on direct touch
- Pain with bowel movements

Treatment for Coccyx Pain:

- Pelvic floor muscle training (often 'down training' or relaxation of the muscles)
- External and Internal soft tissue techniques
- Pain education and treatment of the nervous system including deep breathing and relaxation
- Therapeutic exercise
- Manual therapy to the coccyx to assist in mobility
- Education on posture and supports/cushions

Pelvic health physiotherapists have an advantage with PGP and coccyx pain as they can directly assess and treat the pelvic floor muscles. They are also trained to use a biopsychosocial approach which acknowledges that the nervous system along with mechanical/tissue issues can contribute to pain and problems in these areas. They can help with management of these issues through education, manual therapy, exercise and addressing psychosocial factors that can contribute to symptoms.

Dysmenorrhea:

The term used to describe pain before or during menstrual periods. Dysmenorrhea may be a sign that our hormones (particularly the relationship between estrogen and progesterone) are not functioning optimally.

Causes of Dysmenorrhea – May have no underlying problem but can be related to:

- Uterine fibroids, adenomyosis (thickening of the uterine lining) or endometriosis (endometrial tissue from the uterus in other parts of the body)
- More common with heavy and/or irregular periods
- Periods starting before age 12
- Low body weight

Symptoms of Dysmenorrhea:

- Typically last <3 days
- May include pain in the pelvis, lower abdomen, low back and pain that radiates to the thigh area
- May be accompanied by diarrhea or nausea

Endometriosis:

A condition where tissue similar to the inner lining of the uterus grows outside of the uterus. This can lead to inflammation and scar tissue forming in the pelvic region and occasionally other parts of the body. It can cause severe pain in the body and lead to infertility.

Causes of Endometriosis – The cause is unknown, but may involve:

- Genetic predisposition
- Retrograde menstruation (when menstrual blood containing endometrial cells flows back through the fallopian tubes and into the pelvic cavity. Can result in endometrial cells being deposited outside of the uterus where they can implant and grow)

Symptoms of Endometriosis:

- Pain during menstruation but can occur at other times during the menstrual cycle
- Pain with bowel movements and vaginal penetration
- May be accompanied by bloating, heavy periods, fatigue and nausea

Interstitial Cystitis (IC) and Bladder Pain Syndrome (BPS):

Persistent or recurrent chronic pelvic pain, pressure or discomfort perceived to be related to the bladder and accompanied by increased frequency of voiding or an urgent need to void. The terms may be used interchangeably but they are different in their presentation. Their symptoms most often resemble those of a urinary tract infection (UTI), although tests are normal.

Causes of IC & BPS – The cause is unknown

Symptoms of IC & BPS:

- Pain that worsens as the bladder fills
- The urge to urinate is related to pain, pressure or discomfort
- Frequency of urinating is >8 times per day
- Nocturia (waking at night to urinate)
- Pain in pelvic region
- Dyspareunia (pain with intercourse)

Pudendal Nerve Irritation:

Pudendal nerve irritation (neuralgia or nerve entrapment) is pain in the distribution of the pudendal nerve. The pudendal nerve supplies the area between the buttocks, penis, vagina, perineum and around the anus. It can occasionally refer to areas near the pelvis.

Causes of Pudendal Nerve Irritation:

- Pudendal nerve entrapment secondary to traumatic injury to the pelvis
- Obstetric trauma from forceps delivery or other instrumentation
- Post surgical
- Nerve entrapment from other causes such as tension from muscles and ligaments, activities that place strain on the pelvic region (prolonged sitting, cycling, chronic constipation), certain infections and diseases, neuropathy associated with diabetes or other conditions

Symptoms of Pudendal Nerve Irritation:

- Nerve pain in area supplied by the perineal nerve – tingling, numbness, aching, burning, stabbing
- Worse at the end of the day
- Increased sensitivity to light touch in the area or clothing feels uncomfortable
- A feeling often described as sitting on a golf or tennis ball
- Increased urgency and frequency to urinate

Treatment for Pudendal Nerve Irritation:

- Physiotherapy
- Nerve block
- Nerve decompression surgery

Pelvic health physiotherapists have an advantage with pudendal nerve irritation as they can directly assess and treat the pelvic floor muscles. They are also trained to use a biopsychosocial approach which acknowledges that the nervous system along with mechanical/tissue issues can contribute to pain and problems in that area. They can help with management of these issues through education, manual therapy, exercise and addressing psychosocial factors that can contribute to symptoms.

Persistent Genital Arousal Disorder (PGAD):

The spontaneous, persistent, unwanted and uncontrollable genital arousal in the absence of sexual stimulation or desire and is not often relieved with orgasm.

Causes of PGAD: Causes are unknown

Symptoms of PGAD:

- Pain or discomfort in your genitals
- Tingling in your clitoris
- Vaginal contractions
- Unpredictable orgasms
- Symptoms do not improve with orgasm

Treatment for PGAD:

- Medications
- Behavioural health interventions such as psychology
- Physiotherapy

Pelvic health physiotherapists are trained to use a biopsychosocial approach which acknowledges that the nervous system along with mechanical/tissue issues can contribute to pain and problems in these areas. They can help with management of these issues through education, manual therapy, exercise and addressing psychosocial factors that can contribute to symptoms.

Effective management of pelvic pain involves accurate diagnosis and tailored treatment plans. This can include medications, physical therapy, lifestyle modifications, and, in some cases, surgery.

Understanding these common pelvic health issues is the first step in maintaining and regaining pelvic health. In the following chapters, we will explore the role of physiotherapy in pelvic health, preparation for pelvic health assessments, and practical strategies to improve and maintain pelvic health throughout life.



Chapter 3: The Role of Physiotherapy in Pelvic Health

This chapter will shed light on the importance of seeking professional help and the benefits of physiotherapy in pelvic health management.

Physiotherapy plays a crucial role in treating pelvic health issues. As part of the assessment process, a physiotherapist will take a detailed medical history, perform a physical examination, and use specialized techniques to evaluate pelvic floor function. Physiotherapists require advanced training to assess your

pelvic floor using internal palpation. The physiotherapist can gather crucial information from an internal assessment of your pelvic floor muscles which contribute to their treatment planning and intervention.

Pelvic health physiotherapy is an evidence-based treatment for conditions in the pelvic region such as incontinence, pelvic organ prolapse and pelvic pain. It has been established as the first line of treatment for these issues.

After a comprehensive subjective and objective assessment, the physiotherapist can recommend a treatment plan and discuss treatment options. They will help restore function through education, exercise prescription, manual therapy (massage, soft tissue techniques) and modalities (acupuncture, intramuscular stimulation, ultrasound, electrotherapy etc.). The physiotherapist is an integral part of your recovery team, and may work with other disciplines such as chiropractic, kinesiology, massage therapy, psychology, medical doctors and specialists. They will advocate on your behalf and communicate with the treatment team.



Chapter 4: Preparing for Your Pelvic Health Appointment

Preparing for a pelvic health assessment can be overwhelming. This section will guide you through what to expect during your appointment and how to be comfortable and open during the evaluation process. We'll also discuss setting treatment goals and understanding the recommended treatment plan.

The subjective assessment may include discussion of your past medical history and questions regarding your bowel, bladder and sexual function. Questionnaires called outcome measures may be used to gather information about your physical and mental health status.

The physical examination will look at posture and alignment, breathing and movement patterns, the back (thoracic and lumbar spine), abdominal area, hips and pelvis as well as your pelvic muscle function.

During the internal examination, the physiotherapist will thoroughly explain what the assessment and treatment will involve. They will provide you with sheets to drape your body and always maintain your dignity. Consent will be asked for often and before proceeding to different portions of the examination. At any point within the examination, you may withdraw your consent and alternative options will be presented to you. The internal examination of the pelvic floor muscles involves the physiotherapist inserting a finger into the vagina and/or rectum. They will ask you to perform contractions of the pelvic floor muscles as well as other maneuvers such as bearing down to assess tension and weakness of the pelvic floor muscles as well as signs of pelvic organ prolapse. They may also do a visual inspection of the vulva and pelvic region.

It can be overwhelming to have an internal examination; however it is the gold standard for assessment and treatment of the pelvic floor.

Through the combination of your medical history, your answers on the subjective examination and outcome measures as well as the physical examination a treatment plan will be formulated with individualized short and long-term goals.



Chapter 5: Pelvic Floor Exercises and Training

Pelvic floor exercises, commonly known as Kegels, can be an effective way to strengthen and rehabilitate the pelvic floor muscles. It is strongly recommended to consult with a pelvic health physiotherapist to determine if these exercises will be helpful and to develop an individualized treatment plan based on your symptoms as they have the potential to aggravate your condition if done improperly or if they are not indicated. This chapter will provide detailed instructions on exercises to train the pelvic floor muscles correctly, discuss their benefits, and offer guidance on developing a personalized pelvic floor training program. Additionally, you'll learn how to integrate pelvic exercises into your daily routine for maximum impact. When you have more questions than these simple starters can answer, it is time to book in with one of our practitioners.

A strong and healthy pelvic floor is essential for overall pelvic health. Pelvic floor exercises, commonly known as Kegels, can help strengthen these muscles. In this chapter, we'll explore the importance of pelvic floor exercises, how to perform them correctly, and how to create a personalized training program.

Pelvic Floor Dysfunction May Be Caused By:

- 1) Weakness (Underactivity) of the pelvic floor muscles – contributes to incontinence and symptoms of pelvic organ prolapse
- 2) Tightness (Overactivity) of the pelvic floor muscles – contributes to symptoms of urinary and fecal urgency, urge incontinence, dyspareunia (painful intercourse), vaginismus, vulvodynia, pudendal neuralgia, interstitial cystitis (IC)/bladder pain syndrome (BPS), endometriosis, chronic prostatitis as well as pelvic and unexplained pain in your low back, pelvis hips, genital area or rectum.

You may also experience a combination of muscles that are tight and weak. If more of your pelvic floor issues fall into the 'overactivity' category, pelvic floor strengthening/Kegel's may not be indicated as the first line of treatment intervention. The tension must be addressed prior to beginning a strengthening program. A pelvic health physiotherapist uses an internal evaluation to determine the state of your pelvic floor muscles and can provide guidance as to how to engage or relax your pelvic floor muscles and assist in releasing tension of the overactive muscles using manual techniques. Once the muscles have returned to a normal resting tone, strengthening exercises may be prescribed.

5.1 The Importance of Pelvic Floor Exercises

The pelvic floor muscles play a critical role in supporting pelvic organs, controlling urinary and fecal continence, and contributing to sexual function. Pelvic floor exercises are vital because they:

Strengthen Muscles: Regular exercises can increase the strength and endurance of the pelvic floor muscles, reducing the risk of incontinence and prolapse.

Improve Bladder and Bowel Control: Strong pelvic floor muscles can enhance your ability to control urine and feces, reducing episodes of incontinence.

Enhance Sexual Function: A healthy pelvic floor can lead to improved sexual sensation and responsiveness.

Support Pregnancy and Childbirth: A strong, flexible pelvic floor can aid in pregnancy, labor, and postpartum recovery.

5.2 How to Perform Pelvic Floor Exercises (Kegels)

The pelvic floor muscles are a group of muscles which extend from the pubic bone in the front to the tailbone in the back, and side to side at the sit bones (which are the bony structures you feel when you sit). These muscles are like a trampoline and are in the shape of a diamond or two triangles. The front triangle has the urethral (where urine exits) and vaginal openings, and the back triangle has the rectal opening.

Pelvic Floor Strengthening (Kegel's) – How To:

- The front and back triangles are connected and contract together. You can focus on the front or back triangle based on your symptoms – front triangle for urinary incontinence, back triangle for fecal incontinence. Once you have had practice you can contract them together
- To contract the front triangle, imagine you are stopping the flow of urine (do not actually attempt this on the toilet as this can cause issues with completely emptying your bladder)
- To contract the back triangle, imagine you are stopping the passage of gas or drawing in a marble to your rectum
- Hold the contraction as long as you can without letting the muscles go. Work up to 10 second holds. Repeat up to 30 times, once per day. Relax the pelvic floor muscles fully between repetitions. It may take up to 3 months to notice a change in symptoms
- Do not hold your breath or squeeze your buttocks, abdominal muscles or inner thighs. The contraction should be gentle
- Start in a lying position and work your way up to different positions such as sitting and standing. You may try them during transitional movements such as going from sitting to standing, squatting or lifting when you are ready
- Coordinate your contractions with your breathing. Relax your pelvic floor when breathing in and contract your pelvic floor when you breath out

The Knack: The pre-contracting of the pelvic floor muscles before activities that cause leakage (coughing, sneezing, laughing or jumping) or activities that aggravate prolapse symptoms

The Knack – How To:

- Practice 'quick flicks' of the pelvic floor muscles. Strongly contract the pelvic floor muscles and release quickly. Use this before any activity that causes symptom of urine leakage or prolapse
- This needs to be practiced repetitively until it becomes reflexive

Pelvic Floor Drops (Reverse Kegel's/Down-training) – How To:

Learning to let go of tension or relax the pelvic floor muscles can be beneficial in those that experience symptoms of an overactive pelvic floor or pelvic pain. Reverse Kegel's may help in lengthening and relaxing these muscles.

- Gently contract the pelvic floor muscles. Do not hold your breath or squeeze your buttocks, abdominal muscles or inner thighs. The contraction should be gentle
- Relax, letting the tension go completely as if you are urinating or having a bowel movement
- Coordinate your contractions with your breathing. Relax your pelvic floor when breathing in and contract your pelvic floor when you breath out

The practice of deep breathing is also an important part of learning to relax tension in all of the muscles in your body, especially the pelvic floor. Here are a few examples of breathing exercises:

6-8-10 Breathing

- Breathe in for 6 seconds, feel your ribcage expand and relax your pelvic floor (reverse Kegel)
- Hold your breath for 8 seconds
- Breathe out slowly through pursed lips (as if blowing a bubble) for 10 seconds

Box Breathing

- Breathe in for 4 seconds
- Hold breath for 4 seconds
- Breathe out for 4 seconds
- Hold breath for 4 seconds

5.3 Developing a Personalized Training Program

Creating a personalized training program will help you progress and track your pelvic floor strength. Here are some key steps:

Assessment: Begin by assessing your current pelvic floor strength. It is recommended to consult a physiotherapist specializing in pelvic health to help with this assessment if you are experiencing urine leakage, prolapse symptoms or suspect you have a diastasis recti after pregnancy. They can help guide you so that you are exercising safely.

Set Goals: Determine your specific goals, whether it's to reduce incontinence, support pregnancy, or enhance sexual function.

Frequency: Decide how often you'll do your exercises. Initially, aim for at least 3-4 times a week.

Progression: As your muscles strengthen, increase the duration and intensity of your contractions. You can also explore variations of Kegel exercises.

Consistency: Consistency is key. Make pelvic floor exercises a part of your daily routine.

Monitor and Adjust: Regularly assess your progress and adjust your program accordingly to continue challenging your pelvic floor muscles.

A strong, flexible pelvic floor can contribute to your overall well-being. In the following chapters, we'll delve into lifestyle and habits for a healthy pelvic floor and address specific considerations for different life stages to help you maintain a strong, healthy pelvic floor throughout your life.



Chapter 6: Lifestyle and Habits for a Healthy Pelvic Floor

The choices we make in our daily lives can significantly impact pelvic health. In this chapter, we will explore the effects of diet and hydration on pelvic health and discuss the role of physical activity in maintaining a strong pelvic floor. Furthermore, we'll address habits that can negatively affect pelvic health, such as smoking and excessive caffeine consumption, and offer tips on making positive lifestyle changes.

6.1 Foods and Other Triggers

Diet plays a crucial role in pelvic health. Certain foods and beverages can either support or negatively impact your pelvic floor. Here are some key points to consider:

Hydration: Proper hydration is essential for overall health, including the health of your pelvic floor. Insufficient water intake can lead to constipation and bladder irritation. Aim to drink an adequate amount of water daily to keep your system running smoothly.

Dietary Fiber: A diet rich in fiber can prevent constipation, which can strain your pelvic floor muscles. Incorporate whole fruits, vegetables, whole grains, and legumes into your meals for optimal digestive health.

Irritants: Some individuals may find that certain foods, like spicy foods, citrus, artificial sweeteners, alcohol and carbonated beverages can irritate the bladder. If you experience bladder discomfort, consider reducing or avoiding these potential irritants.

6.2 Bladder Habits

Maintaining healthy bladder habits is crucial for pelvic health. Here are some guidelines:

Ineffective Management Strategies: Many people use self management strategies that are common but very ineffective and can perpetuate or worsen the symptoms of OAB/Incontinence:

- **Fluid Restriction:** limiting the amount of fluid you consume with the belief that urgency, frequency and leakage will occur less often if you consume less fluid. Unfortunately, restricting fluids may have the opposite effect and can irritate the bladder as your urine is more concentrated causing more urgency and frequency. Your urine should be a pale yellow color. If it is dark yellow and/or has an odor you are not drinking enough
- **Urinating 'Just In Case':** urinating before leaving the house or before a meeting or an appointment thinking that if there is less urine in the bladder, there will be less urgency, frequency and leakage. However, the symptoms associated with OAB are not associated with the amount of urine in the bladder and may lead to increased symptoms as the bladder becomes accustomed to being emptied more often than it needs to be
- **Toilet Mapping:** knowing where are the bathrooms are in the places you frequent. Many people experience anxiety when going somewhere new or when they are unsure if they will have access to a bathroom

Effective Management Strategies (Lifestyle & Behavioural Treatment): The most effective treatment options include lifestyle and behavioral changes with or without the use of medications. The main behavioural approach includes bladder retraining, which teaches you to suppress the urge to urinate for progressively longer durations of time. A physiotherapist will help you with an individualized treatment plan based on your presentation. They may have you keep a bladder diary and determine how often you should be voiding. It is considered acceptable to void once every 3-4 hours. For example, if you currently void once every hour, you can aim to push the urge to urinate to every hour and fifteen minutes.

Urge Suppression Techniques: Each time you feel a strong urge to urinate, follow these steps. Gradually increase the amount of time you hold it. Start small and work up to longer periods of time in between voids:

1. Stop what you are doing, stand still or sit. Apply firm pressure to your pelvic floor with rolled towel or chair
2. Tighten your pelvic floor muscles quickly several times but do not relax them fully between squeezes
3. Relax the rest of your body and take deep breaths.
4. Mental distraction - count backwards by 3's from 100 etc.
5. Sensory distraction - wiggle your toes and squeeze your calf muscles
6. You can repeat the above steps if needed to make the urge lessen or disappear

If you are able to suppress the urge then the technique was successful. If not, slowly and calmly make your way to the washroom to void. Overtime the goal will be to increase the time between voids until you reach voiding every 3-4 hours.

Scheduled Voiding: Try to empty your bladder at regular intervals, such as every 3-4 hours, even if you don't feel a strong urge. This can help prevent overstretching of the bladder.

Avoid Rushing: When you need to urinate, don't rush to the restroom. Take your time to ensure you fully empty your bladder and avoid straining.

Posture: Use proper posture on the toilet. Sit with your feet flat on the floor and lean slightly forward, resting your hands on your knees to encourage complete bladder emptying. Never hover over the toilet seat

6.2 (a) Bowel Habits

Chronic constipation can contribute to pelvic floor dysfunction from the repetitive strain on the pelvic floor muscles. Retained stool and straining also create more pressure on our pelvic organs and may contribute to prolapse, urinary incontinence, frequency and retention.

Management Strategies for Constipation:

- Maintain adequate fibre and hydration in your diet
- Never ignore the urge for a bowel movement
- No straining during a bowel movement – to stimulate a bowel movement walk for at least 30 minutes per day, do daily morning stretches of bringing one or both knees to your chest and holding for 30 seconds, repeat for 5 minutes
- Use a step stool so your feet are supported and your knees are above your hips during a bowel movement
- Keep your pelvic floor soft and relaxed

- Try repetitively tilting your pelvis forwards and backwards
- Try blowing hard into a closed fist
- Try leaning forward with a book or your hands against your stomach to increase intra-abdominal pressure
- If you have a rectocele (bulge of the rectum into the vagina) you may need to push on the prolapse by inserting your fingers into the vagina (directed towards your back) to support the back wall of the vagina, to help empty your bowels (splinting)
- Don't stay on the toilet for more than five minutes. If you can't go, get up and get busy. Try again when the urge returns
- Use ILU massage 1-2 times daily (see below)

ILU (I Love U) Self Massage

- This is used for constipation and general pelvic and abdominal pain
- These strokes follow the path of the large intestine and help to stimulate it
- Always do the massage from right to left, using lotion or in the shower/bath using soap
- Start by forming the letter "I" by stroking with moderate pressure from under the left ribcage down to the front of the left hipbone, 10 times
- Next, form the letter "L" by stroking with moderate pressure from the right ribcage, underneath the ribcage to the left, and down to the front of the left hipbone, forming the letter "L"
- Lastly, do 10 strokes from the front of the right hipbone up to the right ribcage, across to the left ribcage, and down to the left hip bone, forming the letter "U"
- Do this massage 1-2 times daily

6.3 Smoking and Caffeine

Smoking: Smoking is detrimental to pelvic health for several reasons. It can lead to chronic coughing, which increases intra-abdominal pressure and places strain on the pelvic floor. Smoking is also linked to reduced blood flow, which can hinder tissue healing.

Caffeine: Caffeine is a diuretic, which means it can increase urine production and potentially irritate the bladder. While you don't necessarily need to eliminate caffeine entirely, moderating your intake can be beneficial for your pelvic health.

6.4 Exercise Habits

Physical activity is an essential component of a healthy lifestyle, and it plays a significant role in maintaining a strong pelvic floor. Here's how to incorporate exercise effectively:

Pelvic Floor Exercises: Alongside general physical activity, consider integrating specific pelvic floor exercises into your routine. These exercises can help improve muscle tone and support your pelvic

organs. It is strongly recommended to consult with a pelvic health physiotherapist if you have pelvic floor dysfunction to determine if these exercises will be helpful. They can develop an individualized treatment plan based on your symptoms as pelvic floor exercises may have the potential to aggravate your condition if done improperly or if they are not indicated.

Core Strength: A strong core can support your pelvic floor. Exercises that engage your core muscles, such as planks and bridges, can indirectly benefit your pelvic health.

Low-Impact Activities: Engage in low-impact exercises like swimming, walking, or cycling. High-impact activities like running or heavy weightlifting can put excessive strain on the pelvic floor.

Exercising with POP: Even if you have pelvic organ prolapse it is still important to maintain an active lifestyle. Low impact activities such as walking, biking and swimming are less likely to aggravate your symptoms. If your prolapse symptoms are limiting you, consider consulting with a pelvic health physiotherapist.

This chapter emphasizes that lifestyle choices significantly influence pelvic health. By making informed dietary choices, adopting healthy bladder habits, minimizing harmful habits like smoking and excessive caffeine consumption, and incorporating appropriate exercises into your routine, you can actively maintain a strong and resilient pelvic floor. In the upcoming chapters, we'll explore pelvic health considerations during pregnancy and postpartum, as well as address the specific pelvic health needs of men.



Chapter 7: Pregnancy and Postpartum Pelvic Health

Pregnancy and childbirth put significant stress on the pelvic floor. This chapter will focus on addressing pelvic health during pregnancy, preparing for childbirth, and the role of the pelvic floor in the birthing process. For new mothers, we will discuss postpartum pelvic floor rehabilitation and recovery, including exercises and strategies to aid in healing.

7.1 Education

Understanding the Pelvic Changes: During pregnancy, hormonal shifts and the growing baby can lead to significant changes in the pelvic area. It's essential to educate expectant mothers about these changes, so they can better comprehend the importance of pelvic health.

Preparation for Labor: Education should encompass preparation for labor and childbirth. This includes understanding the stages of labor, breathing techniques, and positions that can facilitate the birthing process while minimizing strain on the pelvic floor.

Informed Decision-Making: Expectant mothers should also be informed about interventions like episiotomies or assisted deliveries and their potential impact on pelvic health. Being informed empowers them to make decisions that align with their birth plan and long-term health.

7.2 Exercise

Pelvic Floor Exercises: During pregnancy, gentle pelvic floor exercises can help maintain strength and flexibility. These exercises, often referred to as prenatal Kegels, can contribute to better bladder control and postpartum recovery. It is strongly recommended to consult with a pelvic health physiotherapist if you have pelvic floor dysfunction to determine if these exercises will be helpful. They can develop an individualized treatment plan based on your symptoms as pelvic floor exercises may have the potential to aggravate your condition if done improperly or if they are not indicated.

Prenatal Yoga and Pilates: These forms of exercise focus on flexibility, strength, and relaxation. They can support overall physical and mental well-being during pregnancy.

Low-Impact Activities: Engaging in low-impact exercises like swimming or walking can help alleviate the physical discomforts of pregnancy while reducing strain on the pelvic floor.

7.3 Habits

Bladder Habits: Proper bladder habits remain important during pregnancy. Adequate hydration is crucial, and women should continue to avoid rushing to the restroom.

Diet and Constipation: A fiber-rich diet can help manage constipation, which is common during pregnancy. It's essential to educate expectant mothers about the importance of a balanced diet for digestive health.

Pelvic Support: Wearing supportive maternity belts or bands can alleviate pressure on the pelvic floor and provide comfort, particularly during the later stages of pregnancy.

7.4 Plans

Birth Plans: Expectant mothers should be encouraged to create birth plans that reflect their preferences regarding labor, birthing positions, pain management, and interventions. These plans can include strategies to protect pelvic health during childbirth.

Postpartum Care Plans: Developing postpartum care plans is equally important. These plans can address postpartum exercises, seeking professional help if needed, and ensuring proper pelvic floor recovery.

By providing education, encouraging appropriate exercise, fostering healthy habits, and helping expectant mothers create informed birth and postpartum care plans, this chapter aims to support women in maintaining their pelvic health during and after pregnancy. In the upcoming chapters, we'll explore pelvic health considerations for men and address pelvic health across various life stages.



Chapter 8: Men's Pelvic Health

Pelvic health issues are not exclusive to women. Men, too, can experience problems related to the pelvic floor. In this chapter, we'll explore common pelvic health issues in men, such as urinary incontinence and prostate-related concerns. We will discuss the importance of pelvic floor exercises for men's health and encourage open discussions about seeking help and support for any pelvic health concerns. Not all practitioners have the tools needed to assist male patients. Be sure to ask if the practitioners at your closest clinic will treat men.

8.1 Erectile Dysfunction (ED)

Erectile dysfunction (ED) is a common pelvic health concern among men, particularly as they age. This condition involves the inability to achieve or maintain an erection sufficient for sexual activity. In this section, we'll delve into:

Causes: ED can result from various factors, including physical conditions like heart disease, diabetes, and high blood pressure, as well as psychological factors such as stress, anxiety, or relationship issues.

Treatment Options: It's essential to explore the diverse treatment options available for ED. These may include medications, lifestyle modifications (e.g., exercise and diet), counseling, or, in some cases, medical devices or surgical interventions.

Role of the Pelvic Floor: The pelvic floor muscles are integral to male sexual function. They help control blood flow to the genital area and are vital for maintaining erections. Pelvic floor exercises can be a valuable component of ED treatment plans.

8.2 Prostatectomy

Prostatectomy is a surgical procedure to remove all or part of the prostate gland and is commonly used to treat prostate cancer. After a prostatectomy, men may encounter various pelvic health challenges:

Incontinence: Some men experience urinary incontinence after prostatectomy due to the impact on the muscles and nerves involved in bladder control. This section will discuss the types of incontinence that can occur and management strategies, which might include pelvic floor exercises, lifestyle modifications, or surgical interventions.

Sexual Function: Prostatectomy can also impact sexual function. Many men experience changes in erectile function after surgery.

Rehabilitation: Pelvic floor rehabilitation can be an essential part of the recovery process after a prostatectomy. This includes exercises to strengthen the pelvic floor muscles and regain control over urinary function.

An appointment with a Pelvic Health Physiotherapist should include conversations and plans of care for the following:

- Chronic Nonbacterial Prostatitis
- Testicular Pain
- Hernia
- Abdominal Wall Pain
- Pain with Ejaculation

Additionally, it's important to note that not all healthcare practitioners have experience with male patients, so we'll encourage readers to inquire about the services available at their nearest clinic. In the

upcoming chapters, we'll explore pelvic health considerations across various life stages and provide additional resources for those seeking support.



Chapter 9: Pelvic Health Across the Lifespan

Pelvic health is relevant at every stage of life. This chapter will address specific considerations for different age groups, including adolescents, adults, and seniors. We will explore preventative measures and techniques to maintain a healthy pelvic floor throughout each life stage.

9.1 Prenatal Pelvic Health

Pregnancy Preparation: Preparing for pregnancy involves understanding the changes your body will go through, including the impact on the pelvic floor. This section will explore the importance of prenatal pelvic floor exercises, proper nutrition, and maintaining a healthy lifestyle to support a healthy pregnancy.

Early Pregnancy: Once pregnancy begins, it's essential to continue pelvic floor exercises and engage in safe physical activity. Managing common issues like morning sickness and frequent urination is crucial for overall well-being.

Emotional Well-being: The emotional aspects of pregnancy are also crucial. Reducing stress and anxiety through techniques like mindfulness can positively impact pelvic health.

9.2 Postnatal Pelvic Health

Postpartum Recovery: After giving birth, it's vital to focus on postpartum recovery. This includes postnatal pelvic floor exercises to help the pelvic muscles regain strength and address any issues related to childbirth.

Diastasis Recti: Some women experience diastasis recti, a separation of the abdominal muscles, postpartum. Addressing this condition is essential for both pelvic health and overall core strength.

Breastfeeding and Pelvic Health: Breastfeeding can impact pelvic health due to hormonal changes and the influence of hormones on pelvic floor muscles. Understanding these connections and taking appropriate steps is important.

9.3 Menopausal Pelvic Health

Hormonal Changes: Menopause brings significant hormonal changes that can affect the pelvic floor. Understanding these changes, including a decrease in estrogen levels, is critical

Pelvic Organ Prolapse: Menopausal women are more susceptible to pelvic organ prolapse due to the weakening of pelvic muscles and changes to the tensile strength of the vaginal wall with hormonal fluctuations. We'll explore preventative measures and management options for this issue.

Urinary Issues: Incontinence, frequency and urgency

Dyspareunia (pain with intercourse): Hormone fluctuations can lead to vaginal dryness. This can cause pain with sexual intercourse

Bone Health: Osteoporosis, common in menopausal women, can indirectly affect pelvic health. Strategies for maintaining bone health will be discussed.

9.4 Pediatrics (bedwetting (enuresis), constipation, encopresis (fecal incontinence), urinary incontinence, pelvic pain

By addressing pelvic health throughout the lifespan, individuals can better prepare for significant life events and proactively manage their well-being. In the following chapters, we'll provide additional resources and support for those seeking further information and assistance in their pelvic health journey.



Chapter 10: Additional Resources and Support

In this final chapter, we'll provide a comprehensive list of websites, books, and other resources related to pelvic health. Additionally, we'll highlight the importance of support groups and communities for individuals seeking further help and camaraderie in their pelvic health journey.

- [Gemsforgems](#)
- [Calgary Women's Emergency Shelter](#)
- [Pelvic Floor Clinic \(AHS\)](#)
- [Momentum Health Pelvic Health Physiotherapists](#)
- [Evidence Sport and Spine Pelvic Health Physiotherapists](#)
- Your family doctor or obstetrician/gynecologist

Conclusion:

Congratulations on completing "A Guide to Pelvic Health: Empowering Your Well-being." We hope this e-book has equipped you with valuable knowledge and tools to take charge of your pelvic health. Remember that prioritizing pelvic health is essential for a fulfilling and active life. If you encounter any concerns, don't hesitate to seek help from our qualified healthcare professionals. Thank you for investing time in your pelvic health, and here's to a healthy and empowered you!