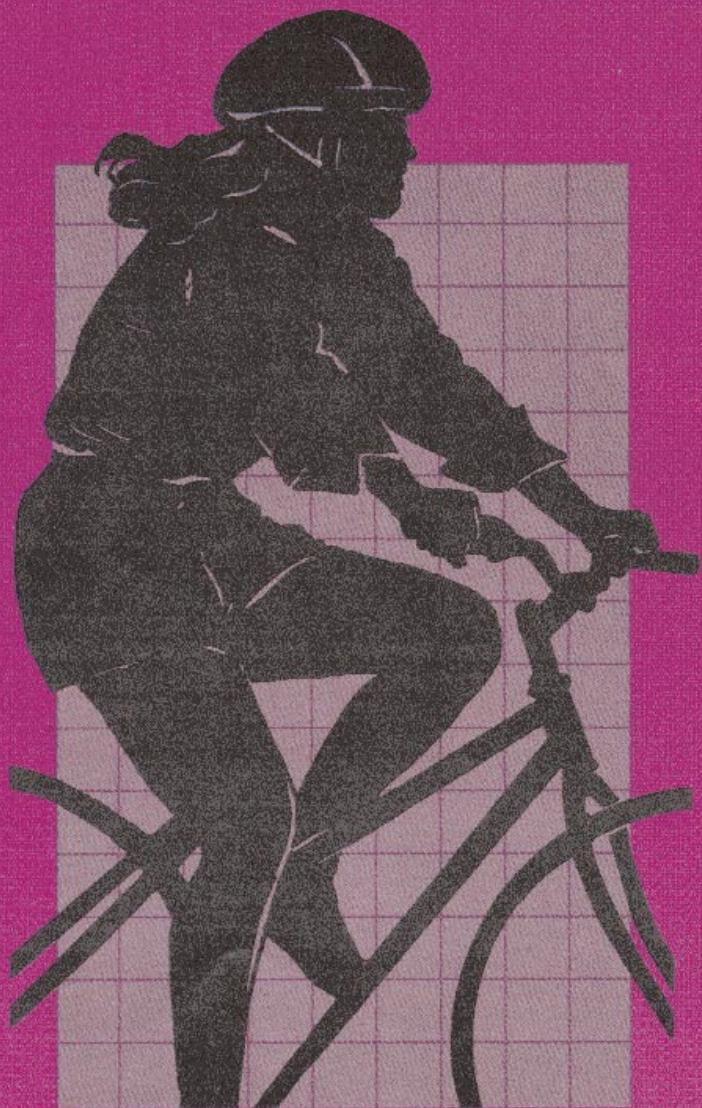


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**For**  
**WOMEN**  
**Of All Ages**

*A Physical Therapist's Perspective on  
Women's Health*



*American Physical Therapy Association*

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## For Women of All Ages

**W**omen are unique in many ways. At the most fundamental level, women's bodies are structured to give birth and supply early nutrition to the next generation. But whether or not a woman decides to have children, her reproductive system affects her body throughout her entire life.

While the changes and stages of the maturing female body are certainly natural, there may be times when a woman needs extra help to cope with modern demands — athletics, later child-bearing years, and career stress, to name a few. Many physical therapists concentrate their practice in obstetrics and gynecology and can help design an exercise program to fit each woman's lifestyle and take care of the body that will carry her comfortably through life. Physical therapists also may recommend that their clients with OB/GYN concerns see a physician for a full evaluation.

While many states require a doctor's referral to make an appointment with a physical therapist, other states have direct access, where an individual can contact a physical therapist herself.

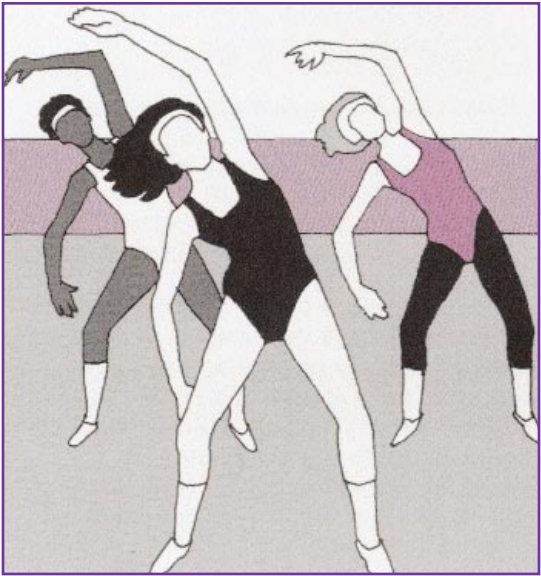
This booklet discusses the various stages a woman's body goes through, from adolescence to the mature years, and describes how a physical therapist can help ensure a healthy body.

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## Adolescence

**A**dolescence is a time when girls begin to mature into women. Girls start developing breasts and hips, their hormones go into overdrive causing oily hair and skin blemishes, and menstruation begins. There is no standard starting age for adolescence: it can start when a girl is as young as nine or when she is well into her teens.

Adolescence is a perfect time in life to develop good exercise habits. When a girl's body begins



producing the hormone estrogen, which helps trigger sexual development, she may notice an increase in body fat. She may then try a variety of crash diets to maintain what she thinks is an ideal body image. Physical therapists agree that exercise is a safer way to maintain ideal weight than dieting by itself. They can help the adolescent girl determine her appropriate body weight and encourage her to enjoy aerobic and resistance exercise, such as walking, swimming or dancing.

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## Menstrual Pain

Once menstruation begins, and over the next several decades, many women suffer from some degree of *dysmenorrhea*, or pain, during their monthly menstrual cycle. Symptoms can range from slight irritability to intestinal upset, severe cramping, and even fainting.

Coping with pain during your period can be a vicious cycle: the menstrual cramping causes pain in the lower abdomen, so your muscles tighten and cause you more pain, which then

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makes you tense, causing your muscles to tighten even more. Over-the-counter medications work well for some women, but others cannot take these remedies because of stomach upset. And some prescription medications can cause unpleasant side effects.

Once your gynecologist has determined there is no abnormal cause of pain, a physical therapist can help you deal effectively with the pain brought on by menstruation. Recommendations include a postural evaluation to rule out musculoskeletal dysfunction and exercises to help you relax tense muscles. A physical therapist can teach you pain control techniques such as deep breathing exercises.

Physical therapists recommend these easy exercise techniques to relieve menstrual pain: *Lying down* — bring your knees up to your chest, hugging them with your arms. Hold for 10 seconds. *Sitting* — rock back and forth in your chair (a rocking chair is ideal) to pump the blood into your abdominal muscles. *Standing* — face the wall with both your elbows touching the wall at eye level. Then try to lean forward slowly until your tummy touches the wall, without bending your spine forward. Hold for 10 seconds. This action stretches your anterior abdominal wall and helps loosen those tight muscles.

Women with severe cramping have reported success with TENS (transcutaneous electrical nerve stimulation). Physical therapists are experienced in the use of TENS for a variety of con-



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ditions that require pain management. A TENS unit is a small machine that delivers mild electrical stimulation to the pain site through electrodes placed around the areas of discomfort. This stimulation blocks nerve impulses to help control pain.

### **Dyspareunia (painful intercourse)**

There are many reasons for painful intercourse. A physician's thorough assessment can rule out serious medical problems. A physical therapist can help you decrease pain through relaxation techniques, exercise and scar tissue massage if you've had an episiotomy, cesarean section or hysterectomy.

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## **Women Athletes**

**W**hile a lifelong exercise program is essential to healthy living, some women approach athletic training with extra intensity. Professional





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athletes who train every day, sometimes for several hours, have special health concerns. For one thing, a rigorous athletic regimen can lead to *amenorrhea* (cessation of menstruation).

If you plan to become pregnant, yet want to remain active, then your physical therapist may recommend a few changes in your lifestyle. As a pregnant athlete, your training program may be more moderate than you're used to. Your physical therapist will help you modify your exercise program and train you to monitor your heart rate so that you can continue to enjoy the advantages of fitness in pregnancy.

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## The Childbearing Years

**G**iving birth and raising a family can be one of the most exciting times of your life. But you may be so busy focusing on the child that's growing inside you, that you neglect the changing needs of your own body.

When you're pregnant, your posture, center of gravity and body size all change as the fetus develops. Keep in mind that all these changes might be accompanied by some discomfort. But don't dismiss these aches and pains as merely a part of the pregnancy. Physical therapists will tell you that the "grin and bear it" approach is wrong. They can work with your doctor to determine what's causing your pain and tell you if it's pregnancy-related.

A physical therapist will start off with a complete evaluation to determine how your body movements might be causing added strain on your spine. You'll learn how to maintain good posture throughout the day and even at night while you're sleeping.

Back pain is a frequent complaint of pregnant women and has many causes. The hormonal changes that occur in pregnancy cause *ligamentous laxity*, a loosening of the ligaments, which hold bones together, especially where the pelvis and spine connect. As the weight of the baby increases, so does the pressure on your spine



and pelvic area. The lumbar curve in your lower back can increase and cause poor posture: your shoulders begin to round and your head tilts forward.

Some women experience such laxity that they need to wear an orthotic support for their low back and abdomen. This type of belt is worn to improve stability and function. It can help correct faulty alignment and relieve the strain on muscles that are stretched by the increasing size of the uterus in pregnancy.

As your size changes, your balance, center of gravity and ability to move alters, and the extra weight can strain your back as well as stretch your abdominal muscles. Even the arches of your feet can fall due to the added weight of a baby on board (wear lower heels and use heel inserts for shock absorption).

Since your balance changes during pregnancy,



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a physical therapist will teach you to be more cautious in your movements. Be careful using the stairs, and when you're sitting, try not to cross your legs, which could slow down the blood returning to your head.

## Prenatal Exercise

Even if you're not especially athletic, it's important to both you and your baby that you be in the best shape possible during your pregnancy. Physical therapists recommend some guidelines on safe exercise for expectant mothers. These guidelines take into account the safety of the fetus and encourage regular exercise, not vigorous, competitive exercise. A complete exercise program includes flexibility, low-impact aerobics, muscle strengthening, endurance and relaxation exercises.

Key muscle groups targeted during prenatal exercise include: *the postural muscles* — along the spine and between the shoulder blades; *the abdominal muscles and iliopsoas* — the iliopsoas is the deep muscle in front of the pelvis and spine; and *the pelvic floor muscles* — that layer of muscle deep within the pelvis which is a base of support for the pelvic organs and openings from the vagina, urethra and rectum.

If you enjoy the water, swimming or walking in a pool will give your muscles a well-rounded workout and keep your body cool.

## Natural Childbirth

More and more women today are choosing to deliver their babies without taking pain medication. Some physical therapists are also childbirth educators and can teach you about the labor process, nutrition and various birthing positions that provide a more comfortable delivery. You'll learn relaxation and breathing techniques, pain management, and prenatal and postnatal exercises.

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Pregnant women need plenty of sleep, but nighttime can be very uncomfortable, particularly during the last three months. In the later stages of pregnancy, most women sleep on their sides. This position allows for free blood flow between mother and fetus through the placenta.

To keep your body well aligned if you sleep



this way, place a pillow between your knees and another under your abdomen. This will help reduce stress that the weight of your abdomen can put on your natural

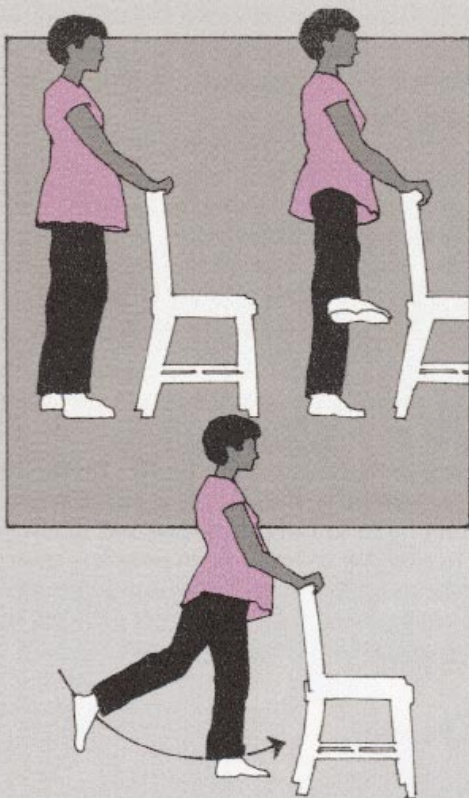
body alignment. You can also hug a pillow to help keep your shoulders from rounding.

## Cesarean Section

A cesarean section (C-section) is major surgery — an incision is made through the skin and muscles of the abdomen and the baby is removed through the open area. Women have C-sections for different reasons: the baby's head may be too large to come down through the birth canal; the baby may be very large at birth due to the mother's medical condition, such as diabetes; or an emergency might develop during labor, such as abnormal changes in the baby's heart rate.

Whatever the reason for a C-section, women recovering from this surgery need help with pain management and learning how to move in a protected way to avoid strain on the abdominal area. Even the simple motion of sitting up can be painful after a C-section.

A physical therapist teaches post-cesarean patients how to guard their movements to keep



To keep the muscles around your hips strong and healthy, and to avoid the "pregnancy waddle," you can do these exercises at home. Stand and hold onto a chair in front of you, then slowly swing one leg out to the side and back, repeating with the other leg. Next, slowly swing your leg back and forth, like a pendulum, repeating with the other leg.

from hurting themselves and how to manage their pain. Gentle massage techniques and scar tissue management, modified postnatal exercises

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and the use of a TENS unit can help patients get back in action as soon as they are safely healed.

## Postnatal Care

After you've had your baby, you'll want to get back on track with postnatal exercises. Your physical therapist can evaluate you for postural problems or abdominal weakness and then put you on a program to gradually strengthen those muscles. The program may include pelvic floor exercises to prevent incontinence (difficulty with bladder control).

Simple attention to little details in everyday life will make a big difference in your comfortable recovery. Your baby's changing table, for instance, should be at waist level, so you don't have to bend forward and strain your back. In fact, try to keep from bending over from the waist as much as possible. If you stand a lot, try resting one foot on a stool or box. This will give your back added support.

## Breastfeeding

Breastfeeding is a perfect opportunity for maternal infant bonding. But many moms tend to bring their breast to the baby instead of their baby to

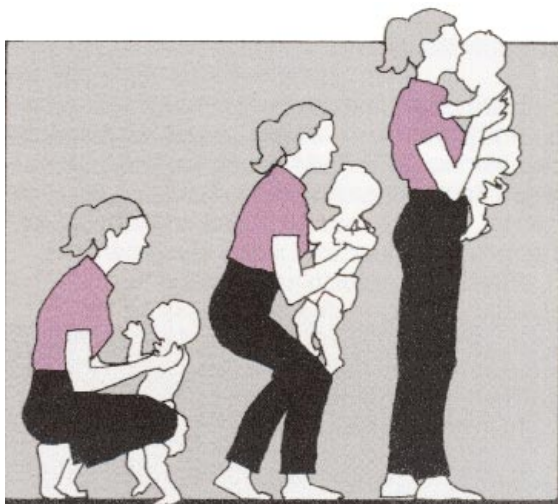


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the breast. This can lead to pain between the shoulder blades and strain on the lower back. A physical therapist can instruct you on the proper positions for comfortable breastfeeding.

Physical therapists will tell you to make the furniture and pillows do the work for you, not your muscles. Sit in a chair with a soft pillow behind your lower back to give it support. Rest your baby and your arms on a pillow to keep your shoulders from rounding and placing strain on the muscles between your shoulder blades.

After a long session of breastfeeding, stand up, put your hands on your hips and lean back slightly to help reverse the strain on your back from prolonged positioning. Repeat this motion, gently, three to five times.



## Handling Your Baby

Lots of touching, holding and interacting is good for your baby and for you, too. Studies have shown that this kind of tactile stimulation encourages the baby's development. But while you're learning about handling your baby correctly and

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gently, you need to be careful not to do your own body some damage.

When picking up your baby — or younger child — remember to protect your spine. Bend your knees, keep your child close to your body and lift with your leg muscles, not your back. Also, don't carry your baby all day on one hip.

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## As You Get Older

**Y**our reproductive system continues to influence your life long after you've given away the last of your children's outgrown clothes and toys. As they're putting on their graduation caps and gowns or beginning families of their own, your maturing body is taking you through more changes.

## Menopause

Menopause is a biologic phase that marks the end of hormonal changes and ovary function and menstrual periods. Some women notice "side effects" of menopause, including hot flashes, tingling, muscle aches and pains, and changes in temperament and sleep patterns.

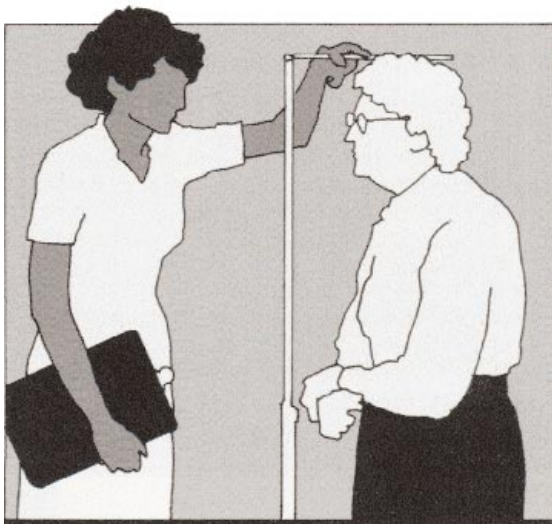
Physical therapists understand the importance of exercise and fitness for the mature woman. They encourage continued exercise, with modifications if necessary, with special emphasis on preventing osteoporosis.

## Osteoporosis

Osteoporosis is the loss of bone density that begins by your early 40s. How much density you lose depends on your diet and exercise choices. Once the bones lose a significant amount of calcium, they become brittle and can break easily.

For women who already have osteoporosis, physical therapists will recommend postural strengthening exercises and activities such as





walking, possibly using an exercise bicycle, and perhaps some light swimming.

Good nutrition, plenty of calcium, estrogen supplements after menopause, and weight-bearing exercise such as walking with good posture can help prevent this debilitating condition from happening to you.

## Hysterectomy

Hysterectomies, the surgical removal of the uterus, are prescribed by physicians for a variety of reasons. While new developments in diagnostic procedures and surgical techniques have provided options, you may someday need to undergo this operation.

A physical therapist can put you on a good postoperative treatment plan to ensure a healthy recovery after the hysterectomy. Physical therapy techniques for hysterectomy recovery include pelvic floor exercises, stretching, deep breathing, and weight-bearing exercise.

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## Mastectomy

Women who go through a moderate or radical mastectomy are often worried about their body image and are afraid to move because of the tightness they feel in their chest and shoulders.

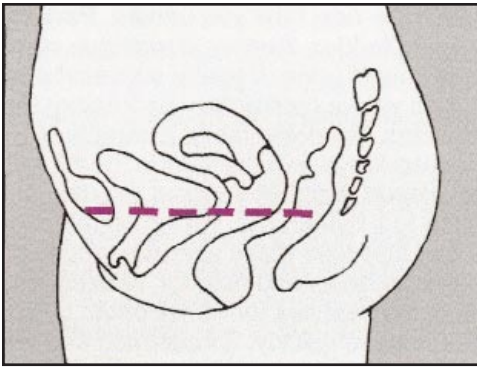
A physical therapist will help you become accustomed to your new shape. You will learn deep-breathing techniques for stress reduction and how to gently massage your scar tissue to prevent adhesion. Your physical therapist also will tailor an exercise program that will help you regain the full range of motion in your shoulder and upper body.

## Incontinence

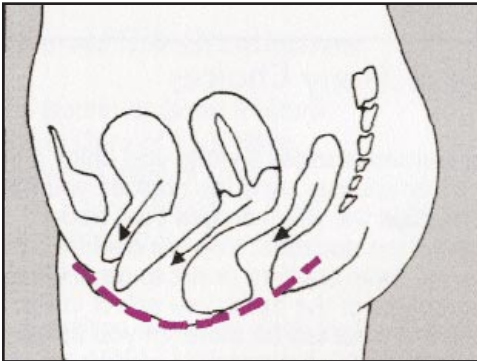
Incontinence means difficulty with bladder control. The bladder's function is to store and empty urine. Normally, it fills to capacity and the *detrusor*, the muscle that lines the bladder, contracts and causes the urge to relieve. Incontinence occurs when the lining of the bladder becomes irritated, causing the bladder to contract prematurely and/or frequently.

Incontinence strikes all ages. Over 12 million Americans experience some form of incontinence, twice as many women as men. Factors that can contribute to incontinence are weight, number of babies you've delivered, chronic illness, smoking, caffeine, and certain medicines that cause bladder irritability. But understanding incontinence doesn't make it any less embarrassing if you have a bladder-control problem.

Two major types of incontinence that physical therapists work with are stress and urge. Stress incontinence is the sudden, involuntary loss of urine because of physical stress, such as coughing, laughing, jumping or sneezing. Urge incontinence occurs when the urge to urinate is so strong it can't be overcome — the bladder does not relax so that it can fill normally and you get the sensation to go — and you have no control over it.



**Above: Good pelvic floor support.**  
**Below: Inadequate pelvic floor support.**



Incontinence is a symptom of an underlying problem, not a disease itself. Incontinence can be a sign of a bladder infection or more serious disease. But once these conditions have been ruled out by a physician, the source of the problem might be weak pelvic floor muscles.

Knowing that you can do something about it is a step in the right direction. Physical therapists are trained to rehabilitate muscles and have a variety of methods to teach clients how to correct pelvic floor weakness. More important, they can teach you how to exercise your pelvic floor muscles to prevent the onset of incontinence or help to reverse the process.

You also can check the strength of your pelvic floor the next time you urinate. Partially empty your bladder, then try stopping or slowing down the flow of urine. If you're successful with either,

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then you're contracting (tightening) the right muscles. Try doing these contractural exercises (called Kegel exercises after the physician who developed them) throughout the day, driving, sitting in a meeting or talking on the phone.

You can also vary these exercises: contract your pelvic muscles and hold for 10 seconds, then relax the muscles for 10 seconds. Or contract and release quickly. Or contract, and while holding, cough. The purpose is to vary these exercises and do them several times throughout the day. Remember that Kegel exercises are discreet. Nobody will notice.

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## A Life of Many Choices

**A**s a woman in today's world you enjoy a life of many choices. And the choices you make will determine the way you use your body throughout the decades. But regardless of the paths you select—such as whether or not to have children—a physical therapist will be there for you as you progress through all the stages of your life.

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## **About APTA**

**T**he American Physical Therapy Association (APTA) is a national professional organization that represents members throughout the United States.

Physical therapists are vital members of the multidisciplinary health care team. They provide treatment and can refer clients to other health care specialists. APTA serves its members and the public by expanding understanding of the physical therapist's role in the health care system. APTA also promotes excellence in the field with improvements in physical therapy education, research, and practice.

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