

Love Your Body!

10 Lower Body Exercises for Mamas on Bed Rest

With Additional Stretches and Kegels

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Compiled and presented by

Darline Turner-Lee, Owner and Founder

Mamas on Bedrest & Beyond

FORWARD

In 2002, three of my friends and I were pregnant with high risk pregnancies. They were already on bed rest and my OB was contemplating the same for me. During one of our internet conferences as I was trying to gauge what I was in for, I asked them, "What are you doing to keep your muscles supple and strong?" As a personal trainer I was really concerned about being inactive for so long would do to my body. None of them had been given any instructions or guidance on how to combat muscle wasting or loss of strength. I tried researching exercises for women on bed rest and found nothing. Knowing that I could lose much of my muscle strength and tone, I knew that I had to do something. I didn't want to come away from my first pregnancy experience unable to walk after delivery, or to hold my baby right away. Right then, ***Bedrest Fitness*** was conceived.

It would be 4 more years before I actually filmed and produced ***Bedrest Fitness***, and it has now been 4 years since the DVD first debuted. While I am very proud of the DVD, I can see gaps in the information. So I am preparing to produce a second edition, probably in the fall of 2010.

For this revision I need your help. I would love to get your input as I prepare to film the second edition. As a mama on bed rest, do you want more leg exercises? More upper body strengthening? More stretching? What type of exercise program would best suite your needs while you're on bed rest?

As you contemplate your answers to these questions, I've put together a short series of lower body exercises, upper and lower body stretches and kegels . These exercises will help you maintain muscle strength and tone and will also help alleviate some of the lower back, hip and leg pains that come from prolonged inactivity.

Give these exercises a whirl and send your comments to info@mamasonbedrest.com. Please help me make the second edition of Bedrest Fitness the best exercise program possible for mamas on Bedrest.

Thanks so much for your input. Good Luck with the rest of your pregnancy! Here's to you and your baby!

Darline Turner-Lee, Owner, Mamas on Bedrest & Beyond

About Darline Turner-Lee

Darline Turner-Lee is a nationally certified physician assistant, ACSM Clinical Exercise Specialist[®], perinatal fitness instructor and the owner and founder of ***Mamas on Bedrest & Beyond***. After 2 miscarriages and 2 high risk pregnancies, she set out to develop products and services she would have used while she was having her own children including ***Bedrest Fitness***, an exercise DVD designed specifically for pregnant women on prescribed bed rest. Her company provides information, products and services to support high risk pregnant women and new moms. For more information on ***Mamas on Bedrest & Beyond***, ***Bedrest Fitness*** or to contact Darline visit www.mamasonbedrest.com.

Medical Disclaimer

This exercise program has been designed specifically for pregnant women on prescribed bed rest ("Participant"). Every effort has been made to modify the exercises so that they are safe for pregnant women on bed rest and still adhere to the guidelines set forth by the American College of Obstetricians and Gynecologists and the American College of Sports Medicine. However, some movements may still be inappropriate or uncomfortable under certain circumstances. If at any time you experience dizziness, pain, cramping, bleeding or other discomfort, stop immediately and contact your healthcare provider. Next Step Fitness, Inc and Darline Turner-Lee highly recommend that your healthcare provider review this program and give consent prior to individual participation.

Participants perform the exercises at their own risk, and assume all risk and liability for their participation in these exercises. Participants hereby release from liability, waive any liability and all causes of action, and agree to hold harmless Next Step Fitness, Inc., Mamas on Bedrest & Beyond and/or Darline Turner-Lee from any liability associated with any injury to Participant and/or her unborn child. Participant further releases Next Step Fitness, Inc., Mamas on Bedrest & Beyond and/or Darline Turner-Lee from any liability to Participant's spouses, partners, children or heirs, and Participant agrees that the aforementioned may not hold Next Step Fitness, Inc., Mamas on Bedrest & Beyond and/or Darline Turner-Lee liable for injury or death incurred by Participants or their unborn children as a result of performing this exercise program.

Introduction

Many people have the mistaken idea that women on prescribed pregnancy bed rest are lounging around and living the life of luxury. ***Nothing could be further from the truth!*** Prescribed bed rest can be both emotionally and physically draining due to the stress of trying to maintain the pregnancy and the impact that prolonged inactivity has on one's body.

Lying in bed day after day takes its toll-both physically and emotionally. It is essential to keep your body and mind active to stave off the negative effects of bed rest such as muscle atrophy, de-conditioning, anxiety and depression. Prolonged bed rest can leave a woman feeling tired and listless as she becomes more and more deconditioned. NASA studies performed on female astronauts found that in as little as 60 days women lost up to 25% of muscle mass and between one third and one half of their muscle strength. From their studies on weightlessness, NASA researchers and exercise physiologists believe that similar results may be taking place with pregnant women on prescribed bed rest.

Judith Maloni, PhD, RN, FAAN is an Associate Professor of Women's Health Nursing at the Frances Payne Bolton School of Nursing at Case Western Reserve University in Cleveland, Ohio. She is also a leading researcher on the impact of the bed rest prescription on pregnant women, a subject she has studied for more than 20 years. In her publication, ***Astronauts and Pregnancy: What NASA is Teaching Us About Inactivity***,* Dr. Maloni recounts data produced by NASA showing the many similarities between the weightless existence that astronauts experience in space and the existence pregnant women experience while on prescribed bed rest. According to Dr. Maloni, pregnant women on bed rest experience:

- Loss of muscle strength, particularly in the legs and back.
- Dizziness when they first get out of bed
- Weight loss or slow weight gain, headache (even when not on tocolytics) indigestion, depression and boredom
- Increased stress and a sense of isolation
- Major stress due to separation from their family in the home, particularly any children.

Post partum recovery is longer and different from women who had not been on bed rest. The more time a person spends in bed, the longer it takes to recover.

Symptoms commonly reported by post partum women include:

- Leg and back muscle weakness
- Difficulty negotiating stairs, stepping off curbs, getting out of a chair or leaning over a changing table or crib.

Other symptoms include shortness of breath and dizziness upon exertion, a lingering depression and difficulty concentrating.

NASA researchers found that many of these negative side effects, mostly the physical ones, could be prevented if astronauts exercised. They designed exercise regimens that included 40 to 50 minute aerobic workouts two or three times a week and 20-minute strength training sessions two or three days a week.

While it is not yet recommended that pregnant women on prescribed bed rest engage in aerobic activity, there are several strength training exercises that women can perform to keep their muscles stimulated, toned and to maintain muscle strength. Here is a sample of 10 lower body exercises and stretches that women can do to help prevent loss of muscle strength, to preserve muscle tone and to alleviate lower back, hip and leg pain while on prescribed bed rest. As with any exercise regimen, consult with your OB or Midwife prior to doing these exercises. Be sure it's safe for **you** to perform these exercises and review with your health care provider any restrictions or contraindications.

Here's to you, Mama! May you be healthy and strong and your pregnancy full term!

Exercises

Hip Abductors: If you are lying on your left side, bend your knees so that your hips and knees are at 90 degree angles. Your feet should be stacked right on top of the left.



Starting position for hip abduction

Gently press your heels together and open your knees until your right knee is pointing up towards the ceiling. Hold for 1-2 secs and then return to the starting position. Repeat 10 times.



Right leg in abduction

If you don't have to remain on your left side and your OB/midwife consents, roll onto your right side, place a pillow behind your back so that you are slightly rolled backward (to relieve pressure on the inferior vena cava, the large blood vessel taking blood back to your heart from your legs) and repeat the exercise on your right side.



Positioning for right side lying.

Note: Pillows under left side allow you from to roll off your right side, off the inferior vena cava preserving blood flow to the heart from the lower body, but prevent you from lying completely flat on your back which is contraindicated after 14 weeks.

Hip Circles: Lying on your left side the same as for the hip abductors, raise your right knee towards the ceiling.



Starting Position for Hip circles

If it's not too difficult, reach down and gently grab your right knee and gently rotate your knee (and hence your hips) in small circles.



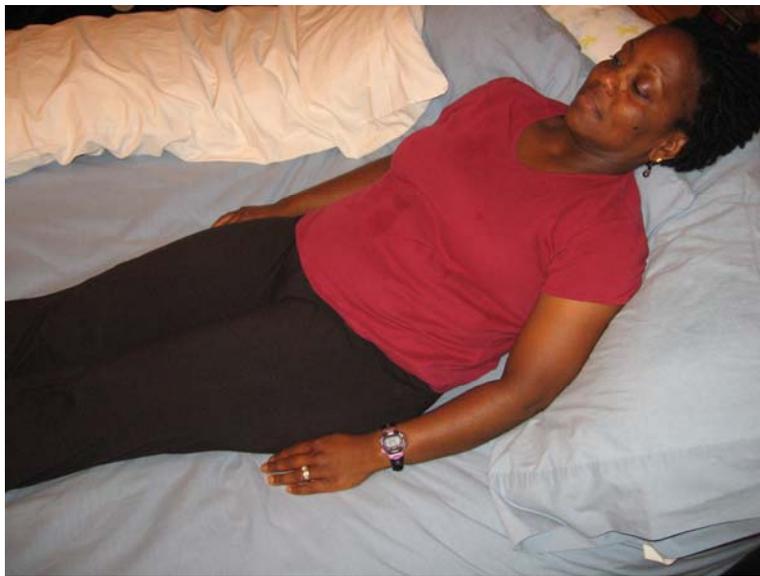
If you can't reach your knee, use an exercise band or towel to assist.



Assisted hip circles using a theraband

If you have permission, roll onto the right side, (see positioning above) and circle the right knee and hip.

Leg ab(ad)duction: If you are able to lay on your back, prop yourself up on some pillows and rest comfortably with your legs stretched out in front of your. Legs should be resting comfortably on the bed.



When lying in bed, rest propped up on pillows, not flat.

Slowly open your legs as wide as you can without straining. (Your legs should gently glide over your mattress like you are making a snow angel). Hold 1-2 seconds and return to starting position. Repeat 10 times.



Leg Ab/Adduction

Leg Sweeps: If you aren't allowed to lie on your back, you may be able to do leg sweeps. Lay on your left side **without** the pillow between your knees. Gently extend your right leg without locking your right knee.



Very slowly and gently sweep your right leg in front of you then sweep it back behind you as far as you can comfortably go without straining. Repeat 10 times.



Left Side Leg Sweep

If you are allowed to do so, repeat on the right side. Remember to prop pillows behind your back so that you can lean back slightly releasing pressure off the vena cava.



Right Leg Sweep Start Position



Right Side Leg Sweep end Position

Knee Flexion/Extensions: This exercise can be done lying on your side or propped up on your back. We'll address the side lying position first. On your left side, with or without the pillow between your legs (which ever is more comfortable), start with your legs bent.



Side Knee Flexion

Gently extend your legs until you are lying straight on your left side. Then slowly draw your knees back to the starting position.

Side Knee Extension





Return to Side Knee Flexion.

Repeat 10 times and if you are able, repeat on the right side.

If you prefer to do them in a pseudo supine position, lay on your back, propped up on pillows, legs straight out in front of you.



Propped supine start position.



Propped Supine Knee Flexion.

Don't strain to bring your feet all the way to your buttocks. Release to starting position. Repeat 10 X. These can also be done assisted.



Assisted Supine Knee Flexion Start Position



Assisted Supine Knee Flexion

Toe Point/Flex: Lie comfortably with your legs extended and feet flexed. Point then flex your toes. This will stretch the muscles of the feet, ankles and calves and shins.



Legs extended, feet flexed



Legs extended, feet extended

Ankle Circles: Lie comfortably with your legs extended. Circle your ankles 10 times in one direction and then reverse and do circle your ankles 10 times in the other direction.



Start of Ankle Circles



Circle Ankles



Circle Ankles



Return to Start

Full Body Stretch: You should stretch at least once an hour. Here is a stretch you can easily do on your left side. Lie on your left side with a pillow between your knees



Resting Position before full body stretch

Then extend your arms over your head and your legs in the opposite direction. When you are fully extended, hold for 5 seconds and return to the starting position.



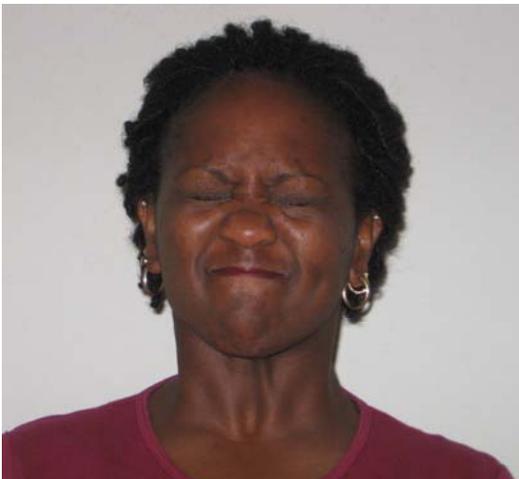
Left side lying full Body stretch

Additional Stretch Series

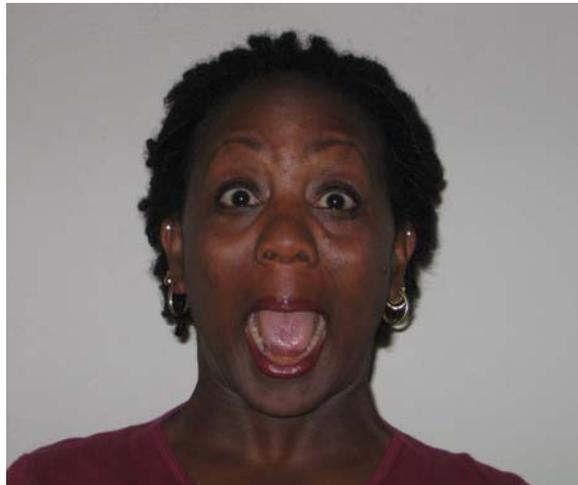
To begin, get comfortable and take 3 deep cleansing breaths.



After the third breath, squinch up your face; squeezing your eyes shut, cinching your lips shut and drawing them up to your nose. Hold for 1-2 seconds. Now really stretch your face wide; with wide eyes and a wide open mouth. You may yawn and that's good. Take a wide open mouthed deep breath.



Tight Facial Contraction

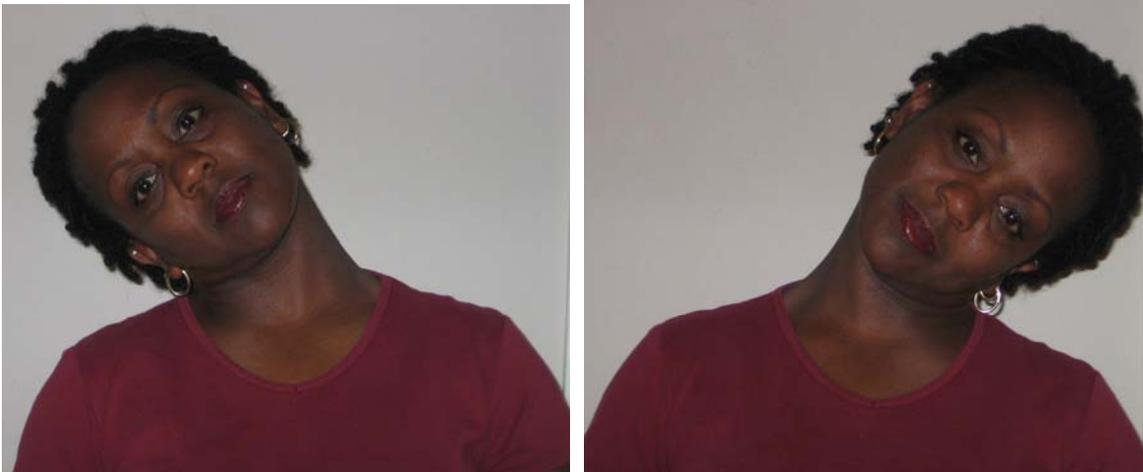


Wide Facial Stretch

Next, drop your chin to your chest and rotate your head from shoulder to shoulder in front of you, stretching the muscles of your neck. Repeat this motion 10 times.



Chin to Chest



Rotate head Shoulder to shoulder

Now shrug your shoulders up by your ears. Hold 1-2 seconds then release. Repeat 3 times and then roll your shoulders backwards 5 times.



Shoulder Shrug



Shoulder Release & Roll

Stretch the muscles of your chest and upper back. Start by pulling your shoulder blades back as tight as possible, forcing your breasts forward (See Image 33 Above). Now round your shoulders forward, crossing your arms in front of you and grasping your shoulders with the opposite hands.



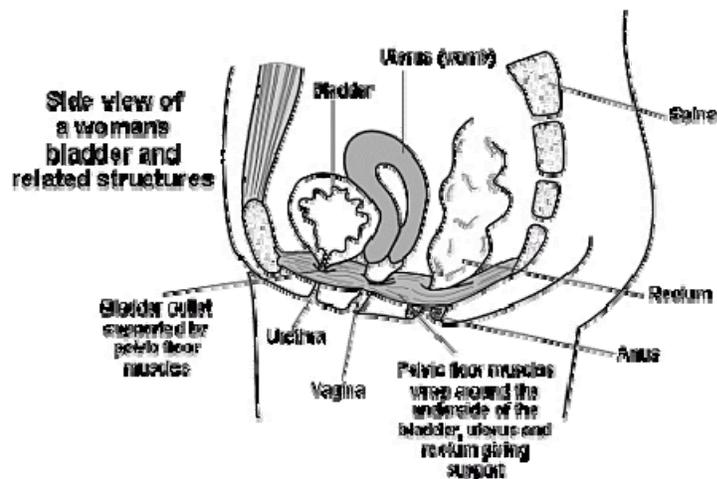
Image 34: Shoulder Hug Stretch

Kegels

Most women have heard of Kegels and at one time or another have been advised to perform Kegel exercises. But in my experience as a woman's health professional, I find that many women have no idea what muscles are involved in Kegel exercises and as a result have no idea how to perform one properly. So I offer here a short review.

Kegels are essential exercises for all women, but especially for pregnant women on prescribed bed rest. Mamas on bed rest, with their prolonged inactivity and growing uteri are at increased risk of weakened pelvic floor muscles which will be further stretched and potentially weakened if they vaginally deliver their babies. The results can be urinary incontinence (involuntary loss of urine with coughing, laughing, sneezing), organ prolapse (bladder, uterine or rectal prolapse (bulging or protrusion of the bladder, uterus or rectum through their respective openings to the outside), or decreased sexual sensation due to the lax musculature. But I don't want to get ahead of myself here. Let me start with the basics and work forward.

Dr. Arnold Kegel developed "Kegel" exercises to help women strengthen the pelvic floor



muscles following pregnancy.

Dr. Kegel noted that women frequently became incontinent following pregnancy and found that if they could strengthen the pubococcygeus "PC" muscle (the muscle that is suspended along the pelvic floor like a hammock and holding all of the pelvic organs in place), they could often improve or reverse urinary incontinence as well as bladder, uterine or rectal prolapse. He started teaching his patients how to contract the PC muscle and Kegels were born

So how is a Kegel done? First, you have to be sure that you are working the proper muscles. If you are squeezing and releasing your buttocks, you are probably not working your pelvic floor muscles—at least not effectively. You can be sure you are working the pelvic floor muscles:

- By stopping the flow of urine while urinating. While this is a good way to get to know the pelvic floor muscles and what they feel like when contracted, do not stop the flow of urine ROUTINELY as a way to strengthen the pelvic floor muscles. This practice will actually weaken the muscles and cause or worsen urinary incontinence.
- You can look at your perineum and watch as you contract the muscles. If you are performing the exercises correctly, you will see the anus "wink" the perineum move up and down and the clitoris "nod" (thanks to Desiree Andrews of Prepforbirth.com for these great visuals!). This is a great way to see and learn which muscles are working. You can place a mirror on the floor and squat over it to see the muscles or hold a mirror between your legs. However, if you're pregnant, it may be hard to hold the mirror between your legs and see and this is really hard if you are on bed rest. But for non-pregnant women, this is a good way to start learning how to Kegel.
- You can feel for muscle contractions by placing a finger or two into your vagina and then contracting the pelvic floor muscles around your fingers. Again, once you know which muscles to contract, you can effectively perform Kegels.
- There are devices that one can use to help stimulate the PC muscles. Physical therapists often use such devices when teaching clients how to do Kegels. Additionally, one can buy such devices and learn to Kegel using the devices.

Now once you get the basic muscle contractions down, you can then move on to some "advanced" Kegeling.

Squeeze, Hold, Release : This is just as it states. Squeeze your PC muscle, hold for a few seconds and release.

Elevators: This is an increasing contraction and likened to making floor stops while on an elevator. You begin by lightly contracting your pelvic PC muscle. After about 2-4 seconds, increase the contraction further pulling up the PC muscle. Hold for another 2-4

seconds and then tighten the contraction again. Hold for 2-4 seconds and then release. A variation is to gradually release the contractions holding for 2-4 seconds as the "elevator goes down."

Quick Bursts: These are just what they say, quick contractions. You quickly contract the PC muscle, say 10 times. Rest for a brief moment and then repeat the series. This should be done several times over the course of about 5 minutes.

Some people recommend that women "Kegel" approximately 200 times a day- performing a variety of contractions. If you Kegel regularly, say 3-4 times a day performing 10 or more Kegels at a time, you will strengthen the PC muscle. But as the saying goes, the more you work a muscle, the stronger it becomes. So if you want to keep your PC muscle strong and have a strong pelvic floor, Kegel often, several times a day and in various situations so that you not only develop pelvic floor muscle strength, but also muscle control which can help prevent incontinence and enhance sexual pleasure.

I hope these exercises help. If you liked this work out, purchase ***Bedrest Fitness***, a full body strength and tone workout, modified specifically for pregnant women on prescribed bed rest. It is available here www.mamasonbedrest.com/shop. Bedrest Fitness is available in English and the Spanish translation, ***Ejercicios Para El Embarazo En Reposo***

Please send your questions, comments and suggestions to info@mamasonbedrest.com.