

Position is everything

Understanding the Structural Differences Between Men and Women

An excerpt from Holly Mason's book: **It's Never Too Late** – to Learn, to Improve, to Make a Difference in Your Riding

Male & Female Pelvises

Most of the great riding tomes were written by men, about men and for men...and the physical proportions of a woman's body are very different for obvious and not so obvious reasons. When we address the differences, we can sort out what works best biomechanically for your own spinal integrity.

A woman's pelvis we all know is wider than a man's, but it is also shorter in height and deeper front to back – being more bowl-like than not, for the obvious reason of carrying a child in the uterus. As Jochen Schlee once told me, it means that women have more surface area “under the panty-line”. The science of making saddles for women is catching up, but still has a way to go. We usually need a narrower fit in the front (the twist) and a wider area under the seat bones. However, if you look at the body proportions of some top female riders, you will notice they are long and tall and have more male proportions in their pelvises, just like runway models. All body types can be good riders. It's how you move, not your exact proportions that dictate good communications with your horse.

Most women hold tension in their lower backs and have a slight arch to the low back that shifts them forward toward the pubic synthesis in the front. If you are riding on your crotch at all, this is incorrect. One must sit on the back of the seat bones, where God clearly has put the padding! Men don't make the mistake of tipping forward onto the front of the pelvic bones for VERY obvious reasons!

Male & Female Femurs

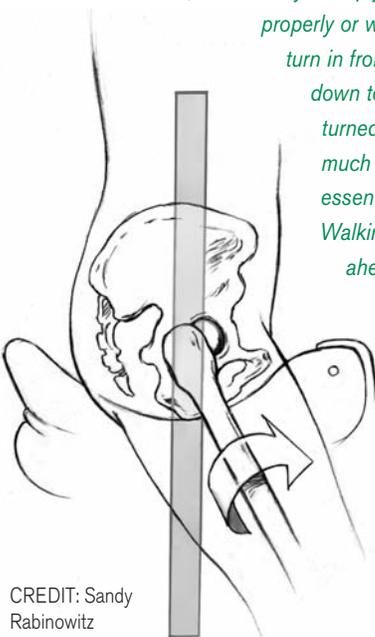
Another very key difference about how our bodies work with the back of a horse, is the angle of the femur as it comes out of the lower pelvis and hip and descends to the knee. Because women have proportionately wider pelvises in relationship to their height, there is a greater angle coming into the knee. This angle, known as the Q-angle, can be anywhere from 10 degrees to 15 degrees wider in a woman than in a man. That's a very big percentage difference! It is why female athletes are much more prone to knee injuries than men.

It also reveals the differences on how our legs fit astride a horse. With a narrower, taller pelvis, a man's legs just hang straight down from the hip socket and one can see why letting your legs hang down like “wet towels” works pretty easily for men. Also, women have longer femurs and are proportionately shorter from knee to ankle.

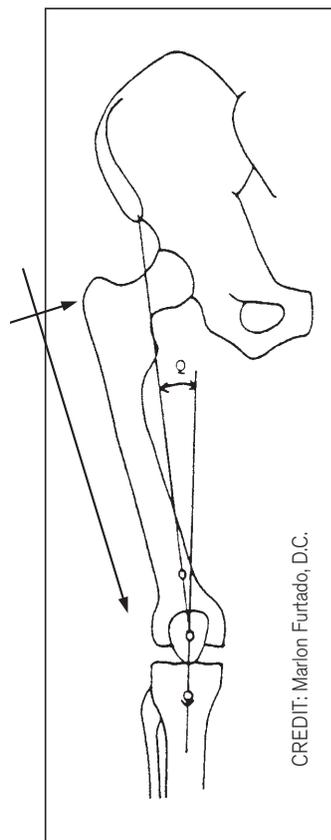
In conjunction with these facts, a woman's muscles are usually long with short tendons while men have shorter muscles with longer tendons. This is why men bulk up and the muscles have more definition as their shorter muscles get rounder as they work them harder. There are women with these kind of muscles but it is the exception, not the rule. It has also taken boot manufacturers a while to catch up to these facts and we now have fitting systems available to women for our naturally larger, longer calf muscles. My husband and I are exactly the same height. Ours legs are the same height off the ground at the point of the femur coming out of the hip but his knees are an inch higher than mine. Not exactly a statistical base but interesting none-the-less. Another example of proportions is the desirable shape for runway models – the modeling agencies look for women who are abnormally long from the knee to the ankle. Even in fashion illustration the goal is to keep elongating the proportions

With a rolled out thigh, your lower torso will not have the structural integrity necessary for good balance and effectiveness on your horse. It is also important to have soft contact with your knee against the saddle so you can feel the horse's shoulders. If your thighs (femurs) are rolled out, the ball of your hip joint does not fit in the socket properly or work as efficiently. This need to

turn in from the hip telescopes right on down to your feet. On your horse, a turned out toe represents a problem much higher up in the hip. It is also essential to practice OFF your horse. Walking with toes pointed straight ahead is a more balanced way of walking but it will also save your hips and your knees as you age. I have had many students cure their “duck footed” walks, so I've seen people work hard and correct this – they ALWAYS ride better when they've mastered this everyday, every walking moment correction!



CREDIT: Sandy Rabinowitz



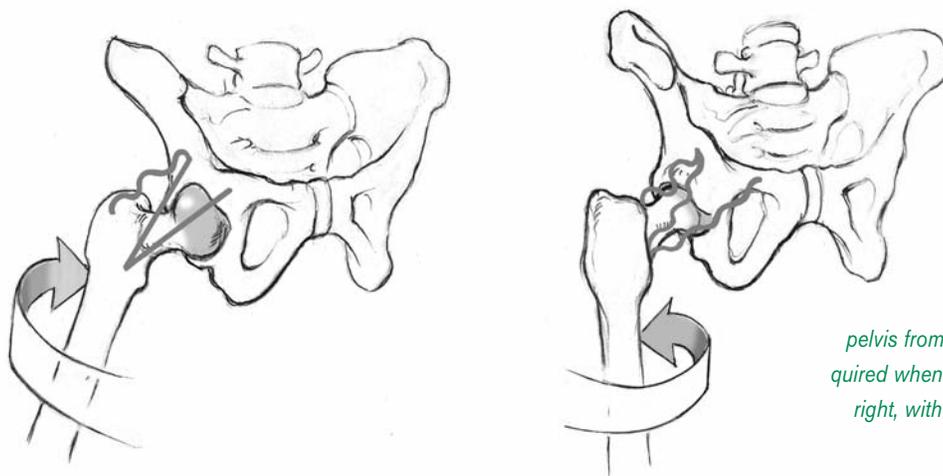
CREDIT: Marlon Furtado, D.C.

as you move down the figure...so model types are long-legged, especially below the knee, and narrow in the pelvis – these female proportions are very like adolescent males and not widely seen in women in the general population!

The Q- Angle: Since women have wider pelvises, there is an increased angle at the top of the femur as it comes out of the hip and into the knee that determines how a man's leg and a woman's leg will drop down in the saddle. This increased Q-angle in women also influences how a woman's legs will contact the sides of the horse, as well as how their thighs will lie against the knee rolls of the saddle.

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The gray lines at the front of the hip joint indicate the major ligaments that hold the top of the femur in the socket. When the upper leg is rolled out, in the drawing on the left, the ligaments are taut and prevent the pelvis from moving smoothly from back to front as is required when sitting on a moving horse. In the drawing on right, with the thigh rolled in, the ligaments are not taut so the pelvis can move better.

Back to the femurs, the Q-angles are different between men and women, so the way the muscles and tissue lie under the inner thigh has all kinds of variations in women. The result of a slightly arched back and the seat bones trailing is a turned out knee and toe. Obviously the pelvis should come more forward under the shoulders in an upright position but working on the actual hip joints to increase correct range of motion will contribute a great deal to an upper leg that gently embraces and lies against the horse.

Some of the top female riders have the body proportions of men. You can see this in photos by noting how a man's feet are often below the belly of the horse. Then look at tall female riders and see that they have a similar leg length that puts the foot at or below the belly. There are notable exceptions, like the diminutive Debbie McDonald – she is a notable exception in many ways! Longer legs are an asset for effectiveness but if your horse has appropriate responsiveness training, you can become very effective regardless.

One of the goals of this book is to inform riders about the issues of their own confirmation so they can make the appropriate adjustments and ride well.

Arm & Leg Length

Since women are usually less tall in stature, their arms are shorter and their shoulders more narrow. This totally affects the placement of the hands on horseback. Most women ride with their hands closer to the front of the saddle rather than over the withers. Again, if you look at the “long tall” proportions of some of the top female riders, their arms and hands are more forward, as they have longer arms than most women.

Men have shoulders that are wider than their pelvises and have naturally more upper

body strength due to their higher proportion of muscle, as well as the fact that their rib cages are bigger both side to side and front to back. This gives them more leverage to shift the upper body back in its balancing rod function for better hindquarter engagement. And with longer legs a man can also more easily bring the rib cage of the horse forward up under the saddle to lift the back.

But mechanical advantage is not everything. It is easy with superior strength and size to muscle a horse and hold them in position. I am not suggesting men ride this way but they can. A woman with smaller proportions is left with tact and persuasion to create better equine athletes.

There is no one perfect position for the hands. The hands are an extension of the shoulders and thus anatomical realities often dictate where the hands and arms of a woman are positioned both in how they work in front of the saddle and how wide apart they are.

Female Persuasion

The sport of riding has definitely tipped to females in the 21st Century, so we need to examine the ways that women can be effective in more persuasive ways rather than in demanding ways. Women have neither the strength nor the inclination, usually, to dominate horses. And, as eternal managers of children, we know that inclusion is very powerful. Let a child or horse express their ideas and mold them into socialization that makes sense for correct behavior. Demanding rarely works. Does that mean children or horses can do whatever they please? NO. It means there are guidelines for behavior. Politeness, for instance, counts in children and even more so in horses. Manners are only the consideration of another's feelings and space.

Find out what is Effective for You

It is essential to find the physical vocabulary that helps you as a rider be appropriately effective. The rules of position, even my observations, are really guidelines for conceptual thinking about your own physiology. I can only open the door in one book to reveal all I have learned and have learned to see. It is important to develop a mind that challenges things that don't make sense. Be the person who studies the science so the old platitudes are sent packing as the science of biomechanics will not support them any longer.

Also, remember that there is a shorthand that advanced riders use to describe and instruct that isn't thorough enough for the average rider to make sense of. Not understanding this shorthand leads many riders to become very insecure and assume they are dummies. It has been very frustrating for me to work with wonderfully capable women who in their professional and private lives are fantastically smart yet due to the nature of incomplete instruction are reduced to feeling inadequate and worse, that they will never improve. It makes me very sad to see this. Aside from bringing biomechanical enlightenment to the world of riding, I am very dedicated to helping women understand more, so the crippling insecurity I see in them around horses can be put aside.

Since knowledge IS power, search for better answers.

Holly Mason has just published “It's Never Too Late – to Learn, to Improve, to Make a Difference in Your Riding”. It is available at www.dressagebydesign.com