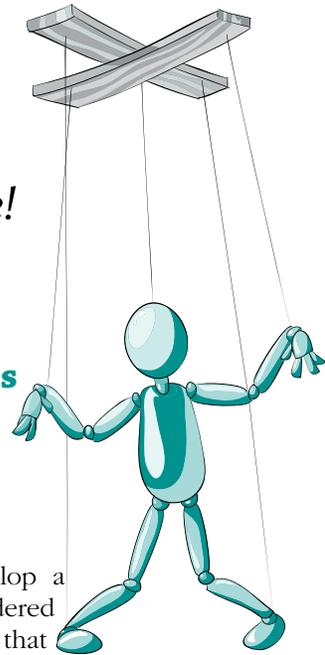


FIBRONOMICS

Promote Proper Posture to Prevent Painful People!

by Mark Pellegrino MD

Having fibromyalgia means we have to **pay extra attention to our bodies** so our pain doesn't flare up so often. Observing **proper posture and body mechanics** needs to be continuous and automatic.



What's proper posture? Many of us had a Grandma reminding us to "sit up straight". I still remember the grade school nuns telling me, "Don't slouch!" It was as if somehow sitting properly at all times would prevent our spines from bending and curving or freezing in some abnormal position. So we learned how to lift heavy objects using our legs and to not bend over at the waist to prevent back injury. As we became more sophisticated, we also learned ways to maneuver our bodies to avoid causing injuries or pain, yet still complete the functional task at hand.

There's a scientific study of posture and body mechanics and its relationship to various tasks known as ergonomics. It specifically involves designing equipment for work to fit the capabilities of the human body in order to minimize the risk of injury, like ergonomic chairs and keyboards for example. A key goal is to achieve a natural position for the human body where there is minimal or no strain of the joints and soft tissues.



Let's use the natural standing position of the human body to illustrate. The head is relaxed and slightly bent forward. The arms are loosely hanging down at the sides with the elbows bent to a 90 degree angle, wrists straight, fingers relaxed and slightly curled. The back is in a natural lordotic curve, knees slightly bent and the feet about 12 inches apart.

If an unnatural or awkward position occurs, more strain is placed on the joints and soft tissues. Examples of unnatural positions include: head turned to the side or looking up, arms outstretched or overhead, elbows away from the body, wrists bent, palms up, body leaning forward and bending.

But we cannot maintain natural body positions all day long! On the other hand, if we put a lot of strain on our tissues by repeated unnatural positions, we are at risk for injury or pain. A strategy: *promote proper posture to prevent painful people!*

With fibromyalgia, we have to develop a different concept of what is considered "proper posture". All of the stuff that Grandmother told us just doesn't work. When we try to sit up straight for a long time, we hurt more. Slouching is actually comfortable. Many of us who have had fibromyalgia for years develop a characteristic fibromyalgia posture that results from countless hours in a comfortable but less than perfect posture.

The 4 Rules to FIBRONOMICS

1. Arms Stay Home
2. Unload the Back
3. Support Always Welcome
4. Be Naturally Shifty

Consequently, a different set of "posture rules" apply to fibromyalgia. We need to reprogram our minds and muscles for these fibromyalgia posture and body mechanic rules. We need to learn *Fibronomics!*

I've defined fibronomics as the *art of properly manipulating our fibromyalgia bodies in the environment to enable completion of an activity with minimal pain*. Fibronomics can be applied to everything we do in life, no matter how simple it is. There are four easy rules and once these are learned and applied, our bodies will automatically follow them.

1 Arms Stay Home

Fibromyalgia muscles in the neck, shoulders and upper back area do not like activity that involves reaching or overhead use of arms. Isometric contractions occur when muscles stay continuously contracted. This causes decreased blood flow, decreased muscle oxygen, and increased pain. Any time the arms are away from the body, the trapezial, scapular, shoulder and upper back muscles all go into sustained isometric contractions, which usually causes increased pain after only a few seconds. Many will notice immediate increased pain or feelings of weakness in the arms when we reach. Sometimes we are so focused on what we are doing that we may not notice the early pain



Continued

Fibronomics *continued*

signals arising from our neck, shoulders, and upper back until it is too late.

The favorite position of our arms is at the sides with our elbows touching our sides and bent at a 90 degree angle. Our arms stay home (with the rest of the body) and do not reach away while performing a particular task. We should try to maintain this position as much as possible, so we need to move our whole body – not just our arms – when we want to confront each specific task.

2 Unload the Back

The back actually includes the entire spine, pelvic, and hip areas with particular emphasis on the lower back and sacroiliac region. Many back and pelvic muscles interact with each other to maintain proper alignment. Anything that causes a shift in the alignment can create mechanical imbalance and/or misalignment. Pain occurs, whether it be from bones, ligaments, nerves or muscles. Activities that increase the load on the back are bending forward, prolonged standing, bending at the waist to pick up an object, or arching the back. All of these will increase the potential for mechanical imbalance and pain in our fibromyalgia muscles. We need to learn how to unload the back.

Ways to unload the back include:

- ◆ Cross legs or put foot up on a foot rest when seated
- ◆ Lie in a fetal position on your side with a pillow between your knees
- ◆ Ladies, wear sensible shoes; no heels!

3 Support Always Welcome

We should take advantage of existing environmental structures to relieve some of the force on our bodies. Our muscles work hard every day to support us and get us from one place to another. We expect that our muscles will get tired, and usually when they tire, they hurt more. It is okay to use extra support to relieve our muscles whenever we can. Our muscles won't deteriorate or atrophy if we are responsible using additional support.

Learn to support yourself:

- ◆ Use arm rests and pillows to rest arms
- ◆ Sit in a chair with good seat and back
- ◆ Lean against a wall if standing

4 Be Naturally Shifty

This rule emphasizes maintaining natural or neutral body and joint positions, and periodically moving the muscles. If we keep our muscles in one position for too long, we tend to get painful tightening and spasms. To counteract this, keep moving the muscles regularly. Some people have more tolerance than others, but we



all have our limit. We must learn to automatically alternate between positions such as sitting, standing, and walking. This strategy will enable various muscle groups to relax and stretch regularly.

How to be naturally shifty:

- ◆ When standing in line, shift from foot to foot
- ◆ When sitting, stand up and stretch periodically
- ◆ Alternate slouching with sitting up straight

APPLIED FIBRONOMICS!

Use fibronomics to examine everything you do. First, determine why an activity may be causing pain by identifying the fibronomic rules that are violated. Sometimes the activity may be obvious, other times it may be subtle but think about the rules and analyze every single thing that you do no matter how automatic it is. Correct these violations and practice these new strategies until they become automatic additions to your body mechanics. At first, you must consciously think about these violations and take steps to correct them. After a while, your subconscious takes over and the techniques will become automatic.



WEAR A MENTAL SEAT BELT

We wear a car seat belt as a protective device to prevent injury in case of an accident. I say we should wear a mental seat belt at all times to help prevent a fibromyalgia flare-up and remind us not to be careless. Not only do we need to follow proper fibronomics, but we have to remind ourselves that every situation is a flare-up waiting to happen. One of the most common causes of flare-up is a body injury, so we need to avoid any potential harm or injury to our body as part of controlling our fibromyalgia. I pay particular attention to fibronomics in my everyday activities. In fact, I tend to be a little paranoid at all times. I don't want to do anything that will cause my fibromyalgia to flare up, so I try to be extra cautious to make sure I am following proper fibronomics!

Adapted from *Fibromyalgia, Up Close and Personal*, Chapter 15; used with permission. You'll find posture problems and answers, with illustrations of safe movements in the book, omitted here for space reasons. Dr. Pellegrino draws on his own experience with fibromyalgia and extensive patient population (more than 25,000). He is also a member of TyH's Health Advisory Panel. Graphic rendition ©TyH Publications (M. Squires).

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