

Functional Awareness®: Anatomy in Action

The Relationship of Habit to Training in the Studio, at the Gym or on the Mat

Many people experience tension or pain and assume this is something that “just happens” to them. It is as if the body is a separate entity. People think of joint and body pain as being like a cold virus: we just pick it up from somewhere. Often, there is no one particular event to precipitate the discomfort. Most muscular discomfort actually arises from something we do or more often it is the way in which we do it. If the action is repeated with frequency, it creates wear on the system and leads to pain and discomfort over time. In a sense, people “practice” discomfort through unconscious posture and movement habits. The following is an old joke to illustrate this point.

The Story: How Your Suit Fits

A woman has taken her pantsuit to be fixed and altered by a tailor. She tries on the outfit to be sure the alternations are correct. As she tries on the pants, she notices the leg lengths appear different.

The tailor is not interested in doing more work so he just adjusts her hip a bit and now the legs look even. The woman adjusts and decides she can live with this. The woman now tries on the jacket and discovers one sleeve is too long and also the darts make the jacket hard to button in the front. The tailor just says, “Look if you just make this little adjustment in your shoulders, it will fit perfectly.”

The woman actually buys into this sales pitch, makes the adjustment, and walks out of the store. As she is walking out of the store and down the street two people are coming at her from the opposite direction. One says, “Look at that poor woman.” “Yes,” the other one says, “doesn’t her suit fit perfectly!”

People make subtle or larger adjustments in life and these adjustments become habits that are unconscious. Over time they begin to take a physical toll on our system. This toll is exhibited in tension, pain, stiffness, or rigidity of movement. The good news: It is possible to shift posture and movement habits and discover more ease and less tension in the body. Here are three simple approaches:

1. Become more aware of your personal movement habits.
2. Learn a basic understanding about how the musculoskeletal system functions, and how this affects body action.
3. Practice new skills to improve movement function and dynamic alignment.

Try this experiment:

1. Clasp your hands together with all the fingers crossed.
2. Notice which thumb is on top. Is it your writing hand or your non-dominant hand?
3. Open your hands and close them quickly and unconsciously. Does the same arrangement in your thumbs and hand arise?
4. Now release your hands and reweave your fingers to place the other thumb on top.

How comfortable or uncomfortable is this? Does it take a little more time for your brain to tell your body how to place your hands in this way?

Try the same activity with your arms crossed.

1. Fold your arms.

2. Notice which arm is on the top. Is this the same arm as the thumb earlier?
3. Drop your arms by your side and now raise your arms to fold the arms with the opposite forearm on top. How does this feel? Often, we have a preferred manner in which we fold our arms and the other way feels a bit peculiar.

Try the same activity with legs crossed.

1. Cross your legs or your ankles if that is more familiar to you.
2. Notice which leg is on the top. Is this the same leg as the arm earlier?
3. Uncross the legs and then try the other side. How does this feel?

Record Your Findings from the Experiments above in Your Assignments portion of your journal:

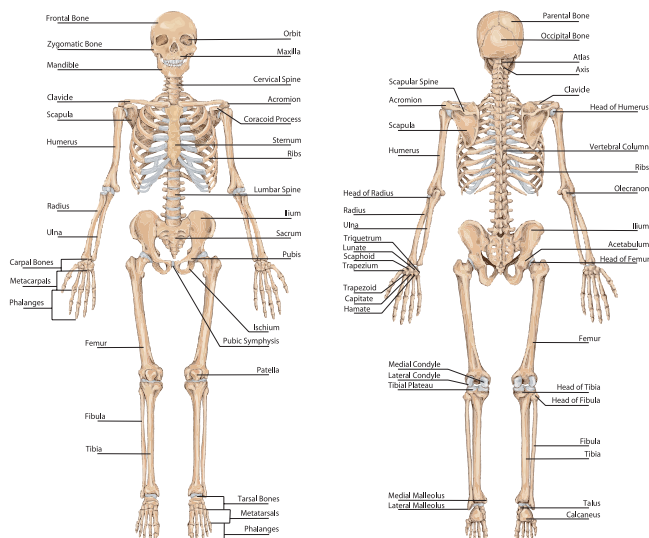
Findings and Why They Matter

Chronic unconscious misuse of the body leads to chronic discomfort or pain. A subtle habit can have a profound impact over time. Folding your hands does not have a large impact on your neuromuscular system, but crossing your arms often leads to many other accommodations so the body becomes imbalanced.

Crossing one leg far more often than the other can lead to an imbalance in the hips. If your legs are crossed right now, notice if you have more weight on one hip. You may want to check this out while you are driving. Are you always leaning slightly into one hip? This constant small imbalance creates instability in the low back and pelvis, and this can lead to pain or discomfort over time. How you move through daily action affects your whole health.

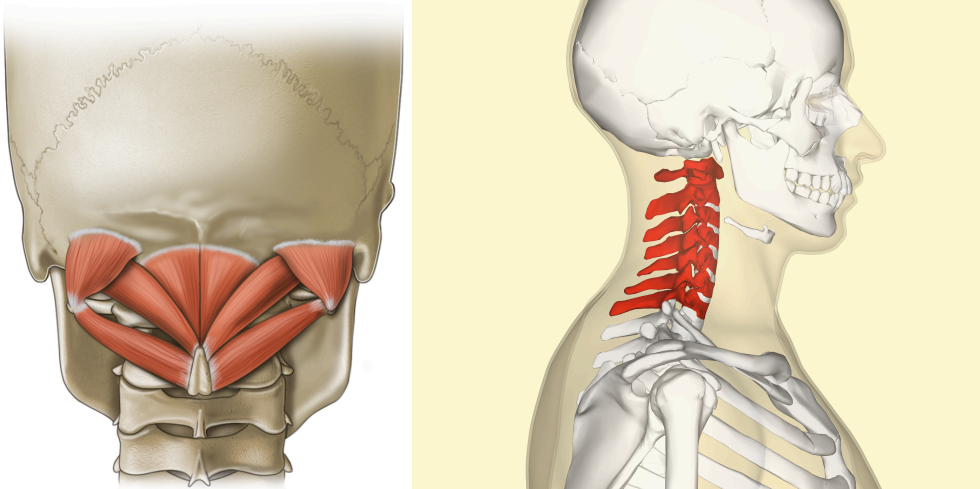
The Anatomy: The Skeletal Structure

Our skeletal structure is the scaffolding that supports the other body systems. To have a framework of understanding about the body, it is helpful to be able to name and identify basic elements of the skeletal structure.



There are seven vertebrae in the neck or cervical spine. The first cervical vertebra is called the atlas. Just as the Greek god, Atlas, held up the entire world, this first cervical

vertebra holds up our world of ideas and thinking. The atlas or C1 vertebra articulates with the skull at the occiput. The top of our spine does not end at the base of the skull. The first vertebra or atlas meets the skull at the occiput.



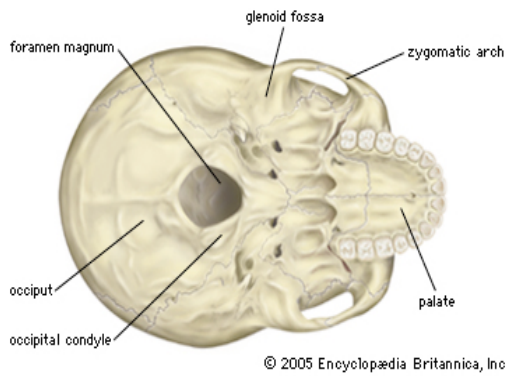
The atlas is the pivot point to nod yes. If we begin the action at this place, minimal impact is made on the spine. If we habitually nod to look down at our computer or phone with the vertebra further down the spine, our large muscle structures of the back have to do far more work. This can lead to muscle fatigue and pain.

Why Is This Structural Understanding of the Body Useful to Know?

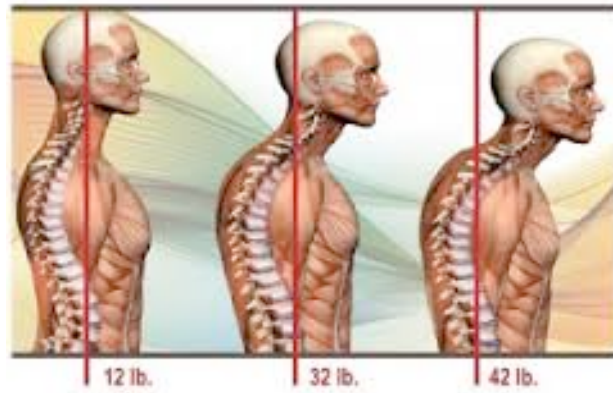
Unconscious movement habits promote imbalance in the skeletal structure. It can be detrimental to the body, leading to pain and accelerated joint deterioration. How we stand or sit or hold our head affects overall function. Our head is the very top or most superior portion of the skeletal system. How it is poised on the spine has a very potent impact on how we move.

The adult head weighs 10 to 12 lbs. on average. How this structure is balanced at the top of our spine affects the rest of the musculoskeletal system in significant ways.

The amount of physical exertion needed to support the head is minimal if it remains poised with the ears aligned over the shoulders and hips, as shown in the left image in Figure 1.3. If we have a habit of jutting our face forward to see the computer screen or to read this book, the amount of physical stress and energy can be up to three times greater on the system. This action to jut the face forward creates wear and tear on the vertebrae and fatigue and overuse symptoms in the muscle structure.



Skull and Foramen Magnum



Copied with permission from Eric Dalton

Exploration: Improve Your Skills for Functional Awareness in Action

Notice the relationship of your head to your neck and spine in daily activities.

1. What happens to your neck and head when you slump, when you work at the computer? Does your head pull the face forward? This position actually tips the weight of the skull down onto the cervical vertebrae.
2. Do you like to bring your food up to your face, or do you bring your face to your food by pulling your face forward to the fork? This action of face forward compresses the cervical vertebrae.

How This Positioning Affects Movement Training?

In dynamic alignment, if your head is not aligned over the spine, this positioning creates instability. An example of how this can affect balance. It is harder to balance on one leg and it is more difficult to execute multiple turns reliably. Your ability for vertical height in jumping is compromised as well. It is very difficult for the body to suddenly align the head during physical training, dancing or yoga if most of the day you are craning the head forward while looking at your cell phone or computer screen.

Website: www.functionalawareness.org

The information provided is protected under copyright law. Feel free to use and distribute for educational purposes with proper citation