Back to Basics

**Local author and occupational therapist explains why chairs and computers can make us sick.**

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**Squat Team:** Author Joy Colangelo points to simple changes in body positions that can prevent major damage. *photo: Jane Morba*

Scientist/inventor Leonardo Da Vinci thought that pressure on the knee promoted religious thoughts. When he broke the law to cut open a dead body and perform the first recorded autopsy, he found a huge sciatic nerve running the full length of the body. The sciatic nerve, he proposed, was stimulated as it passed through the large, mobile knee joint and must account for why people prayed on their knees.

**Modern medicine scoffed at Da Vinci’s 600-year-old assertion that a nerve in the knee could make you think about God. Then the Functional MRI (magnetic resonance imaging) allowed scientists to test nerve conduction in the brain. The knee, it so happens, heightens a very precise section of the tempo-parietal lobe, an area where we store religious and spiritual thoughts**.

Hmmm. Weird, huh?

Not to Joy Colangelo. As clinical supervisor of Rehabilitation Therapy at Community Hospital of the Monterey Peninsula (CHOMP) for 13 years, Colangelo has seen a lot of people in pain. To her, the Da Vinci story was just more evidence that modern science and technology’s dismissal of ancient wisdom has been really bad for our bodies. Regardless, it convinced her to begin collating all of this data into Embodied Wisdom, a remarkable book about what our anatomy can teach us about the art of living.

“I wanted to put together everything that rehab people—speech, occupational and physical therapists—know about the body,” she says. “It’s a preventative lifestyle. If they knew this information before they got sick, they could live fuller lives. The book merges ideas of science and ancient wisdom that we’re just now ‘discovering’ through modern science and brain science.”

Born and raised in Orange County, Colangelo moved to Santa Cruz in 1973 and attended UCSC, studying politics and Ancient Greek. She owned a gardening business and was a professional cyclist for a while “before there was really a women’s pro circuit,” spending a summer at the Olympic training camp in Colorado Springs in 1983 and racing in Europe. At the age of 35, she went back to school and received a masters degree in Occupational Therapy from San Jose State, before moving to Pacific Grove 11 years ago.

As an occupational therapist, it was startlingly clear to Colangelo that modern conveniences such as chairs, cars and televisions were crippling American bodies. The book is full of examples.

“**We sit in chairs instead of squatting,” Colangelo says. “We see 600,000 hip replacements in our country a year. Two-thirds of the world doesn’t need hip replacements simply because they squat.** It’s one of the three prime positions the body loves. **Squatting relieves disc pressure: The diaphragm muscle is in its favorite position, as are the bowels, sphincter, knees and hips.”**

In other words, squatting rules. Typing, however, does not.

“The keyboard’s nonsensical pattern of letters was invented to be slow to keep the hammers of old typewriters from jamming,” Colangelo says. “We’ve invented all this other incredibly clever software and hardware technology but never changed the keyboard and our body still has to put up with this nonsense.

**“Our brains were very clever to invent this chair and this car, but the body is struggling all day long and never in its favorite positions,”** she says. “The brain decided one thing but never consulted the body. There are irreconcilable differences. It’s a divorce. Inevitably, all of these modern punishments accumulate and your body starts talking to you. The only language it has is pain.”

**Consequently, it should come as no surprise that the way we move our bodies can even change our personalities.** In Embodied Wisdom, Colangelo points out that the 13th century philosopher Saint Thomas Aquinas believed that pessimistic people had a “contraction of the mind” or a “one-sided brain.”

**“More asymmetrical activities like walking and kayaking force us to use both sides of our brains, which releases more dopamine, a calming neurotransmitter**,” Colangelo says. “**More symmetrical activities like rowing or bench pressing force us to use only one side of the brain. When we only use one side of the brain, it’s naturally the pessimistic side because, biologically, we cannot trust our world. We have to be leery and cautious to be safe. So if you do more symmetrical movements like sitting you’re more inclined to pessimism.”**

So should we sell our cars, buy kayaks and start squatting around the dinner table?

“You don’t have to give up your car, chair or TV,” Colangelo says. “But there are ways to position yourself that are more curative.”

A simple enough thing to do, if only simplicity were not the most difficult of things.

**Embodied Wisdom is available at local bookstores and on amazon.com.**