Office Ergonomics: Top 10 Myths

One size fits all is a big problem in offices, where everyone has different needs and responsibilities.

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The importance of office ergonomics to end users and facilities managers has waxed and waned several times over the past 30 years. Yet, certain inaccuracies about ergonomics in the workplace have retained a level of persistence typically associated with urban legends. So this month, I'll debunk the top 10 ergonomic myths.

Myth #10: We "did" ergonomics, so we don't have to do it again.
Not true. Things in the office change, and ergonomics, like personal freedom, is something that requires continued vigilance and attention.

Myth #9: It must be ergonomic—it says so on the label!
Labeling doesn't make something ergonomic, although labels themselves can exhibit positive or negative ergonomic properties.

Myth # 8: Ergonomics is just adjustable chairs, or keyboard trays, or _____ (fill in the blank).
Adjustability, by itself, is neither necessary nor sufficient. It is possible to achieve a good ergonomic solution with minimal active adjustments. What matters most is how well the workplace can be configured to fit the worker and the work.

Unless the total workplace adapts to the size differentials of employees, users must accommodate the shortcomings. That accommodation can lead to discomfort, pain, and injury.

Myth #7: The right angle posture is the correct position.
Some of the earliest formal measures of body size, called anthropometrics, were conducted by the military. To standardize the process, everyone was required to sit in a right angle position (erect, with the major joints at 90°). The center point of the entire range of motion of the major joints of the body is where the greatest power is exerted. That point is generally around 90°; however, this is not perfect, nor is it correct posture. In fact, research shows this position exerts excessive pressure on the spine.

A less stressful posture is the so-called neutral or the dead person's float position. This is the position the relaxed body assumes in weightless conditions or in water where joint angles are about 120°. This position puts much less strain on the joints and spine.

Finally, there is no such thing as one ideal posture for everyone. For example, some folks sit with one foot tucked under and behind the other knee. They're comfortable that way; I would be in agony.

Myth #6: Computer display height should be at or above eye height.
I'm not sure where this one started, but I've seen way too many people with their display heights raised well above eye height.

To understand why this is wrong requires a discussion of how our eyes evolved. We look up to see far away ("Run! The lions are approaching across the Savannah!"), and we look down to see something near ("Don't step on that snake!"). Finally, we best see things in the middle distance, which is about 10° to 15° below horizontal. So to see a computer display, it is best to place it in a position where the top is about even with the chin when looking straight ahead.

Myth #5: Lowering the display and viewing it through a glass desktop is good ergonomics.
Just as a display can be too high, it can also be too low. Some products tout the benefits of positioning the display below the work surface and viewing it through a glass panel in the desktop. This is not ergonomic, it's balderdash! Not only does this configuration make the user look through another layer of reflective and refractive material, but the position is wrong, and it takes up valuable knee space. Don't do it.

Myth #4: Surgery cures carpal tunnel syndrome (CTS).
As long as I'm debunking myths, I might as well tweak the medical community. CTS surgery is among the most frequently performed operations in the U.S. Surgery may temporarily relieve some of the symptoms, but it cannot cure the problem. If surgery were the cure, people wouldn't have to undergo multiple CTS procedures.

CTS is a repetitive stress injury. The injury results from prolonged, often rapid, repetitious motion, usually while maintaining a constrained posture. Cutting open someone's wrist doesn't change what they do or how they do it. Only job and workplace redesign can.

Myth #3: Ergonomics is expensive.
It certainly doesn't have to be. Like everything else, there are expensive and inexpensive ways to apply ergonomics. Equipping everything in the workplace with electric motors that move the position and placement of any device may be excessive, or it may be appropriate. It depends on the users and circumstances. Workplaces can be configured to fit workers without excessive costs. In my experience, people seldom use adjustments even when they are available.

Another consideration is the price of neglecting ergonomics. Safety violations, injuries, worker discomfort, and lost performance cost many times the price of effective, comprehensive ergonomics.

Myth #2: One size fits all. If this were true we could all trade shoes!
Thankfully, people are not all the same, so why should the things or places they use be standardized, homogenized, and regimented? The fundamental premise of ergonomics is the recognition and accommodation of individual differences.

And the #1 myth about office ergonomics is (drum roll, please)....
Ergonomics is just common sense.
It's true, when ergonomics is done well, solutions feel right, because they fit the user and the circumstances. The best solutions are often quite elegant and seem intuitive. But, as my grandfather used to say, "It seems like any idiot could do that…but we're not just any idiots." Or perhaps this quote from Voltaire is more appropriate—"Common sense is not so common."

That's the way I see it from where I sit, but then again, I could be wrong.