

## Follow The Principles Of Ergonomics

These guidelines will help you avoid fatigue and injury, both at work and at home.

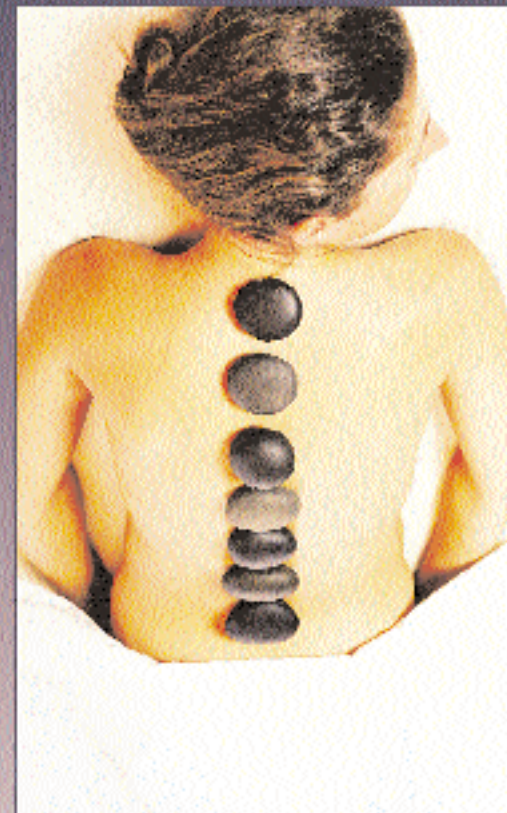


**E**rgonomics is the evaluation of how well the environments you work and live in support what you do there. From a cushioned pad to stand on at the treatment table, to our computer workstation design, to how an assembly line is constructed with workers' needs in mind, ergonomics contributes to both our productivity and our well-being. Therapists tend to be fairly ergonomically minded today, but it's important to apply these principles to all aspects of our lives in order to bring as much balance between comfort and functionality as possible into our daily experiences.

Using our bodies in the most relaxed and efficient manner—both at work and in life—helps us to avoid fatigue, over-use injury and eventual burnout. The work and living environments that we create either support our health or diminish it.

Throughout my 40-plus years in practice, I have learned a number of things that I would like to share with other therapists. In my early 20s, I was influenced by both the Alexander Technique and Feldenkrais Method® when creating environments, as well as training therapists. I learned how to construct my environment so that it did not deplete energy, but rather added to my productivity.

In this article, we will talk about the physical environments we live in, and how they can help or hurt us. We will talk about working with the least physical stress by selecting the best treatment tables, computer workstations/software, beds, chairs, tables, desks and telephones. My hope is that this information will be useful for both the practitioner and the client when at work and at home.



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### Massage Treatment Tables

Selecting the right treatment table that is best suited for your body and the type of work that you do is a very important decision. If your table is too low, too high or too wide your body will pay the price. Many therapists strain their low backs and wrists when the table is too low, and their shoulders and arms when the table is too high. Difficulty arises when you need the table to be lower when working on a client's back and higher when working on the same client's legs. Being in the optimally aligned position is not always possible, but you will do your best work when your body is comfortable and working most efficiently.

I often notice that therapists who strain their low backs while working use a table that is too wide. If the client lies in the center of a table that is 30 inches wide, the therapist will often offset his or her rib cage sideways in order to get his or her weight over the center of the client's back. My solution to this problem has been either to work on a narrower table or to have a sliding-face cradle that can be moved sideways so that the client can move toward me. A number of companies even have a table designed with a curve in it so that the therapist can be closer to the body at the waist, while maintaining table width for client comfort. If you can afford it, the best option is having an electric or hydraulically controlled table so that you can adjust the height depending on the client's size or on the body part you are working on. I never realized how much more comfortable my body would be within the same session until I began working on an electrically adjustable table.

### Beds

Finding a comfortable bed that is ergonomically good for your body is worth taking a little time to investigate. You will be spending many hours there. Restorative sleep is vital to our health, and a comfortable bed helps us sleep better. The type and quality of your mattress are the most important issues for your comfort. I strongly recommend finding the mattress that gives you the highest quality rest. If a very hard or very firm mattress makes you happy and allows you to get a wonderful night's rest, stick with it. Everyone's body is different and my rec-

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ommendations may or may not work for you. The mattress I often recommend to my clients allows the heavy parts of your body to sink and the rest of the body to be supported and aligned while you sleep.

This kind of mattress must sit on a solid, hard surface, such as a platform bed—not on a box spring. (Platform beds can easily be purchased.) There also are three types of mattresses that I have found most useful: 1) a mattress made of egg crate foam; 2) a latex foam mattress and 3) a TempurPedic® mattress. Clones of the tempurpedic mattress are also available.

The first mattress is easy to have made at a foam rubber store, is not too expensive and is very durable. It is made of five or six inches of egg crate foam glued together.

The second option is a latex foam mattress with a density of 20 or 21. The latex mattress can be 6 to 8 inches thick. These generally can be purchased only from a specialty foam store. The third, more expensive mattress is a TempurPedic, which is commercially available. All three of these mattresses must be placed on a platform-type frame, or one with wood slats.

A more inexpensive option is a clone of the tempurpedic. Although it is much less expensive than the real thing, it does not have a lifetime guarantee. Another very inexpensive option that works for many people who find that their mattresses are too hard is to purchase a one-inch thick egg crate mattress and place it on top of the regular mattress. This topper is very

useful for people with lower back or shoulder pain.

### Chairs

The best kind of chair provides a few inches of padding on a firm foundation and allows your feet to rest firmly on the ground. It should be of a height that permits your legs to slope down slightly from the hip to the knee so that the front thigh makes contact with the chair while the lower leg is perpendicular to the floor.

Different people require chairs of varying heights. The proper height is generally the distance from the base of your heel to the back of your knee when you are in a sitting position. A low chair is bad for the lower back because it tips the pelvis backward. A chair that is too high cuts off circulation in the back of the thigh. Chair arms should be sufficiently low to permit the shoulders to relax and should not be raised. The depth of the chair should match the distance from behind the knee to the back of the hip. A chair with a short seat makes you sit up, but one that is too deep encourages you to lean back and slump, which unnaturally stretches the ligaments of the lower back.

### Work Stools

Most therapists use a work stool to sit on while performing certain techniques. A cushioned stool with good rolling wheels is the most efficient type of seating while you work. Another comfortable substitute for a stool is to work while sitting on a large exercise ball.

There is also a chair produced in Germany called the Swooper, which allows you to exercise while sitting. Its base functions as a trampoline and can provide good exercise throughout the day for the legs and the spine.

### Tables And Desks

Tables and desks that are too high force you to raise your shoulders; if they are too low, you'll lean over and strain your low back. The proper height for a table or desk depends on the length of your trunk and arms. If the table comes up to your elbow when you are sitting with your arms bent, it is the proper height.

Propping your feet up when you sit at a desk may feel good, but it adds strain

\*AM Technologies [www.WhyType.com]

### Leg Elevation

If you stand all day while working, accumulated muscle tension in the legs can be alleviated by lying on the floor with your lower legs elevated on a chair for five to 10 minutes, once or twice a day. This position encourages blood circulation in the legs because when you are standing, your blood must defy gravity to return to your heart. By elevating your legs, you help your blood circulate. While elevating your legs, you can read a book, talk on the phone, or do anything you like. If you have a heart condition, however, check with your doctor—this position is sometimes recommended for some heart conditions, but may pose risks for others.



and pressure to your low back. Keep your feet on the ground. Before deciding upon your worktable or desk height, be sure your chair height is correct.

### Computer Workstations

Computers are now as commonplace as telephones, televisions and automobiles. If you don't have one yet, you probably will soon. However, with each new technological leap, there often comes a downside. More people sit for longer periods of time working at their computers.

Working at computer stations has led to a higher incidence of low back and neck pain, and a widespread series of pain problems called repetitive strain injuries (RSI). If you work for long hours at a computer, the placement of the monitor, the height of your keyboard, how long you sit without a break, the position of your wrists and the type of chair you use all play an important role in keeping you either physically healthy or making you vulnerable to injury.

### Voice Recognition Software

If a person works at a computer for long hours each day, does periodic long hours of typing, has weak arms, or is getting symptoms of pain or discomfort in the wrists, forearms, shoulders or neck, he or she may want to consider purchasing voice recognition software. I have been following the development of this technology for 20 years and have been using it for 10. This new technology allows you to dictate to the computer instead of typing. As computers have gotten faster, voice recognition software has improved enor-

mously. I find that Dragon Dictate Version 7 (published by SoftScan®) is the best product on the market. Unless you are very computer savvy, you will probably need training\* in order to use the software well. Retailers tell you it is easy, and it is, once you learn how to use it. But, you might want to contact a company or an expert who can spend time teaching you.

### Telephones

Everyone who talks on the telephone frequently or for long periods of time should use a telephone headset. Holding the phone between your ear and your shoulder contributes to many neck pain problems. Nobody believes a neck pain will happen to him or her until it does. If your workplace will not purchase one for you, buy it yourself. It will save you a great deal of pain and misery. I have headsets all over my home and workplace. If you use a cellular phone, be sure to use a headset attachment. Not only is it better for your neck, but the controversial effect of the potential radiation put out by it will be eliminated, or at least mitigated. ☞



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