Tech And Your Eyes

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Words like "ergometrics" and "accessibility" fly around when talking about tech devices but what does that mean practically – to the user?

First, a definition:

Ergometrics is an applied science concerned with designing and arranging things people use so that the people and things interact most efficiently and safely

— called also biotechnology, human engineering, human factors

merriam-webster.com/dictionary/ergonomics

In the first of this series of articles, we'll talk about how tech interacts with EYES.

COMFORT can be an important guide for dealing with eyes and tech.

1. Ambient lighting should complement light from the screen.

Lamps pointed directly at the screen cause reflection making it harder to see what is printed. If you are typing from notes, however, it is important to have that document well-lit to prevent eye fatigue. Avoid setting a monitor where it will get direct sunlight for the same reason.

2. Most monitors (*hardware*) and operating systems (*software that controls how interactions occur within various computing components like hardware or programs used to browse the internet or create documents*) have light level controls in addition to colour and size settings. Tempering the background colour and complexity of any graphic that "shows through" your viewing windows will lessen the need for more lumens (*the amount of light*). Sometimes changing to dark background and yellow or white print is less taxing to the eyes … making it easier to see.
3. The position and angle of the monitor are important! You might be surprised how much raising the monitor, or tipping it slightly, will improve screen visibility.
4. Some find "computer glasses" help arbitrate the distance to a monitor if using a desktop or laptop regularly … and some find glare is cut (*particularly with cataracts*) by using "yellow lens" sunglasses (*slipovers or clip-ons*).

Safety is assisted by comfort, but it is a **DISCIPLINE**. Eyes, balance, circulation, joint health, and physical health in general benefit from:

1. Adjusting the monitor so you can see it easily. Perhaps getting a riser for it (*if you are taller)* so you will sit straight in the chair.
2. Look away from the screen often. When you look away from the screen, shake out your hands.
3. Plan to stand and walk regularly – some suggest every 10 minutes … most at least every half hour.

Don't be afraid to experiment with screen resolution or font size. Just remember the following:

1. Before a change, take note of what it is you are having trouble seeing. Every solution makes "changes." But making the ***most efficient change*** for your problem will be the most helpful. It also makes it easier to "undo" if your needs evolve.
2. Make one change at a time and see if (or how well) it works for you. This may seem pedantic, but it will assist you in knowing what part of the system, changed, helps you most.
3. Don't forget – colour change can be as or more effective than size change in some circumstances.

4. Many programs have "options" or "preferences" that can be set to make viewing easier. Where these do not exist, third-party "extensions" can provide additional modifications not included by the developer.

Don't forget about using ZOOM to make individual pages larger or smaller when needed, rather than changing the entire machine unnecessarily.

Hopefully, you got an idea or two in this. In coming issues, we will talk about:

- Does size matter?
- Things in your hands
- Cords, Voice, Sound, and other hazards

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