

Hoag Rehabilitation Services Occupational Therapy: Strategies to Improve Quality of Life

Cancer Survivorship Symposium
January 22, 2018

Hoag Memorial Hospital Presbyterian

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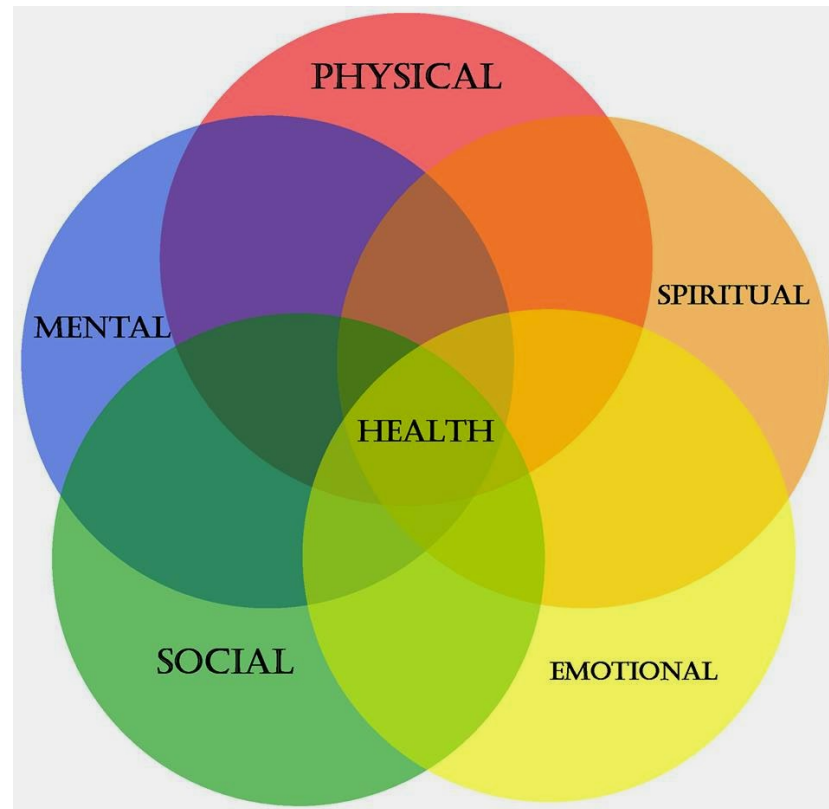
“A lot of people find the hardest time is from active treatment to survivorship or post-treatment period where all of a sudden, it’s time to get back to one’s life, but what’s the new normal? For many people, it’s a catalyst or transition period. They look at their life and wonder what’s important. What are my values? What does an authentic life look like? What brings me meaning and purpose?”

Dr. Linda Carlson





“An occupational therapist’s starting point is always the experiences of the people they are working with – the person with cancer and their family/carers – and their choices and priorities drive any interventions that take place.”



Impact on daily life...

Experiencing...	May look like...
Fatigue	“I try to keep up with my family, but this exhaustion is debilitating.”
Sensory issues	“I love to cook, but using knives makes me nervous since I have decreased sensation in my fingers.”
Decreased dexterity	“I avoid wearing shirts with buttons because it’s too hard to button it up.”
Cognitive deficits	“I feel foggy all the time. It’s really hard to concentrate on anything.”
Decreased energy	“I have so much to do, I’m tired just thinking about it.”

Today's Take-aways:

- Strategies for dealing with “brain fog”
- Energy conservation tips
- Neuroplasticity 101
- Education on ergonomics/body positioning for everyday function
- Coordination of breathing

“Neuroplasticity

provides us with a brain that can adapt not only to changes inflicted by damage, but allows adaptation to any and all experiences and changes we may encounter.”

**Dr. David Perlmutter,
MD
The Empowering
Neurologist**





Brain Fog



- Effects of chemotherapy, radiation, medications
- Sleep disturbances
- Psychological/emotional changes
- Stress
- On a cellular level can be due to high levels of inflammation
- Changes in hormones: cortisol, serotonin, dopamine

50 SHADES OF BRAIN FOG



50 SHADES OF BRAIN FOG

Yay! You have the spoons to cook a healthy dinner!



Uh-oh! Forgot to set the timer!



Things are really heating up!



Your neighbor who hates you is calling 911.

There goes the smoke alarm!

Well, at least your dinner isn't undercooked.



I smell smoke! AGAIN.



Effectively Navigating Brain Fog

- ...by managing stress
- ...by managing fatigue
- ...by conserving energy
- ...by staying engaged and active
- ...use of external memory strategies
- ...by maintaining a healthy diet



Managing Stress with Mindfulness


“**Mindfulness** is paying attention to the present moment with intention, while letting go of judgment, as if our life depends on it. The present is the only real moment we have.”

-Jon Kabat-Zinn



Mind Full, or Mindful?

Mindfulness & Cancer: Growing Research

- UCLA
 - Harvard
 - Johns Hopkins University
 - Publications in JAMA Internal Medicine, Harvard Business Review, Journal of Clinical Oncology
- 
- Reduce stress, depression
 - Contribute to cell longevity
 - Reduce inflammation
 - Assist with insomnia
 - Increase gray matter
 - Increase mental flexibility
 - Boosts immune system
 - Improves focus and attention

[http://marc.ucla.edu/mpeg/
Body-Scan-Meditation.mp3](http://marc.ucla.edu/mpeg/Body-Scan-Meditation.mp3)

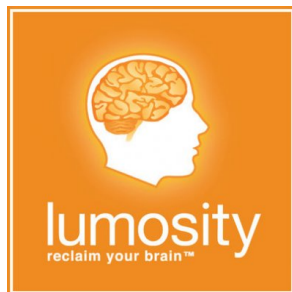
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There's An App For That!



- **Lumosity:** computer program based on the science of neuroplasticity—your brains ability to strengthen and grow. Available on iPhone, Android, Desktop (www.lumosity.com)



fit brains
Rosetta Stone®

- **FitBrains Trainer:** Based on research on neuroscience. Tracks improvement. Available on iPhone, Android, Desktop (www.fitbrains.com)



- **Calm:** Available on iPhone, Android, desktop (www.calm.com)

- **Headspace:** Available on iPhone, Android, desktop (www.headspace.com)



[Calm](http://www.calm.com)

[Fitbrains](http://www.fitbrains.com)



Conserving Energy



- Practicing the 4 P's
 - **P**rioritize
 - **P**lan
 - **P**ace
 - **P**ositioning

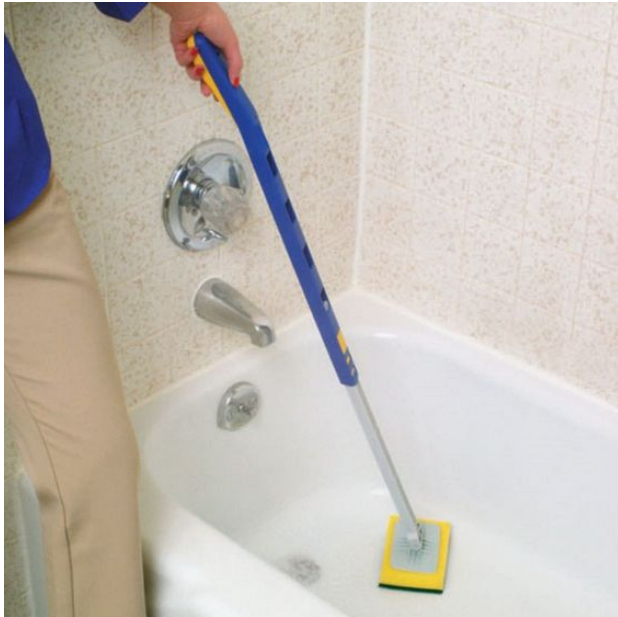
- **Prioritize:** What is the most important? What can wait?
- **Plan:** alternate heavy/light tasks, plan out your day/week, plan rest breaks
- **Pace:** Rest before feeling tired to conserve energy, avoid holding your breath
- **Position:** Sit when you can, sitting reduces energy expenditure by 25%

Routine is important, listen to your body!

- Dress lower body first, dry off with terry robe
- Sit to complete meal preparation
- Use of pre-packaged, already prepared foods
- Set alarms on your phone
- Send yourself text message reminders
- Use of adaptive equipment to decrease bending, increase safety and efficiency
- Give yourself plenty of time
- Make lists







 **MOEN**
HOME CARE

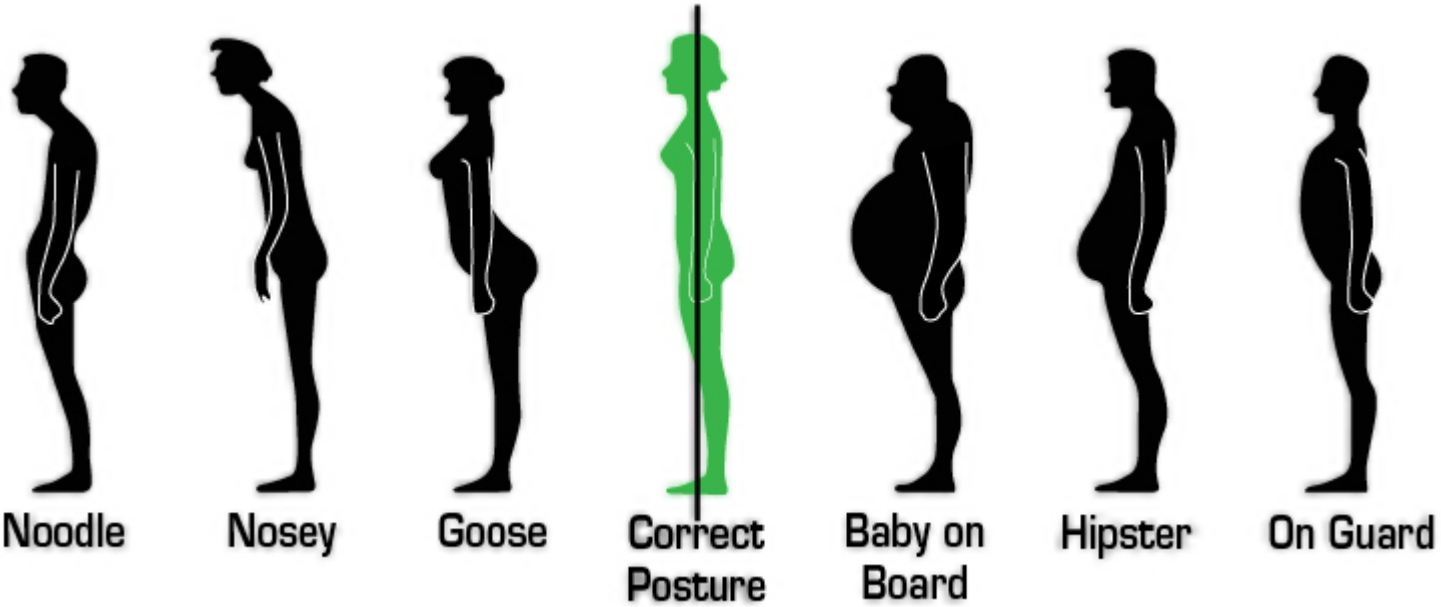
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Cancer Survivorship Symposium Posture, Ergonomics and Breathing

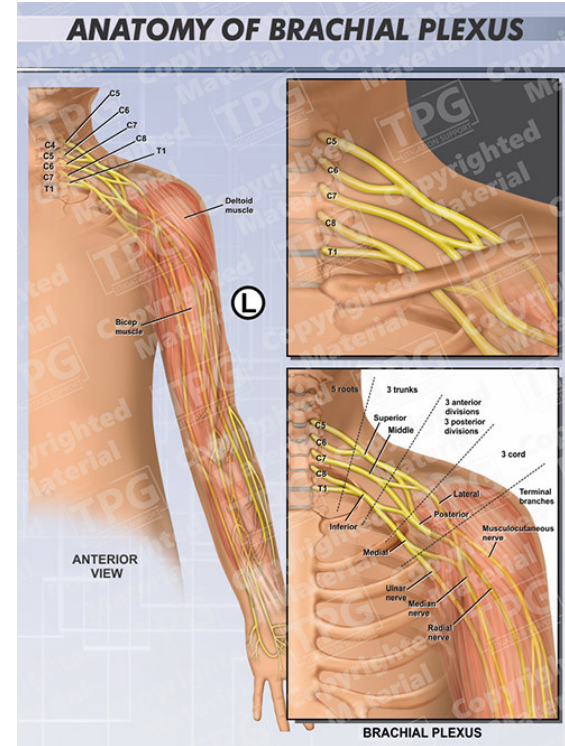
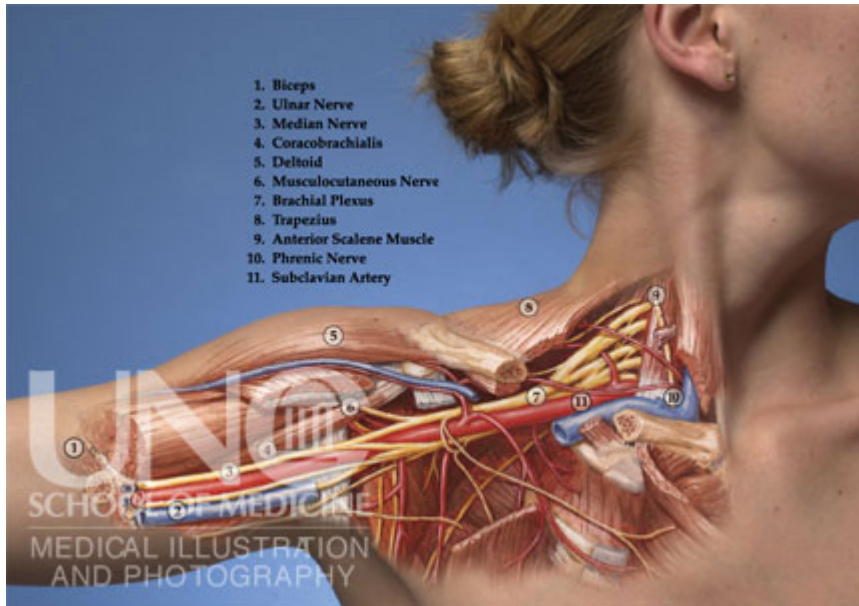
Christina Schmidt, OTR/L, CHT



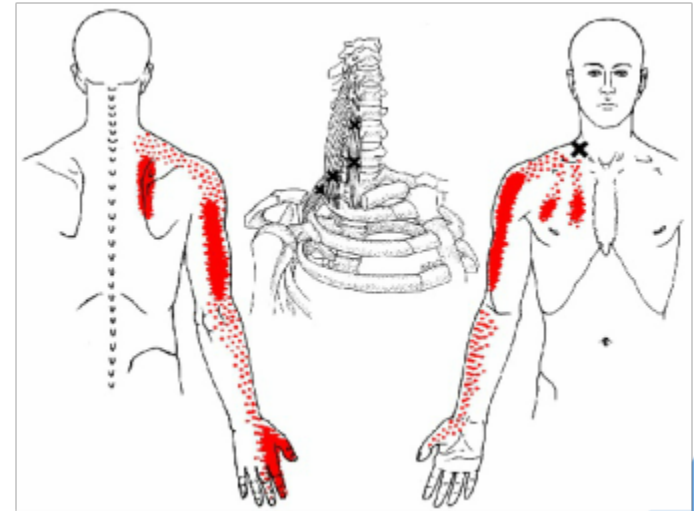
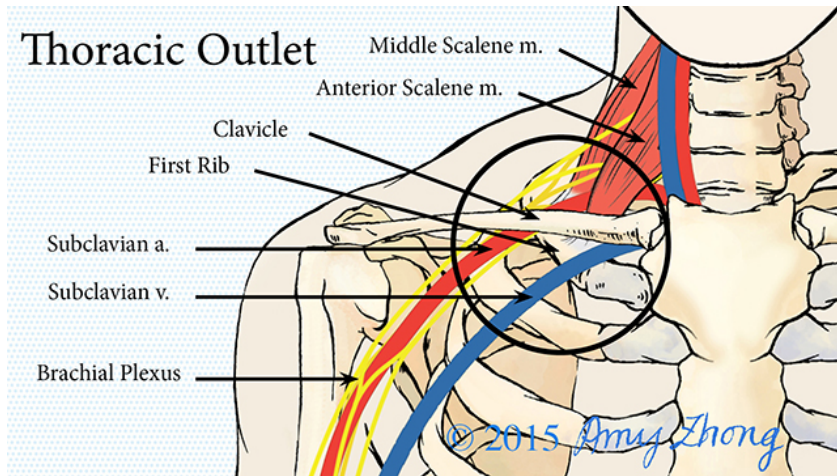
Neutral Posture



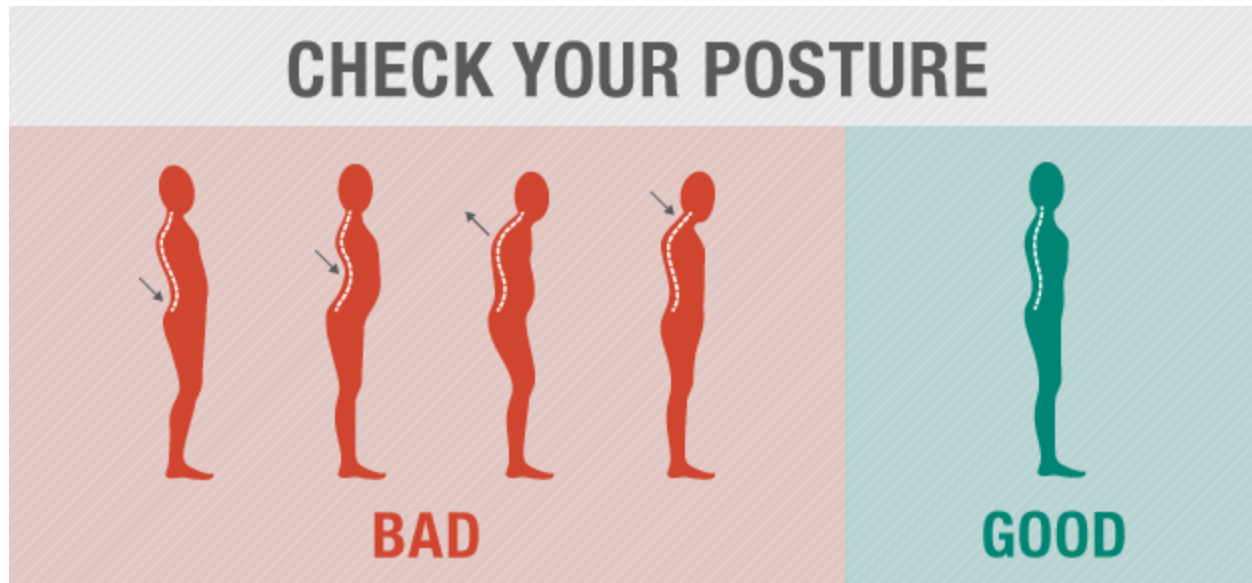
Brachial Plexus



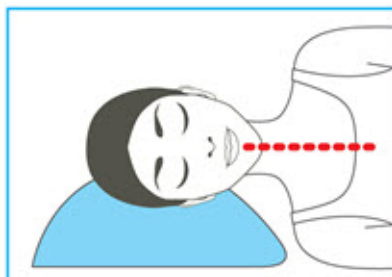
Thoracic Outlet



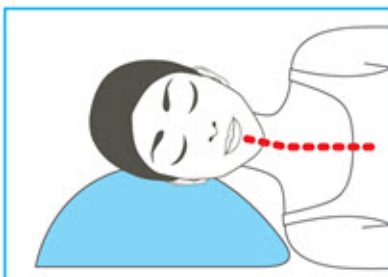
Neutral Postures



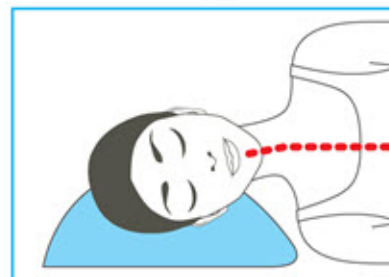
Neck Alignment In Side Sleeping



Neck in neutral alignment



Pillow too high angles neck upward



Pillow too low angles neck downward

Sleeping posture

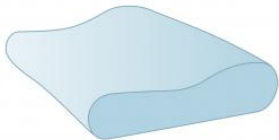


TIPS FOR BETTER SLEEPING



✓ CHOOSE THE PROPER PILLOW

When considering the types of pillows to use, we suggest cervical pillows as they allow for the neck to be supported in the neutral anatomical sleeping position while on your back or side.



✓ USE PILLOWS FOR ADDED SUPPORT

Pillows help to neutralize and support position by filling the space that has a tendency to displace joints from non-neutral positions. Used properly, your pillow will help to alleviate and even prevent consequential back and neck pain as well as many other levels of joint pain.

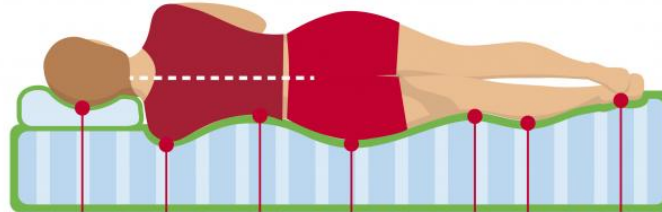


✓ GIVE YOUR HEAD A REST

It's also important to ensure your pillow fully supports your head by filling the negative space from your head and neck down to the mattress at a height that allows for the spine to maintain this neutral alignment.

✓ POSITION SUPPORT PROPERLY

Fill spaces and gaps to help neutralize and support sleep positions. Doing this will help to preserve body alignment and relieve any pressure.



✓ POSITION JOINTS IN NEUTRAL ALIGNMENT

Sleep positions play a key role in neutralizing your joints. But if you aren't following the expert-recommended sleeping positions, the potential long-term damage to your body and health is significantly increased. Regardless of your position of choice, you must ALWAYS make certain that maintaining alignment of your spine remains one of the most important variables in the mix.

If aches and pains are getting in the way of daily activities, take action now! Stop by your nearest ATI Physical Therapy clinic for a complimentary screening and get back to doing you.

WHAT'S YOUR GO-TO SLEEPING POSITION?



✓ SLEEPING ON YOUR BACK

Known to be the ideal position, sleeping on your back with a pillow supported underneath your thighs allows your head, neck and back to settle in the best neutral and natural position. When it comes to arm positioning, comfort preferences dictate what's best, but ultimately, it's recommended you keep arms at your side.



✓ SLEEPING ON YOUR SIDE

Side sleeping, which is one of the more commonly used positions, is an acceptable alternative to back sleeping since it helps to elongate your spine. The best thing you can do when sleeping on your side is add a thick and firm pillow underneath the rib cage/torso to fill the space between your hips and shoulders.



✓ SLEEPING ON YOUR STOMACH

If you can, avoid this position at all costs. The only value stomach sleeping provides is lessening the likelihood of snoring. Stomach sleeping is extremely taxing and counterbalancing on the back, spine and neck.



Desk Design

SLOUCHED POSTURE ✗

NECK AND BACK PAIN ✗

BAD VIEWING ✗

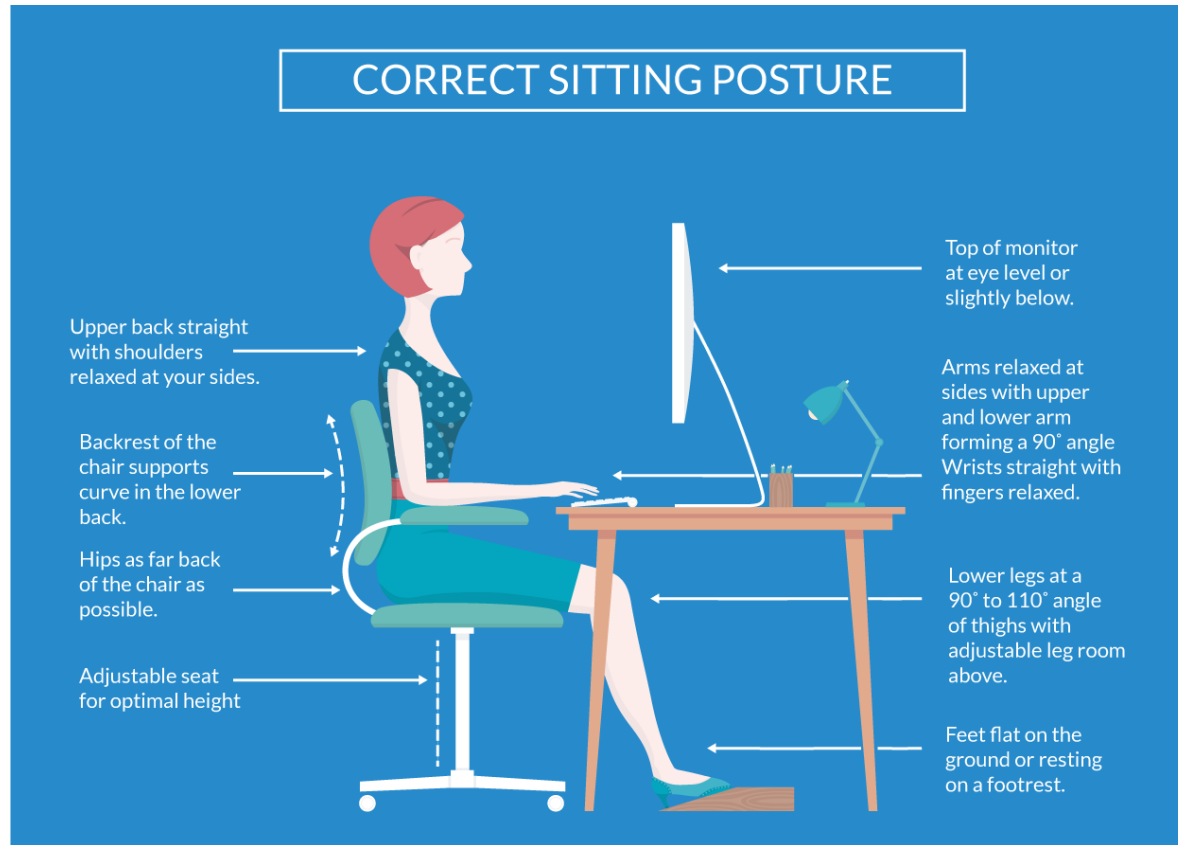
✓ OPTIMAL VIEWING

✓ HEALTHY POSTURE

✓ RELAXED



Ergonomics



iPad, Tablets, Smart Phones



- Introduced in 2010, over 1 billion users
- Tend to be less attentive about postures
- Should try to use PC or laptops for projects
- Learn to use voice assisted functions
- Take breaks
- Use night shift mode or Twilight app, blue glasses

Ergonomics



How to Avoid Injury when Using an iPad or Tablet

- Position your body ergonomically
- Avoid holding your iPad
- Use ergonomic iPad holders
- Take periodic breaks

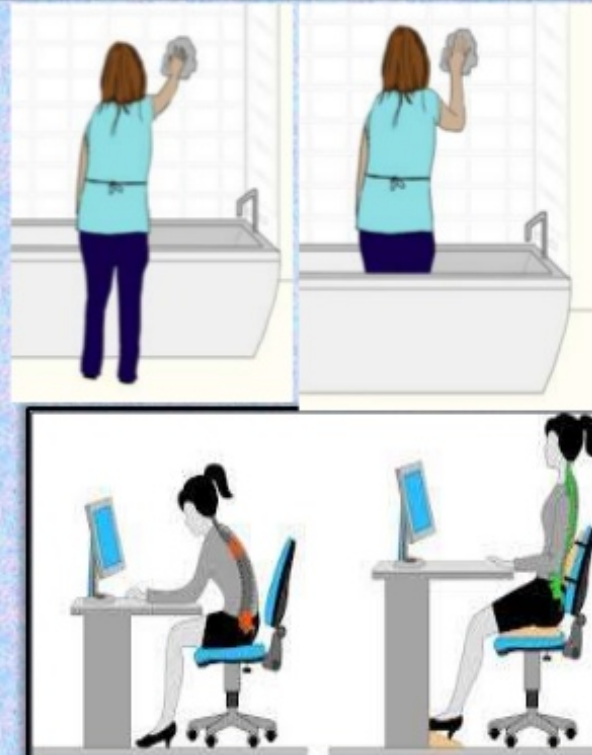




Working

Principles of ergonomics :

- Work in Neutral Postures.
- Reduce Excessive Force.
- Keep Everything in Easy Reach.
- Work at Proper Heights.
- Reduce Excessive Motions.
- Move, Exercise, and Stretch.
- Maintain a Comfortable Environment.



Household chores



Diaphragmatic breathing

Diaphragmatic breathing technique

1. Lie on your back on a flat surface or in bed, with your knees bent and your head supported. You can use a pillow under your knees to support your legs. Place one hand on your upper chest and the other just below your rib cage. This will allow you to feel your diaphragm move as you breathe.



2. Breathe in slowly through your nose so that your stomach moves out against your hand. The hand on your chest should



remain as still as possible.

3. Tighten your stomach muscles, letting them fall inward as you exhale through pursed lips (see "[Pursed Lip Breathing Technique](#)"). The hand on your upper chest must remain as still as possible.



Benefits of Diaphragmatic breathing



Efficient gas exchange –the bottom third of the lungs is where about two thirds of the gas exchange takes place, so oxygenation is more efficient when you use the diaphragm

Muscle relaxation

- Decreases tension and tightness in the neck and shoulders as the muscles here can relax.

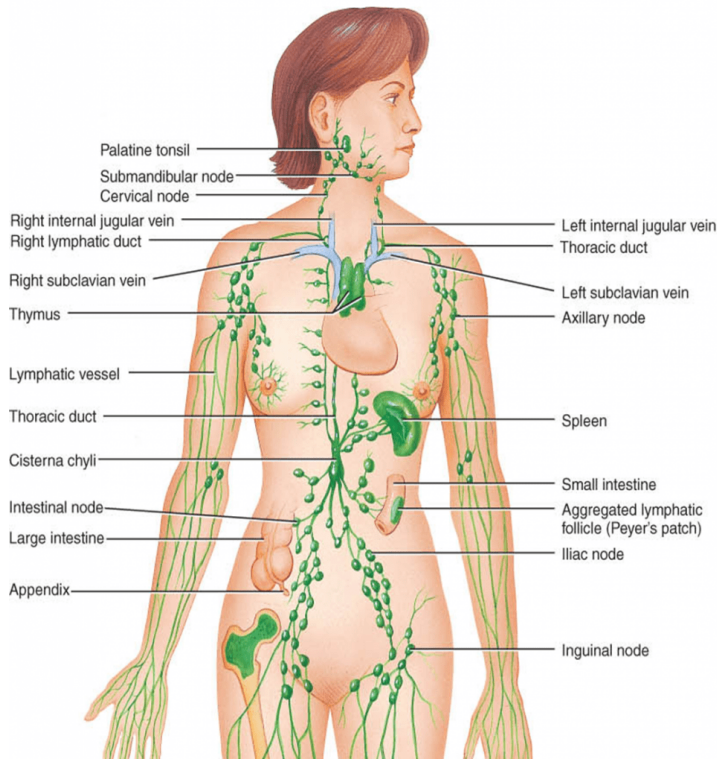


Promotes calmness and relaxation



- Diaphragmatic breathing rebalances the autonomic nervous system, reducing heart rate and breathing rate and changing from sympathetic fight or flight to parasympathetic calm and relax.

Lymphatic massage



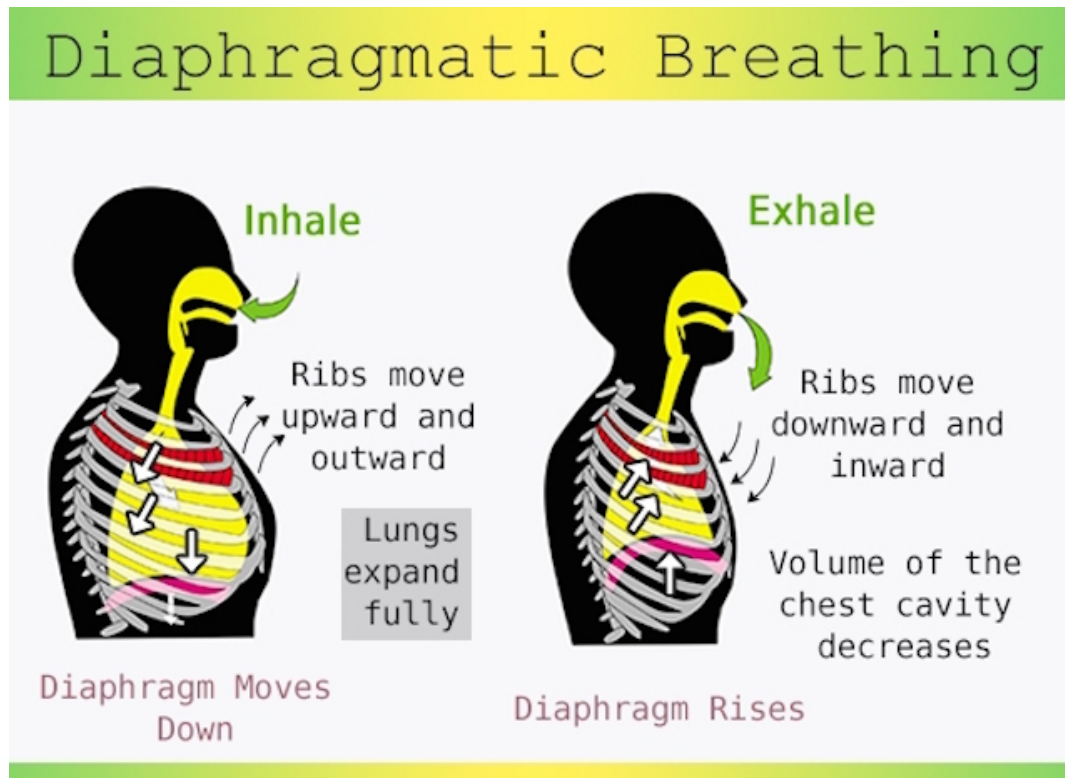
- Diaphragmatic breathing gently “massages” or moves the abnormal organs, aiding in digestion and helping lymphatic drainage
Much of the lymphatic system is located just below the diaphragm.

Core muscle strength



- The diaphragm contributes to good posture and core muscle strength, so needs to work properly. In fact overdeveloped abs and sucking the stomach in can hinder proper movement of the diaphragm and promote upper chest breathing.

- Diaphragmatic breathing technique



Inhale, and smell the roses



Exhale, and blow out the candles



Coordination of breath and effort

- Inhale slowly through the nose
- Pause
- Exhale slowly through pursed lips twice as long as your inhalation.
- In activity
 - Inhale – prepare
 - Exhale through pursed lips - work

Meditation

HOW TO START MEDITATING



BREATH

Don't try to "calm your mind." Instead, appreciate the sensations of your breath in the same way that a wine snob tastes a cabernet. When your mind starts wandering away into thoughts, just recognize that you're thinking. Then return to appreciating the sensations of your breath.



ARMS/HANDS

Relax your shoulders and arms, letting your hands rest on your thighs. Alternately, place one hand on another in your lap.



LEGS/FEET

If you're sitting in a chair, keep your feet flat on the floor and your spine straight. If you're sitting cross-legged on a cushion, the important thing is to **have your knees below your hips**. If you need a higher seat, make one.



EMOTIONS

Long-term meditators show increased size in brain regions associated with emotional regulation. "Larger volumes in these regions might account for meditators' singular abilities and habits to cultivate positive emotions, retain emotional stability, and engage in mindful behavior," according to a UCLA study.



EYES

Decide what you're going to do with your eyes. If you want the experience to be more body-based, close them. If you want to feel more anchored in the space you're in, keep them open.



TIME

Meditation isn't about length; it's about frequency. In the same way you don't get strong by lifting one giant weight one time, you should try and sit regularly. Five or ten minutes a day is a great start.



Sources: "Start Where You Are: A Guide to Compassionate Living" by Pema Chodron; "The Miracle of Mindfulness: An Introduction to the Practice of Meditation" by Thich Nhat Hanh; "10% Happier: How I Tamed the Voice in My Head, Reduced Stress Without Losing My Edge, and Found Self-Help That Actually Works—A True Story" by Dan Harris

BUSINESS INSIDER

- Meditation resources:
 - The Miracle of Mindfulness by Thich Nhat Hanh
 - Start Where You Are by Pema Chodron
 - 10% Happier By Dan Harris

Promoting Sleep

Fall Asleep...

Guided Breath Meditation for Insomnia,
Anxiety, Worry and Stress Relief



 UNLOCK YOUR LIFE

Thank you for your time!



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Resources

Alfano, et al. (2012). Cancer survivorship and cancer rehabilitation: revitalizing the link. *Journal of Clinical Oncology*. 904-906.

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