Breathe Well - Feel Better!

How Simple Relaxation and Breathing Techniques Can Change Your Life

Steve Ross, M.A.
Healthcare Affiliate
University of Arizona Cancer Center

¡VIDA! Educational Series
Educational Objectives

1. Describe the physiological effects of stress on the body
2. Explain the importance of managing stress
3. Describe the impact of diaphragmatic breathing and stress reduction
4. Identify how to practice belly breathing for stress management and improved oxygenation
Contact Information for Steve Ross, M.A.

www.relaxandbreathe.net

steve.ross@wildblue.net

(520) 320-5559
References

• www.relaxandbreathe.net

• Breathe Well, Be Well, by Robert Fried, PhD.

• Science of Breath, A Practical Guide, by Swami Rama, Rudolph Ballentine, MD, and Alan Hymes, MD

• The Breath of Life: A Path To Inner Peace, by Karen McChrystal, M.A.
Gauge your stress level on a scale of 1-10...

Now take 60 Seconds to count your breaths

Inhale and exhale = 1...
Inhale and exhale = 2

4-12

12-15

Over 15

¡VIDA!
Simple Relaxation Techniques

Mindfulness of…
• Sensation in your body
• Sensation of your breathing

Again, measure your stress level on a scale of 1-10

Why does this always work?
(hint: multi-tasking is a myth…)
The sympathetic branch of the Autonomic Nervous System (ANS) kicks in:

- adrenaline, cortisol, and other stress hormones dumped into the blood stream
- soaring heart rate and blood pressure
- increased blood flow to the brain and the large muscles for vigilance and fight or flight
- blood sugar rises for extra energy
- clotting occurs more quickly to prevent blood loss
- metabolism and non-essential functions put on hold
# The Long-Term Impact of Stress

<table>
<thead>
<tr>
<th>On The Brain</th>
<th>On the Gastro-Intestinal Tract</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Fatigue</td>
<td>• Ulcer</td>
</tr>
<tr>
<td>• Aches and pains</td>
<td>• Cramps and diarrhea</td>
</tr>
<tr>
<td>• Crying spells</td>
<td>• Colitis</td>
</tr>
<tr>
<td>• Depression</td>
<td>• Irritable bowel</td>
</tr>
<tr>
<td>• Anxiety attacks</td>
<td></td>
</tr>
<tr>
<td>• Sleep disturbance</td>
<td></td>
</tr>
</tbody>
</table>

"¡Vida!"
# The Long-Term Impact of Stress

<table>
<thead>
<tr>
<th>On The Glandular System</th>
<th>On The Skin</th>
<th>On The Immune System</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Thyroid gland malfunction</td>
<td>• Itchy skin</td>
<td>Decreased resistance to viral-linked disorders: common cold, herpes, AIDS and cancer</td>
</tr>
<tr>
<td>• Diabetes</td>
<td>• Rashes</td>
<td></td>
</tr>
<tr>
<td>• Adrenal burn-out</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*Note:* people suffering from depression, alcoholism, malnutrition, obesity, and panic disorders have increased cortisol levels.
Stress is relative...

“People are disturbed not by things, but by their perception of things”
Epictetus, 55-135 CE
Greek sage and Stoic philosopher
According to Dr. Andrew Weil, *breathing* is the ‘Master Key to Self-Healing’

“I feel very strongly that proper breathing is a master key to good health. Over and over again, I’m impressed by the power of breath and its ability to correct specific health problems and promote our general wellness.”

¡VIDA!
**Why & How Diaphragmatic Breathing Works**

Note the lower lung has greater air capacity. Alveoli (air sacs) are surrounded by capillaries for gas exchange.

Image from “Alcohol in the Body,” University of Illinois, Engineering Wiki
More blood vessels are available in the lower lobes of the lungs

Photo from “The Body Show”
The Effects of Diaphragmatic Breathing

<table>
<thead>
<tr>
<th>Benefits</th>
<th>Mechanisms</th>
</tr>
</thead>
<tbody>
<tr>
<td>Quickly reduces Stress</td>
<td>Activates the Para-Sympathetic branch of the ANS and calms us down</td>
</tr>
<tr>
<td>Releases endorphins to ease pain</td>
<td>Removes toxins &amp; balances pH</td>
</tr>
<tr>
<td>Relaxes body and mind</td>
<td>Increases mindfulness</td>
</tr>
<tr>
<td>Energizes</td>
<td>Activates the body’s powerful natural healing processes (immune response)</td>
</tr>
</tbody>
</table>

**ANSM** - Autonomic Nervous System
<table>
<thead>
<tr>
<th>Specific Conditions Benefited by Abdominal Breathing</th>
</tr>
</thead>
<tbody>
<tr>
<td>Stress, Anxiety States and Sleep Disturbances</td>
</tr>
<tr>
<td>Immune System Suppression</td>
</tr>
<tr>
<td><strong>Obesity</strong></td>
</tr>
</tbody>
</table>

¡VIDA!
Let’s Learn How...

- Know your breathing rate
- Assess your breathing pattern
- Take a deep breath…
- Loosen up down there!
- Re-assess breathing pattern
- Practice it sitting, standing, & moving around
- How to practice (with patience & self-compassion)
How To Breathe Diaphragmatically

• Belly breathing is the body’s natural breath

• Soften the belly. Let it be round and soft
  Your new mantra: “Bellies Are Beautiful!”

• Fill the belly without muscles, let the air do it

• Breathe gently. Only take in the air you need

• You don’t need chest breathing except when you exert yourself
Once again, take 60 Seconds to count your breaths

Inhale and exhale = 1
Inhale and exhale = 2
4-12
12-15
Over 15
Summary

• The effect of stress in the body

• The beneficial effects of diaphragmatic breathing for reducing stress, anxiety and improving many health conditions

• How to breathe diaphragmatically and how to practice it at home