

# IMPROVE YOUR GREEN MACHINE

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*These days everyone has become conscious of conserving energy. When we think of energy conservation, we think about the best ways to heat our homes or which car is most fuel-efficient. But how many of us have given any thought to the fuel our bodies use? I am talking about oxygen. To enjoy higher levels of energy, improve our posture, and lower our response to stress, it is essential to learn to breathe efficiently, to be fuel-efficient.*

## Peak Efficiency

Breathing is indispensable, and it works best when it is effortless. Most of us do not think about the way we breathe. We usually take breathing for granted; we do not realize the harmful effects that faulty breathing can have nor the freedom we can gain by improving how we breathe. Most of us begin life breathing fully and without strain. As we age, our natural breathing abilities and rhythms become compromised, for many different reasons. But we can return our breathing to its inherent ease and maximal flow. Ironically, the respiratory system reaches its peak efficiency when we do less. In fact, the less you do, the better the respiratory system functions. So the trick is: How to do less? How do we get out of the way of our own breathing?

# The Most Adaptable Fuel

Oxygen is a basic necessity of life and an inexhaustible resource, filling our lungs and generating energy for our bodies. Breathing is a most adaptable, responsive, and always available way to fuel the body by carrying oxygen into the lungs. Breathing is ongoing; we are either letting the breath out or allowing the breath in. We breathe new life into ourselves anywhere from eight to eighteen times a minute. We never have to worry about our next breath; it has a quiet presence, and is in perpetual motion. It is inspiring to know that our breath responds naturally and spontaneously to our every thought and feeling.

I invite you to take a moment right now to attempt—without altering anything, without judgment—to simply notice what your breath is doing. (It is difficult at first to observe without becoming anxious about the breath. Resist the urge to change anything.) What is your breath's rhythm, pace, fullness, duration? Where do you feel your breath happening?

And now, what happens with your breath when you shift your thought? For example: Visualize the face of someone you love. What is your breath like now? Recall the last time you received a piece of distressing news. How does the quality of your breath change? Now recall the rhythm of your breath after climbing three flights of stairs. Sitting in a traffic jam? And what does your breathing feel like when you are lying in bed at night?

You have just observed—and experienced—how your breathing adapts to the way you function moment to moment as a psycho-physical being.

## Stress...and Ease

Unfortunately, due to unconscious habits and other stresses on the respiratory system, we have lost our natural breathing rhythms. In today's world, respiratory complications come from a myriad of causes: environmental pollutants; stress; neuromuscular and skeletal problems; illnesses such as asthma, headache, backache, or gastrointestinal problems; and last but not least, emotional ups-and-downs. And then there are the various medications prescribed to treat these symptoms, which often interfere with natural breathing rhythms.

We have an internal landscape that is always in motion. Food is being digested, blood is circulating, and nerves are passing messages. The lungs are either inflating or deflating and the diaphragm is either descending or rising. This coordinated breathing actually massages our internal organs (the stomach, the intestines, the kidneys, the pancreas, the liver, the spleen). Alexander referred to this as the “visceral massage,” the result of the diaphragm moving between the thoracic and abdominal areas. Gastro-intestinal discomfort, for instance, is often a result of stress and clenching around the digestive organs. By releasing the breath and allowing it to

move freely, we enable this visceral massage to soothe the tension around these constricted organs. Breathing is our body's natural way of healing and restoring harmony.

## Holding the Breath

Walter Carrington writes:

In Alexander terms, we all worry about the neck and the neck being free. It's difficult to know about your neck; you can't really tell by feeling. It's very difficult to be sure whether you've stiffened your neck or freed your neck. But you can know whether you've stopped breathing. Nobody really has any justification for doubt as to whether they're holding the breath or not. That is absolutely something that you can register.<sup>1</sup>

When we hold our breath, we interfere with internal movement. Holding the breath also creates a backlog of carbon dioxide, which is a known stressor to the nervous system. In addition, holding the breath weakens the respiratory system by reducing the muscular tone of the diaphragm. First let's acknowledge that we all hold our breath. This is a common response to stress. You know those moments when you tighten in preparation to speak? Or the times that you find yourself slumping and feeling sluggish with fatigue? You are probably holding your breath; or if not holding it, you are certainly interfering with it. The breath is an accurate barometer for identifying the habits that create roadblocks and constrain our lives. If you can observe yourself holding your breath, you can then ask yourself to stop holding it, to let the breath out. And if we can learn to let the breath out (exhale) to avoid the unconscious holding of the breath, we will all feel a whole lot better.

## Anatomy of the Breath

Let's take a closer look at the anatomy of the breath. We need to remind ourselves that the body is three-dimensional and that breathing functions all the way around. The motion of breathing begins with the diaphragm in the middle of the torso, and expands throughout the abdomen, ribs, and back. The diaphragm--a flexible dome lying just below the lungs and heart, separating the chest from the abdomen--is primarily responsible for the filling and emptying of the lungs. Its upward movement helps move air out of the lungs, and its downward movement creates space for the lungs to fill.

Intercostals, abdominals, and back muscles are equally important to breathing

coordination. Back motion, often neglected, is vital. There has been an overemphasis on the breath in the front of the body (i.e., belly breathing and chest breathing), but there is actually a lot of movement in the back, and it is closer to the source. There is more lung tissue in the back of the body, and the diaphragm itself originates on the lumbar spine. That is why doctors first listen with their stethoscopes to our lungs from our backs.

As breathing becomes better coordinated, the diaphragm's range of motion is increased, integrating muscles of the pelvis and increasing spinal movement and mobility of the ribs. If you pull down or collapse (slump), or overcorrect (arch), you interfere with the diaphragm's range of motion, and the mobility of the muscular-skeletal system. You are also reducing your vital capacity (the amount of air that can be taken in by the lungs) because you have literally reduced the volume of your torso.

Breathing is at its best when it is synergistic--that is, when it is working in coordination with not just the diaphragm, not just the lungs, not just the abdomen, but all the muscles of respiration throughout the whole torso. It is best not to isolate any of the muscles of the respiratory system. We do not want to think in parts because breathing is a coordination of the whole, top to bottom, front to back, side to side.

## Coordinated Breathing

Coordinated breathing is easy. It is not necessary to suck air in or to push the air out. When we force the breath by over-muscling, pressure is created and can cause a fight, flight, or freeze response--including a tight chest and a restricted airway. This is at quite an oxygen cost--dramatically reducing the fuel available to us.

As it turns out, the key to coordinated breathing is an easy exhalation, which prompts a full and easy inhalation. We're often told to "Take a deep breath." But if a container is going to be re-filled, it must first be emptied. Trying to "take" in new air on top of stale air is like wiping a counter with a waterlogged sponge. When we breathe out, we are letting go of stale air (the stressor carbon-dioxide). Everything depends on how much air gets out, so that a full, easy, automatic inhale can occur. The new fresh air arrives without over-muscling in response to the full release of the breath.

## Sound Rides the Breath, or the Whispered "Ah"

Here is a natural way to promote a full exhalation: As the air is leaving your body, let out the sound of a whispered "ah." Although breathing is involuntary by nature, the whispered "ah" is a consciously controlled exhalation. It will help you think of breathing as a full-bodied

activity that will bring awareness to the whole self. Remember not to sink down or collapse your chest as the breath leaves your body. Any movement that collapses the body will interfere with breathing coordination and undermine the stability of the muscular skeletal framework. The ongoing motion of the breath strengthens the postural muscles of the body and supports the fundamental movement of length along the spine. You can think of your breath as a column of air, fueling the length of your spine. Then, invite the breath to your back and let it return... easily and fully...just the way you like it.

## Renewing the Thought

Can you take a moment now to observe your breath? Notice if anything has changed. Notice any shifts in your body or your thoughts. As you cultivate a continuing awareness of your breath--three-dimensional and on-going--and its relationship to your psycho-physical state, see if you notice that by simply returning to an easy exhalation or the whispered “ah,” you can bring about renewed vitality, balance, and poise to the whole of yourself.

### ENDNOTE

1. Walter Carrington, *Thinking Aloud* (San Francisco: Mornum Time Press, 1994), 65.

### FOR FURTHER READING

- F.M. Alexander. *Articles and Lectures*. London: Mouritz, 1995.
- Walter Carrington. *Thinking Aloud*. San Francisco: Mornum Time Press, 1994.
- Carl Stough. *Doctor Breath: The Story of Breathing Coordination*. New York: The Stough Institute, 1981.

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