

# The Myth of “Diaphragmatic Breathing”

*By Ken Hutchins*

Since I was a beginner trumpet player at the age of 10, I have heard the recommendation to apply “diaphragmatic breathing.” I do not remember either of my parents—both accomplished wind musicians (flute, trumpet and voice)—ever mentioning this verbiage; however music teachers and others often espoused this to me as a fundamental technique that novices often fail to embrace to the detriment of their playing ability.

Over the past 30 years I have heard yoga teachers and general exercise instructors emphasize “diaphragmatic breathing.” I suspect that some SuperSlow and RenEx instructors fall prey to this as well.

Years after I worked at Nautilus and for the first time, I asked my father about diaphragmatic breathing in a context and tone that suggested my doubt to its validity. He responded with, “Yeah, I went to medical school and learned it was all hooey.”

What music teachers and others are trying to convey by the term, *diaphragmatic breathing*, is basically correct, but it begs some clarification and, separately, some qualification.

Their somewhat correct message is often clumsily couched in phrases like, “breathe from below” or “breathe from the belly” or “expand from your belly” *as opposed to* “breathing from the chest” or “breathing from above” or “expanding your chest.”

## **Clarification**

The diaphragm is a dome-shaped muscular structure that functions to create a vacuum in the pleural cavity to draw air into the lungs. This occurs during all normal inhalation regardless of whether expansion occurs in the chest or the abdomen or both.

That’s it! That’s all the diaphragm does. It is relaxed during exhalation. It has nothing to do with exhalation—forced, passive, correct, or incorrect.

What musicians need to emphasize—and I emphatically add that this is most profoundly correct—is that wind musicians must force air out with contraction of the abdominals. This abdominal contraction is the only means to obtain a constant and predictable air stream as the other means—contraction of the costal muscles between the ribs—is not a manageable approach.

## **Qualification**

It is often confusing for a music teacher to emphasize proper inhalation. Yes, the wind performer must “breathe in from below.” I question how much this is actually violated by

wind performers, even novices. At least in my personal experience, I find it unnatural and awkward to inhale by first raising my chest and expanding my rib cage. To do so at any time I must focus to deliberately do this. And if you observe babies and pets as they breathe—especially when sleeping—so called “chest breathing” is difficult to find.

Yes, when given a special task to “take a big breath and blow” a novice may raise his chest before expanding his abdomen, but once air filling passes a moderate threshold the abdomen expands as well.

And just ask any child to blow up a balloon and try not to maximally contract the abdominals. It’s impossible.

Certainly, novices can go off track with their approach, but I see this as unusual and uncommon.

### **Summary**

The diaphragm functions only to inhale and is passive during exhalation.

The diaphragm performs its function regardless of chest expansion, abdomen expansion, or both. Telling a wind musician to “breathe in with the diaphragm” is akin to telling him to “walk with the legs.”

The need to teach a wind musician to inhale must be qualified before needlessly confusing the issue.

The term, “diaphragmatic breathing” is so much gibberish.

### **Exception**

In the case of advanced emphysemics, the shape of the diaphragm is deformed and its function perverted to the degree that exhalation—albeit poor—might occur.