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Dear Doctor / Colleague,

This letter will shed some light on

### *Singing disorders that come from respiratory distress:*

It is believed that new singers should follow the following respiration technique: Inhale as much air in as possible and then exhale quickly. Some singers raise their shoulders using incorrect upper chest breath support. This has a negative effect on the vocal chords causing vocal fatigue and hoarseness.

In his research, Tarneaud found that singers need only 1.5 liters of Tidal-Air (useable air for phonation which is the amount of air inhaled and exhaled in an average human breath (tidal volume) and is about one-eighth the amount that can be inhaled after exhaling as much as possible (vital capacity)) in order to produce the longest musical portion there is. Thus, a good breath technique is not one that has as much air as possible but rather one that has a correct breath support and good technical ability to produce any musical note and using an educated breath supply.

### **Research has shown five respiratory distresses that will cause singing problems, and these are:**

#### 1. Breathing too much into the chest cavity:

As the singer tries to get as much air as possible he/she uses the upper chest muscles on the extreme. This causes the abdominal muscles to put pressure inside, preventing the diaphragm from moving down for a good inhalation. Another effect is hypertrophy neck veins (the blood accumulates there, and they will become visible, because of the outside pressure on them).

2. Not breathing into the chest cavity enough:

The singer does not permit enough space for the air to come in, causing an effortful exhalation trying to produce the musical notes.

3. Certain singers make this next mistake:

While singing on exhalation they will permit their belly to relax and fall out, this will cause Detuning (Flat intonation) and vocal fatigue.

4. Other singers make the opposite mistake:

While singing on exhalation they will push their abdominal muscles in too hard, thinking this will support even better their voice production and musical output, while it will actually do the opposite: It will cause strenuous breathing process, their tones will not sound smooth anymore, and their head register will sound glottal and unsecured.

5. Flexed belly muscles are quite common among female singers after pregnancy or post abdominal operations in male singers. While singing on exhalation the belly tends to fall out and stay relaxed, in order to compensate these singers will tend to overuse their chest muscles – Thus, causing unsecured tones because the singing process is done with tensed facial and neck muscles.

**I trust you have gained some insight from this educational note. I appreciate the opportunity of being of service to you and your patients. Please e-mail me at [galslp@gmail.com](mailto:galslp@gmail.com) if you would like this or previous information to be sent to you via e-mail in a digital format.**

Thank you,

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