**The Singers Breath in Three Parts.**

**Part 1: The Diaphragm.**

In this article I talk about the somewhat complex steps to developing a supported singer’s breath. I am writing this in three parts because often achieving a diaphragm breath is emphasized, particularly for young singers, but a singer’s breath is more involved than just having an understanding of how the diaphragm works and what a diaphragm breath is. It is only the first step to achieving a supported singer’s breath. So, in part 1 I will discuss the diaphragm and how it relates to singing. Part 2 will focus on the muscles of the pelvic floor and their importance for singing and in Part 3 I will discuss breathing using the back muscles and intercostals and also the importance of reincluding the movement of the chest cavity once an understanding of the diaphragm and the pelvic floor is achieved.

The diaphragm is a large, dome shaped muscle at the bottom of the rib cage.





The basic principle of diaphragmatic breathing is as follows. When your diaphragm muscle lowers, your belly expands outward. There are a number of ways to practice this motion until breathing with your diaphragm becomes second nature. Put your hand on your stomach during inhalation and exhalation, or lie on the floor and put a book on your stomach. Move your hand or move the book, depending on which method you choose. The important thing is that your breathing should not cause your chest to rise and fall. When learning diaphragmatic breathing, during inhalation and exhalation you should focus on moving the stomach in and out.

Take as much time as you need until breathing with your diaphragm (or breathing with your stomach moving in and out) becomes totally second nature. As a singer it’s also important to relate diaphragm breathing with the understanding that your stomach movement is cause by this muscle that lies across the bottom of your rib cage descending with inhalation and raising with exhalation. In other words, there is a difference in your breathing that comes from thinking of this large muscle descending to push out your abdomen, verses just pushing your stomach out and back in. Understanding what is physically taking place with your body is important in working towards finding a good supported singer’s breath.

Please watch the YouTube video on the Diaphragm breath: <https://youtu.be/pX6LBVI6zj8>

**Part 2: The Pelvic Floor.**

The Pelvic Floor is composed of several muscles which span the area underneath the pelvis.



 After you have a good understanding of what a diaphragm breath is, and it is second nature for you in your breathing as a singer to use your diaphragm breath, you can begin to initiate your breath using the muscles of your pelvic floor. There are several ways to think about initiating your breath from the pelvic floor. I have heard that you can think of going to the bathroom number 2, to put it in a less than crass way. Or, I have heard teachers say, if you have had a baby, to think of childbirth. The great soprano Joan Sutherland talked about singing from her pubic bone. I like to use the word “groin”. You initiate your breath from the groin. Using whatever image that gets you to initiate your breath from this deep place in your pelvic region is key.

What personally helped me to gain an understanding of initiating the breath from the pelvic region, and maintaining that focus even on the exhale was doing pelvic floor exercises. Here are a couple for you to try:

The Clam Shell: Lie on your side with knees slightly bent. Keep your heels together and raise the top knee up towards the ceiling and then lower again to you lower knee. Do three sets of 10. Then switch sides and raise and lower the opposite knee.

Bridging with leg extension: Lie on your back with your head supported and your knees bent. Draw your belly button towards your spine and tighten your stomach muscles. Raise your hips off the floor. Extend one knee while keeping your hips raised and pelvis level. Do three sets of 10 on with each leg.

There are many more pelvic floor exercises that you can find online. Pick what works for you. In this way you will get an idea of what muscle group you should use to initiate your breath. As you try to discover and identify your pelvic floor muscles, do the pelvic floor exercise you choose until you feel the burn. Until your pelvic floor muscles are beyond tired. This will give you a good idea of what your pelvic floor muscles are. Your pelvic floor muscles continue to work as you exhale when singing. You should feel the muscles of the pelvic floor kick in on the exhale when you are singing, towards the end of your phrase, when you are getting close to running out of air. Understanding and using the muscles of the pelvic floor in your singing is as important as understanding a diaphragm breath. As with the diaphragm, take 10 minutes to research your pelvic floor, how it works and then begin your journey to discovering what your pelvic floor muscles are and how to use them in your singing. Also, try to work in exercising your pelvic floor on a regular basis, just as you may do sit ups to strengthen your core for singing. Exercising your pelvic floor should be a part of your workout routine.

Please watch my YouTube video on the Pelvic Floor muscles: <https://youtu.be/v9-pCyqzl3Y>

**Part 3: Your Back, Intercostals and your Chest Cavity.**

After you have a good understanding of a diaphragm breath and you understand what your pelvic floor is and you are able to use both in your singing, then it’s time to discover the muscles of your back, your intercostal muscles and to make sure that you allow the breath to fill your chest cavity.

The back muscles: There are approximately forty strong paired muscles in the back. The muscles of the back are divided into the Extrinsic (superficial) and Intrinsic (deep) muscles. Please take 10 minutes to read about the physiology of the back.



As a singer you need to enter into a journey of discovery to learn what space you have for air in the various parts of your back. I suggest every night before you fall asleep, breathe into different parts of your back. Lie in bed on your back so that you can feel your back move as you breathe. Take several days or a week on each part, so that you have a good understanding of that part of your back. Breathe into your lower back, or hip area. Next, breathe into your lower back rib cage area. Breathe into your upper back area. Breathe evenly into both sides of your back. Again, take a week for each part of your back and as you breathe into each part, make sure to keep your diaphragm and pelvic floor muscles a part of the breath.

The Intercostals: The Intercostal muscles are a group of muscles that run between the ribs. There are three principle layers. The External intercostals are used for inhalation. They raise the ribs during inhalation. The internal intercostals are used for exhalation. They depress or compress the ribs during exhalation. The third set are the Innermost intercostals. They are there mainly for protection. So, you have two sets of Intercostal muscles that work to raise and lower the rib cage. Again, be aware of this action when you are practicing your breathing. Be aware that your external intercostals are opening your rib cage and your internal intercostals work diagonally to lower your rib cage on the exhale.

Your chest cavity: Finally, reintroduce filling up your chest cavity when you breathe. The chest cavity (or thoracic cavity) is the second largest hollow space of the body. FYI, the abdominal cavity is the largest. On the inhalation, you want to take air into every part of your body, from your pelvic floor, your stomach, your lower and upper back all the way up to the top of your chest cavity. Hopefully now your breath is connected at all times to your pelvic floor muscles and your diaphragm is automatically being used as it should. The chest cavity is a large part of your capacity for taking in air so it is important that you do breathe into your chest, but you do NOT want your chest raising and lowering independently from the lower part of your body. That is an unsupported breath.

As a singer, you need to be in touch with your body. Some athletes have good natural support as a singer because they understand their body and are physically fit. Either way, take the time to understand your body from the perspective of your breathing. Learning to have a supported breath is a long-term journey. Just like learning vocal technique and your music, the journey of learning to breathe takes ongoing study.

When singing: If you have taken a full body, active inhalation you are poised and ready to sing with a supported and relaxed voice. Many vocal issues can be resolved once your breath is relaxed. A relaxed breath can lead to a relaxed tongue or jaw. It may not solve every issue but it can help. Support while you are singing is taking in a full breath and then trying to maintain the expansion that you have achieved with that full body breath. You are fighting gravity on the exhale, although fighting is the wrong word to use. You need a relaxed approach in singing but you are trying to keep every part of your chest cavity expanded while the exhalation occurs.

Good supported singing comes from this dichotomy. The dichotomy of keeping your body as expanded as you can while your body naturally wants to collapse on the exhale or the action of singing. As you now know, your internal intercostals are going to compress your ribs during exhalation. There is nothing you can do to fully stop this action. Supported singing comes from your attempt to keep your chest cavity as open and elevated as possible without tension. The Sh and S consonants are commonly used by teachers. Say the Sh consonants consecutively: Sh Sh Sh Sh Shhhhhhh. Or Ss Ss Ss Ss Sssssssss. Saying theses consonants in succession or even just once when held for the duration of your exhale mimics supported singing. When you use these consonants, they cause the rib cage to push out while you are exhaling. That is a tool you can use to give you a general idea of what supported singing feels like.

Please watch the YouTube video on the back, intercostal and chest: <https://youtu.be/Cwrp4VTe-Uw>

Good luck in your singing! (And breathing)!

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