

Anatomy of the Vocal Cords

Mastering the Mix

The vocal cords are two muscular folds that connect from the inside front to the inside back of your larynx.

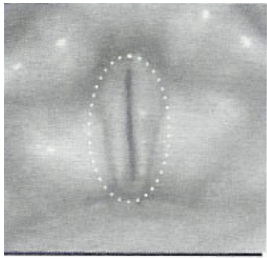
The larynx made up of cartilage ligaments and muscle rest on top of the trachea (windpipe).

Your vocal cords are designed to execute different coordinates to accommodate the various registers.

When you sing in Chest, your cords are at their longest and thickest position . As you ascend you cords should zip up making the vibrating surface shorter and thinner.

That's how the high notes are accessed not by stretching, straining or pushing the chest voice.

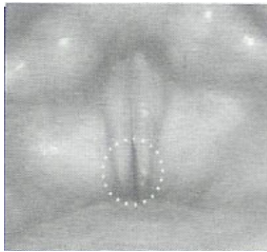
The zipping up action is great news because if you want to sing with greater freedom or if your voice tires out too quick your singing range is limited (both high or low) much more by the lack of knowledge than lack of talent.



Chest Voice

This is the heaviest register. The cords are vibrating along their entire length. We use the terminology 'Chest' because you feel the resonance predominantly in the Chest.

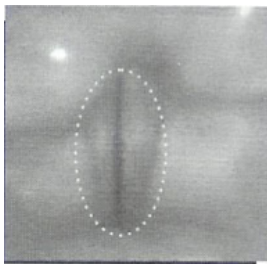
We use this register in everyday speech, and especially when we get angry and start yelling.



Head Voice

This is the highest part of your natural range. The cords zip up about 2/3 of their length, leaving 1/3 to vibrate.

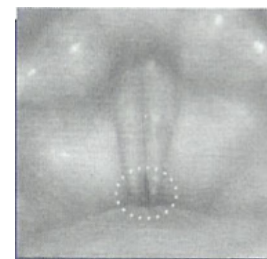
We use the terminology 'Head Voice' because you feel the resonance primarily in your head.



Falsetto

This is the lightest of all vocal coordinates. The cords are long, and only the outer borders vibrate producing a 'false voice.'

Falsetto differs from Head Voice in that it lacks depth and colour.



Whistle Register

While primarily found in the female voice whistle register can be developed in both male and female voices.

You can see here that the vocal cords zip-up nearly their entire length leaving just a small opening free to vibrate.

These high pitches sound squeaky or bird-like.

Vocal Fry

The vocal fry is the lowest register most commonly used by basses in chorus works that require very low notes. To produce the sound, the vocal cords relax and lengthen. The opening between the cords is small and loose. It is similar to the glottal attack, but air flows continuously through the cords and they "pop" or "fry" in a growling fashion.

Mixed Voice

When both the head and chest registers are used simultaneously, it is referred to as mixed voice. Great singers mix chest and head voice to create an unbroken transition between the two. Mixing registers also helps unify sound quality, so the entire range of the voice sounds similar. Physically, the vocal folds are continually fluctuating.

Resonators

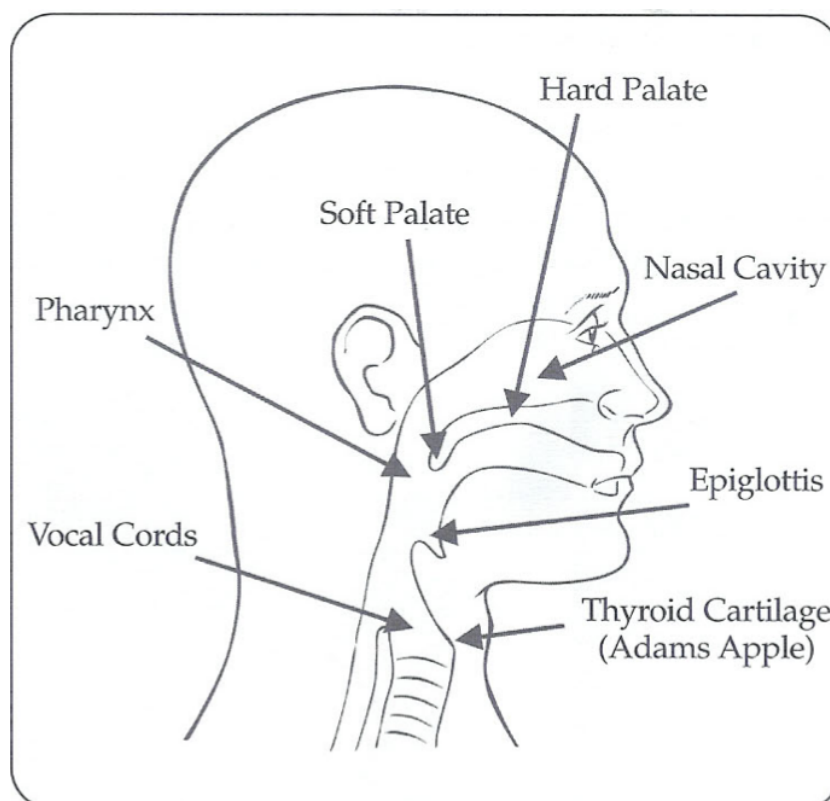
The soft palate hangs down as a natural divider between the mouth and sinus cavity.

If it hangs too low the tone may be too nasal. If it is lifted too high preference is shown to the mouth as a resonator making it difficult to sing in your Head Voice.

Before the sound formed by your vocal cords reaches the ears of the audience it is transformed and amplified by the spaces above your larynx namely the pharynx (throat), the mouth and the sinuses (nasal cavities).

These three areas that make up your vocal tract form a resonant trinity with each space favoring certain frequencies.

Because the shape of your resonance system is unique your voice is different from that of anyone else.



Technique

Posture

It's straightforward. Stand up straight with slightly bent knees and relax.

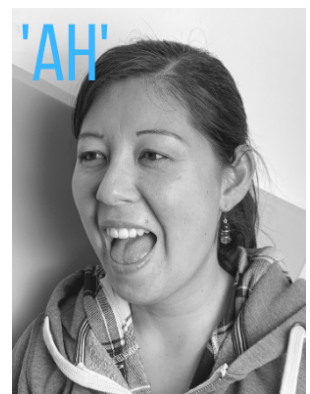
Vowels

Correct way

'A' as in face, 'Oh' as in gold, 'Ah' as in father



Incorrect way



Tight facial muscles equal a tight throat. The longer you sing in this condition, the weaker the muscles inside the larynx become. This gives the preference to the development of the outer, muscles of the larynx, causing numerous dysfunctions.

Technique

Posture

Your posture should not be rigid. If you were to lie flat on your back on the floor, in a comfortable manner, that would also be how good posture looks when you are standing up.

Tongue

- A. Tip of the tongue resting on the back of the bottom of the bottom front teeth.
- B. Tongue reesting somewhat flat with slight groove on vowels 'a' (cat), 'eh' and 'ah.'

Singer friendly foods:

herbal teas
non-citrus fruits
vegetables
eggs
pasta
lean meats
water
water
water

Singer deadly foods:

dairy products
MSG
refined sugars
junk food
excessive alcohol
smoking
caffeine
artifical sweeteners