

Question and Answers

Q: Dear Mark--How do you make your voice sound "squeak" like Mariah Carey or Kelli from American Idol? Thanks, Jen.

A: Dear Jen, the squeak is called whistle register. It's the highest vocal register and it gets its name because the vocal folds are held tightly and then literally whistle to produce the notes. Many people can't access this register, Mariah developed it when she was very young. It requires a tension in the vocal folds (which you can't feel) and a release of the surrounding area (which you *can* feel). So if you just go pushing to get those high notes your throat will close in defense and shut down the voice. Work at low volumes when exploring -- imitate a sea gull or kitten to trick the folds into this register. It will be extremely delicate at first but in time you can get control over its pitch.

Q: Dear Mark, Great column! I am trying to increase my upper register range, like all those '80s hair band singers, but it's hard to do it with a full voice and not a falsetto. How did they all do it? My speaking voice is pretty mid range. Thanks!

A: Not once has an award been handed out for singing glass-shattering high notes. Likewise, no song has ever become popular simply because it contained some birdcalls. Yet, we singers tend to fixate on range as if it's the reason we're not winning awards and selling piles of CDs. True, there is an emotional lift when a melody soars upward, but the pitches should always be proportionate to the instrument. Sing at the height of your voice's potential and your audience will assume your abilities are limitless. Sing beyond your boundaries and you merely call attention to your limitations. This does not mean you are stuck with the measly dozen or so pitches you sing well these days; rarely does a singer access his or her full genetic range without some training. It does mean, though, that before you worry about expanding, it helps to embrace what you have.

Vocal range is a lot like the range of motion of your limbs. Can you drop down into a split without warming up? Even after warming up? For most, the elasticity necessary for a move like that requires a long program of stretching. The same is true for your voice. The vocal folds are membranes (a little smaller than your eyelids) that close over the windpipe. When air streams through the tiny opening they create, their edges vibrate. The vibration is nothing more than a microscopic wiggle. Look closely at a guitar string after it's played and you'll see them same thing. The speed of the wiggle, or vibration, is called the frequency. We refer to frequencies, or pitches, by their beats per second. The pitch, for instance, that an orchestra uses when tuning is A 440, meaning the frequency wiggles 440 times in one second (the larger the number, the higher the pitch). To sing high, your vocal folds have got to vibrate fast.

The action required to sing different notes is very much like tuning a guitar. Muscles surrounding the larynx pull or release the folds to create high and low pitches. The amount of movement required for your entire range is microscopic. I suggest you reread that previous line about a thousand times until it is embedded in your subconscious. The root of all vocal problems is that we perceive the activities involved with singing as big events. They are not. We ball our fists and load up enough air pressure to create an aneurysm just to get through the chorus of a song. The automatic reaction to such force is resistance; the body braces for the assault. Rigid muscles surrounding the larynx deny flexibility and lock up the vocal folds. No flexibility, no range it's that simple.

The key to singing high notes is volume. Reducing the volume of your voice removes the burden of excess air pressure so your folds can become more elastic. Just as it takes a little stretching every day to get your legs into a split, vocalizing daily at a low volume will allow you to visit higher notes without stress. It's best to sing scales rather than songs at first; the memory of a song's performance will lead you to pushing. Allow your higher notes to venture into falsetto or head voice. It's okay if the transition cracks or skips out; this is just a symptom of your imbalanced ways. Don't worry that the light voice you vocalize with is not up to performance standards. Only after you are completely comfortable with producing a note at a low volume should you attempt to raise the output. Increasing the volume in very small increments will allow you to monitor muscle independence. If facial or neck muscles join in to support a note, you've added too much air pressure. Your controllable range for the day lies waiting at the balance point between force and flexibility. And as always, tomorrow is another day.

Q: How do you keep a high note steady?

A: A note is held steady by keeping it free of external tension and feeding it a proportionate amount of air. If the note is breathy, it won't last because the air is leaking; the singing is inefficient. If the note cracks or chokes, it's because the air pressure was too much. The balance between too much and too little air is the difference between having control of your voice or not. Practicing at lower volume levels is the best way to cultivate this balance. It's not that loud singing is harmful, it's just that we tend to get into bad habits easily. Once you have control at a low volume, gradually increase your volume without sacrificing form.

Q: *I am an aspiring singer and would like you to answer a question please. I am 18, male and my vocal range, that is chest/natural voice is about 2 ½ octaves. Starting 2 octaves below middle C and ending on G on the middle C scale. My falsetto range ends on a very high E on the 7th, last octave on the piano. That's very high, Mariah Carey high. It's not screaming because I could put vibrato on the notes, crescendo and all sorts of stuff that natural register voice can do. I would like to know if it's wise to use that very high falsetto of my voice. Although it doesn't hurt. Could it be damaging my voice?--Rhian*

A: Greetings Rhian, your ultra high notes must be in a register called 'whistle'. The pitches are produced by stiffening the vocal folds and literally whistling with them. The air rushing through creates the sound, just as it does when you whistle with your lips or hear wind rushing through a crack in a wall. The other registers produce sound by the folds vibrating. In whistle register, air pressure is responsible for the change in pitch. In all other registers the folds are either tensed or loosened to change pitch. The only danger in developing whistle voice is that you may start to push too much in your other registers. Since you seem very aware of the way things feel inside, I would say there is no harm in enjoying this extension of range.

Q: *Mark, I took an intro voice lesson at my college for one semester and my teacher told me I was a baritone. My range is pretty flexible, though (I think). I tend to do most of my singing in my chest voice. However, the band I am currently in does a few covers, some of which call for a pretty raspy reinforced falsetto (in the style of Chris Cornell) Now, my question is, is he simply a freak of nature, or is it possible to sing like that (assuming it doesn't harm the voice) if I am a baritone?...I notice Sammy Hagar has a similar style, and doesn't seem to have a problem. Being that most of his vocals are 'up there', needless to say, chest voice would be seemingly impossible to use. As a rough comparison, I tend to sing similarly to Mike Patton, formerly of Faith No More. Any help you could give me would be greatly appreciated! :)--Alex*

A: Hey Alex, both Sammy and Chris are baritones who push incredibly hard to achieve their sound. Both singers have also paid dearly for the abuse with canceled dates and bouts with vocal damage. It is not necessary to abuse yourself quite so much to sing like this -- a little warming up, for instance, goes a long way. In general, most rock singers are like yourself -- self taught by learning covers. The bad habits are passed down when copping a sound becomes more important than form. Experiment away from the band by singing the raspy high songs clear and easy first. Then, gradually add pressure until the sound thickens up. This way, you will be using a minimum amount of push and retain far more control.

Q: What is the best thing to drink when singing? --Paul.

A: Dear Paul, without a doubt the all time best drink for your body is room temperature water. Just remember that nothing we drink wets the vocal folds. The larynx closes when we swallow to protect the lungs. All mucous membranes are lubricated with a saline solution. If your body is properly hydrated (don't forget you also gain water by eating fruits and vegetables), there is no need to drink anything when singing. Tense throats muscles, however, often restrict saliva glands and cause dry conditions. In this case, drinking simply provides something to swallow which loosens the muscles and allows saliva to flow. Water is best for this because it doesn't leave any residue.

Q: *Hi, Mark, I have been singing for the past 18 years, but for the past three years my voice hasn't been the way it used to be. I stay away from drugs, drinks, smoking, screaming, and everything that can possibly damage my voice, but I think my voice has changed and gotten a little deeper now that I'm older. I know I need to take voice lessons to regain strength and control in my voice with this lower pitch, but the high price of proper voice lessons in my city has pretty much prevented this. Is there a way that I can train myself in the meantime, while I try to either find*

affordable voice lessons, or have enough money to take more than one lesson per month? Thank you.

A: First of all, it is not predisposed that you will lose range when you age. Range is flexibility; we lose flexibility from lack of use – not age. I'm sure we've all seen a 70 year-old who can do a split, or one who can sit in a perfect lotus. These people did not start these activities at age 65. Everyday they stayed limber.

You voice has gotten deeper because the muscles lining the throat have relaxed. This affects the tone of the voice – not the range. It actually helps range when these walls stop competing. Psychologically, the deeper tone makes us feel like high notes are less available. Sing scales at a low volume on an EE vowel with a guitar or piano accompanying you. Sing the same scales everyday, attempting the same pitches everyday. Don't don't turn on any facial or neck muscles to hit the high notes, even if that means blanking out on them. Don't increase the volume to hit a high pitch either. Some days we are more flexible than others. Keep asking for the freedom and it comes. Keep pushing and it goes. Technically, you should have the same range at 65 that you had at 20.

Q: *Hi Mark...great column!....I was wondering what kind of exercises I should do to increase my ability to sing rapid scales?.....basically I'm a rock singer but I would like to add that R&B "style" sometimes.*

A: Turn down the volume. Rock singing is a push style and tenses the throat. The mobility will come back if you ease off the throttle.

Q: *I have been performing for 10 years. I have no problem dancing in front of a crowd, but when I sing I begin shaking and lose support and control of my voice. What do you suggest to prevent that and to conquer it during a performance?*

A: Perform *more*. I can't imagine you have performed very regularly in the past ten years if you are still wrestling with these symptoms. Perhaps you can incorporate more body movement into your singing. Since you are already comfortable dancing. Sing in public every chance you can. Your body is responding to an illogical fear. However many gigs it takes to get over it will be worth the time.

Q: *I am going on tour next month. The last time I went on tour I got sick and had to sing on pure adrenalin. Do you have any advice to prevent this happening this time? Best Wishes from London, England Sharon.*

A: Sleep. Wash your hands. Eat well. Remind yourself that you chose to do this!

Q: *I have just started teaching singing. Although I was trained years ago my only recent 'qualifications' are through experience. I've been cruising along nicely so far, but suddenly have come up against 2 things for which I have no answer. 1. How do I teach a male to use his falsetto, (I've spoken to two other teachers regarding this with conflicting views) and 2. What do I do with a kid with attention deficit disorder? - I can't get him to stand still long enough to show him any one thing.*

A: 1. Have the male pretend he is calling a cat. Most times we males will only access falsetto by accident. Don't make falsetto the agenda and if he should stumble into it – make him aware of the feel immediately. Then, you can work on transitioning down into head and chest voice. I also recommend [my book and video](#) for providing an overview on the voice.

2. Slap the kid (just kidding!!!) Actually, clap your hands and have him do the same. Sing simple melodies and have the kid clap the rhythm. If this is too hard then the two of you should hop around on one foot –changing pitches with every hop. It is exhausting to reach a child with ADD but very rewarding in the end. Don't give up.

Q: *I am in the process of trying to change my vocal style. I have had a very low voice for the past 7 years with my band and am looking to change slightly. I listen to a lot of Kiss and love Paul Stanley's voice. He can hit very high notes but it is a very smooth voice. I find for me to hit high notes I have to make my voice raspy and after not too long I have to stop due to tightening in my voice which causes all sorts of weird squeaks to come out of me. What would be the best way to work up to that vocal style? For instance, are there any exercises I should do?*

A: The raspy sound and tightness you feel when singing high notes are related. You are turning on too many muscles, thinking that they are necessary to sing high. Practice singing the songs at a much lower volume than usual. Release all facial and neck muscles. The less visible activity you use when singing the more control you'll have.

Q: *Dear, Mark: I find that whenever I try to project my voice, my vocals sound strained and a bit off. At lower volumes, my vocals are okay. What can I do to improve?*

A: Keep singing! There are no short cuts to real improvement. The trick is to raise the volume slowly – but since you're already in a band that's not possible. In one way, you are slowing your process by asking too much too soon. On the other hand, playing with a band develops so many other aspects of singing that I think it's worth the small negative of pushing for volume. When practicing, release your facial and neck muscles. Try to keep as relaxed as possible in order to develop internal muscles rather than external.

Q: *dear, mark--i've sung for years to radio and have just gotten my first coffee shop gig which a friend was going to split with me. however she's going out of town. it's a two hour thing and i'd like to work up to it. today is 1/24 and the gig is 2/20. any suggestions on a regimen to build up or should i look for another person. one hour i could do alone.*

A: Sing every night. Add two extra songs to your routine each night. The voice does not have a time limit on it. What wears the voice down is friction. Make sure you warm up every night.

Q: *Mark, I own the [rock singers survival guide](#) and I have studied very intensely with it. My voice was right where I wanted it. However, in the past 5 months it does not feel the same. I find that my nasal passages are stuffy, esp. the morning after a gig, and sometimes I have to push harder than normal. I have been singing 3 hour shows 3 to 4 nights a week for the past 7 years. Do you think I have nodes? Or maybe developing an allergy to something because the problem comes and goes. Thanks for your help!*

A: Nodes don't go away without a deliberate adjustment in behavior. This seems like allergies, but more to the point is that, no matter how it feels in the morning, you're not ready to sing at night until things are balanced. Don't push, warm up more. Thin your folds before each gig and maintain flexibility. This might take hours some days. Remember that there is no clock on the larynx. The real determining factor for damage is friction not hours in use. Make sure you are getting as much sleep as possible, flood yourself with water and vocalize lightly all day.

Q: *I have a pretty high range voice. I am a high tenor and I usually have no problem in hitting high notes and my voice sounds very nice. However, I've felt that my voice has a very low volume and not enough power and I feel that I need to put a lot of effort into singing when let's say I am playing with a band. In singing in a gig for example my voice does not last too long and usually gets hoarse pretty soon after about 10 to 15 songs even though the songs fall perfectly within my range. What do you recommend I should do to get over that problem??*

A: Tenors in rock all deal with this problem. Your folds are small and thin (that's why high notes are easy). Volume requires more mass, like heavy gauge strings on a guitar. To make up for this you are driving way too hard and swelling the folds. Wear ear plugs to stop competing with the band. Singing within your abilities will allow the maximum amount of overtones, which is the most you can do. The real solution to this is to re-arrange your band's instrumentation to fit your voice instead of you beating yourself up to match them (thinner guitar sounds, less bashing on the drums). I know this seems drastic, but do you think Sting (who also sings very soft) contorts himself to compete with the music. I know everyone's thinking, "Well, he's Sting, everyone will listen to what he says." Be smarter than that. How do you think he got to be "Sting?"

Q: *When dancing and singing together, it's hard for me to do both. What exercises are there for me to overcome that?*

A: Getting better at each separately will help when you do both. Honestly though, whoever was the first to combine the two should be exiled. Singing and dancing are a terrible combo. There is no way to control the fine adjustments necessary for singing when you're whipping your body

around. Dancing dominates the body -- so the singing always suffers. That's why everyone either lip syncs or lays back on the moves.

Q: I'm 18 years old and sing and play guitar in a pop-punk band, we just recorded a CD and realized my singing is a lot worse than we originally thought. What are your best tips to learn to sing and stay on key?

A: If it took a recording to realize that your singing is off, you obviously can't hear yourself at gigs and rehearsals. Pushing hard to compete with the volume of the band is causing the pitch problems. Wear ear plugs. Hold vocal rehearsals (when the band plays half throttle so you can get some practice) and record yourself often. Even if it means using a boom box, recording more will let you monitor your ability. Singing is a feel. To recognize the feel, though, you need to know what works and what doesn't.

Q: HI, I AM 19 YEARS OLD AND AND HAVE BEEN SINGING FOR MOST OF MY LIFE. MANY PEOPLE HAVE TOLD ME THAT IT IS GOOD TO DRINK HOT TEA WITH LEMON OR HONEY BEFORE SINGING, IS THIS REALLY TRUE?

A: Hot tea will relax the throat -- that's good. Honey coats the throat -- that's not good. Lemon acts as an astringent, stripping mucus away -- that could be good if you have excess mucus. Nothing we swallow touches the vocal folds, but what coats the throat can seep down when singing and interfere.

Vocal stretches will relax the throat without the potential for anything working its way down as you sing. I stick with room temperature water.

Q: How come when I sing I like the way I sound, but when I record myself, I don't like it, it sounds different and not as good?

A: When you're singing you are listening to two sounds, an internal one and an external one. The inner vibration gives our voice body and richness but don't project outward -- they stay inside you. Only the external sound makes it on tape. That's why it's so different. All this means is that we singers can't judge the way we sound when we're singing. We are the only ones who don't hear the sound correctly. We have to wait and listen back. Feel, attitude and sentiment, however, are what we should be addressing as we sing. Those are things which we don't need to hear.

Q: Dear Mr. Baxter, as I read your articles, I realize that I was born with a horrible voice. I stay up night after night with it like a disease trying to cure it. Trying to sound better to have the distinguishable tone the music industry looks for. I am very good at guitar but my music, requires a voice as well. I must allow others to sing my music and lyrics until I understand this tedious process. Did you feel the same way? How can I make my voice stronger and allow whispered tone to not require me to pass out in the process. Can you please give me some hints on what you mean by "release all facial muscles". How does it pertain to the voice? I need that industry sound. How long did it take you to get the voice you always dreamed of? Thanks again!

A: It took me about ten years to get the voice I wanted. It finally came around when I stopped trying to get an 'industry sound'. You see, what you hear on the radio today was in the works about two years ago -- and it was not a popular sound then. What the industry is working on today won't show up on the radio until about two years from now. In other words: just be yourself. The industry wants individuals -- not copies.

Releasing facial muscles prevents you from locking in too many muscles just to hit a pitch. Watch yourself singing in the mirror and pretend you're a ventriloquist. Can you still hit all your pitches? Denying help from outside muscles is what will build strength in the internal ones. Your whippers will be less draining as well. It takes time, but it's well worth it.