Introducing A Video for Using Straw Phonation

Ingo Titze

Over the past ten years John Nix and I have been describing vocal exercises that utilize phonation into a straw. These exercises are part of a bigger picture of training vocal fold adduction, registration, and epilarynx tube narrowing for the best acoustic power transfer from the glottis to the lips. Use of a thin straw is not the only way to facilitate this power transfer, but a semi-occlusion at the mouth is a requirement. Lip trills, nasals, /u/ and /o/ vowels, bilabial fricatives, and other semi-occlusions can all be used to meet the objective.

Given that phonation into a thin straw is the latest in a century-old tradition of using resonance tubes (with and without dipping the end of the tube into water), and given that some basic acoustic and aerodynamic science has been used to explain the therapeutic effects, I would like to make the Journal of Singing readership aware of YouTube videos that have been produced for an introduction to this technique. The full text is given below:

For those of you who speak several hours a day and your voice gets tired, here’s a tip to keep you talking. You need to stretch and un-press your vocal folds (vocal cords) often. To accomplish this, you can vocalize into a thin straw (like a stirring straw) several times a day for 2–5 minutes.

Here is a regimen you can follow. First do a pitch glide, from as low as you can to as high as you can [demonstration]. After a few repetitions, try to build progressively larger hills with the pitch and loudness of your voice [demonstration]. We call these hills accents. After you have practiced the accents for a minute or two and you have a little extra time, vocalize your favorite song through the straw. I will choose the National Anthem because it has lots of ups and downs in pitch. It also gives me a chance to do some note-to-note accents [demonstration].

It is important that no air escapes around the straw between your lips, and that no air escapes through your nose. If you pinch your nose, the sound should not change [demonstration]. And, all your accents should be belly accents, not throat accents [demonstration].

After you have practiced these exercises for 2–5 minutes and you return to natural speech, you will find that your voice seems to be coming out of your eyes instead of your throat. This is an important sensation that you should always remember and try to maintain in your speech. We call it a high placement of the voice. If after a long time of talking your placement begins to drop and gravitate to your throat, and your voice becomes pressed, take the first opportunity to reset your voice with the straw.

Give it a try. I think you will like it. If you have further questions or vocal problems, contact a speech-language pathologist specializing in voice. We call this specialty vocology.
You can also contact the National Center for Voice and Speech (www.ncvs.org) for further information.3

I am always quick to point out that semi-occluded vocal tract techniques are not my invention. There is a long tradition in Europe and in the United States, both among voice clinicians and singing teachers. I am also quick to point out that the final story about these techniques has not been written. There is much active research (and technology development) that is ongoing. There is little doubt (in my mind) that full optimization of semi-occluded vocal tract techniques will accelerate voice training and therapy in the future. Meanwhile, the video may help you in your own explorations.

NOTES

Ingo R. Titze is Distinguished Professor of Speech Science and Voice at the University of Iowa and Executive Director of the National Center for Voice and Speech at the University of Utah. His formal education is in physics and electrical engineering, but he has devoted much of his studies to vocal music and speech. Dr. Titze has published more than 500 articles in scientific and educational journals, coedited two books titled Vocal Fold Physiology, and has authored two books called Principles of Voice Production, and The Myoelastic Aerodynamic Theory of Phonation. He has lectured throughout the world and has appeared on such educational television series as Innovation, Quantum, and Beyond 2000. He is a recipient of the William and Harriett Gould Award for laryngeal physiology, the Jacob Javits Neuroscience Investigation Award, the Claude Pepper Award, the Quintana Award, and the American Laryngological Association Award. He is a Fellow and a Silver Medalist of the Acoustical Society of America, and a Fellow of the American Speech-Language-Hearing Association. Dr. Titze has served on a number of national advisory boards and scientific review groups, including the Scientific Advisory Board of the Voice Foundation and the Division of Research Grants of the National Institutes of Health. In addition to his scientific endeavors, Dr. Titze continues to be active as a singer. He is married to Kathy Titze and has four children and eight grandchildren. Mail should be addressed to Ingo R. Titze, National Center for Voice and Speech, 330 WJSHC, Iowa City, IA 52242. Telephone (319) 335-6600.