

Evidence-based Voice Exercises

(EVE [Also shown to be effective with Swallow & Speech]):

- 1) Sustain loud /a/ for the first five minutes.
- 2) While using the loud /a/, perform glissandos from low pitch to high pitch for 5 minutes.
- 3) While using the loud /a/, perform glissandos from high pitch to low pitch for 5 minutes.
- 4) Loud /a/ drills at the word level for 5 minutes.
- 5) Loud /a/ drills at the phrases level for 5 minutes.
- 6) Loud /a/ drills at the sentence level for 5 minutes.
- 7) Loud/a/ in conversation for 5 minutes.

For each of the above steps in this hierarchy, it is imperative for both the clinician and the patient to take a sip of water after each 5 repetitions for the prevention of phono-trauma to the TVFs of both patients and clinicians.

May use Pitch Analyzer smart phone application to assist in determining the fundamental frequency, as well as to determine the lowest and highest frequencies of a given patient's vocal range in Hz (Hz = Hertz or cycles per second). Remember pitch (perceptual/qualitative) is the psychological correlate of frequency (acoustic/quantitative).

May use dB Decibel smart phone application to assist in determining the vocal intensity in dB SPL (decibels Sound Pressure Level) for an extended duration (e.g. sustained /a/) while using a stopwatch or second hand on a wrist watch. This may also be useful to assist in determining the vocal intensity in dB SPL at word level, phrase level, sentence level, and/or conversational level. Remember loudness (perceptual/qualitative) is the psychological correlate of vocal intensity (acoustic/quantitative).

If perturbation measurements are desired, may consider use of the Voice Test smart phone application to calculate Jitter (The stability of frequency based upon a 3 second sample) and Shimmer (The stability of vocal intensity based upon a 3 second sample).