VOCAL HEALTH - THE ROLE OF HYDRATION- PART 1

by Dr. Sadhana Nayak

Hydrating the body is vital for its functioning, as the human body is 70% water. Dehydration or inadequate hydration affects every cell, organ and system in the body. Inadequate hydration affects the efficient functioning of the vocal folds and therefore vocal communication and performance.

As a laryngologist and voice coach dealing with performers and professional voice users, I am often surprised by their ignorance and lack of awareness regarding hydration. In my practice, I often meet clients who have reasons, sometimes valid, sometimes amusing, for not drinking enough water - some who drink as few as 1- 2 glasses a day because they think it is adequate; others who think their tea, coffee, cola or beer intake takes care of their hydration and others who argue that they don’t need to drink water since they don’t feel thirsty. And there are others, who are aware of the benefits of adequate hydration, but are too busy with work or traveling or just don’t remember to drink water.

How does inadequate water intake affect the voice?

The vocal folds are responsible for phonation i.e converting the airflow from the exhaled breath into acoustic energy or the raw sound. When we speak, the vocal folds vibrate and there is contact between the covering layers of the two vocal folds. Normally, the structure of the vocal fold lining and a layer of thin mucus protect the vocal folds from trauma. The mucus acts like a lubricant for the vibrating vocal folds. Water provides the raw material for producing this thin layer of mucus. Inadequate water means the mucus tends to be thick and viscous and the vocal fold tissues are dry which make them vulnerable to vocal injury. Dehydration increases vocal effort [by raising the viscosity of the vocal folds and therefore the phonation threshold pressure].

Professional voice users and performers, whose work often entails the use of the voice for long hours, use of a wider pitch and dynamic range, use of vocal projection and vocal artistry, very often in
environments and conditions not conducive to vocal health, make themselves more vulnerable to vocal problems and injuries, if they fail to drink adequate amounts of water. Water also hydrates and lubricates the lining [mucous membranes] of the throat and mouth, making speaking, especially articulation easier.

**Does drinking water during a performance/presentation help in hydrating the vocal folds?**

This will instantly moisten the lining mucous membranes of the mouth and throat, but it does not work for the vocal folds. It is the water, that you drink through the day, that reaches all the cells in your body, including those in your vocal folds, through the blood stream and hydrates them.

**Recognizing vocal fold dehydration**

These are a few indicators [Note that they could indicate other conditions/problems]

- Your throat feels dry/ scratchy
- You clear your throat very often
- Your urine looks yellow/dark
- Voice use is effortful
- You feel thirsty