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Therapeutic diet for vocal health: A review

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Abstract

Vocal health is the major concern because it is very much crucial for human life. Without appropriate function of vocal cord, there is nothing interaction. So, vocal health should keep healthy. Proper diet and physical exercise maintain the vocal cords and the surrounding tissues effectively. Appropriate vocal health ensures that, communication will be done among each other. Therapeutic diet gives protection to maintain vocal health. Less amount of fat and proper micronutrients mitigates the manifestation of vocal health. Furthermore, ripe fruits and vegetables contain more healing nutrients for improving the vocal health. Adequate quantity of water intake express right hydration. Dehydration can be caused of bad vocal condition. Remove the carbonated beverage from dietary pattern. Whole grains should be incorporated into diet to maintain adequate vocal condition. Protect the vocal cord from acid reflux because acid of the stomach irritates the mouth and oesophagus. Avoid the smoke totally because it deliberately damages the vocal health. In this review discuss the importance of therapeutic diet on vocal health.

Keywords: Dehydration, acid reflux, GERD, exercise, dietary pattern

Introduction

Voice is the signed stone of communication. Without voice nothing is possible. So, people should give importance on vocal health. Literature review has expressed that, vocal cords are composed of two soft muscle tissues situated contradictory each another at the larynx. They are functioned when human breathe. Apart from that, when people communicate, the vocal muscles separate jointly to express voice and when air exits from lungs that time vocal cords are vibrated (NIDCD, 2021) [5]. Authors have noted that, vibration develop sound waves that moves by throat, nose and mouth that is functioned as resonating cavities to improve the sound of human. The standard of individuals sound depends on its pitch, tone and volume, these are regulated through size, shapes of vocal cords, and the resonating functions, therefore sound of everybody is different.

Authors have examined that, a good vocal routine follow fine sound all over at human's life (NIDCD, 2021) [5]. Human utilises their sound for conversation on daily basis along with it is most crucial in the professional sectors such as in case of music, lecture or teaching profession etc (Boyle & Engen, 2008) [2]. So that, for retaining the adequate vocal health some guidelines need to be maintained therefore singers specifically practice the instruments with their iconic voices individually in work areas which is regarded as AMTA (American Music Therapy Association) (Boyle & Engen, 2008) [2].

Excessive usage of voice is the bad outcome in vocal nodes, polyps and promote laryngitis that is interlinked with larynx and also vocal cords difficulties (Clements-Cortes, 2013) [3]. Reflux disease possess respiratory distress like cold, allergy, drugs, hormones, ageing these are involved to express the trouble in voice (Gooding, 2018) [4]. Some ecological attributes are concerned for obstacle the good voice like noise, bad temperature condition, dryness etc (Baker & Cohen, 2017) [1].

Authors have clarified that, development of voice is usually attached with utilisation of bones, muscles, tissues (Schwartz *et al.*, 2018; Gooding, 2018) [8, 4]. Each and all organs are interlinked along with mechanism of vocal health. Furthermore, diet contributes very essential factors to maintain good vocal health condition. Lesion fat, enhanced amount of vitamin along with calcium enrich foods, luscious fruits and ripe vegetables are consumed adequately in segment of well dietary patterns. Insufficient diet affects vocal health including vocal cords and it's another tissues. Such as less protein contain foods and high processed food can develop inflammation, dehydration and fatigue in muscles. These may contribute poor vocal condition.

Insufficient vitamins like vitamin C, vitamin A besides minerals is iron, zinc, contribute bogus impact on vocal organs. So cautiously should intake these micronutrients to improve the vocal health and adjacent tissues and provide adequate immunity (Schwartz *et al.*, 2018) ^[8].

Therapeutic strategies for maintaining vocal health

a. Consumption of water and caffeinated beverages:

According to National Academy of Medicines, adequate water consumption on daily basis for adult who are healthy these are 3.075 litre are recommended for male and 2.129 litre are issued for female. A survey administered on intern's who are attached in music therapy. They consumed plain water and caffeinated beverage outcome possessed that, 16% of the trainee intake water followed by recommendation of intake. Besides 70% trainee imbibed caffeinated beverages on daily basis. Little quantity of caffeine doesn't cause of illness like vocal acoustics and aerodynamics (Sivasankar & Leydon, 2010) ^[9]. These express dehydration in vocal cords, larynx and in whole body (Schwartz *et al.*, 2018) ^[8]. Dehydration promotes negative impacts on vocal health including manifestation of vocal cords. One of the outcomes is that, hoarseness, exhaustion in vocal cords, decreased vocal span (Ragan, 2016) ^[6]. Moreover, dehydration can be caused of dried mucous membrane in throat therefore challenging to fabricate sound and to develop vocal strain (NIDCD, 2021) ^[5]. Literature review has expressed that, dehydration can't produce saliva adequately, saliva is the omnipotent lotion for the vocal cords. If there is no moisture resulting is that, vocal cord buffing at joint much brutally therefore progress inflammation (Voice Academy, 2020) ^[10]. Precisely to maintain good vocal health, required to intake water adequately besides restrict the caffeinated beverages to remove dehydration and maintain better health status. According to literature review, human body will be hydrated when 60% water is present there (Water Science School, 2019) ^[11]. However, for abundant voice utilisers, keep hydrated is most crucial. Water doesn't reside in mouth; throat therefore provides negative impact on vocal health. Water helps to hold the mouth moisturised as well as energizing the speaking power (Schwartz *et al.*, 2018) ^[8]. There is no standard for type of drinking water, nevertheless dark urine along with feeling thirst, weakness, body aches and headache that give signals about inadequate hydration in body. Authors have also reviewed that, lengthy voice utilisation involves into moisture evaporation that aggravate dryness in vocal cords (Waldon & Isetti, 2019) ^[11].

b. Drugs and acid reflux: GERD (Gastroesophageal reflux disease) is happened into stomach when acid from stomach comeback to oesophagus (Clements-Cortes, 2013) ^[3]. Acid reflux shares bad condition on vocal health as acidic substances disturb the tissues of throat and larynx. This evolves some symptoms like hoarseness, weakness in voice, coughing, inadequate swallowing. In chronic condition, acid reflux is active to create negative effects on vocal cord like vocal nodules, this tiny section is in the vocal cords that develop hoarseness and another vocal insufficiency (Schneider *et al.*, 2016) ^[7]. Moreover, chronic acid reflux may be caused of laryngeal cancer. People should remove the

irritating food items, maintain adequate weight, stop smoking. Medication is used properly to decrease the acid content in stomach and also encourage for alleviating the oesophagus. Medication mediated acid reflux as well as asthma, cold, allergies or dryness in vocal cords (Waldon & Isetti, 2019) ^[11].

c. Smoking: It is very much bad for maintaining vocal health. Cigarettes interrupt vocal cords especially lower sound scale.

Summary for keeping good vocal condition

1. Avoid smoke, as smoke is one of the causes of vocal cord damage.
2. Remove spicy foods from diet. Spicy foods irritate throat, oesophagus, therefore caused of heart burn and GERD.
3. Add sufficient quantity of fruits and vegetables, whole grains into dietary agenda. Foods contains vitamin A, E and C. It improves the condition of mucus membranes which helps to keep healthy throat muscles.
4. Wash hands properly to keep away from flu, cold and cough.
5. Take rest because physically fatigue can be caused of bad voice.
6. Do exercise on daily basis. It ensures good breathing status as well as posture therefore adequate speaking is expressed.

Conclusion

Vocal health is very much serious issue for individual as without adequate vocal health there is no communication, no expression among each other that's why try to keep adequate vocal health. Maintain adequate dietary pattern with proper recommendation to improve the vocal health. Which foods affect vocal condition, those foods are removed from food lists. Apart from that, maintain physical exercise which incorporate proper vocal condition. However, some information till now is not published so Researchers need to fill the gaps regarding healthy foods which is beneficial for maintaining proper vocal health. So further investigations are required to follow up clear understanding of therapeutic intervention regarding vocal health.

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