



THE BENEFITS OF MICRONUTRIENTS IN **HEAD & NECK** CANCERS



Head and neck cancers are a group of tumors originating from several areas above the collarbone. They include cancers of the larynx, salivary glands, tongue, thyroid, and nasopharyngeal area. Annually there are 60,000 new cases of head and neck squamous cell carcinoma (HNSCC) in the US, and more than 13,000 deaths. Squamous cells are a type of cells found in the outer layer of the skin and in the mucous membranes and include the cells lining airways and intestines.

The biggest risk factor for head and neck cancers include tobacco use and smoking (this includes the smokeless tobacco), and alcohol - all of which are highly preventable causes. Additionally, sun exposure, and occupational exposure to substances like chromium, radium, leather, and wood dust can also increase the risk of developing HNSCC. Hence, the ears, nose, and throat happen to be the most common affected areas.

Apart from the squamous cell carcinomas, tongue cancer is also one of the categories in head and neck cancers. Tongue cancers have different names depending on the location of the cancer. Cancer that forms in the front two-thirds of the tongue is called tongue cancer, while those developing on the back one-third of the tongue are considered a type of head and neck cancer. A persistent sore throat, white or red patches on the gums, tongue, or tonsils, and difficulty swallowing can be some of the most common symptoms of tongue cancer. Conventional methods of treatment such as surgery, and radiation are most commonly used and may be helpful in some cases. However, more than 50% of the HNSCC and tongue cancers are detected when they have already spread (metastasized) locally or to distant sites in the body. This aspect increases the complications of treatment and eventual recovery.

It is known that the matrix metalloproteinases (MMPs) – the enzymes which destroy collagen and connective tissue surrounding the cells - facilitate the formation and spread of tumors. Activity of these enzymes correlates with the aggressiveness of cancers. Among various MMP types, MMP-2 and MMP-9 are important in cancer invasion and metastasis.

In a recent publication from the Dr. Rath Research Institute, we investigated the effects of a unique micronutrient combination and selected stimulators and inhibitors of MMP enzymes to study their effects on the metabolism and viability of HSNCC and tongue cancer cells*. We compared their effects to the popular cancer drugs such as doxycycline, dexamethasone, retinoic acid, and others. The specific synergistic micronutrient combination contained vitamin C, green tea extract, the amino acids lysine and proline, and other nutrients. Our results show that the micronutrient combination is as effective as the cancer drugs in blocking the MMP enzymes. Moreover, this combination did not harm normal cells and selectively inhibited the overproduction of MMP in cancer cells.

Several synthetic substances are being investigated as inhibitors of MMP enzymes in the treatment of cancers. However, they are also associated with severe side effects. Therefore, it is important to note the safety and equal efficacy of synergistic micronutrients as MMP inhibitors to stop the spread of cancers.

* *MW Roomi et al., J Otolaryngology Rhinol 2017, 3:029*

This information is provided to you by the Dr. Rath Research Institute a leader in the breakthrough of natural health research in the field of cancer, cardiovascular disease and other common diseases. The Institute is a 100% subsidiary of the non-profit Dr. Rath Foundation.

The ground-breaking nature of this research poses a threat to the multi-billion dollar pharmaceutical "business with disease". It is no surprise that over the years the drug lobby has attacked Dr. Rath and his research team in an attempt to silence this message. To no avail. During this battle, Dr. Rath has become an internationally renowned advocate for natural health. Says he: "Never in the history of medicine have researchers been so ferociously attacked for their discoveries. It reminds us that health is not given to us voluntarily, but we need to fight for it."

This information is based on scientific research results. It is not intended to substitute for medical advice to treat, cure, or prevent any disease.
© 2017 Dr. Rath Research Institute | Santa Clara, California, USA. We encourage the distribution of this News Page, provided its content remains unaltered.

You can print this News Page at: www.drathresearch.org,
to share it with your practitioner and others.



www.drathresearch.org

*You can!*TM