Healios® Resource Guide

A guide to Healios for healthcare providers



About Healios

Healios is an over-the-counter, nutritional supplement, developed by board certified hematologist-oncologist Dr. Peter Anderson to address mucositis caused by cancer treatment.

Healios is used as a prophylactic for cancer patients at-risk for mucositis and esophagitis, and also as a treatment when patients are first symptomatic.

What makes Healios different

Healios is unlike other supportive care products which are designed to provide a protective barrier over the mucosa (e.g. GelClair) to soothe the oral lesions, or a lipid membrane (e.g. Episil) to coat and soothe inflammation from mucositis. Healios uses a different approach; instead of relieving pain and infection after tissue breakdown has already occurred, Healios addresses tissue breakdown and prevents it from advancing.

Formulation

Healios contains L-glutamine complexed with two types of disaccharides in a precise combination that increases glutamine absorption, locally, along the mucosal lining. The amount of glutamine per day in Healios is similar to a high protein diet.

For more information about the ingredients found in Healios, please reference the <u>Healios fact sheet</u>.

How it works

Healios increases glutamine absorption as it comes in contact with the epithelial cells of the mucosal lining. The glutamine disaccharide formulation in Healios has been shown to increase glutamine absorption into the epithelial cells 100 times more than glutamine alone, within 10 seconds.

Like many products, the specific mechanism of action of Healios is unknown. However, researchers hypothesize the disaccharides help shuttle the glutamine directly into the epithelial cells of the mucosa, where it supports normal healthy cell repair and renewal. Because glutamine absorption with Healios is greater and quicker than with pure glutamine, this helps the damaged epithelial cells get the glutamine they need to regenerate more rapidly.

For more research information, please reference the <u>Healios research summary</u>; all papers are available for download at enlivity.com.



Administration and packaging

Healios is administered orally as a swish-and-swallow solution. The product comes packaged as a powder that's reconstituted with water to form a liquid suspension. It's important for patients to swish and swallow for at least 10 seconds, so the liquid suspension can come in direct contact with the mucosa where the damage from treatment occurs.

Flavor and taste

Healios comes in three different flavors (orange, grape, unflavored) and it does not have a medicine-like or strong flavor. The powder is mixed with water, resulting in a mild and slightly sweet, non-gritty liquid solution.

Patient compliance

Healios is very well-tolerated resulting in strong patient compliance. It's easy to use, has a pleasant taste, and does not cause additional pain or discomfort.

Patient benefit

When used as recommended, patients will feel less pain from the sores because the mucositis will stay around a grade 1 instead of advancing to a grade 2 or 3 (based on the WHO oral mucositis scale). Healios also helps reduce the duration of the sores, so patients can swallow with ease sooner than expected.

Provider benefit

Healios acts to repair damaged mucosa, thereby reducing the severity of mucositis and its associated symptoms. This in turn minimizes the need for added palliative and supportive care treatments, and at times eliminating these all together.

Depending on the patient's health history and risk factors, some patients may experience some degree of pain from low-grade mucositis (or a different side effect in the oral cavity), so managing mild symptoms may still be required for some patients. However, the strength and frequency of those medications will be reduced when patients use Healios as indicated – at the beginning of treatment (or when first symptomatic) and daily throughout, or until the sores are gone.

Ordering and availability

Healios is an over-the-counter product, so patients can easily purchase it online and at select pharmacies including over 700 CVS stores across the U.S. We also offer wholesale pricing to hospitals, cancer treatment centers, and pharmacies interested in carrying Healios for their patient to access more easily and at a lower cost.

If you are interested in carrying Healios at your facility, please contact your sales representative or email us orders@enlivity.com

