

COMMENTARY

Oral Health and Nutraceuticals: Can Green Tea Treat Herpes?

Scott S. De Rossi, DMD | April 04, 2016

Topical Lipophilic Epigallocatechin-3-Gallate on Herpes Labialis: A Phase II Clinical Trial of AverTeaX Formula

Zhao M, Zheng R, Jiang J, et al

Oral Surg Oral Med Oral Pathol Oral Radiol. 2015;120:717-724

Nutraceuticals

With consumers considering nutraceuticals as a means to fortify their daily dietary intake as well as an alternative to over-the-counter and prescription drugs, the outlook for the global nutraceuticals market looks extremely positive. According to a recent study published by Transparency Market Research, the global nutraceuticals market stood at \$182.60 billion as of 2015 and will rise to \$278.96 billion by 2021.^[1] It is only a matter of time before numerous products fill the shelves at local grocery and drugstores. This study suggests that a green tea product boosts healing of herpes labialis.

Previous research indicates that potent antioxidants called catechins from the tea plant (*Camellia sinensis*) may have a therapeutic effect on virus infections.^[2] The aim of this study was to clinically evaluate a topical proprietary formulation containing catechins (AverTeaX® [Camellix, LLC; Evans, Georgia]) on recurrent herpes labialis. Zhao and colleagues performed a double-blind, placebo-controlled, randomized trial with 40 participants comparing AverTeaX against 100% glycerin USP. The green tea product or placebo was applied topically six to eight times daily.

The green tea group experienced a significant reduction in clinical episode duration of herpes labialis lesions and shortened blistering and ulceration stages within an episode. Median quality-of-life scores, based on a multiquestion survey, showed significant differences between the groups with respect to duration of itching and duration until symptom free (Table).

Table. Key Findings

Median	AverTeaX	Placebo
Lesion episode duration	4.5 days	9 days
Duration of itching	1 day	4 days
Duration to symptom free	4 days	8 days

No adverse effects of using this topical product were reported. The researchers concluded that the AverTeaX formulation containing lipophilic catechins effectively inhibited herpes simplex labialis infection with clinical significance.

Viewpoint

Green tea has been used as a medicine for thousands of years, originating in China but widely used throughout Asia. This beverage has a multitude of uses from lowering blood pressure to preventing cancer. Tea trails only water as the most commonly consumed beverage worldwide.

Green tea has more health benefits than black tea because of how it is processed. Black tea undergoes fermentation, whereas the manufacture of green tea avoids the fermentation process. As a result, green tea retains the maximum amount of antioxidants and polyphenols, the substances that give green tea its many benefits. The emerging benefits of green tea include cognitive improvement, weight loss, diuresis, and prevention of many conditions and diseases (cancer, genital warts, headaches, heart disease, Parkinson disease, stomach disorders, Crohn disease, and hypercholesterolemia).^[3,4]

Green tea continues to be extensively studied. Its medical benefits are growing daily, and new prescription and over-the-counter products are likely to emerge. In many cultures, the use of herbs is a time-honored approach to strengthening the body and treating medical illness. Yet, herbs contain active substances that can trigger side effects and interact with other herbs, supplements, or medications. Some have advocated that people with cardiovascular problems or hypertension, renal or liver disease, gastric ulcers, or psychological disorders, as well as pregnant and breastfeeding women, avoid green tea.^[5]

It is therefore incumbent on the oral health professional to continue to evaluate emerging evidence and to carefully and cautiously recommend nutraceuticals to their patients. At a minimum, based on this new study, it appears that AverTeaX and green tea antioxidants have the potential to provide effective topical treatment for recurrent herpes labialis. In future, the role for green tea in promoting and maintaining oral health may well expand.^[6]

Abstract

References

1. Transparency Market Research. Nutraceuticals Market (Functional Food, Dietary Supplements, Personal Care And Pharmaceuticals) - Global Industry Analysis, Size, Share, Growth, Trends, and Forecast 2015 - 2021. September 23, 2015. <http://www.transparencymarketresearch.com/global-nutraceuticals-product-market.html> Accessed March 4, 2016.
2. Cooper R, Morr  DJ, Morr  DM. Medicinal benefits of green tea: part I. Review of noncancer health benefits. *J Altern Complement Med.* 2005;11:521-528.
3. Cooper R, Morr  DJ, Morr  DM. Medicinal benefits of green tea: part II. Review of anticancer properties. *J Altern Complement Med.* 2005;11:639-652.
4. Steinmann J, Buer J, Pietschmann T, Steinmann E. Anti-infective properties of epigallocatechin-3-gallate (EGCG), a component of green tea. *Br J Pharmacol.* 2013;168:1059-1073.
5. Patel SS, Beer S, Kearney DL, Phillips G, Carter BA. Green tea extract: a potential cause of acute liver failure *World J Gastroenterol.* 2013;19:5174-5177.
6. Narotzki B, Reznick AZ, Aizenbud D, Lew Y. Green tea: a promising natural product in oral health. *Arch Oral Biol.* 2012;57:429-435.

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Cite this article: Oral Health and Nutraceuticals: Can Green Tea Treat Herpes? *Medscape.* Apr 04, 2016.

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