

**Vinh Nguyen, Class of 2025****Clerkship Campus:** CHI-St Joseph Health Regional Hospital – Bryan, TX**MSE Project Research Area:** Impact of Diet on Collagen and Skin Aging**Mentor:** Julie Boisen, M.D. (Dermatology)**ORCID:** [0000-0002-2342-248X](https://orcid.org/0000-0002-2342-248X)

Vinh Nguyen is a member of the Class of 2025 at Texas A&M School of Medicine. He is conducting research under the guidance of [Julie Boisen](#), M.D., who is a resident physician in the Department of Dermatology at Baylor Scott & White in Temple, Texas. Their goal is to write a review paper using peer-reviewed literature to determine the mechanisms by which different food groups impact skin aging with a specific focus on collagen. Collagen is a protein in the deeper layers of the skin that gives the skin structure and support. With increasing age, skin cells lose significant amounts of collagen probably because the body produces less of it. Other environmental factors such as ultraviolet radiation, pollution, and tobacco have been shown to accelerate this natural process by producing reactive oxygen species and up-regulating enzymes that destroy collagen. Combined, these factors lead to visible signs of skin aging such as wrinkles, fine lines, and sagging skin. Consuming certain food types may have a protective effect against collagen degradation. Food categories that will be examined in detail in this review include red vegetables and fruit (tomatoes for example), orange vegetables and fruits (carrots, mango), dark leafy green vegetables (kale), vitamin C-rich fruits (kiwi, blueberries), omega-3 fatty acid-rich foods (fish, flaxseed), polyphenol-rich beverages (green tea, coffee), and collagen peptide supplements. With the increasing popularity in the relationship between diet and skin aging, many patients approach dermatologists and other providers for recommendations. The goal of this review article is to produce a nutritional guide based on the current medical literature that will help dermatologists provide guidance to patients.