Skin Health evidence

	Oral Intake of Low-Molecular-Weight Collagen Peptide Improves Hydration, Elasticity, and Wrinkling in Human Skin: A Randomized, Double-Blind, Placebo-Controlled Study Abstract Collagen-peptide supplementation could be an effective remedy to improve hydration, elasticity, and wrinkling in human skin. The aim of this study was to conduct a double-blind, randomized, placebo-controlled trial to clinically evaluate the effect on human skin hydration, wrinkling, and elasticity of Low-molecular-weight Collagen peptide (LMWCP) with a tripetide (Gly-X-Y) content >15% including 3% Gly-Pro-Hyp. Individuals (n = 64) were randomly assigned to receive either placebo or 1000 mg of LMWCP once daily for 12 weeks. Parameters of skin hydration, wrinkling, and elasticity were assessed at baseline and after 6 weeks and 12 weeks. Compared with the placebo group, skin-hydration values were significantly higher in the LMWCP group after 6 weeks and 12 weeks. After 12 weeks in the LMWCP group, visual assessment score and three parameters of skin wrinkling were significantly improved compared with the placebo group. In case of skin elasticity, one parameter out of three was significantly improved in the LMWCP group from the baseline after 12 weeks, while, compared with the placebo group, two parameters out of three in the LMWCP group were higher with significance after 12 weeks. In terms of the safety of LMWCP, none of the subjects presented adverse symptoms related to the test material during the study period. These results suggest that LMWCP can be used as a health functional food ingredient to improve human skin hydration, elasticity, and wrinkling.
	Oral intake of collagen peptide NS improves hydration, elasticity, desquamation, and wrinkling in human skin: a randomized, double-blinded, placebo-controlled study Abstract Collagen hydrolysate, which contains bioactive peptides, is used as a dietary supplement for the refinement of elasticity, hydration, desquamation, and wrinkling of aging human skin. Here, we conducted a double-blind, randomized, and placebo-controlled oral administration study on the effects of a collagen peptide (CPNS) containing dipeptides, including Gly-Pro and Pro-Hyp, on skin wrinkling, desquamation, elasticity, and hydration. Our results show that an intake of 1650 mg per day of CPNS for 12 weeks had beneficial effects on skin health in a cohort of women aged from 30 to 60 years (n = 100). Compared with the placebo group, skin desquamation, hydration, skin wrinkling, and elasticity were significantly improved after 4, 4, 12, and 12 weeks of administration, respectively. In a safety test of CPNS ingestion, none of the participants showed any side effects during the clinical study period. These results demonstrate that the low molecular weight bioactive peptides contained in CPNS, such as Gly-Pro and Pro-Hyp, exert positive effects on skin hydration, elasticity, desquamation, and wrinkling.

	From Dysbiosis to Healthy Skin: Major Contributions of Cutibacterium acnes to Skin Homeostasis
	The microbiome extends to subepidermal compartments of normal skin Commensal microbes on the skin surface influence the behavior of cells below the epidermis. We hypothesized that bacteria or their products exist below the surface epithelium and thus permit physical interaction between microbes and dermal cells. Here, to test this hypothesis, we employed multiple independent detection techniques for bacteria including qPCR, Gram-staining, immunofluorescence, and in situ hybridization. Bacteria were consistently detectable within the dermis and dermal adipose of normal human skin. Sequencing of DNA from dermis and dermal adipose tissue identified bacterial 16S rRNA reflective of a diverse and partially distinct microbial community in each skin compartment. These results show the microbiota extends within the dermis, therefore enabling physical contact between bacteria and various cells below the basement membrane. These observations show that normal commensal bacterial communities directly communicate with the host in a tissue previously thought to be sterile.
	The Potential Uses of Omega-3 Fatty Acids in Dermatology: A Review Conclusion: This review yielded many well-studied benefits of O3FA uses in dermatology. Given its high safety profile, low cost, and ease of supplementation, O3FA is a reasonable supplement that may benefit patients wishing to improve inflammatory skin conditions through diet. Areas of particular clinical interest where supplementation may be valuable include O3FAs for systemic UV photoprotection, as well as adjuvant treatment for acne to reduce both inflammatory lesion count and the severity of mucocutaneous side effects associated with isotretinoin use.