

Improvement in Skin Moisture – Ohara et al. 2009

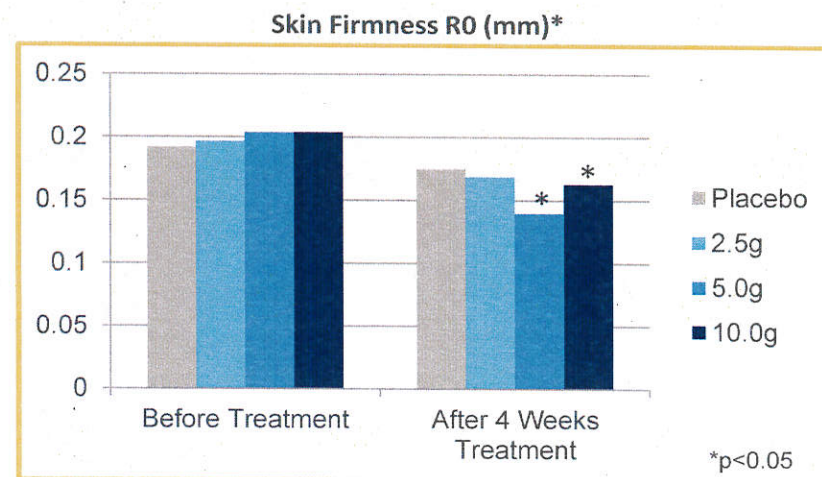
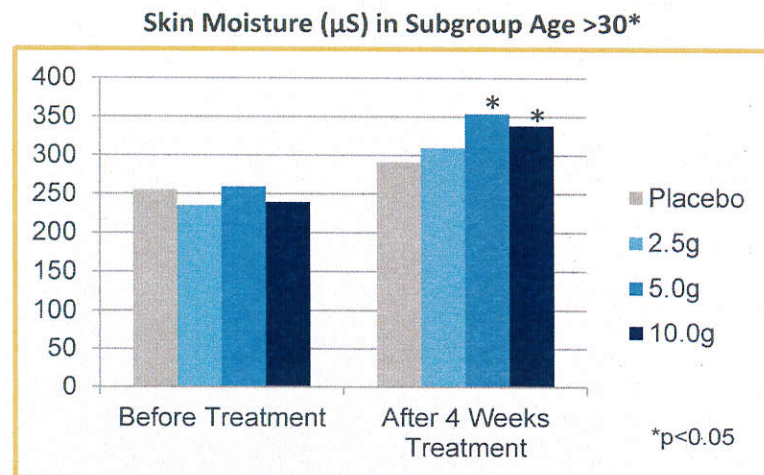
Study Design

- Double blind, placebo controlled, randomized
- Participants: 214 healthy female volunteers (mean age 34.1 +- 5.9 years)
- Supplementation: Collagen peptides oral dosage 2.5g, 5.0g and 10.0g per day vs. placebo
- Test period: 4 weeks
- Parameters tested:
 - Moisture content of stratum corneum (outer layer of epidermis)
 - Skin firmness
 - Transepidermal water loss
 - Viscoelasticity

Improvement in the Skin Moisture Content of Stratum Corneum Following 4 Weeks of Collagen Peptides Ingestion, Ohara et al. (2009)

Improvement in Skin Moisture – Study Results

- Significant increase in moisture content in all groups
- No significance was measured for moisture content, transepidermal water loss or viscoelasticity for the collagen peptide groups vs placebo
- A subgroup analysis in subjects > 30 years old showed a significant dose-dependent effect in skin moisture for collagen peptides vs placebo
- A dose-dependent effect in skin firmness with significant results was observed for 5 and 10g collagen peptides vs placebo



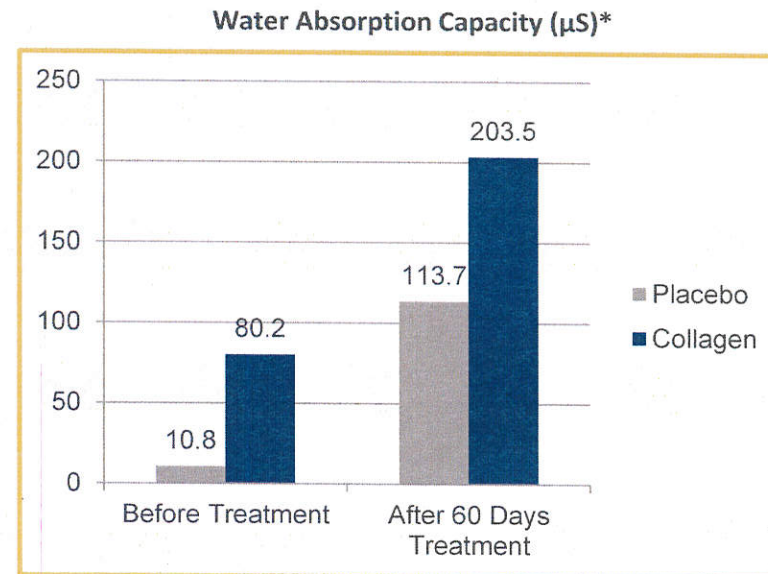
The Effect of Oral Ingestion of Collagen Peptide on Skin Hydration – Sumida et al. (2004)

Study Design

- Double blind, placebo controlled, randomized
- 39 healthy Japanese women (aged 20 - 30 years)
- Supplementation: Collagen peptides oral dosage of 10g per day vs. placebo
- Test period: 60 days
- Parameters tested:
 - Water absorption ability of stratum corneum (outer layer of epidermis)

Results

- Water absorption ability of stratum corneum of volunteers who ingested 10g of collagen peptides daily increased gradually through 60 days vs placebo



* adapted from Sumida et al. (2004)

GELITA Collagen Peptides for Beauty Applications



- Scientific backup for communication with consumers
- Recommended dosage of 5-10g / day.
- Halal certified fish and bovine grades available
- Excellent sensory profile for manifold applications



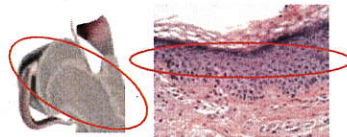
CDIAL Halal approved / accepted by MUI Indonesia

GELITA Collagen Peptides Preclinical Research Path

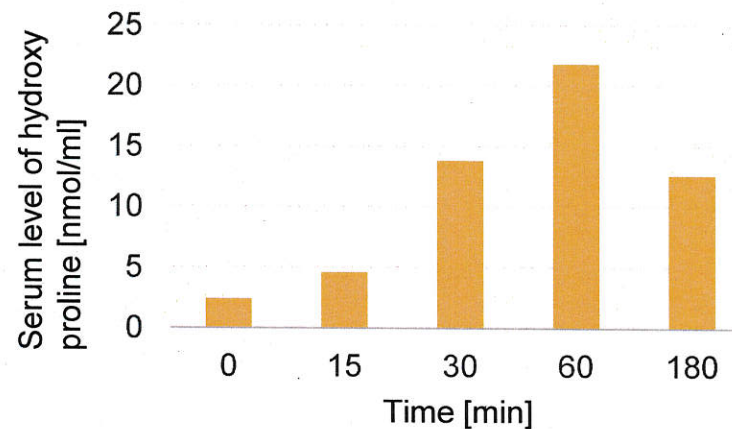
Rapidly absorbed,
partially in intact form



Distribution &
accumulation in the
target organ



Stimulatory and
regulatory effect in
bones, joints and the
skin



Iwai et al. (2005) J. Agric. Food Chem. 53: 6531-6536 (modified)

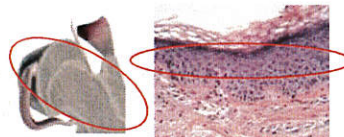
- Excellent and rapid absorption of collagen peptides after oral uptake (Iwai et al. 2005)
- Significant and continuous increase of collagen-specific amino acids in human blood after collagen peptide supplementation (Beuker et al. 1993)

GELITA Collagen Peptides Preclinical Research Path

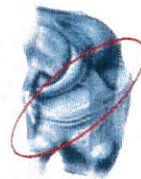
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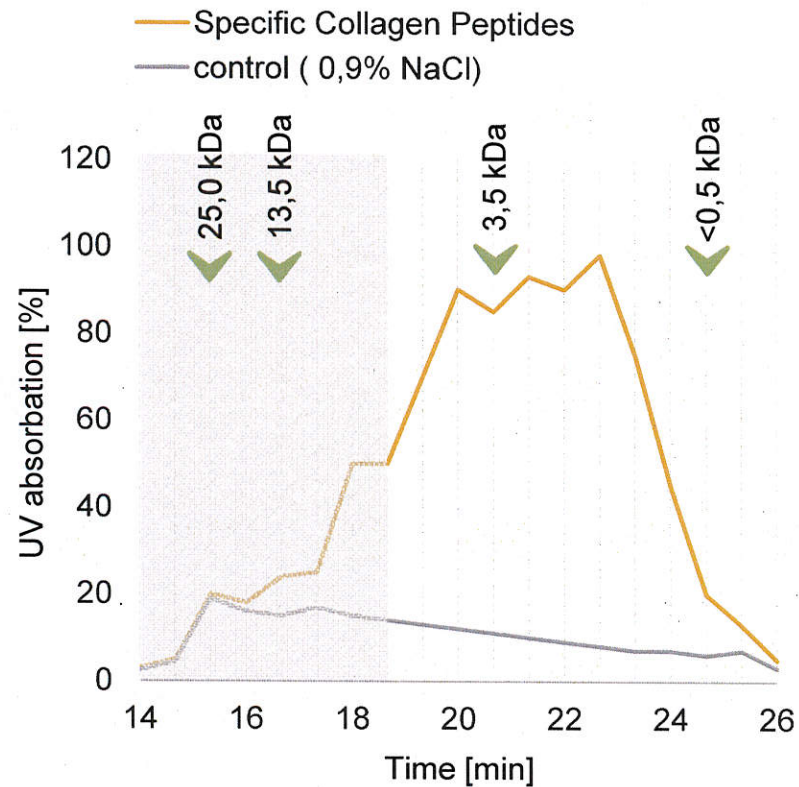
Distribution & accumulation in the target organ



Stimulatory and regulatory effect in bones, joints and the skin



Absorption profile of SCP



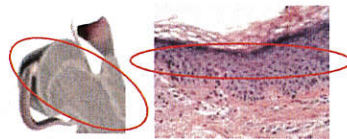
Oesser et al., J. Nutr. (1999), 129, (modified)

GELITA Collagen Peptides Preclinical Research Path

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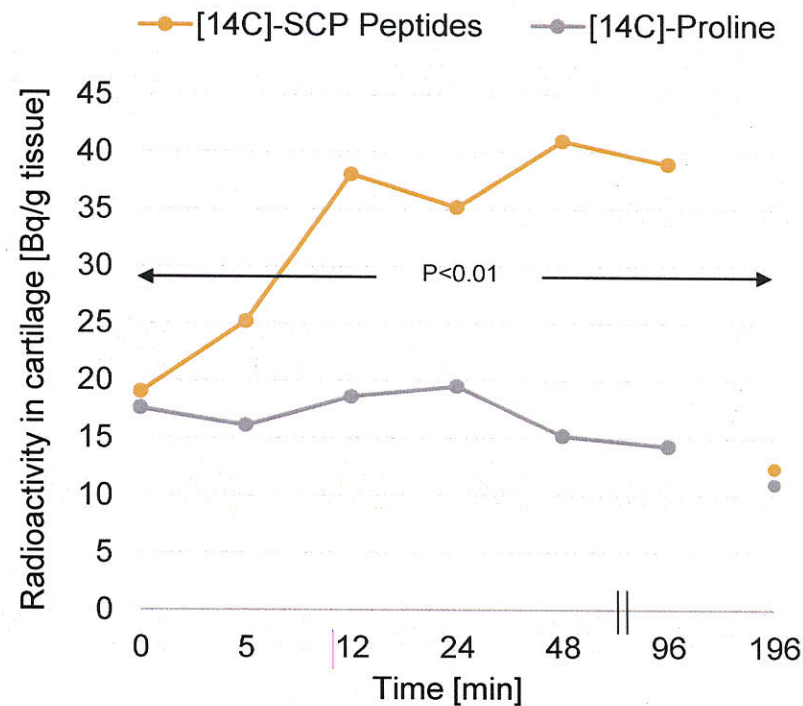
Distribution & accumulation in the target organ



Stimulatory and regulatory effect in bones, joints and the skin



Accumulation of SCP peptides in cartilage tissue



Oesser et. J. Nutr. (1999) 129 (modified)