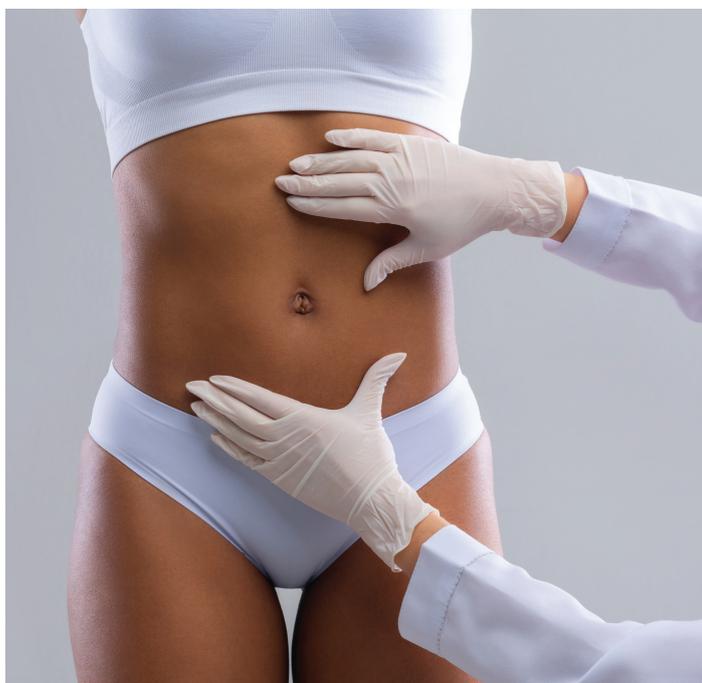


Gut

The gut health & skin connection

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Interesting results from the cystic acne study in healing the gut lining (connective tissue) with therapeutic dosage collagen amino acid peptides, as well as a clever mix of co-factors.



Our skin is a visible reflection of what is going on inside our body. Eczema, dry skin, acne and rosacea can be linked to gut health as their root cause. A great diet and proper hydration is key to healthy skin.

A compromised digestive system won't allow this to happen and we won't receive the essential nutrients for our physiological and aesthetic processes to function properly.

Why is collagen important for the skin?

Enzymatically hydrolysed collagen amino acid peptides help the skin regain elasticity and firmness and soften the fine lines and wrinkles. Moreover, collagen plays a huge role in stimulating gut health, both directly by providing the gut lining with the necessary amino acid peptides for repair, and indirectly by regulating the stress and sex hormones that affect gut functioning. The balance in the gut microbiome is essential for radiant, young, and blemish-free skin.

Immunity and gut health

Crucial as we battle COVID-19. Boost immunity by cutting out sugar and limit alcohol; eat a diet rich in vegetables, good fats and fibre.

If gut health deteriorates, this leads to Leaky Gut. If left unchecked, can cause autoimmune responses.

L-Glutamine is an amino acid which can repair and reverse the damaging affects of Leaky Gut Syndrome (when intestinal barriers no longer have tight junctions, holes form in the lining, causing toxins to leak into the blood stream).

Consuming Totally Derma® helps form connective tissue and "heals and seals" the protective lining of the gastrointestinal tract.

How does gut health affect skin?

Many studies support the existence of an intimate and bidirectional relationship between the gut and the skin. While certain gut bacteria encourage the anti-inflammatory response in the body, others facilitate inflammatory cell growth, which reflects onto the skin, causing acne and other skin conditions. The gut microbiome can also be affected by the emotional and nervous states. For example, feelings of worry, panic, stress, and anxiety are linked to adverse changes in the gut microflora that impact the skin negatively. The gut plays a very significant role in the metabolism of hormones and hormones have proven to greatly impact the health of the skin. There is more and more research, indicating that estrogen, the hormone that is said to be the key hormonal trigger when it comes to skin health may be affected by the gut microbiota.

3 months clinical study

Cystic Acne Skin

Introduction

The bacteria present in our gut have an enormous effect on our overall health and well-being, dictating many internal processes in our bodies. Poor gut health, including changes in the gut microbiome and permeability in the gut lining, allows particles and toxins to pass through the digestive tract into the bloodstream, where they can kick off an inflammatory cascade, known as a leaky gut syndrome. This inflammatory response can then be communicated to the skin, triggering cystic acne, dermatitis, rosacea, and other skin conditions.

As more and more research is emerging in support of the importance of the gut-skin connection for skin health, we were inspired to conduct a trial of our own and see if ingesting Totally Derma® could improve cystic acne.

Objective

This trial aimed to assess the benefit of ingesting nutraceutical collagen drink Totally Derma® for treatment of cystic acne following everyday use of the supplement for 12 weeks.

Background

The patient (female, age 25) began to develop mild acne in the late summer of 2020, which worsened and developed into cystic acne in a matter of a few weeks. The patient started a skincare regimen, comprised of topical products described below 2 months prior to the trial with no improvements.

Methodology

A 90-day supply of Totally Derma® was provided to the skin trial candidate. She was informed and understood the importance of compliance in drinking Totally Derma® daily.

The patient maintained her consistent skincare routine throughout the 3-month trial. For clinical research and data purposes, the candidate agreed to keep a journal of her weekly journey and submit 2 before photos (left and right side of the face) and subsequent weekly photos over the 12-week trial.

Skincare protocols

During the 3-month trial, the patient was following a skincare regimen consisting of 3 prescription topical products:

- Dermol 500 lotion
- Erythromycin (zineryt) lotion
- Benzoyl peroxide 5%

The candidate was not taking any oral medication throughout the trial. Neither could she undergo any clinical treatments due to severity of skin condition (microneedling, microdermabrasion, laser, etc.)

Improvement in skin



Excerpts from the diary

Week 2 "I could see a huge improvement in the rest of my face. My skin felt hydrated and the stubborn dry patches are starting to clear up. I can see the colour back in my cheeks and feel that my skin looks healthier and plumper."

Week 4 "A slight step back for my skin, due to feeling unwell with a cold. My skin has always suffered when I am feeling unwell so I am trying not to let this get me down as it is still far better than it was a month ago. I also skipped my drink a couple of nights due to feeling unwell."

Week 6 "This is the best my skin has looked in a VERY long time and the happiest I have felt since being diagnosed with cystic acne. The largest and more problematic cyst on my lower right cheek is starting to shrink down drastically. I am noticing that I am getting far fewer new spots."

Week 8 "My cysts have pretty much completely cleared up! I have had no drastic break outs in weeks."

Week 10 "This week has been challenging I have a few spots around my chin area due to just finishing my period. Apart from the cyst that popped up last week I have had no new cysts which is amazing! I feel like the scarring is much better. My skin is plumper, so my scars are a lot flatter"

Week 12 "Today marks the end of my 12-week course. I am so happy with the results. I am so relieved to have found the answer. My skin is clear of infection with just some scarring left, which is already starting to heal too."



Results of the trial

The patient noticed a huge improvement in the condition of her skin within the first 2 weeks of taking the supplement. She reported that swelling around the inflamed areas on her face had gone down and the cysts had flattened. In weeks 3 and 4, the candidate suffered from a cold, which triggered a worsening in her skin condition and she also skipped the supplement a few nights in a row. By the midpoint of the trial, a major difference can be seen between the baseline photos and photos taken during week 6 of ingesting Totally Derma®. The patient reported that "it is the best my skin has looked in a very long time".

In weeks 7 and 8 the candidate reported further clearing of the skin, followed by minor breakouts in weeks 9 and 10, which coincided with the luteal phase of her menstrual cycle – a phase that is often associated with the increased sebum production. By the end of the 3 months, the patient's skin had improved significantly and no active breakouts or cysts were reported.

The patient was very satisfied with her skin condition and her only concern was the post-acne scarring. The candidate reported that her skin remained clear for 2 months following the trial but 3 months after stopping Totally Derma® her acne has returned, however not nearly as aggressive as before the trial.

The gut-skin communication

The bacteria present in our gut play an important role in our skin's health. They help keep the skin barrier healthy and protect it against both internal and environmental stressors. When these processes are functioning properly, the skin loses less water (known as trans-epidermal water loss or TWEL) and can protect itself from "bad" bacteria, such as those that are responsible for acne. The exact mechanism through which the gut communicates with the skin is not fully known yet. What we do know is that certain gut microbes and their by-products promote the accumulation of anti-inflammatory agents, while others can facilitate the growth of inflammatory cells. Besides the direct relationship between the gut and the skin, there has also been research done on possible ways that the hormones or the brain could be involved in gut-skin communication.

Skin conditions, such as cystic acne and psoriasis have long been associated with hormonal imbalances. This is why birth control pills are sometimes prescribed as an acne treatment. But the gut bacteria is also involved in a significant way. The gut plays a very significant role in the metabolism of hormones and hormones have proven to greatly impact the health of the skin. For example, it is becoming more and more evident that estrogen, a hormone that plays a key hormonal role in skin health may be affected by the gut microbiota.

Collagen is a mediator in the gut-skin relationship

Collagen is a protein that is packed with the types of amino acids that our GI tract uses to repair and heal itself. By mending the damaged cells which comprise the gut lining, these amino acids regulate the gut microbiome and its permeability, thereby treating and preventing leaky gut syndrome.

Collagen has also been shown to reinforce the gut by making it more resistant to elastic stretching. This resistance is very important as excessive stretching makes the cells that comprise the gut lining misalign or sit further apart, which may eventually make the gut "leaky". The fascinating blend of amino acids or protein building blocks in collagen also helps to regulate stomach acid levels, facilitating the breakdown of protein-rich foods. On top of that, collagen assists with digestion, bowel movements and improves the bacterial balance in the gut microbiome. By keeping the gut healthy and balanced, collagen may help treat the causal issues of skin conditions, such as cystic acne from the inside.

The super-nutrient amino acids in collagen also help maintain balanced levels of hormones in the body, especially the stress hormone cortisol and the sex hormone estrogen. Estrogen has anti-inflammatory properties, so decreased estrogen levels can lead to inflammation in the gut and skin issues, such as acne and rosacea. By regulating the estrogen and cortisol levels, collagen helps maintain a healthy gut and clear, firmer-looking skin.

There are different types of collagen, e.g. type I, type II, type III, and many more. The types that are most important for gut health maintenance and intestinal support are types I and III as they are the types found in our GI tract. From the various sources of collagen, e.g., marine, bovine, etc., it is bovine that contains I and III in the largest amounts. Totally Derma® Nutraceutical Collagen drink supplement contains bovine collagen in a hydrolysed form, which simply means the large protein molecules have already been broken down into their smaller peptide form for easier absorption in the gut.