

## The Hidden Connections Between Skin Health and Overall Wellness

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#### STORY AT-A-GLANCE

- > In my interview with Dr. Keira Barr, a functional dermatologist and melanoma survivor, we explore the complex connections between skin health, diet, stress and emotions, advocating for a holistic approach to dermatology
- > Psychodermatology examines the mind-skin connection, revealing how stress, anxiety and childhood trauma can manifest as visible skin conditions and influence overall wellbeing
- > Sun exposure requires a balanced approach, considering factors like diet (especially vegetable oil consumption), skin color and body composition to maximize benefits while minimizing risks
- > Skin issues are often indicators of deeper health concerns. Barr encourages viewing skin problems as invitations to explore underlying physical and emotional factors
- Your gut-skin axis plays a crucial role in skin health. Disruptions in gut bacteria, such as those caused by oxalate imbalances, can lead to skin conditions like prurigo nodularis

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Beneath the surface of your largest organ — your skin — lies a complex web of connections to your diet, your stress levels and even your deepest emotions. Dr. Keira Barr, a pioneering functional dermatologist and author of the book "The Skin Whisperer," has made it her life's work to unravel these intricate relationships.

In our interview, we dive into Barr's remarkable journey from melanoma survivor to holistic skin health revolutionary. Our discussion highlighted the hidden factors influencing your skin's health, challenging conventional wisdom and offering a fresh perspective on achieving radiant health from the inside out.

Barr's journey into functional dermatology began with a shocking personal diagnosis. As she shared, "About 12 years ago, my own health started falling apart ... As a dermatologist, it was very humbling. The focus of my career at that time was skin cancer, melanoma. My own skin started changing, and I had to diagnose myself with early melanoma."

This experience was a turning point for Barr, leading her to explore the deeper connections between overall health and skin health. She realized that her approach to dermatology needed to evolve beyond just treating symptoms.

## **The Mind-Skin Connection**

There's a little-known dialogue between your thoughts and your skin, or a mind-skin connection. The field of psychodermatology explores this intricate interplay between your mental state and skin health, revealing how stress, anxiety and childhood trauma can manifest as visible skin conditions.

- The implications of psychodermatology This emerging discipline challenges us
  to view our skin not just as a protective barrier, but as a dynamic mirror of our inner
  emotional landscape, capable of both reflecting and influencing our psychological
  well-being.
- The connection between our skin and mind Barr explains, "Psychodermatology is
  a relatively new field in dermatology, about 40 years, but we've known for so much
  longer than that eons about the connection between our mental health and our
  skin simply because the brain and the skin are embryologically derived from the
  same layer of tissue. They're communicating with each other all the time."<sup>2</sup>

Stress plays a role in cancer development — One example Barr gave is the link
between stress and the risk of cancer. She explains, "Chronic and traumatic stress
does play a role in all cancers, but specifically in skin cancer in the biology life
cycle. And they've shown that childhood adverse events coupled with stress in
adulthood most definitely plays a role in tumor formation, progression, metastasis
and response to treatment ...

What contributes to stress includes how we are nourishing our body, how we are sleeping, how we are moving, how we are spending our time, and not being able to necessarily process and metabolize the emotional experiences and traumatic experiences that we may have had at some point in our life."

This underscores the importance of addressing not just physical factors but also emotional and psychological aspects when dealing with skin health and disease prevention.

While the impact of psychoemotional stressors on health is well-established, it's crucial to recognize that physical stressors can have equally significant effects through similar neuroendocrine pathways, primarily involving cortisol and adrenaline. This aspect is often underappreciated in both public understanding and medical practice.

- A low-carb diet influences skin health In Barr's case, her low-carbohydrate diet likely induced a substantial increase in cortisol levels. This dietary-induced stress, compounded by a high intake of polyunsaturated fats (PUFs), likely created a state of metabolic stress that exceeded the impact of her emotional stressors.
- Your diet, hormones and overall health are interlinked The physiological response from Barr's experience demonstrates the intricate interplay between diet, hormonal balance, and overall health. It underscores the importance of considering both psychological and physiological stressors in assessing and managing health conditions.

The body's stress response doesn't differentiate between emotional and physical triggers, leading to similar hormonal cascades that can significantly affect metabolic health and overall well-being.

Sadly, even though she readily agreed with my suppositions, as you can see by watching the interview, I was unable to convince her of this likelihood. This highlights a common challenge in health care: the difficulty in shifting established perspectives, even when presented with evidence of alternative factors contributing to health issues.

It emphasizes the need for ongoing education and open dialogue in the medical community about the complex interactions between diet, stress, and hormonal health.

### The Importance of Sun Exposure

Our discussion on sun exposure revealed some interesting differences in our approaches. While I've long been an advocate for responsible sun exposure, Barr took a more cautious stance. She emphasized the importance of being "sun savvy" and "sun smart," acknowledging the benefits of early morning sun exposure while also highlighting the risks of skin cancer.

• Skin cancer in North America — Skin cancer is the most prevalent form of cancer in both the U.S. and Canada. The key is understanding how to protect yourself from overexposure to the sun while still reaping the benefits. If you've consumed a diet rich in vegetable or seed oils, exercise extra caution with sun exposure.

These oils contain linoleic acid (LA), an omega-6 fat highly susceptible to oxidation from ultraviolet (UV) radiation. Sunlight breaks down these oils in your skin, triggering inflammation and DNA damage.

- Be careful with sun exposure It's advisable to limit sun exposure until you've
  eliminated these oils from your diet for at least four to six months. Your unique
  physical traits also play a role in how much sun exposure is ideal for you. Skin color,
  determined by melanin content, is a prime example darker skin requires more sun
  exposure to produce equivalent vitamin D levels compared to lighter skin.
- Body fat stores toxins Body composition, particularly fat percentage, is another
  critical factor. Adipose tissue can store fat-soluble compounds, including oxidized
  vegetable oils. Those with higher body fat may need to take extra caution regarding

sun exposure, as these stored oils can prolong the risk period even after dietary changes.

- Perform a sunburn test To gauge safe sun exposure, especially with a history of vegetable oil consumption, monitor your skin for redness or burning. This "sunburn test" accounts for factors like season and skin type. If you don't notice even slight pinkness, your exposure was likely within a safe range. Always avoid sunburn, as it indicates overexposure.
- Optimal exposure time during transition As you reduce your body's LA stores, your risk of sunburn and skin cancer decreases significantly. However, remain mindful of sun exposure, particularly during the transition period. While reducing vegetable oils in your diet, avoid peak sunlight hours typically an hour before and after solar noon.

In most of the U.S. during summer, this means avoiding direct sun from 11 a.m. to 3 p.m. during Daylight Saving Time, or 10 a.m. to 2 p.m. in Standard Time. As your body detoxifies from accumulated seed oils, gradually increase your time in the sun. Eventually, you may tolerate an hour or more during peak sunlight.

Remember, individual skin responses vary, so listen to your body during this adjustment. The golden rule: never let your skin burn. Sunburn indicates damage, so seek shade immediately if you notice redness.

## **Beyond Skin Deep — Your Skin Is a Window to Your Overall Health**

Your skin has an important role as an indicator of overall health. As Barr put it, "Your skin is this living, breathing organ. It's an endocrine organ. It really can give you so much information about what's happening beneath the surface."

The skin as a window to your health — Barr encouraged a shift in perspective, viewing skin issues not as problems to be fixed, but as invitations to explore deeper health concerns. "Rather than looking at your skin as a problem to be 'fixed', it's really an invitation to get so curious about what might be the one variable that I can

change. How can I support myself to live and feel better just by getting really curious about what's showing up on my skin?"

Your emotions affect your skin health — In one case study, Barr shares, "I've recently had a client come to me and she was struggling with chronic hives. What's very interesting is that there was a recent paper that came out about chronic urticaria, which is the medical term for hives and childhood trauma."5

This client's condition wasn't responding to conventional treatments. Upon digging deeper, Barr discovered that the client was facing resistance from friends and family about a career change.

Barr noted, "She doesn't feel heard, she doesn't feel validated, she doesn't feel seen. So isn't it so interesting that her skin essentially is shouting, it is screaming, it is saying, 'Give me attention, look at me." By addressing these underlying emotional issues, the client's hives began to improve without relying solely on topical treatments.

### **Body-Oriented Techniques for Skin Health**

While I appreciate Barr's focus on the emotional component, I emphasized the need for a comprehensive approach that also considers physical factors like cellular energy and nutrition.

- It's time to consider the emotional aspect Barr agreed with my statement, saying,
   "For me, it's always about both. The problem is the mental-emotional has been left out of the conversation for way too long."
- Incorporate walking In terms of movement, I believe walking should be prioritized
  over other forms of exercise. Aim for about an hour of walking daily, ideally spread
  throughout the day. Barr agreed, adding that walking is accessible, allows us to
  connect with nature and can serve as a form of meditation.

## **My Personal Battle with Prurigo Nodularis**

I shared with Barr the most challenging health issue I've ever faced — prurigo nodularis. Don't let the complex Latin name fool you; it simply means "itchy nodules." But it's far more than just an itch. The itching is so intense that it can drive people to the brink.

- My history with prurigo nodularis For 15 years, I struggled with these itchy nodules on my skin. Conventional and traditional treatments barely touched it.
   Steroids, anti-itch creams, even lidocaine they'd work briefly, but the relief didn't last. Then, just a few months ago, I had a breakthrough.
- Investigating the issues plaguing skin health As I explained in my new book,
   "Your Guide to Cellular Health: Unlocking the Science of Joy and Longevity," I
   discovered what I believe is the root cause of my condition: an excess of oxalates in
   my body. Now, most people have never heard of oxalates, but they're in foods we eat
   every day spinach, almonds and others.
- Environmental factors wrecking your health In my case, my gut health was
  severely compromised, a condition unfortunately common in today's environment.
  This damage was primarily caused by an overabundance of mitochondrial toxins,
  which are prevalent in our modern world.

These toxins had a devastating effect on my gut microbiome, particularly decimating the population of Oxalobacter formigenes, a beneficial oxygen intolerant bacterium crucial for oxalate metabolism.

- Mercury exposure further exacerbates health issues Compounding this issue
  was the inadvertent exposure to mercury, a potent neurotoxin and nephrotoxin. This
  exposure occurred during the removal of multiple silver dental amalgams, a
  procedure that was performed without adequate safety precautions. The released
  mercury not only further disrupted my gut ecosystem but also inflicted significant
  damage on my kidneys.
- Safe procedures are now more important than ever The combination of factors —
  the loss of beneficial gut bacteria and the toxic effects of mercury created a
  perfect storm of health challenges. It underscores the interconnectedness of our

body systems and the far-reaching consequences of environmental toxins on our health.

Moreover, it highlights the importance of proper medical procedures and the need for a holistic approach to health that considers the complex interplay between gut health and environmental exposures.

Take control of your gut health — Why is this important? Exposure to certain
environmental toxins, or mitochondrial poisons, including LA, disrupts the delicate
oxygen balance in your gut. These toxins increase oxygen levels in your colon,
creating an environment where these oxalate-eating bacteria can't survive.

When these bacteria disappear, we lose our natural defense against oxalate buildup. And it's not only about the itchy skin — these oxalates can form painful kidney stones too. But here's the twist: in the right conditions, oxalates aren't all bad. They're made of two carbon dioxide (CO<sub>2</sub>) molecules, which is beneficial if properly broken down. Your body needs CO<sub>2</sub> — it's not just a waste product.

In my case, I believe this disruption in my gut bacteria led to an oxalate overload. My body, trying to get rid of these excess oxalates, pushed them out through my sweat glands and hair follicles. This triggered an inflammatory cascade in my skin, resulting in those maddening, itchy nodules of prurigo nodularis.

This experience reinforced my belief in the gut-skin axis, showing how imbalances in your gut microbiome can manifest in surprising ways on your skin. It also highlights the importance of maintaining a healthy gut environment.

## A New Paradigm for Skin Health

As we wrapped up our enlightening conversation, it became clear that we're on the cusp of a new era in dermatology. The insights shared by Barr, coupled with my own experiences, paint a picture of skin health that goes far beyond the surface.

 All factors play a role to achieve optimal health — We're now moving away from a symptom-focused approach toward a holistic understanding that encompasses diet, lifestyle, emotional well-being and gut health.

Take care of your skin — Your skin is not just as an organ to be treated, but a
messenger of your overall health. Take the time to listen closely to what your skin is
telling you, dig deeper when issues arise, and seek to address the root causes
rather than merely managing symptoms.

As we continue to unravel the complex connections between skin and overall health, we open up new possibilities for healing and disease prevention that could revolutionize not just dermatology, but our approach to health as a whole.

# Frequently Asked Questions on Skin Health and Functional Dermatology

Q: How does stress and emotional health impact skin conditions?

A: The mind-skin connection, explored in psychodermatology, reveals that stress, anxiety and past trauma will be able to manifest as skin conditions like hives, eczema and even skin cancer. Chronic stress triggers hormonal imbalances that affect skin health, making emotional well-being an essential factor in dermatology.

#### Q: What role does diet play in skin health?

**A:** Diet significantly impacts skin health by influencing inflammation, hormone levels and metabolic stress. High consumption of polyunsaturated fats (PUFs) and an imbalance of nutrients can contribute to skin issues. Eliminating inflammatory vegetable oils, maintaining a nutrient-rich diet and supporting gut health will help improve skin conditions.

Q: How does sun exposure affect skin health, and what precautions should be taken?

**A:** Sun exposure is essential for vitamin D production but must be managed wisely. Excess linoleic acid (LA) from vegetable oils in the diet makes skin more susceptible to UV damage. To reduce risk, avoid peak sun hours, gradually increase exposure after dietary changes and monitor your skin to prevent sunburn.

#### Q: What is the gut-skin axis, and how does it relate to skin conditions?

**A:** The gut microbiome plays a critical role in skin health. Imbalances, such as a loss of beneficial bacteria, lead to oxalate buildup in the body, contributing to inflammatory skin conditions like prurigo nodularis. Supporting gut health through diet and reducing exposure to toxins like mercury will help improve skin function.

#### Q: How should skin issues be approached from a functional medicine perspective?

**A:** Rather than merely treating symptoms, functional dermatology looks at skin conditions as indicators of deeper health imbalances. Addressing root causes — such as stress, diet, gut health and toxin exposure — offers a more effective, long-term approach to skin healing and overall well-being.

#### **Sources and References**

• 1, 2, 3, 4, 5, 6 Youtube, Dr. Mercola, The Hidden Connections Between Skin Health and Overall Wellness — Interview with Dr. Keira Barr