

THE SIGNIFICANCE AND ROLE OF THE MICROBIOME FOR SKIN HEALTH

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Healthy human skin in its epidermal and dermal layers is colonized by a diverse population of microorganisms that we call microflora (microbiota) of the skin. Microbiome is a term that refers to the genetic material of all microorganisms that live on and inside the human body, have their own purpose and style of protection of the human body, and can be seen as a key component in the function of the skin as a barrier against threats and infections from the environment. When looking at the role of the microbiome in maintaining skin health, it is first important to understand that this is a two-way dynamic relationship - healthy skin is necessary to maintain a healthy microbiome, and a balanced skin microbiome also contributes and helps maintain the skin barrier, as well as maintaining a healthy and stable skin environment. However, if the composition of the normal skin microbiome is disrupted, inflammation, irritation, dryness, itching and deterioration of the skin can occur, challenging our immune system, leading to inflammatory conditions such as acne, atopic dermatitis and psoriasis (1). The interrelationship between microbial communities and us as hosts is essential to health, gaining better insight into the pathophysiological aspects of skin diseases and helping to develop age-appropriate treatments, as well as the development of cosmetic products, which involves one of three basic approaches, which is an attempt to balance or improving the skin microbiome, protecting the skin microbiome, and activating the microbiome to achieve different effects on the skin (2).

References

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ZNAČAJ I ULOGA MIKROBIOMA ZA ZDRAVLJE KOŽE

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Zdrava ljudska koža u svom epidermalnom i dermalnom sloju kolonizovana je raznolikom populacijom mikroorganizama koju nazivamo mikroflora (mikrobiota) kože. Mikrobiom je termin koji se odnosi na genetski materijal svih mikroorganizama koji žive na i unutar ljudskog tela, poseduju svoju svrhu i stil zaštite ljudskog tela i može se posmatrati kao ključna komponenta u funkciji kože kao barijere protiv pretnji i infekcija iz životne sredine. Kada posmatramo ulogu mikrobioma u održavanju zdravlja kože, najpre je važno shvatiti da je ovo dvosmerni dinamički odnos – zdrava koža je neophodna za održavanje zdravog mikrobioma, a balansiran mikrobiom kože takođe doprinosi i pomaže u održavanju kožne barijere, kao i održavanju zdravog i stabilnog okruženja kože. Međutim, ako se poremeti sastav normalnog mikrobioma kože može doći do upala, iritacije, suvoće, svraba i pogoršanja stanja kože, izazivajući naš imuni sistem, što dovodi do inflamatornih stanja kao što su akne, atopijski dermatitis i psorijaza (1). Uzajamni odnos između mikrobnih zajednica i nas kao domaćina je od suštinskog značaja za uspostavljanje dobro kontrolisane i delikatne ravnoteže potrebne za zdravu kožu. Razumevanje mikrobioma kože u svim fazama života je važno za određivanje uticaja ranih promena u mikrobiomu na zdravlje, sticanje boljeg uvida u patofiziološke aspekte kožnih bolesti i pomoć u razvoju tretmana prilagođenih uzrastu, kao i razvoj kozmetičkih proizvoda koji podrazumeva jedan od tri osnovna pristupa, a to je pokušaj balansiranja ili poboljšanja mikrobioma kože, zaštita mikrobioma kože i aktiviranje mikrobioma u ostvarivanju različitih efekata na koži (2).

Literatura

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