

BioGaia® Aldermis™ **BABY**

Promotes a Healthy Skin Microbiome in Babies'



Gentle
Skin Care
with
probiotics



BioGaia®
Supporting your invisible heroes

Intended for Health Care Professionals

All babies have sensitive skin

At birth, babies undergo a dramatic transition from a watery to a dry environment. While their skin will continue to develop after birth, it cannot fully perform all its functions until the skin microbiome is fully established by the age of 3 to 4 years.

- The outermost layer is 30% thinner than adult skin. Makes it more prone to dryness.
- Babies' skin has a higher pH at birth, but after a few weeks, it becomes similar to that of an adult.
- Babies' skin holds more water but loses it more quickly. When it becomes dry, the skin loses its barrier function.
- Babies' skin has fewer natural moisturizing agents, fewer lipids, less melanin, and smaller skin cells.
- Babies have lower activity in their sebaceous (oil) and sweat glands compared to adults. This decreased activity can result in their skin being more delicate and reactive.





Essential tips for babies' skin



Avoid preservatives

Why: Some preservatives can cause irritation and allergic reactions in sensitive baby skin and disrupt the skin microbiome.

Recommendation: Choose products specifically formulated for infants that are free from harsh preservatives.¹³



Opt for plant based products

Why: Plant-based ingredients are often gentler and less likely to cause irritation.

Benefits: Plant-based products typically contain fewer synthetic chemicals and are enriched with natural moisturizers and antioxidants.¹³



Limit washing

Why: Over-washing can strip away natural oils and disturb the skin microbiome, leading to dry and irritated skin.

Guide: Bathe infants a maximum of 2–3 times a week and use gentle, soap-free cleansers.⁵



Protect the skin microbiome

Importance: A healthy microbiome is crucial for skin barrier function and immune defense.

Disruptors: Overuse of antibacterial products, harsh soaps, and excessive bathing can disturb the natural balance of skin microbes.

Recommendation: Use mild, microbiome-friendly cleansers and avoid products with alcohol and synthetic fragrances.^{3,4}

Skin Microbiome

The skin microbiome is a diverse community of beneficial microorganisms that inhabit the skin's surface. It is now known that the skin microbiota is a significant part of the skin and has an important role in its protection through its interaction with different skin cells, barrier function genes, the production of chemical modulators, and defending against invading pathogenic or opportunistic bacteria. When this balance is disrupted, issues can range from oily or dry skin to chronic conditions like eczema. A reduction in healthy bacteria allows harmful bacteria to thrive, leading to further skin problems.

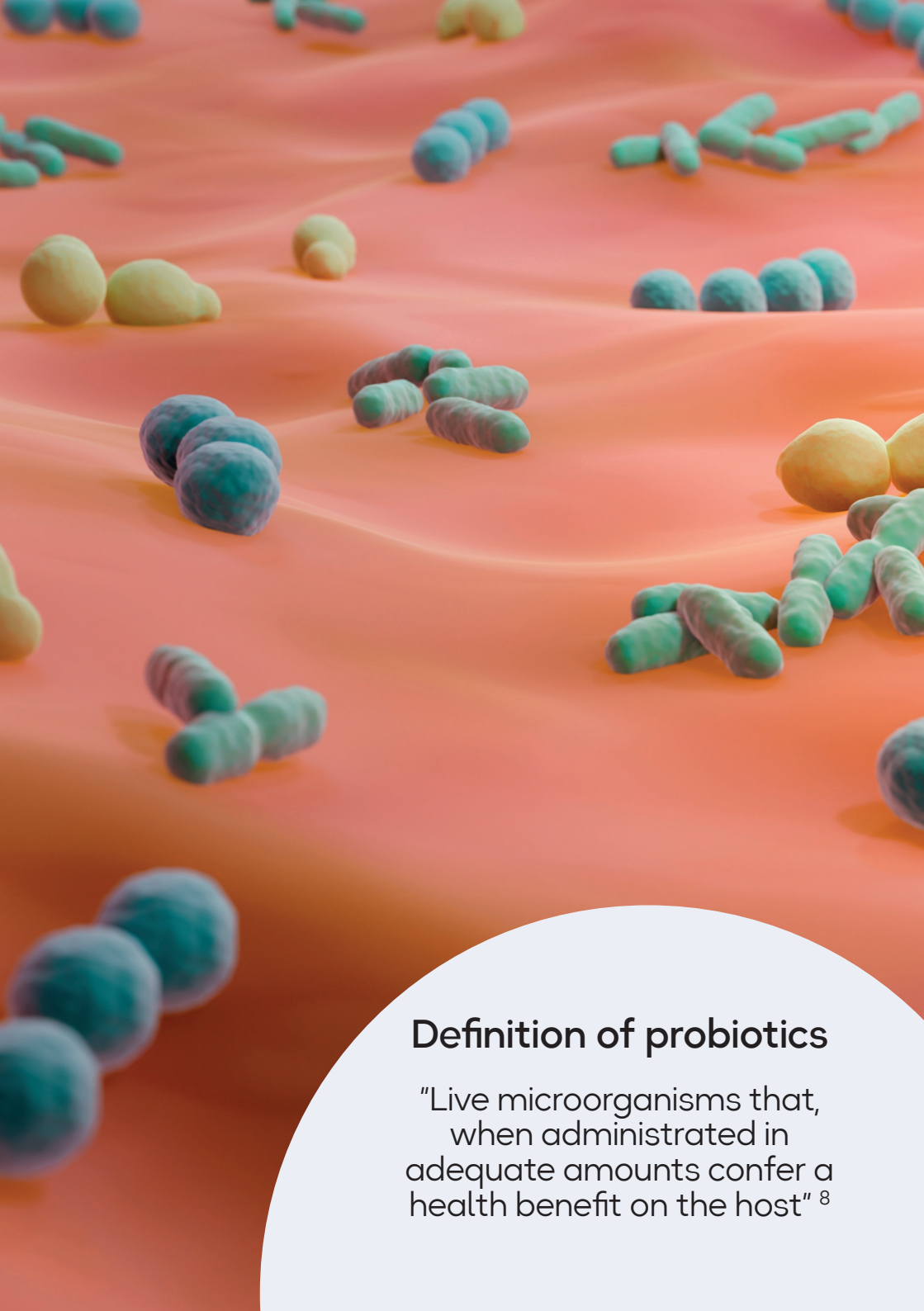
By age 3–4, a child's skin microbiome and skin immunity response are established. We need to protect and cultivate a rich microbiome early to help children develop healthy, resilient skin.^{6,7}

Probiotic Skin Care

Probiotic skincare involves using live beneficial bacteria to improve the health and appearance of the skin. Probiotics help to balance the skin microbiome, reduce inflammation, and enhance skin barrier function.

Insights on Probiotic Skin Care

- Different strains of probiotics can have different effects.
- Being able to identify the specific strain is important, and that the strain has been tested in clinical studies to ensure it's safe.
- Make sure the product is backed by science.
- Not all products that claim to contain live bacteria actually do.



Definition of probiotics

"Live microorganisms that, when administrated in adequate amounts confer a health benefit on the host" ⁸

Nurtures and balances baby's sensitive skin.



PROBIOTIC
SKIN CARE



BioGaia®

Aldermis™ **BABY**

FOR DRY AND SENSITIVE SKIN

Probiotic Ointment

Net wt. 0.8 oz (23 g)

Properties

BioGaia® Aldermis™ BABY is a versatile probiotic ointment designed to nurture and protect babies' delicate skin. Enriched with natural plant-based oils and beneficial probiotics, it effectively soothes dry and irritated skin, strengthens the skin barrier, and enhances the skin's appearance and feel.⁹⁻¹²

Facts

Soothes chafing, flaking, rashes, and other skin irritations.¹⁻⁷
Safe and gentle.
Steroid-free
Dermatologically tested.⁹⁻¹²

Ingredients

Shea butter, canola oil, hydrogenated vegetable oil and *L. reuteri* DSM 17938

Application and Usage

- Apply a small amount to the affected area
- Use twice daily, or as needed
- Suitable for daily use



Key benefits of *L. reuteri* DSM 17938*¹⁰

Anti-inflammatory Properties

L. reuteri DSM 17938 has demonstrated significant anti-inflammatory effects, making it effective in reducing symptoms associated with inflammatory conditions like atopic dermatitis.

Improved Skin Barrier Function

L. reuteri DSM 17938 supports skin barrier function by promoting the production of tight junction proteins, which are essential for maintaining skin hydration and reducing trans-epidermal water loss.

Antimicrobial Defence

This probiotic strain produces antimicrobial substances such as reuterin, which can inhibit both Gram-positive and Gram-negative bacteria, helping to protect the skin from infections.

* *Limosilactobacillus reuteri* DSM 17938



Plant-based ingredients are gentle, natural, and less likely to irritate a baby's delicate skin. They provide essential nutrients and are free from harsh chemicals, making them a safer choice for babies.¹⁴

Plant-based ingredients' effect on the skin

Protective Barrier

Shea butter creates a protective barrier on the skin's surface, which helps to shield baby skin from environmental factors such as cold, dry air, and wind. Hydrogenated vegetable oil, which is often used in skin care products for its texture and stability, also helps in forming a protective layer that safeguards against moisture loss.¹³

Soothing Properties

Both shea butter and canola oil have anti-inflammatory properties that can help soothe irritation and calm redness on sensitive skin. This is particularly beneficial for babies who suffer from skin irritations.¹³

Gentle Care

Plant-based oils are generally considered to be gentler than synthetic oils and are less likely to cause allergic reactions or irritate sensitive skin. This makes them suitable for use in baby skincare products.¹⁴

Moisturizing & Hydration

Shea butter is renowned for its excellent moisturizing properties. It's rich in fatty acids and vitamins A and E, which are essential for maintaining skin moisture and preventing dryness. Canola oil and hydrogenated vegetable oil also serve as emollients that can help to keep baby skin soft and hydrated by forming a barrier on the skin that retains moisture.^{13,14}

Rich in nutrients

Shea butter is not only a great source of essential fatty acids but also has natural antioxidants. Canola oil is rich in omega-3 and omega-6 fatty acids, which are crucial for maintaining healthy skin. These nutrients help in nourishing the skin and promoting its overall health.^{13,14}

The Science behind¹⁰

BioGaia® Aldermis™ BABY was tested in a randomised double-blind placebo controlled trial with adults with atopic dermatitis.

Each subject participated in the study for 8 weeks and came for 3 study visits; baseline (day 0), day 28 (visit 2), and day 56 (visit 3).

Study results

Improved Skin Conditions
Well-tolerated
Reduced Dryness
No Adverse Reactions

Results

Significant Improvement in Skin Condition:

The probiotic ointment led to a statistically and clinically significant improvement in the SCORAD index and local SCORAD in adults with atopic dermatitis after 4 and 8 weeks of use.

High Tolerance and Safety:

The probiotic ointment was well-tolerated by all participants, with no significant adverse events reported.

Reduced Dryness:

The probiotic ointment showed promising trends in reducing skin dryness, a common symptom in atopic dermatitis.

Reduced Symptoms:

Both itching and sleep loss were significantly reduced in the probiotic group, with a 58% reduction in itching and a 78% reduction in sleep loss.

Positive Feedback from Participants:

Participants rated the probiotic ointment as very good or good in terms of cutaneous and cosmetic acceptability.

No Significant Adverse Reactions:

Throughout the study, no significant adverse reactions were reported, confirming the safety of the probiotic ointment for sensitive skin.

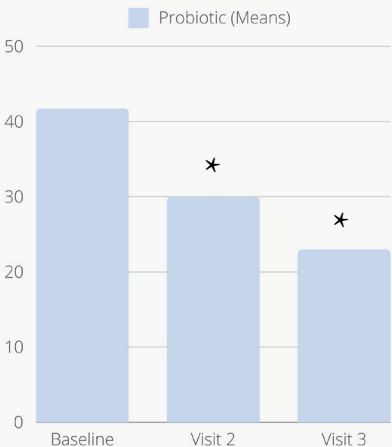
SCORAD index

Figure 1

Bar chart showing the mean reduction in SCORAD index (1) of the subjects after continuous use of the probiotic or control product at baseline, visit 2 (day 28) and end of study visit 3 (day 56)

Each error bar is constructed using one standard deviation from the mean *, significance value of $p < 0.001$

1. The SCORAD index is a tool for assessing the severity of atopic dermatitis by evaluating the affected body area, intensity of symptoms (like redness and swelling), and patient-reported symptoms (itchiness and sleep loss).



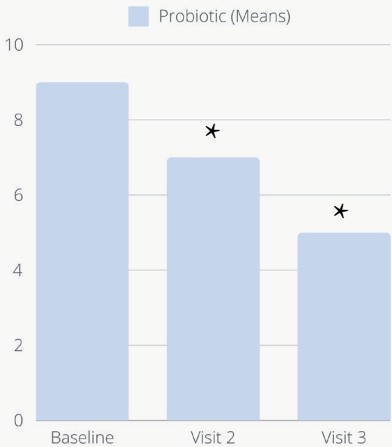
Local SCORAD

Figure 2

Figure 2. Bar chart showing the mean reduction in Local SCORAD (2) of the subjects after continuous use of the probiotic product at baseline, visit 2 (day 28), and end of study visit (day 56).

Each error bar is constructed using one standard deviation from the mean. *, significance value of $p = 0.001$

2. The Local SCORAD index focuses on specific areas of the skin, assessing the intensity of symptoms in those localized regions to monitor treatment effects.



BioGaia® **BABY** Care

Skin Care & Gut Health

Support for Holistic Patient Care

The ointment complements BioGaia's existing probiotic products, offering a comprehensive approach to patient health by supporting both internal and external wellness. Enhance your patient care toolkit with a product that aligns with BioGaia's trusted reputation.

BioGaia® Aldermis™ **BABY** Skin Care Ointment

BioGaia Protectis® **BABY** Drops



Product Facts

BioGaia® Aldermis™ BABY

Product	A multi-purpose ointment probiotics and plant-based oils for babies and kids to soothe dry and sensitive skin.
Packaging	25 ml tube.
Usage	<ul style="list-style-type: none">• Suitable for infants and children.• Use on spots on the face or body, wherever dry, irritated skin exists.
Benefits	Soothe & Nourish dry and sensitive Skin. Microbiome Friendly Safe and gentle
Active Ingredients	Shea butter & rape seed oil, two natural emollients known for their softening and soothing properties. Hydrogenated rape seed oil for a pleasant application. <i>Probiotic L. reuteri</i> DSM 17938 culture with anti-inflammatory and antimicrobial properties.
Name of strain	<i>L. reuteri</i> DMS 17938
Dosing	Twice daily or as needed
Shelf life	24 months at 25° C
Use open tube within	3 months



BioGaia®

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About Us

BioGaia® is a world leader in probiotic research and development. Our clinically proven probiotics have been supporting the health and well-being of people everywhere, throughout every stage of life for more than 30 years

1. Lyon, Sue. An Evidence-Based Approach to Newborn Skin Cleansing. RCM Alliance Programme.
2. Stamatias, Gerorgios & Walters, Russel & Martin, Katharine. (2011). Formulating for the Unique Needs of Baby Skin. Personal Care europe. 31-36
3. Mueller, Noel T et al. The infant skin-microbiome development: Mom matters. Trends in molecular medicine vol. 21,2 (2015): 109-17. doi:10.1016/j.molmed.2014.12.002
4. Capone KA, Dowd SE, Stamatias GN, Nikolovski J. Diversity of the human skin skin-microbiome early in life. J Invest Dermatol. 2011 Oct;131(10):2026-32.
5. Skotnicki, Sandy. Beyond Soap: The Real Truth About What You are Doing to Your Skin and How to Fix It for a Beautiful, Healthy Glow. Penguin, 2018.
6. Byrd, A.L.; Belkaid, Y.; Segre, J.A. The human skin microbiome. Nat. Rev. Genet. 2018, 16, 143-155.
7. Grice, E.A.; Segre, J.A. The skin microbiome. Nat. Rev. Genet. 2011, 9, 244-253.
8. Hill C et al. Expert consensus document. The International Scientific and appropriate use of the term probiotic. Nat Rev Gastroenterol Hepatol. 2014 Aug; 11(8): 506-14
9. Butler E, et al. Microorganisms 2020, 8, 1026. *Lactobacillus reuteri* DSM 17938 as a Novel Topical. Cosmetic Ingredient: A Proof of Concept Clinical. Study in Adults with Atopic Dermatitis
10. Khmaladze I, Butler É, Fabre S, Gillbro JM. *Lactobacillus reuteri* DSM 17938—A comparative study on the effect of probiotics and lysates on human skin. Exp Dermatol. 2019;001-7.
11. Data on file, In use test. Y. Lightening Discomfort of the Skin: QA & Control Systems Ltd.; 2020.
12. Data on file, In use test. Transdermal Water Loss: QA & Control Systems Ltd.; 2020. 5. Belibi S, et al. J Allergy Clin Immunol 2009, 123:Abstract S41. 13. Verma N, et al. J Complement Integr Med 2012, 9:Article 4. 7. Poljšak N, Kočevar Glavač N. Front Pharmacol 2022, 13:868461.
13. <https://thederreview.com/shea-butter/>
14. <https://www.emedihealth.com/skin-beauty/natural-vs-chemical-skin-care>