

A breakthrough in scalp & skin care

Born out love | With the wisdom of nature | Proven with science

Ruchi Gupta, MD, MPH Founder & CEO





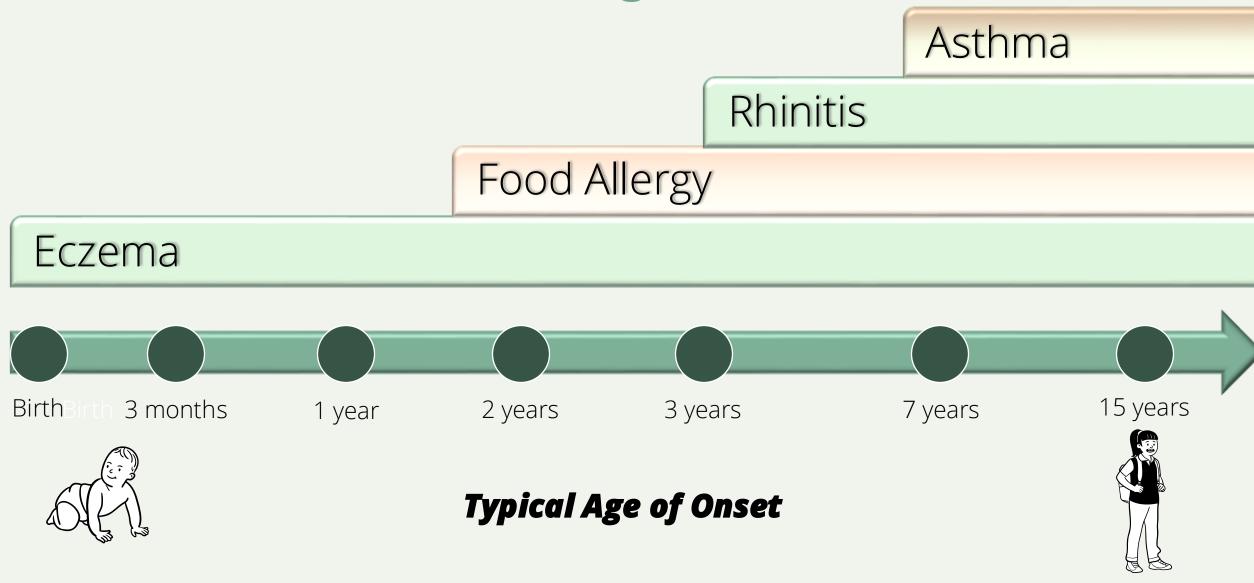
1 in 2

people suffer from dry skin & scalp: dandruff, cradle cap, itching or eczema





The Allergic March





Harmful chemicals & steroids

Non-scientifically proven products

Yobee Innovation

Born out of

Love

Wisdom of

Nature

Proven with

Science



We are on a mission to **free** people from the cycle of using **harsh chemical-ridden** products on their **scalp**, **skin**, & **hair**









Why: Yobee was born out of love





"Necessity is the mother of invention"

Prof. Ruchi Gupta

Mom of a child with cradle cap, eczema & food allergy

- Professor of Pediatrics & Medicine, Northwestern University & Lurie Children's Hospital
- Founding Director, Center for Food Allergy & Asthma Research (CFAAR)

Trusted expert for:















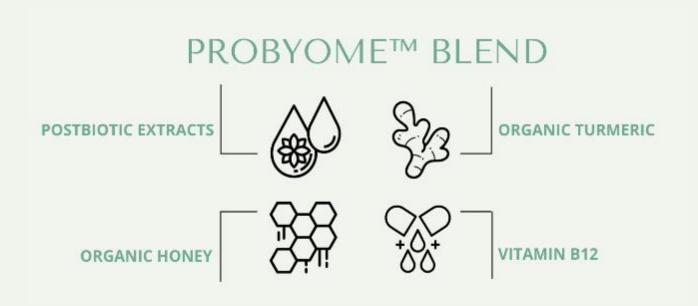






Breakthrough innovation created with the wisdom of nature

To support & balance the skin's natural microbiome





Our ingredients have been clinically proven to be anti-inflammatory, microbiome-supportive, & safe

Increasing Allergies and the Role of the Microbiome

https://www.youtube.com/watch?v=KVbutlY2eNQ



Dirt





Are We Too Clean?

The Hygiene Hypothesis

Sterile indoor environments, excessive use of antibiotics and hand sanitizers, and urban living reduce exposure to bacteria that help mitigate the risk of developing allergies







The Microbiome and Early Life Factors

Right after birth, a baby's microbiomes are impacted by:

- Maternal microbiota
- Antibiotics
- Skin exposure
- Social interactions
- Lifestyle
- Environment
- Food consumption



Dry Skin





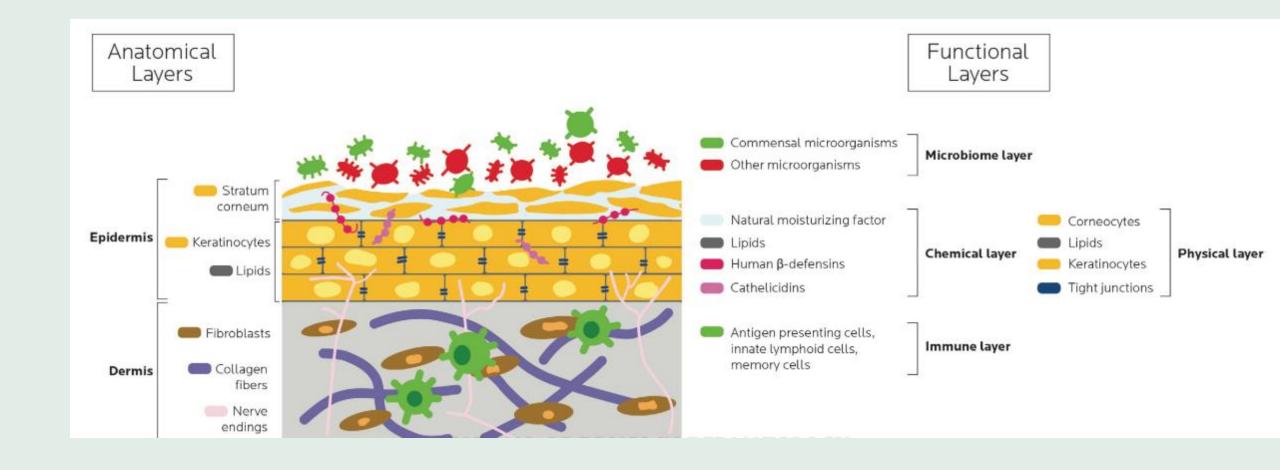
Many Factors Affect the Microbiota of the Skin

- Host Physiology
- (Sex, Age, Location)
- Environment (Climate)
- Immune System (Exposures, drugs, inflammatory issues)

- Host Genotype
- Lifestyle (Hygiene, occupation)
- Pathobiology (Underlying diseases or conditions)

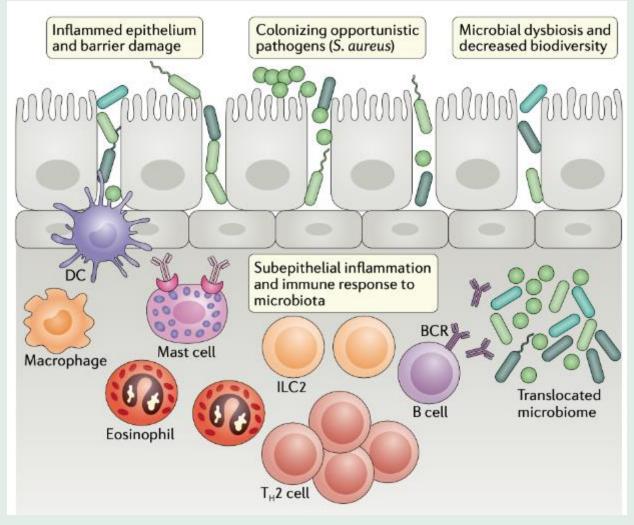


Microbiome Is Part of the Barrier!



Barrier Damage

→ colonization of opportunistic pathogens and inflammation



The Microbiome: Taking Care of Your Skin and Gut Health

Our Microbiome: What is It?

"The community of microorganisms in a particular environment" (gut, skin, nose, lungs, etc.)

Carneros is the microbiome. The people are the microbiota.

Why it Matters

Plays a critical role in health: digestion, immunity, protection against harmful microbes, etc.

Each person's microbe is unique, shaped by genetics, diet, environment, and lifestyle.

The Scale

The human body contains approximately 39 trillion microbes \rightarrow 10x more microbial cells than human cells.

The average human microbiome weights around 2.5 pounds!

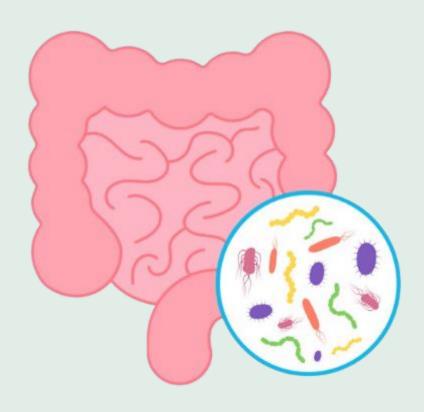


Gut Microbiome

A complex ecosystem of microorganisms in the GI tract

Bacteria produce metabolites/byproducts, which can either be "good" or "bad."

- GOOD metabolites
 - Short chain fatty acids (SCFAs): (acetate, butyrate, propionate)
 - decrease pH → improve defense against pathogens
 → reduce infections
- BAD metabolites
 - Trimethylamine-N-oxide (TMAO)
 - TMAO buildup in the arteries increases risk of atherosclerosis



Skin Microbiome

The skin is your body's 1st line of defense! The collection of microorganisms residing on the skin influences

 Barrier protection, immune modulation, wound healing

Gut-Skin Axis

An unhealthy gut microbiome (dysbiosis) can lead to inflammatory responses that manifest on the skin, potentially contributing to conditions like acne, atopic dermatitis, and psoriasis

Factors Influencing the Skin Microbiome

- pH, moisture levels, UV exposure, and personal hygiene practices
- Products like harsh soaps can disrupt the balance, leading to skin issues



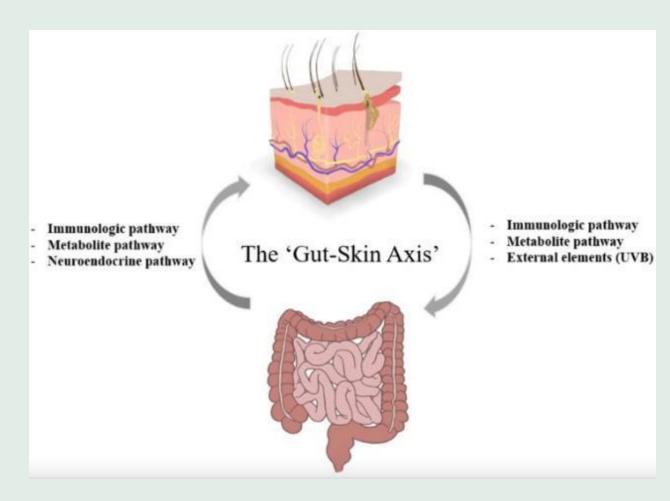


Gut-Skin Axis

An unhealthy gut microbiome (dysbiosis) can lead to inflammatory responses that manifest on the skin, potentially contributing to conditions like acne, atopic dermatitis, and psoriasis

"In patients with acne vulgaris, bacterial overgrowth in the small intestine was 10 times more common than in healthy controls"

Bowe and Logan, 2011





Gut-Brain Axis: Everything is Connected

Gut-Brain Axis

Bi-directional communication between the gut and brain

- Communication via the vagus nerve
 - Influencing factors like mood, appetite, and overall health

An unhealthy gut microbiome (dysbiosis) can lead to inflammatory responses that manifest on the skin, potentially contributing to conditions like acne, atopic dermatitis, and psoriasis

Your "gut feeling" is real!

 Scientists are beginning to attribute it partially to gut health and the gut-brain axis



"Good" Bacteria of the Gut

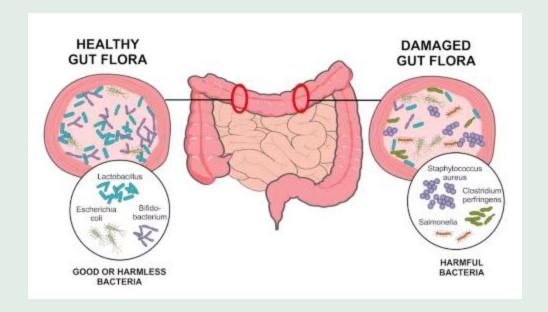
Examples

- Lactobacillus acidophilus (found in yogurt, cheese, sauerkraut)
- Bifidobacterium bifidum (found in breast milk, yogurt, kimchi)

Potential Health Benefits of *L. acidophilus*

- Prevent or reduce diarrhea
 Improve cold and flu symptoms
- Prevent and reduce allergy symptoms

*Many species within the *Lactobacillus*, *Bifidobacterium*, and *Clostridium* genera



"Bad" Bacteria of the Gut

Gut microbiota composition is altered in differing disease states Rheumatoid arthritis, T1D, atopic asthma, etc.

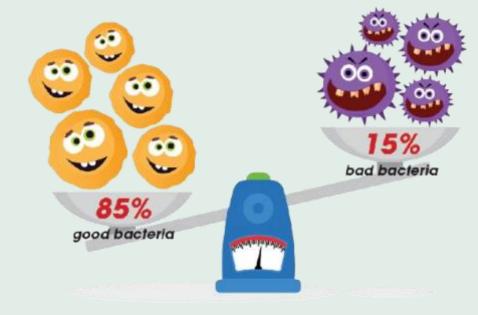
In patients with atopic dermatitis:

Elevated levels of

Clostridium difficile, Escherichia coli, and Staphylococcus aureus

Decreased levels of

Bifidobacteria, Bacteroidetes, and Bacteroides



A healthy bacteria balance means that the good bacteria overpower the bad bacteria

"Good" Bacteria of the Skin

Staphylococcus epidermidis

Produces anti-microbial peptides that help inhibit harmful bacteria

Preliminary studies suggest that:

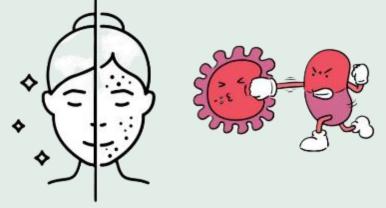
Streptococcus thermophiles, Enterococcus faecalis, and Streptococcus salivarius can improve acne.

Vitreoscilla filiformis, Streptococcus thermophilus, and Lactobacillus johnsonii can improve atopic dermatitis.

*Studies are still ongoing.

The thousands of bacterial species can be confusing! And research is still ongoing.

- Corynebacterium tuberculostearicum is associated with a healthy skin microbiome.
- Corynebacterium diphtheriae is very bad, an opportunistic pathogen causing diphtheria.





"Bad" Bacteria of the Skin

An imbalance and increase of "bad" microbes can lead disrupt the skin's microbial composition, leading to disease.

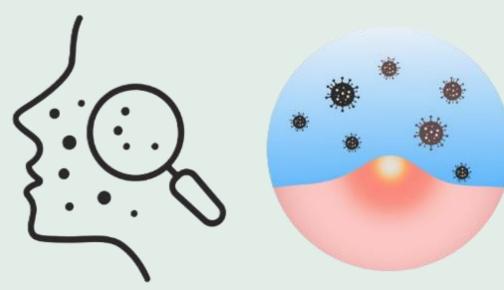
For example, in patients with atopic dermatitis:

Elevated levels of

 Clostridium difficile, Escherichia coli, and Staphylococcus aureus

Decreased levels of

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The Ugly

Dysbiosis: an imbalance or a deficit of beneficial microbes in your microbiome



- → May lead to bacterial infections, inflammatory bowel diseases (ulcerative colitis, Crohn's)
- → Also associated with food intolerances, malnutrition, metabolic syndrome, atherosclerosis, fatty liver disease, chronic fatigue

Risk Factors: Diet, medication, lifestyle, stress, chronic conditions, and genetic background

Ex) Antibiotic Resistance

Overuse of antibiotics can knock out entire bacterial colonies. → Bad bacteria can then multiply and crowd out beneficial bacteria in the gut.





Clostridoides difficile (C. diff)

causes diarrhea, stomach pain, inflammation of the colon, etc.



Helicobacter pylori (H. pylori)

common cause of stomach ulcers, burning pain in stomach, nausea, etc.



Microbes and Skin Diseases

"The dysregulation of human skin microbiota is implicated in immune dysregulation and inflammatory responses."

Staphylococcus aureus

- Produces toxins that compromise skin barrier.
 - → Atopic dermatitis, skin abscesses

Cutibacterium acnes

- Triggers inflammation in clogged pores.
 - → Acne, post-surgical infections

Demodex mites

- Clog pores and provoke immune responses.
 - → Rosacea, democides



Western Diet

A modern eating pattern that includes large amounts of processed foods, red meat, high-fat dairy, and high-sugar drinks. It also typically includes refined grains, fried foods, and conventionally raised animal products.

Western diet associated with:

- Higher Firmicutes to Bacteroidetes ratio
- Dysbiosis, increase in TMAO levels, decreased SCFA production, obesity, diabetes

<u>Takeaway:</u> "Diet is the dominant driver in shaping the gut microbiota over host genetics."



Prebiotics

A substrate that is selectively utilized by host microorganisms conferring a health benefit

aka fuel/food for your microbiome

Think Fiber

- Vegetables: garlic, artichoke, onion, jicama, leafy greens
- Fruit: apples, berries, bananas
- Grains: oats, barley, rye, whole wheat flour

Potential Health Benefits

- Help regulate bowel movements
- Stimulate your body to make hormones that aid in appetite, appetite suppression, etc.
- Improve how well your immune system functions
- Enhance your body's anti-inflammatory response





Probiotics

"A microorganism introduced into the body for its beneficial qualities."

Probiotic Foods

- Ex) fermented vegetables (sauerkraut, kimchi, fermented pickles) (store-bought pickles are typically preserved in vinegar, not fermented)
- Fermented dairy products (yogurt, kefir, cheese), fermented beverages (kombucha), fermented soybean products (miso soup, tempeh)

Potential Health Benefits

- Improve gut health by restoring balance of beneficial gut bacteria
- Stimulate immune cell production
- Lower cholesterol levels and improve blood sugar control
- Reduce inflammation and improve skin conditions, such as acne and eczema





Postbiotics

Bioactive compounds created by probiotics during the fermentation process in the gut

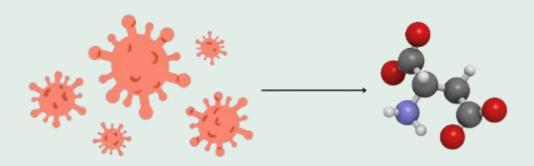
Created during digestion by probiotics

Examples

- Vitamin K and some B vitamins –
 synthesized by bacteria in the gut
- Lactate produced from lactic acid bacteria like Lactobacillus and Bifidobacterium
- SCFAs produced during fermentation of dietary fiber by gut bacteria
- Anti-microbial peptides produced by gut bacteria and help inhibit pathogenic bacteria

Potential Health Benefits:

- Gut health improvement
- Immune system modulation
- Anti-inflammatory effects
- Anti-microbial properties
- Respiratory health postbiotics may reduce the severity of respiratory infections by boosting mucosal integrity





Yobee's patented PROBYOME blend

Postbiotics



Competitively inhibit pathogens

- Balance microbial communities
- Modulate immune responses
- Decrease levels of S. aureus in eczema
- Reduce inflammation
- Improve barrier function

Honey



Antibacterial & hydrating

- Promotes wound healing
- Enhances skin regeneration
- Can reduce S. aureus & balance microbiota, thereby alleviating eczema & psoriasis
- Maintains moisture which can manage dandruff & seborrheic dermatitis

Vitamin B12



Essential for skin regeneration

- Anti-inflammatory properties have been demonstrated in studies focusing on eczema & psoriasis
- Topical B12 formulations have shown promise in reducing cytokine levels involved in these conditions

Turmeric



Natural anti-inflammatory agent

- Curcumin has been shown to inhibit inflammatory pathways, including NF-kB & STAT3, which are hyperactive in psoriasis & eczema
- Topical turmeric treatments have demonstrated reductions in psoriasis plaques & improved skin health



A breakthrough innovation proven by science



of participants who used Yobee had significantly reduced dry scalp symptoms including irritation, itching, & redness

Studied in pediatric patients

<u>Clin Cosmet Investig Dermatol.</u> 2023; 16: 2757–2762. Published online 2023 Oct 4. doi: 10.2147/CCID.S424077



Natural Topical Treatment Contributes to a Reduction of Dry Scalp Symptoms in Children

& adult populations

<u>Clin Cosmet Investig Dermatol.</u> 2021; 14: 945–947. Published online 2021 Jul 24. doi: 10.2147/CCID.S321238



Novel Topical Treatment for Dandruff & Dry Scalp Through Sustained Balance in Skin Microbiome

Why now? Scalp care is key – marketing research results

99%

agree **healthy hair** begins with a **healthy scalp**

Individuals report suffering a range of issues:

- Ory scalp 23%
- Dandruff 14%
- Oily scalp 18%

96%

believe **scalp care** is just **as important** as your **facial skincare**

90%

Of participants who used **Yobee** reported **decreased** dry scalp symptoms including

- Less itching
- Less redness
- Less flaking

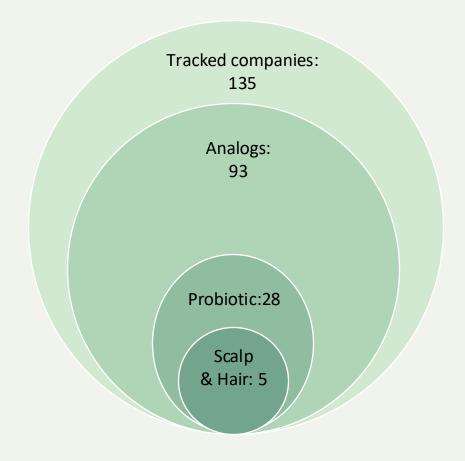


Global Search for

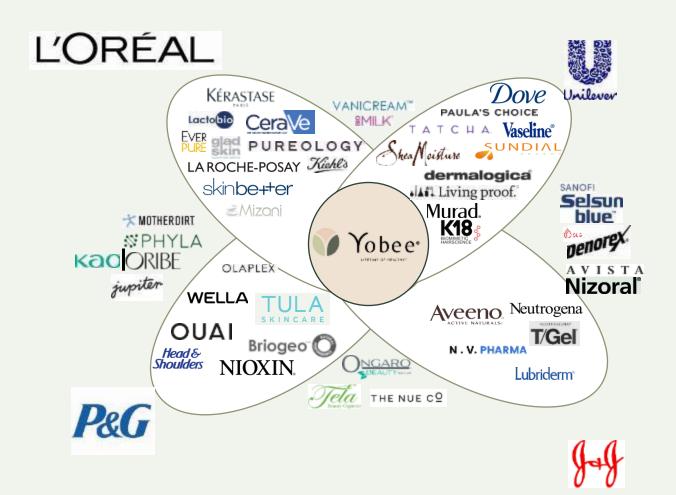
| a Solution | SCALP/HAIR BALANCE | SALON BRANDS | "FREE" FROM CLAIMS | ANTI-FUNGALS |
|--|-----------------------|--------------|-------------------------|------------------------------|
| | ♦ Yobee | KÉRASTASE | Tela Beauty Organics | O head& shoulders. |
| Natural Ingredients | | | | |
| Microbiome Friendly | | | | |
| Safe for all Ages | | | | |
| Free of Zinc, Salicylic Acid, Coal Tar | | | | |
| Clinically Proven | | × | | |

RESTORING

Market research



There are numerous probiotic skincare products but still few that also target hair & scalp



Four major players dominate this personal care space with multiple wholly owned acquisitions

Yobee's market access channels

eCommerce Platform

e.g. Amazon, Yobee, website Tik-Tok Shop



B2BOutlets

Physician
Offices, Salons, &
Spas





Future: Brick & Mortar
Retailers

e.g. Whole Foods



Select team members



Ruchi Gupta, MD, MPH
Co-Founder & CEO



Tarun Jain, MD, MSc Co-Founder & CFO



Kathryn Cherny, PhD Chief Operating Officer



Annie SiebenalerMarketing Director



Joanna Deryniowska
Director of Customer Experience

Select advisors



Catherine Murphy
Former Head of Global Marketing
Johnson & Johnson



Josh Ghaim, PhD Former CTO Johnson & Johnson



Peter Lio, MD
World-renowned
Integrative Dermatologist
Chicago Eczema Center



Amy Paller, MD
Professor & Chair, Dermatology
Northwestern University



Dimitra Georganopoulou, PhD General Partner Qral Ventures



Yobee products are already beloved

Avg 4.7/5 stars on Amazon

Avg 4.9/5 stars on Yobeecare.com





11

I recommended Yobee to my niece who has **psoriasis** & tried every steroid cream. Within a week, her psoriasis improved. **Her doctor couldn't believe it!**

Yobee resolved my baby's scalp & forehead irritation. It gave me my sleep & sanity back!"

The **holy grail** of winter moisturizers. Finding this cream was a godsend.









Award-winning innovation







Allē award judge feedback:

Validated methods for balancing the microbiome to improve skin conditions.

Great safety claim substantiation in pediatric population.

This product seems to fill a real need.

Join the Yobee movement: help us empower people to restore their scalp & skin microbiome







Influencer Partnerships: Collaborate with us to create engaging, informative content & help us share our mission of microbiome-focused skincare



Physician Offices: Partner with Yobee to recommend our products to your patients, empowering them with natural, science-backed solutions for skin & scalp health



Salons & Spas: Offer Yobee's natural skincare treatments to clients seeking holistic scalp & skin care solutions



Retail Partners: Help bring Yobee to more consumers by stocking our products in stores & online

Summary & next steps

Born out of

Love

Wisdom of

Nature

Proven with

Science



Join our mission to help free people from using harsh and chemical-ridden products on their skin, scalp, and hair

Follow us

@YOBEECAREOFFICIAL









Contact us

EMAIL: ruchi@yobeecare.com

WEBSITE: www.yobeecare.com

Follow us



Order today!







Thank you

Wishing you a lifetime of healthy



Appendix



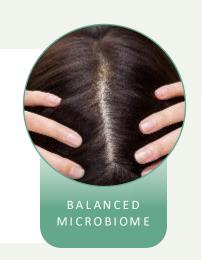
MICROBIOME CRASH COURSE



Imbalanced Microbiome

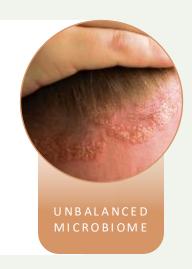
HEALTHY SKIN

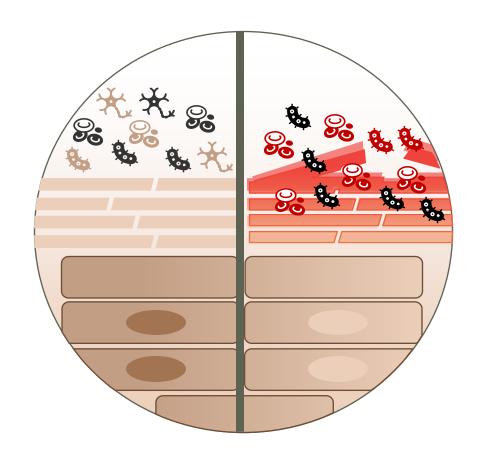
A balanced microbiome with a preserved skin barrier



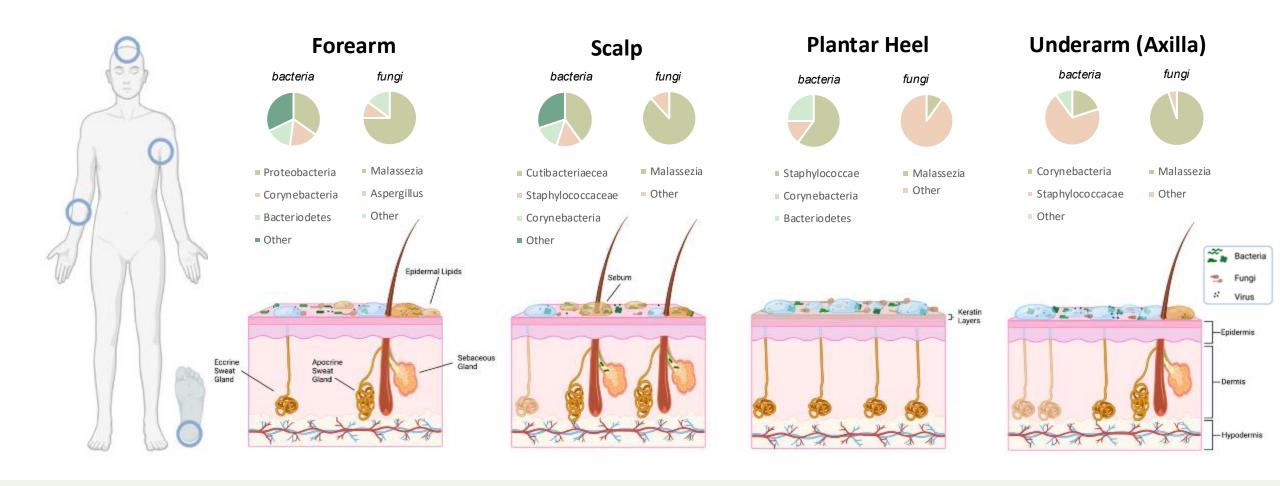
ATOPIC SKIN

An imbalanced microbiome & altered skin barrier --> skin vulnerable to irritants & allergens --> cause inflammation, flare-ups & itching





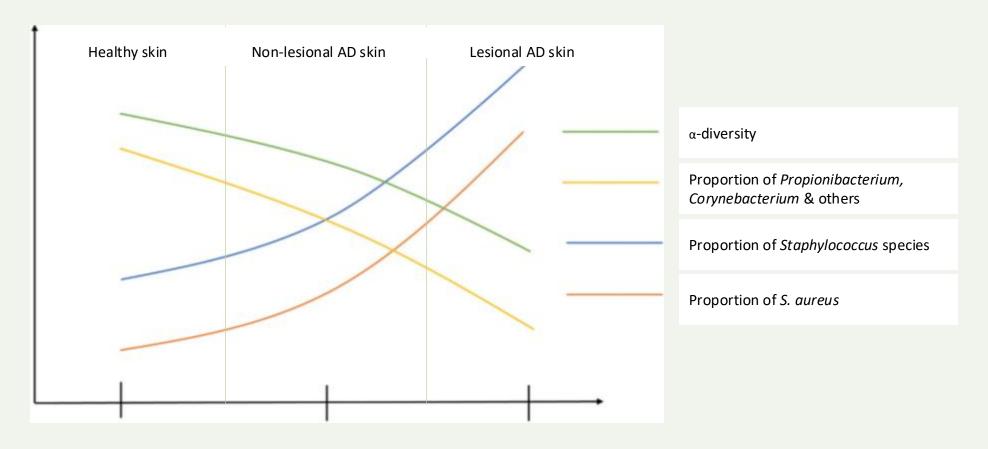
Microbiome composition is site specific



The skin microbiome composition changes in different areas of the body



Microbiome composition changes with skin health



The composition of the skin microbiome also actively changes as skin's health deteriorates (from Healthy to Atopic Dermatitis)

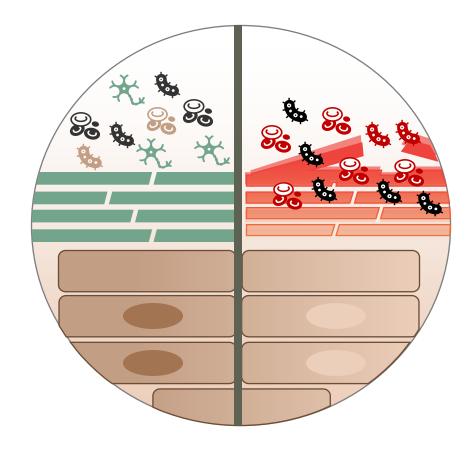
Scalp & skin microbiome affect the skin barrier

Balanced Microbiome



PRESERVED SKIN BARRIER

- The scalp & skin microbiome contain a diverse ecosystem of bacteria, fungi, viruses, & other microorganisms
- The balance of these microbes is key to modulate the skin's immune response & maintain the integrity of the skin barrier



Imbalanced Microbiome



DISRUPTED SKIN BARRIER

- An imbalance (dysbiosis) can lead to overgrowth of pathogenic species, triggering inflammatory responses
- Altered skin barrier increases vulnerability to irritants & allergens
- Further reduced microbial diversity leads to inflammation, flare-ups & itching or other skin & scalp conditions



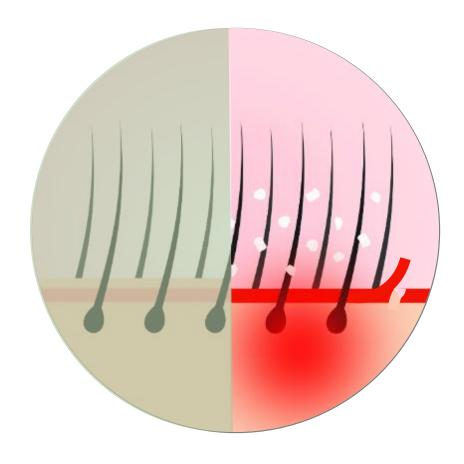
Imbalanced skin microbiome leads to scalp & skin conditions

Balanced Microbiome



HEALTHY SKIN & HAIR

- A unique microbial environment due to hair follicles & glands an optimal environment for certain microorganisms
- A balanced skin microbiome leads to a healthy scalp & skin
- Regulation of the skin barrier, maintains skin hydration, modulates immune responses, resulting in a healthy scalp & skin free of itchiness & flaking



Imbalanced Microbiome



SKIN CONDITIONS

- Seborrheic dermatitis commonly known as cradle cap & dandruff associated with overgrowth of Malassezia yeast & overproduction of skin cells & oils
- Atopic dermatitis, or eczema is linked to an overgrowth of Staphylococcus aureus & reduced diversity of the skin microbiota
- Psoriasis due to an altered microbiome with a reduction in Corynebacterium species & an increase in Streptococcus & Propionibacterium

Yobee Business Model & Operations

YOBEE CARE

Key Milestones



Yobee's seeding channels are Chicago-based





- Spas
- Salons
- Physician offices (Pediatric, Allergy, & Dermatology offices)
- Wellness centers (pediatric & adult)
- Chamber of Commerce



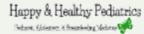


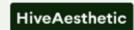




















relax - regenerate - rehalance

















Drobiotic

| Problotic Hairlines | RESTORING SCALP/HAIR BALANCE | KERASTASE Specifique Haircare | ONGARO Probiotic Shampoo | TELA BEAUTY Probiotic Hair Mask | THE NUE CO Probiotic Haircare |
|--|------------------------------------|-------------------------------------|--------------------------------|---------------------------------------|-------------------------------------|
| Tiali lilies | Yobee Yobee | KÉRASTASE | ONGARO. BEAUTY ROOM | Tela Beauty Organics | THE NUE CQ |
| Natural Ingredients | | | | | |
| Microbiome Friendly | | | | | |
| Safe for all Ages | | | | | |
| Free of Zinc, Salicylic Acid, Coal Tar | | | | | |
| Clinically Proven | | | × | | |
| Physician formulated | | × | × | × | × |

Global Search for

| Global Search for a Solution | RESTORING SCALP/HAIR BALANCE | SALON BRANDS | "FREE" FROM CLAIMS | ANTI-FUNGALS |
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| a Joiation | % Yobee⁵ | KÉRASTASE | m:ther dirt | Ø head& shoulders. |
| Natural Ingredients | | | | |
| Microbiome Friendly | | | | |
| Safe for all Ages | | | | |
| Free of Zinc, Salicylic Acid, Coal Tar | | | | |
| Clinically Proven | | | | |

Competitive analysis

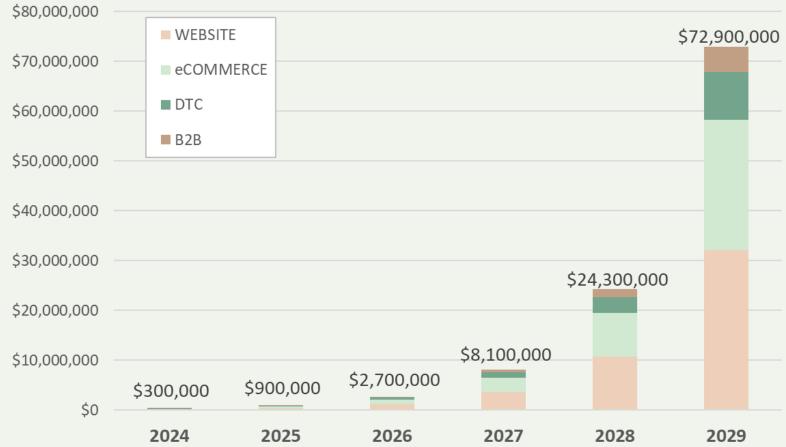
| alialysis | % Yobee [®] | Selsun blue | OLAPLEX. | • head & shoulders. |
|--|-----------------------------|----------------|----------|---------------------|
| Natural ingredients | | | | × |
| Microbiome friendly | | | | |
| Safe for all ages | | | | |
| Free of zinc, salicylic acid, coal tar | | × | | |
| Physician formulated | | × | | × |
| Clinically proven | | | × | |

Financial projections across different channels (US)

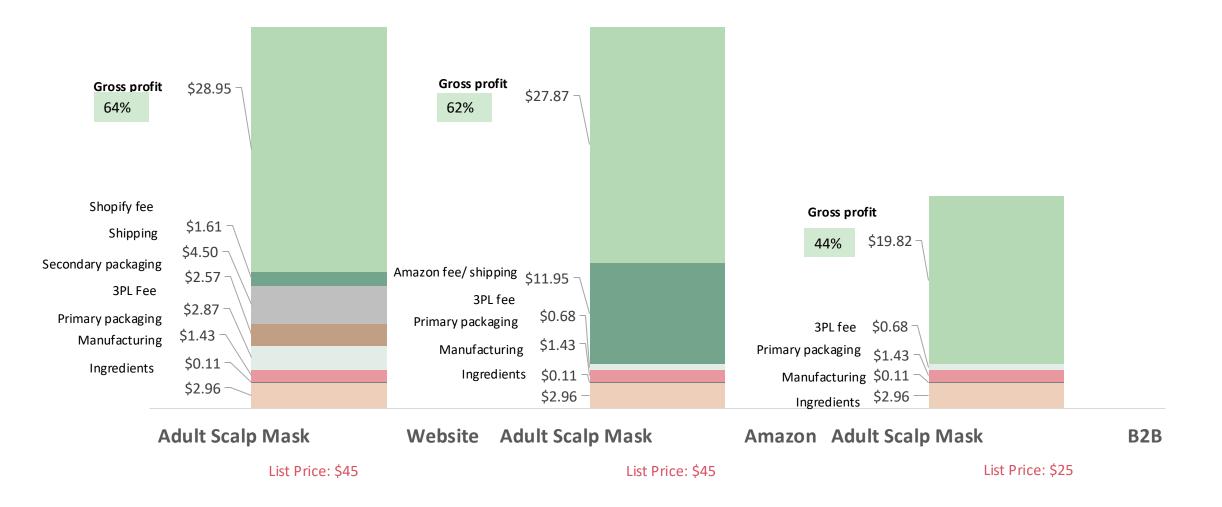
Channels eCommerce Yobee **Platforms** (Amazon) B₂B DTC (Derm (Conferences, Offices) events, etc.) Website 44% eCommerce 36% B₂B DTC 13%



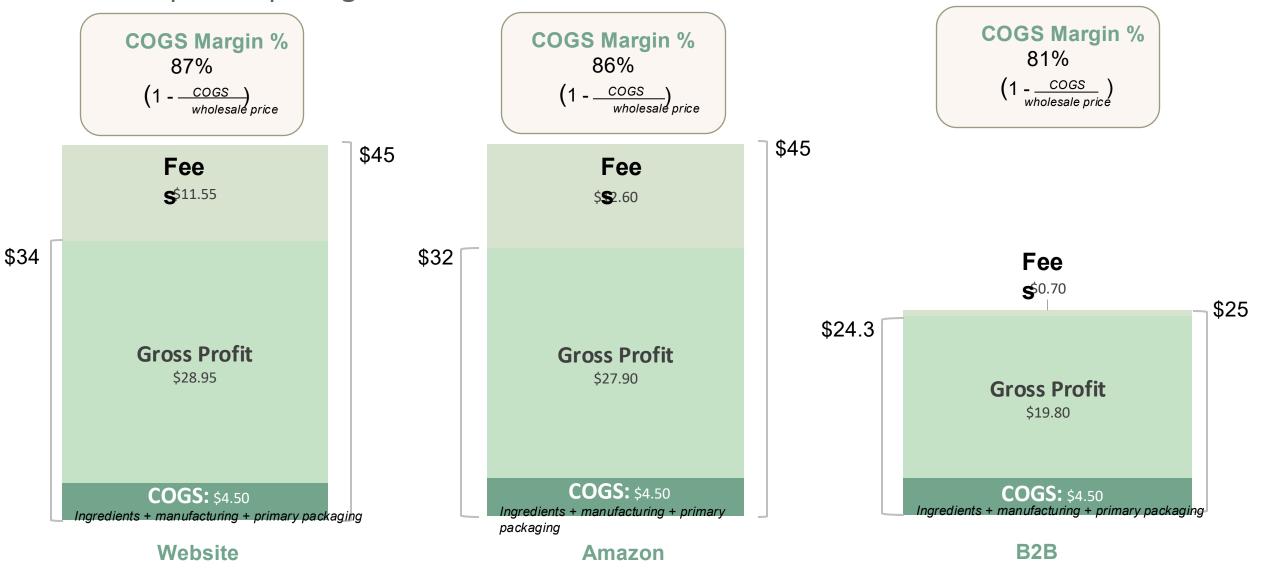
Yobee projected revenue by channel



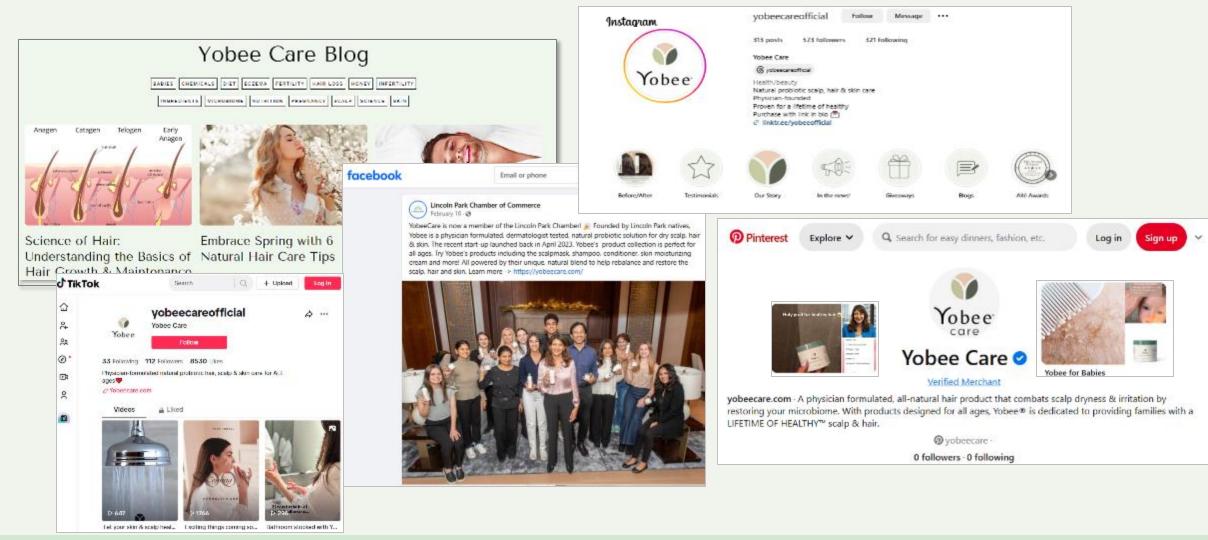
Unit economics: ScalpMask



Adult scalp mask pricing & cost breakdown across channels



Yobee Marketing & Education













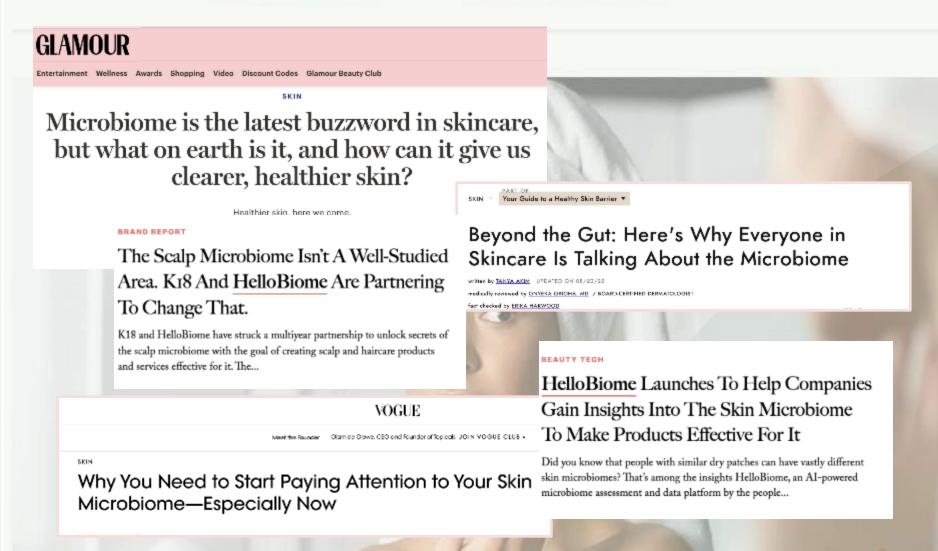


Why now?

Trend amongst consumers, especially GENZ for natural products supported by science!

Formulating on Trend: Microbiome-conscious Skin Care

Mar 24th, 2022 | By Laura Lam-Phaure | From Cosmetics & Toiletries



How to use our innovative ScalpMaskTM

A face mask for your scalp

Massage into scalp

Let it set for 5 minutes

Rinse out

The ScalpMaskTM can be used as your only hair-care product, or with a shampoo &/or conditioner.



Issued US Patent

Compositions of matter & method patents for topical treatment for scalp &/or hair conditions, including those that suffer from dry scalp, d&ruff, psoriasis, cradle cap, seborrheic, dermatitis, eczema, & combinations





Pending Patents

Methods and compositions for preventing atopic march and treating skin conditions

Abstract

Provided herein are methods and compositions for preventing atopic march and treating a skin

Classifications

■ A61K35/744 Lactic acid bacteria, e.g. enterococci, pediococci, lactococci, streptococci or leuconostocs

View 7 more classifications

US20230050868A1





Current Assignee: Yobee Care Inc.



(19) United States

(12) Patent Application Publication (10) Pub. No.: US 2021/0386803 A1 Gupta et al.

- (54) VEHICLES FOR APPLYING BACTERIA TO SKIN, SCALP, AND HAIR
- (71) Applicants: Ann and Robert H. Lurie Children's Hospital of Chicago, Chicago, IL (US); Yobee Care, Inc., Chicago, IL (US)
- (72) Inventors: Ruchi Gupta, Chicago, IL (US); Tarun Jain, Chicago, IL (US)
- (21) Appl. No.: 17/461,347
- (22) Filed: Aug. 30, 2021

Related U.S. Application Data

- (63) Continuation-in-part of application No. 16/474,950, filed on Jun. 28, 2019, now Pat. No. 11,103,544, filed as application No. PCT/US2017/068765 on Dec. 28,
- (60) Provisional application No. 62/440,797, filed on Dec.

Publication Classification

| (51) | Int. Cl. | |
|------|-------------|-----------|
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| | A61K 9/00 | (2006.01) |
| | A61K 47/46 | (2006.01) |

(43) **Pub. Date:** Dec. 16, 2021

(2006.01)

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A61K 31/714

A61K 47/10 A61P 17/00 (2006.01)(52) U.S. Cl.

CPC A61K 35/747 (2013.01); A61K 9/0014 (2013.01); A6IK 47/46 (2013.01); A6IK 31/714 (2013.01); A6IP 17/00 (2018.01); A61K 45/06 (2013.01); A61K 47/44 (2013.01); A6IK 47/10 (2013.01); A6IK 36/9066 (2013.01)

ABSTRACT

Disclosed are methods and topical compositions for applying bacteria to skin, scalp and hair. The topical compositions include bacteria in a suitable base vehicle comprising honey for applying the bacteria to skin, scalp and hair. The base vehicle may include additional components such as, but not limited to, plant-based products, micro-nutrients, emollients and plant-sourced emulsifiers, and anti-oxidants, among other components. The topical compositions may be utilized in methods for treating and/or preventing skin, scalp, and hair conditions such as, but not limited to, dry skin, dry scalp, dandruff, psoriasis, cradle cap, seborrheic dermatitis, and/or eczema.

3 events ②

aimed from US202063013684P

on filed by Yobee Care Inc.

US17/938,393

to YOBEE CARE, INC. @

on of US20230050868A1

Yobee social media education

Strategic Collaborations: Yobee is looking to continue partnerships with trusted physicians, scientists, & wellness influencers to bring the power of the skin and scalp microbiome to a broader audience







Yobee Cares















How we are unique



PROBYOME™ BLEND

Natural / anti-inflammatory
ingredients & key bacteria to
restore microbiome



PATENTED TECHNOLOGY

US Patent No. 11,103,544



OUR SCIENCE

Two clinical trials showed Probyome™ to be safe & effective



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