

The background of the slide is a blurred photograph of a cosmetic manufacturing facility. In the foreground, several clear glass bottles filled with a yellow liquid are visible, some with gold-colored caps. In the background, more bottles and industrial machinery are out of focus. A solid blue horizontal band is overlaid across the middle of the image, containing the title and subtitle text.

6 Key Trends in Cosmetic Manufacturing

Operational Strategies to Increase Agility,
Capture Growth and Maintain Product Quality

ECOLAB®

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Introduction:

Major Changes Driving Significant Market Growth

Led by continued increases in user penetration rates and the rapid expansion of gender-neutral and men's markets, industry analysts forecast strong, continued growth for the global personal care product market:



But for businesses that manufacture personal care and cosmetic products, two sets of accelerating changes are converging to create a gateway – or a barrier, depending on how they're handled – to capturing this significant growth:

1 Rising Consumer Demands

2 Increasing Regulations

Together, these consumer and regulatory pressures converge on a common theme:
The Need for a Safe, Contaminant-Free Product

1. <https://www.grandviewresearch.com/press-release/global-organic-personal-care-market>



Cleaning & Sanitation in the Spotlight

More than simple risk mitigation, strong cleaning and sanitization programs are becoming increasingly essential to achieving compliance, meeting consumer demands and protecting the revenue and growth of the business.

Within the Ecolab Life Sciences division, we've recognized the signs of significant and rapid changes beginning to take shape in the personal care and cosmetic segment. The following eBook is geared towards sharing the regulatory and consumer trends we're seeing to help you make informed and pertinent decisions related to your manufacturing operations.

In this eBook, we will explore:

- 1 Three major consumer demand-driven trends and three key regulatory shifts
- 2 The new and unique contamination-prevention challenges presented by each of these changes
- 3 Smart changes and quick-win strategies to meet these challenges





CONSUMER DEMAND TREND #1

Natural and Organic Cosmetics

The cornerstone of clean beauty

The biggest sub-category of the clean beauty movement, natural and organic products, continues to see significant growth. A 2018 report projected the global organic personal care market to top \$25 billion by 2025, more than doubling from \$12.9 billion in 2017.²

More brands are looking to meet the standards set by the National Organic Program (NOP), and brands making “natural” claims face increasing pressure to provide full transparency and clear evidence for their claims.

Global Organic Personal
Care Market will

A simple bar chart with three bars of increasing height, followed by an upward-pointing arrow, indicating growth.

DOUBLE

by 2025

2. <https://www.grandviewresearch.com/press-release/global-organic-personal-care-market>



NATURAL AND ORGANIC COSMETICS

The Contamination Challenge

Producing an “all-natural” product or achieving NOP (“organic”) certification often requires removing all artificial preservatives from product formulations. But removing preservatives increases the risk of bacterial contamination – the cause of 76% of all personal care product recalls in the past 15 years.³ In addition, moving to organic or all-natural production may require a facility to eliminate the use of some common cleaning and sanitizing products – creating the challenge of finding suitable replacements that deliver effective cleaning and sanitization.



KEY CONSIDERATIONS:

- Do your cleaning and sanitization products fall on the NOP list of prohibited substances?
- How will eliminating preservatives in product formulations change contamination control standards in your production operations?

3. <https://www.mdedge.com/pediatrics/article/191072/health-policy/bacterial-contamination-behind-most-cosmetics-recalls>





CONSUMER DEMAND TREND #2

Halal Beauty

Filling a void in the global market

The simplest definition of halal cosmetics are products that are formulated, manufactured and produced in accordance with Islamic Sharia law. The rapid growth of the halal beauty market isn't really about evolving consumer demand – rather, it's a matter of filling a huge void where demand has existed for some time. Muslims currently account for roughly one-quarter of the global population, and represent the fastest-growing religious group.⁴ Yet, the specific needs of this population have remained largely underserved by the cosmetics and personal care industry. Halal products are largely associated with other values of the clean beauty movement – social and environmental responsibility – giving them appeal to broader consumer segments.

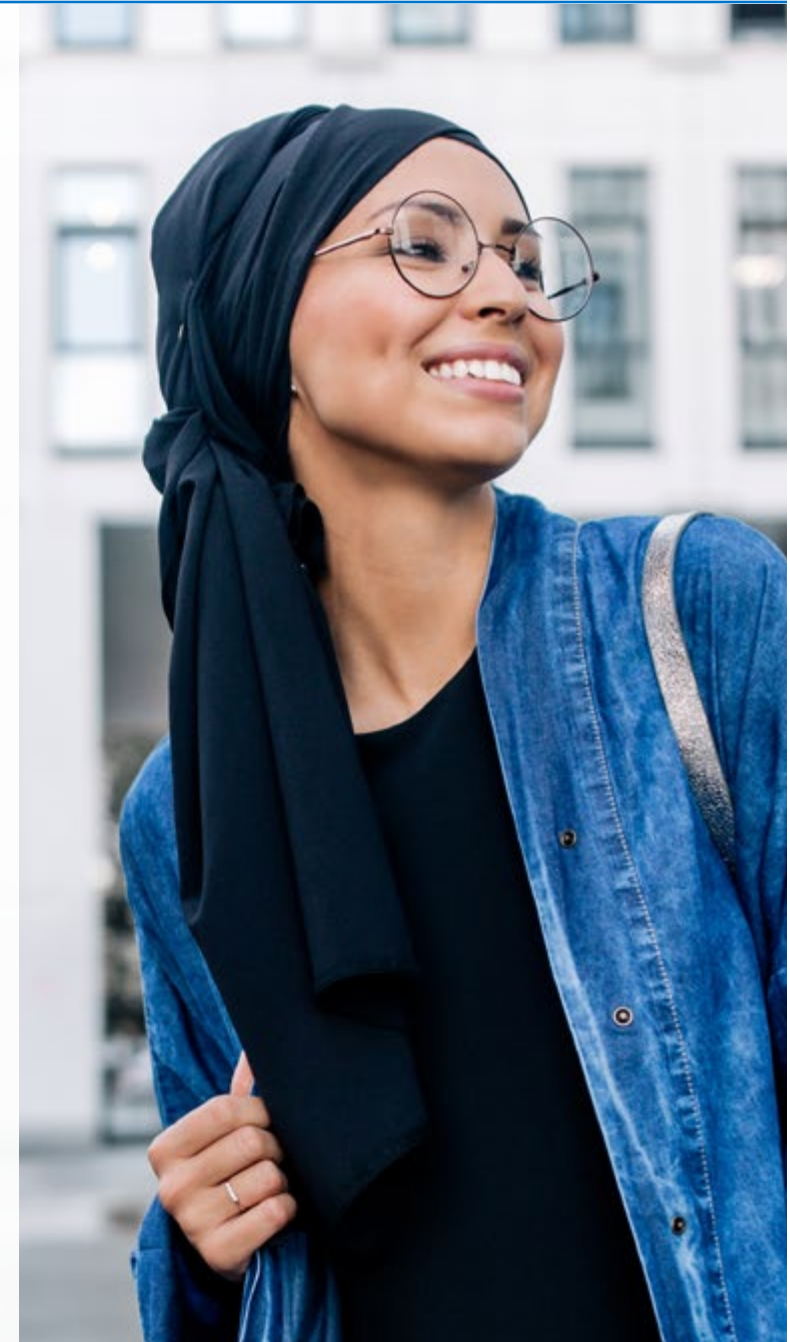
With this widespread appeal, the global halal cosmetics market is expected to more than triple in the next five years, growing to more than \$52 billion by 2025.⁵ It's no surprise that cosmetics brands, large and small, are looking to develop specialized halal product lines, adjusting their ingredients and production methods to meet halal certification.

 **3X Growth**
by 2025



4. <https://www.pewforum.org/2015/04/02/religious-projections-2010-2050/>

5. <https://www.grandviewresearch.com/industry-analysis/halal-cosmetics-market>





HALAL BEAUTY

The Contamination Challenge

Achieving halal certification is a more complicated process than meeting NOP standards for organic labeling. Cosmetics brands must exclude a wide range of materials and substances, including alcohol. Critically, the many exclusions and stipulations apply not just to product formulations, but to manufacturing procedures, ingredient storage, product packaging and even logistics.

Like organic products, the contamination challenge is two-fold: First, a manufacturing operation must ensure that all prohibited (“haram”) substances are effectively removed from both the product and production process. As with organic operations, this frequently means removing preservatives and making changes to cleaning and sanitizing products used in production. This presents the second challenge of ensuring that you are using the right halal-certified cleaning and sanitizing products – and following the correct processes – to maintain a consistently safe, contamination-free product. Falling short of these standards could result in an operation losing halal certification – immediately putting its entire halal product line in jeopardy.



KEY CONSIDERATIONS:

- Do you have access to cleaning and sanitization products that meet halal certification standards?
- How do halal requirements impact your end-to-end manufacturing process?





CONSUMER DEMAND TREND #3

Cannabis in Cosmetics

A niche market goes mainstream

Progressive legalization of cannabis and cannabis derivatives like cannabidiol (CBD) and hemp oil have made these ingredients the hottest trend across the entire personal care products industry. Consumers are extremely interested in CBD-infused products, aligning with the overall trend toward products with natural active ingredients. Analysts expect CBD market to continue growing by nearly 50% annually, and many of the biggest names in cosmetics and personal care are now offering – or experimenting with – products infused with CBD and hemp oil.⁶ Some of the largest cosmetic brands and even upscale retailers already offer such products, showing just how mainstream and upmarket this trend reaches.

 **Cannabis-Infused
Cosmetics Market will**
TRIPLE
in Size by 2026⁷

6. <https://bdsanalytics.com/u-s-cbd-market-anticipated-to-reach-20-billion-in-sales-by-2024/>

7. <https://www.globenewswire.com/news-release/2019/08/16/1903064/0/en/Global-Cannabis-Infused-Beauty-Products-Market-Worth-USD-18-05-Billion-By-2026-Zion-Market-Research.html>





CANNABIS IN COSMETICS

The Contamination Challenge

The sensitive and still-somewhat-controversial nature of cannabis-derived ingredients in cosmetic products means that brands must be extra careful to maintain consistency, purity and transparency across their production operations. Manufacturing operations must take extra steps and precautions to avoid cross-contamination between CBD and non-CBD products. Many manufacturing operations are opting to dedicate entirely separate production lines for CBD products. Given the potency of many cannabis derivatives, even within CBD product lines, there are often differences in concentrations of the active ingredients. This means that there is still a heightened need to ensure effective and consistent cleaning and sanitization to remove all traces of CBD and hemp oil from production lines during changeovers.



KEY CONSIDERATIONS:

- How do cannabis-derived substances present new cleaning and sanitization challenges in your production operations?
- Are you adhering to relevant GMP best practices, regulatory requirements or other standards within your country, state or province with regard to CBD and cannabis derivatives?





Increasing Regulatory Scrutiny Parallels Consumer Demand

After roughly a century of self-regulation in the U.S. cosmetics and personal care products industry, several federal and state regulatory bodies have begun making significant changes – led by the Modernization of Cosmetics Regulation Act (MCRA) of 2018. This regulatory movement has been spurred by rising concerns over contamination and potential long-term health risks of ingredients – and this legislative focus reflects the concerns of the general public. Moreover, the MCRA would bring the U.S. in alignment with the EU and other global regulators on matters ranging from Good Manufacturing Practices (GMPs), to required adverse event reporting, to a focus on microbial contamination – all to ensure the delivery of a safer, contaminant-free product.

From the MCRA to progressive state actions, three of the most significant changes include official legislation that raises compliance standards, as well as expanded authority to enforce policies and standards.

3 Key Regulatory Shifts



**Giving the FDA
Recall Authority**



**Achieving Compliance
with GMPs**



**Redefining Ingredient
Safety Standards**





REGULATORY SHIFT #1

Giving the FDA Recall Authority

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The most significant – and last major – legislation governing the cosmetics industry, the Federal Food, Drug and Cosmetic Act of 1938, does not give the US FDA authority to issue a recall. Instead, the industry has self-policed for the majority of the last century. However, the current movement to modernize cosmetic manufacturing intends to change that, greatly expanding the power of the FDA to issue recalls and even shut down production based upon evidence of product safety risks or compliance issues.⁸



The Contamination Challenge

Product contamination remains the top cause of product recalls in the cosmetics and personal care industry. But as regulatory agencies take a more active role, the standards for contamination are moving out of manufacturers' hands. Moreover, the threshold is likely to be lowered: No longer will a recall be dependent on proof of contamination; rather, a regulatory agency will only need to point to evidence of the potential for contamination in order to issue a recall or even shut down production.

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KEY CONSIDERATIONS:

- Are you proactively seeking out potential contamination risks in your operations?
- Where are the potential gaps or blind spots in your contamination-control program?



8. <https://www.personalcarecouncil.org/perspectives/pcpc-supports-fda-modernization/>



REGULATORY SHIFT #2

Achieving Compliance with GMPs

Following regulatory trends in other markets such as Europe, the cosmetic reform moves to mandate that all manufacturing operations follow established good manufacturing practices (GMPs). Perhaps more importantly, concurrent legislation proposes to implement GMPs to the industry to reflect today's technologies and industry standards and bringing the U.S. industry under increased scrutiny and in line with other international practices.



The Contamination Challenge

Much like the lowered threshold of the potential for contamination, mandated compliance with GMPs puts equal focus on the process and the end product. While most manufacturing operations maintain rigorous quality assurance programs, much of the effort centers on evaluating the finished product. As regulators begin focusing on the process, internal QA programs will need to likewise expand their focus to consistently evaluate compliance with GMPs throughout the facility. In particular, as contamination control becomes a top priority, regulators will look closely at cleaning and sanitization GMPs. Facilities will need to take a closer look to ensure that they are following proper end-to-end cleaning and sanitization GMPs, instead of simply pointing to QA metrics and microbiological counts as evidence of compliance.



KEY CONSIDERATIONS:

- What GMPs are you currently following - and where will you have to change protocols to adhere to GMPs?
- What kinds of internal assessments or third-party audits do you have in place to ensure audit-readiness?

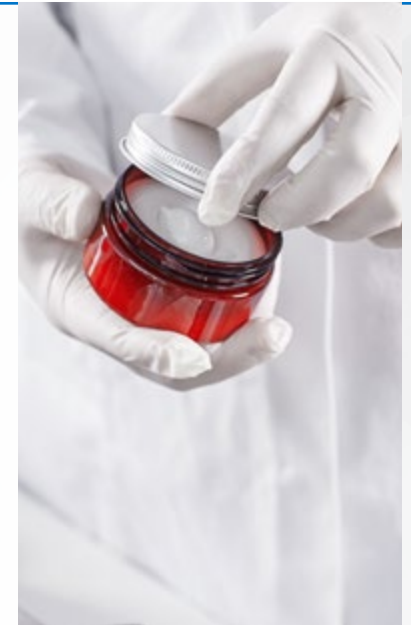




REGULATORY SHIFT #3

Redefining Ingredient Safety Standards

Regulators are taking a closer look at enforcing existing product safety and contamination standards in the cosmetics industry – and taking a closer look at the safety standards themselves. Several states, including California and New York, are taking legal action against cosmetics manufacturers for utilizing ingredients above allowable thresholds considered to be safe. California is also leading the charge in erecting new safety standards, having recently passed the “Toxic-Free Cosmetics Act” which bans the sale of products in the state that contain 20 highly toxic chemicals. Historical precedent shows California to be an early adopter and a strong indicator of consumer protection and regulatory trends that are likely to expand across the nation.



The Contamination Challenge

As the standards for safe allowable levels of various substances change – and regulators more strictly enforce these standards – some cleaning and sanitization chemistry vendors may be required to change formulations and reformat their cleaning and sanitization products. For manufacturers, this product reformatting or reformulation presents the significant burdens of revalidation.



KEY CONSIDERATIONS:

- What cleaning and sanitization products are you currently using that may be phased out in the future?
- What contamination risks do the ingredients in your cleaning and sanitizing products present?
- What roadblocks would your organization face if required to revalidate cleaning and sanitization practices in the event of product reformulation?





Cleaning & Sanitization Now Critical to Business Growth



Delivering Brand Protection

Ensuring contamination-free production doesn't just prevent the immediately high costs of recalls and production shutdowns – it also drives long-term value by enhancing reputation and consumer trust around brand quality.



Enabling Operational Agility

A robust cleaning and sanitization program enables an agile production operation that is ready to rapidly shift to accommodate new production requirements and achieve new production standards.



Empowering Business Growth

Confidence in the agility of your production operation enables your business to capture emerging consumer demand trends such as those discussed in this eBook – opening the door to new business opportunities and unlocking growth.





Expert Partners Deliver Business Value

Many of the most innovative and agile manufacturers are leaning on expert service partners like Ecolab to help them build future-ready programs around three key characteristics:



Value-Added Expertise

- Evaluating plant operations and existing cleaning & sanitization procedures
- Proactively identify risks and opportunities for improvement
- Consistent audit-readiness assessments



Smart Product Guidance

- Providing a wide range of product options for cleaning and sanitization
- Offering versatile products that meet specific standards (organic, natural, halal, etc.)



Industry Insights

- Anticipating consumer trends and developing products that meet new expectations and standards
- Monitoring – and actively participating in – evolving legislation and regulations





About Ecolab

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A trusted partner at nearly 3 million customer locations, Ecolab is the global leader in water, hygiene and energy technologies and services that protect people and vital resources. When you partner with Ecolab you can be confident you are getting comprehensive solutions, data-driven insights and on-site service to promote safe food, maintain clean environments, optimize water and energy use, and improve operational efficiencies for customers in the food and hospitality markets in more than 170 countries around the world.

Ready to Learn More?

To learn more about any of the consumer demands or regulatory trends discussed in this eBook, or to discuss how your manufacturing operation can take steps to enhance contamination prevention, increase operational agility and drive growth, contact your Ecolab representative.

For more information about how Ecolab can help your facility, visit: www.ecolab.com/lifesciences

