

# Elevating patient compliance: A comprehensive taste offering, carefully curated for pharma

## Improving the palatability and acceptance of medication to enhance patient compliance and establish clear product differentiation in an increasingly competitive marketplace

Our new, dedicated **taste portfolio** has been carefully designed for pharmaceutical formulations, and is supported by our quality and regulatory expert services. The portfolio is rich and varied, from flavors and extracts to aromatic compounds – encompassing core notes such as citrus and mint, plus more intricate nuances – as well as maskers, blockers, and sensates, all built upon our extensive heritage in crafting industry-leading **taste solutions**. Our dedicated pharma team has crafted this portfolio to precisely meet our customers' technical and regulatory requirements, streamlining drug development and enhancing brands through quality formulations.

91%

91% of US pediatricians reported unpleasant medication taste as a **key barrier to patient compliance**<sup>1</sup>

64%

64% of 14-year-olds surveyed said **disliking the taste was the main reason** they find some medicines difficult to take<sup>2</sup>

50%

50% of people will **experience difficulties with swallowing medications** at some time in their life<sup>3</sup>

### Meeting industry needs

**Taste masking:** Drug developers face mounting challenges in improving the palatability of medications, with many active pharmaceutical ingredients (APIs) inherently bitter.<sup>4</sup> This leads to poor compliance, suboptimal treatment outcomes, and lower perceived brand value. Our science-backed approach to flavor design directly addresses these issues, with our in-house pharmaceutical formulation specialists helping customers create patient-friendly formulations that meet both regulatory requirements and market expectations.

**Registration:** Our quality and regulatory expert services help our customers to simplify the drug filing process and path to approval with comprehensive quality and regulatory dossiers, best-practice sharing, and customized support.

**Sensory evaluation:** We have developed a pharma-specific tasting protocol that allows our technical team to safely assess drug formulations and apply human insights to optimize a solution.

**Bitterness profiling:** Our receptor-based discovery center enables in-depth analysis and profiling of the bitterness of compounds. This center of expertise can be leveraged to create specific blockers that address the taste challenges of our customers' formulations.

**Chemical interaction:** Our dedicated team of analytical experts can help at the early stages of formulation development by assessing the chemical compatibility of the API with flavor choices.

**Sustainability:** Together, we're not just developing solutions to help advance patient health, we're driving sustainable progress. Through our sustainability services, we can help our customers to achieve their sustainability goals, including scope 3 targets.\*

**Market and consumer insights:** Our profound expertise in flavor trends, coupled with a deep understanding of consumer behavior and taste preferences, enables us to deliver exceptional solutions that not only meet patient needs, but also align with market demands.

# Why dsm-firmenich?



## Pharma-specific taste portfolio

We have drawn on our expertise in taste solutions across various markets to curate a broad portfolio for use in solid, liquid, or semi-solid pharmaceutical formulations. Stemming from our industry-leading innovation capabilities – including sensory analyses of pharma prototypes and receptor-based research – this cutting-edge taste offering has been created by experts with a deep understanding of requirements to enter, navigate, and expand in the pharmaceutical market.



## Dedicated quality and regulatory teams

Each product in our pharma-specific taste portfolio is supported by, and delivered with, access to a comprehensive documentation package, designed to facilitate the drug approval process. This extends to major markets around the world, with our dedicated quality and regulatory teams possessing in-depth knowledge in the filing process. Driven by continuous improvement, we help our customers navigate the ever-evolving pharmaceutical market with confidence and peace of mind.



## Through partnership and collaboration

We work closely with our customers to enable drug products to reach their full potential. Our comprehensive high-quality specialty excipients and ingredients portfolio is elevated by our expert services, enhancing the performance of your formulations and enabling the development of safe and effective drug products. This allows you to focus on what really matters: bringing life-changing and life-saving medicines to market.



1. AAP Division of Health Policy Research. Many patients don't comply with prescription regimens: survey. AAP News. 2001;18 (5): 213
2. Nordenmalm et al. Children's views on taking medicines and participating in clinical trials. Arch Dis Child. 2019;104(9):900-90
3. Radhakrishnan et al. A Difficult Pill to Swallow: An Investigation of the Factors Associated with Medication Swallowing Difficulties. Patient Prefer Adherence. 2021;11:29-40
4. Dagan-Wiener A, Nissim I, Ben Abu N, Borgonovo G, Bassoli A, Niv MY. Bitter or not? BitterPredict, a tool for predicting taste from chemical structure. Sci Rep. 2017;7(1):12074. doi:10.1038/s41598-017-12359-7

\* Scope 3 emissions include all indirect emissions in a company's value chain, such as raw material extraction, product transportation, and end-of-life disposal.



**Scan the QR code and learn how we can help you to incorporate novel taste solutions that elevate drug palatability, patient convenience, and compliance.**

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