

# GuardCap™

Functional hard capsules for colonic delivery  
of dietary supplements and food supplements

GuardCap™



**A best-in-class platform  
of functional ready-to-fill capsules.**



### **Challenges in developing colonic-delivered nutraceuticals**

#### **Sensitivity of certain probiotic strains and health ingredients**

- 60 percent of probiotic bacteria are killed in the gastric environment prior to reaching the intestine.
- Many ingredients are sensitive to moisture, heat or mechanical stress which may occur during a production process.

#### **Delays in development**

- New products are needed constantly to meet fast-changing consumer requirements and scientific developments.
- Testing different coatings, including stability studies, can be time consuming and may not match the challenging timeline.
- Need for scale-up trials of the coating process.

#### **Complex supply chains**

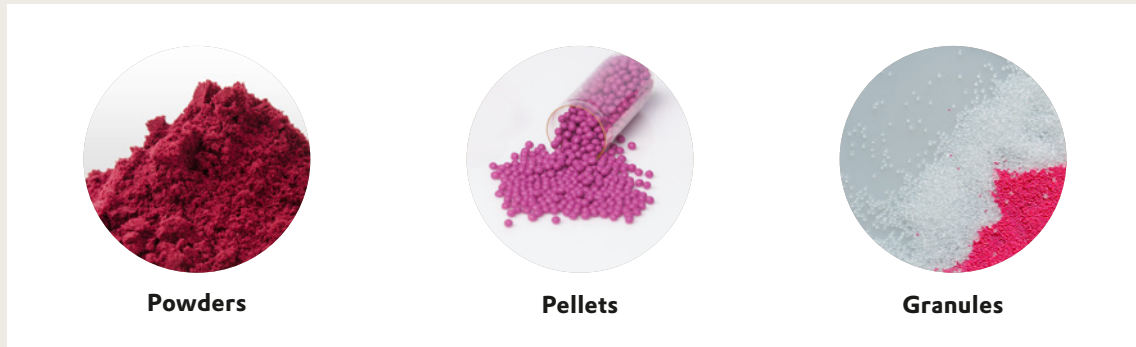
- Many supplement companies do not have their own coating capabilities and need to work with a contract manufacturing organization (CMO).
- Lengthy production times prolong the final supplement and increase the complexity of the supply chain.
- Some probiotics, such as spore formers, are not welcome at CMOs due to the risk of cross-contamination.

## Our Solution GuardCap™

We use empty, pre-locked HPMC (hydroxypropyl methylcellulose) hard capsules that are coated with EUDRAGUARD® biotic based formulation. The coating is applied across the entire surface, including the gap between the body and the cap.

Through this technique the gap is very narrow and hence very leak-proof. The capsules are compatible with conventional capsule filling machines and can be easily opened manually as well as mechanically.

## GuardCap™ is suitable for a range of fillings



## Leveraging the power of EUDRAGUARD® biotic

Our ready-to-fill functional capsules GuardCap™

- Ensure streamlined development of new dietary / food supplements
- Require no coating process – which may be harmful to sensitive health ingredients such as probiotics
- Guarantee the protection of sensitive ingredients from gastric acid, bile acid and enzymes
- Allow targeted release in the colon at a pH > 7
- Are compatible with high-speed capsule filling systems – capsules are delivered in a pre-locked status and ready to fill. They are easy to open, fill and close

## Key benefits of GuardCap™

- Available in different capsule sizes
- Batch size flexibility for your final product
- Easy-to-swallow
- Reliable dissolution and disintegration
- Quality compliance with regulations for dietary / food supplements
- Storage-stable capsule
- No additional sealing or banding needed
- Free from formulation: Solvent-free, TiO<sub>2</sub>-free, talc-free
- Increased viability of probiotics
- Moisture protection

**CONTACT US** and learn more about our functional ready-to-fill capsule GuardCap™

To get in touch with a member of our expert technical team, visit [oncare.evonik.com](https://oncare.evonik.com) or email [healthcare@evonik.com](mailto:healthcare@evonik.com)

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