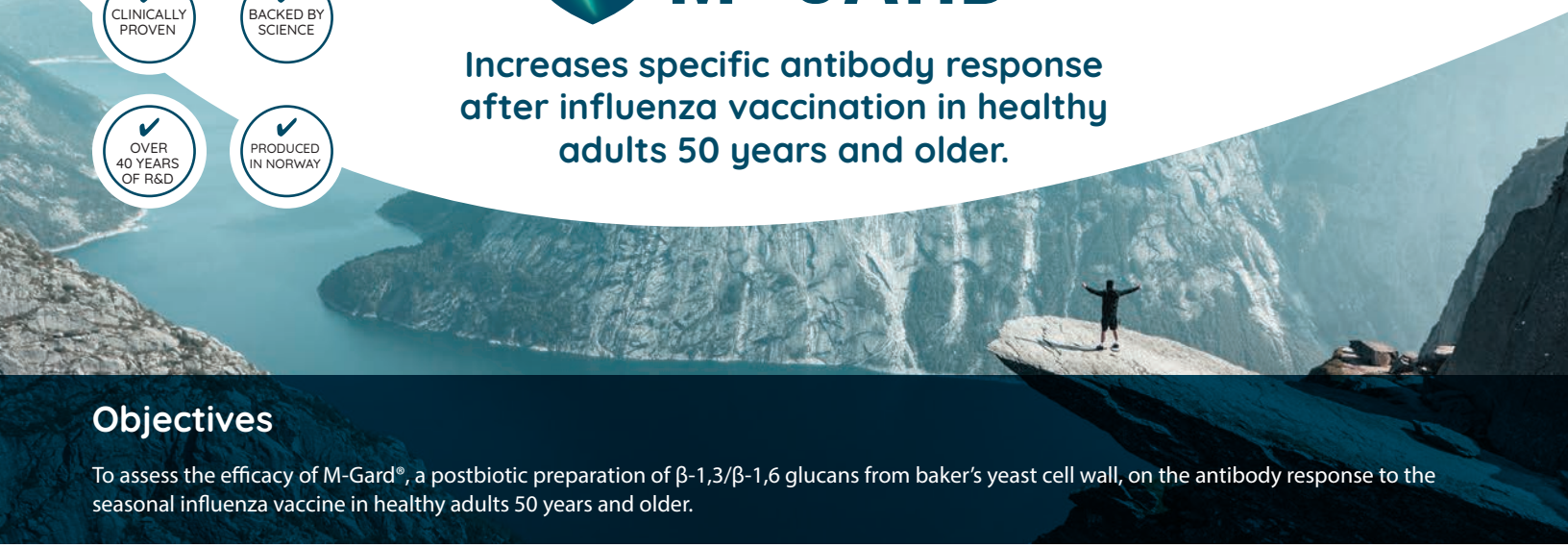
Clinical trial: Immunity

M-GARD®

✔ CLINICALLY PROVEN
✔ BACKED BY SCIENCE
✔ OVER 40 YEARS OF R&D
✔ PRODUCED IN NORWAY

Increases specific antibody response after influenza vaccination in healthy adults 50 years and older.



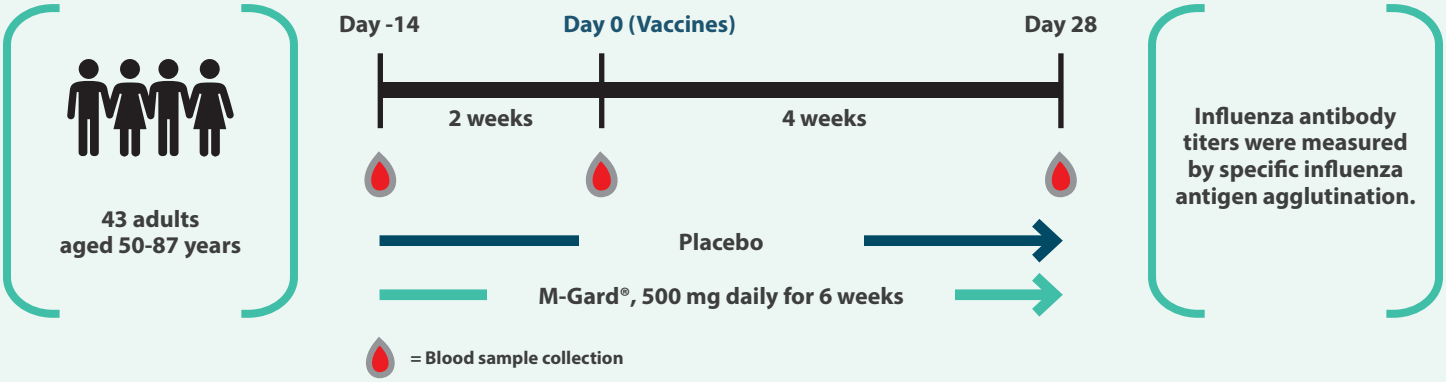
Objectives

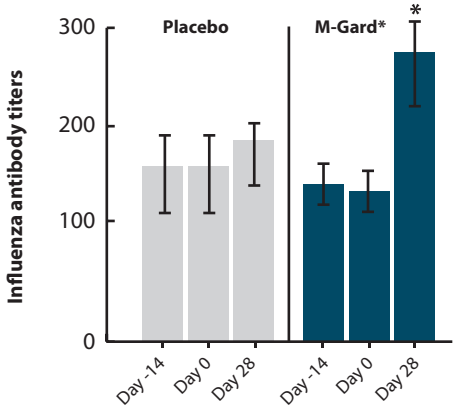
To assess the efficacy of M-Gard®, a postbiotic preparation of β-1,3/β-1,6 glucans from baker's yeast cell wall, on the antibody response to the seasonal influenza vaccine in healthy adults 50 years and older.

Study design and outcome measures

This randomized, double-blind, placebo-controlled study analyzed the immune response of 43 healthy adults, aged between 50-87 years. Participants consumed 500 mg of M-Gard® daily (250 mg/capsule), or a placebo, for 6 weeks.

Participants received the influenza vaccine after 2 weeks (Day 0). Blood samples were taken at baseline (Day -14), at Day 0, and at the end of the study (Day 28).





Study results and findings in context

Influenza **antibody titers were significantly increased by M-Gard®** while the antibody response was blunted in participants receiving placebo.

M-Gard® supports immune fitness and a well-balanced response by training the immune system to respond faster and more efficiently to an immunological challenge.

The results of this study indicate **a beneficial role of M-Gard®** in **supporting immune fitness** in healthy adults.

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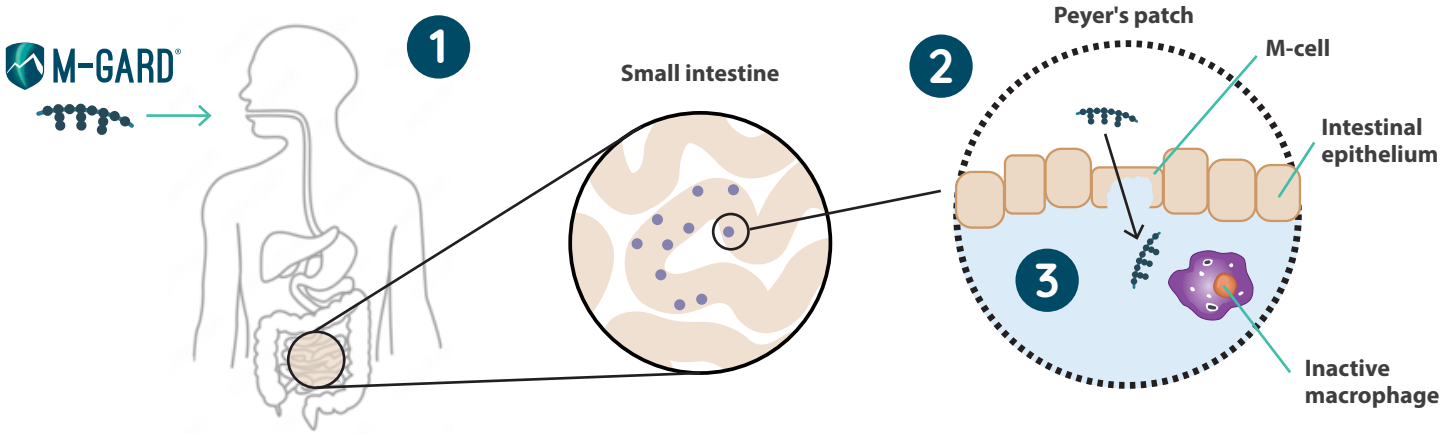
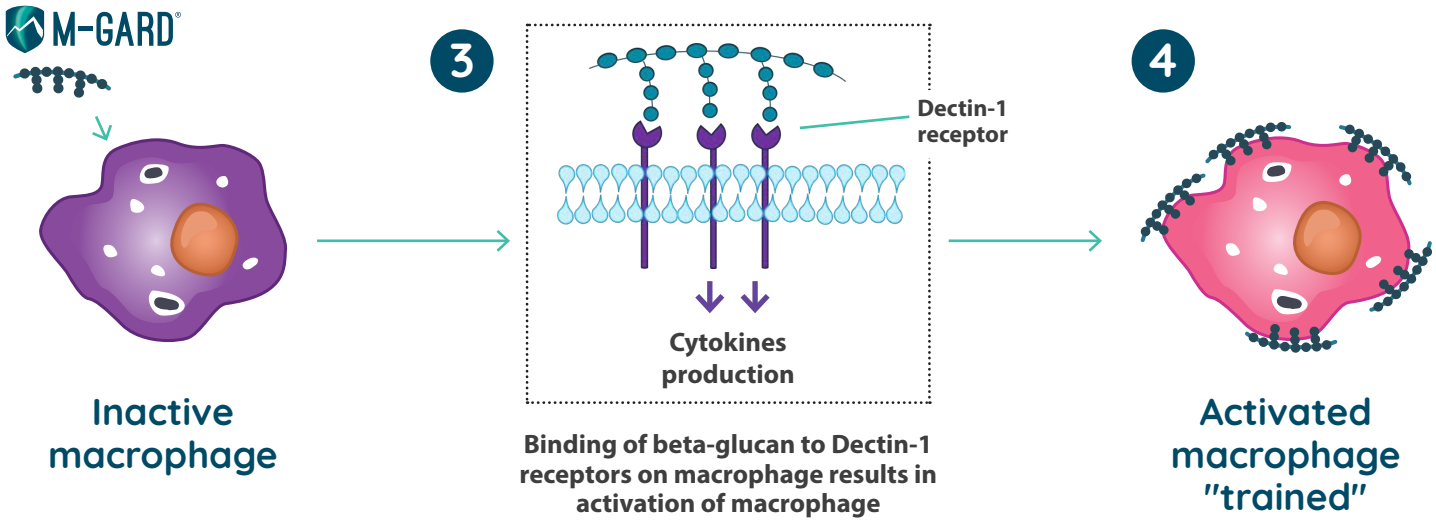
LALLEMAND BIO-INGREDIENTS

Studies have shown that regular yeast beta-glucan intake results in a “trained immune response” upon infection





1. M-Gard® reaches the small intestine and is taken up by M-cells in Peyer’s patches.
2. In the Peyer’s patch, the long side chains of the M-Gard® molecule bind to Dectin-1 receptors on inactive macrophages.
3. M-Gard®-bound Dectin-1 triggers a signaling cascade (cytokines) activating the macrophages.
4. Activated macrophages (i.e., trained macrophages) become better at capturing and destroying pathogens.

Conclusions

- ✔ This study shows that M-Gard® supplementation for 2 weeks before vaccination and 4 weeks after (total 6 weeks) significantly increased influenza antibody titers in healthy adults 50 years and older compared to those consuming a placebo, suggesting an improvement in immune fitness.
- ✔ Daily supplementation with yeast β-1,3/1,6-glucan proactively fosters immune fitness (efficient functioning of the immune system) and supports a healthy lifestyle.

Reference: Moreno, M. L., Nieves, C. J., Hebert, K., Vivas, C. A., Rivero-Mendoza, D., Colee, J., … Dahl, W. J. (2025). Yeast Beta-Glucan Enhances Antibody Response Following Influenza Vaccination – A Double-Blind, Randomized, Placebo-Controlled Pilot Trial. Journal of Dietary Supplements, 1–16. https://doi.org/10.1080/19390211.2025.2539876

Health Ingredients

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