

EPICOR®

Rapid Immune Responses to EpiCor® Consumption in Humans



Summary: Previous published human clinical research had indicated that it may take up to two to four weeks for the full benefits of EpiCor fermentate to take effect. The purpose of this trial was to confirm possible short-term benefits occurring after consuming EpiCor. This clinical trial, published in a MEDLINE-indexed journal, was double-blinded and placebo-controlled. Results include:

- Serum antioxidant protection increased within one hour and reached statistical significance within two hours of consumption.
- There is a significant increase in Natural Killer (NK) cell activity within two hours of consumption.
- These rapid responses complement the modulatory effects of EpiCor, such as the increase in sIgA antibodies and the reduction of inflammation.



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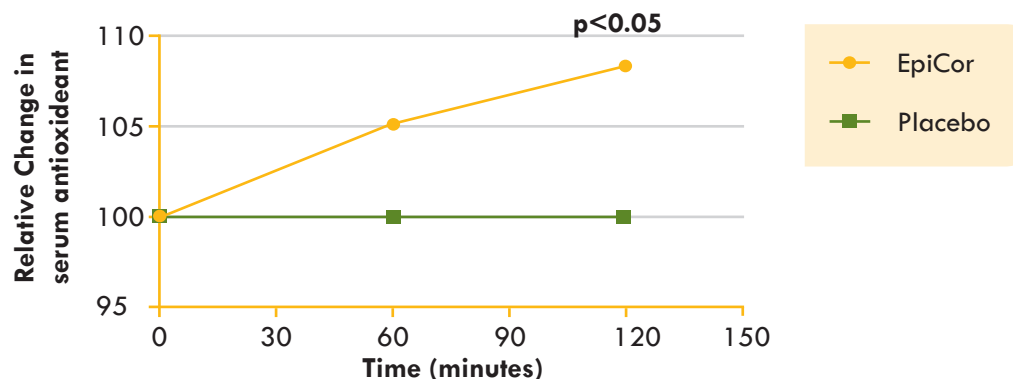
Method

In this double-blinded, placebo-controlled crossover study, subjects fasted for 12 hours before arriving at the clinic for the trial. Questionnaires assessed previous meals, snacks, exercise, stressors, and recent sickness. After blood for baseline analysis was drawn, subjects consumed 500mg of EpiCor fermentate or 500mg of placebo. Further blood samples were taken after one and two hours.

Results

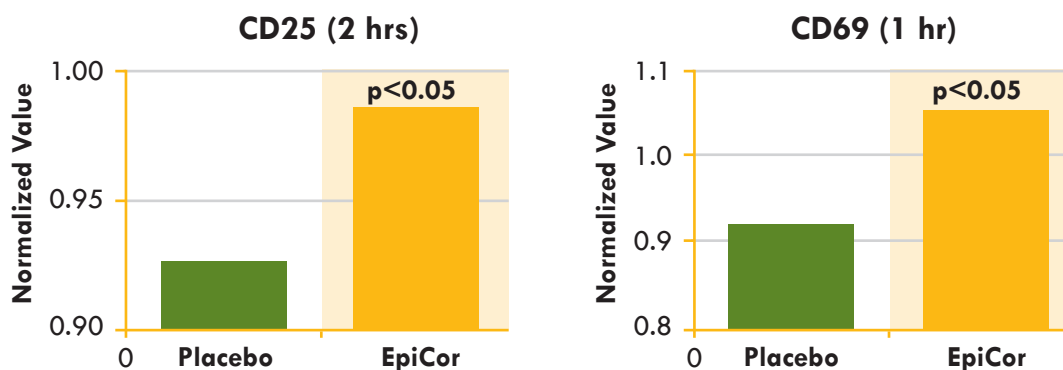
EpiCor consumption resulted in a rapid increase in serum antioxidant protection within one hour of consumption of the EpiCor, and this change reached statistical significance after two hours (Figure 1).

Figure 1. The Effect of EpiCor on Serum Antioxidant Protection Capacity



Furthermore, this human clinical showed that NK cells were activated in the same time frame. Within two hours of ingesting 500 mg of EpiCor, both the CD25 and CD69 activation markers of serum NK cells were significantly increased (Figure 2).

Figure 2. The Effect of EpiCor on NK Cell Activation



Conclusion

Previous studies demonstrate that EpiCor is an overall immune modulator that may take two to four weeks for its effects to be fully realized. This is most clearly shown in two other studies examining the capability of EpiCor to enhance sIgA levels.^{2,3} The present study shows that EpiCor also has some very rapid beneficial effects on the immune system.

References:

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2. Jensen, G. S.; Patterson, K. M.; Barnes, J.; Schauss, A. G.; Beaman, R.; Reeves, S.; Robinson, L., A Double-Blind Placebo-Controlled, Randomized Pilot Study: Consumption of a High-Metabolite Immunogen from Yeast Culture has Beneficial Effects on Erythrocyte Health and Mucosal Immune Protection in Healthy Subjects. *The Open Nutrition Journal* **2008**, *2*, 68-75.
3. Moyad, M. A.; Robinson, L. E.; Kittelsrud, J. M.; Reeves, S. G.; Weaver, S. E.; Guzman, A. I.; Bubak, M. E., Immunogenic yeast-based fermentation product reduces allergic rhinitis-induced nasal congestion: a randomized, double-blind, placebo-controlled trial. *Adv Ther* **2009**, *26* (8), 795-804.

