

# Sport doctors say non-alcoholic wheat beer boosts athletes' health

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Many amateur athletes have long suspected what research scientists for the Department of Preventative and Rehabilitative Sports Medicine of the Technische Universitaet Muenchen at Klinikum rechts der Isar have now made official: Documented proof, gathered during the world's largest study of marathons, "Be-MaGIC" (beer, marathons, genetics, inflammation and the cardiovascular system), that the consumption of non-alcoholic weissbier, or wheat beer, has a positive effect on athletes' health. Under the direction of Dr. Johannes Scherr, physicians examined 277 test subjects three weeks before and two weeks after the 2009 Munich Marathon.

The study focuses on the health risks for marathon runners and the potential positive effects of polyphenols. These aromatic compounds occur naturally in plants as pigment, flavor, or tannins, many of which have been credited with health-promoting and cancer-preventative properties. Unique to this study was the combination of different polyphenols that were tested on the large pool of participants. The research team met the scientific requirements of the study by conducting a randomized, double-blind, placebo-controlled trial.

Non-alcoholic Erdinger wheat beer was selected as the test beverage, chosen for its rich and varied polyphenol content and its popularity with marathoners and tri-athletes. The "active" group drank up to 1.5 liters of the test beverage per day, while a second group consumed an equal amount of an otherwise indistinguishable placebo beverage that contained no polyphenols and was especially produced for the study.

One result from the study was the discovery that, after running a marathon race, athletes experience intensified inflammatory reactions. The immune system is thrown off balance and runners are much more likely to suffer from upper respiratory infections. This heightened susceptibility to illness following strenuous sport activity has been

identified as an "open window." Furthermore it was shown that non-alcoholic wheat beer containing polyphenols has a positive, health promoting effect on the human body: inflammation parameters in the blood were significantly reduced, and there was a lower frequency of infection with milder symptoms.

**Reduced Inflammatory Reaction:** Dr. Scherr, who also serves as physician to the German National Ski Team, explains: The analysis of the leukocytes, or white blood cells, which constitute one of the most important parameters for inflammation, revealed values in the active group that were 20% lower than in the placebo group."

**Support for the Immune System:** Compounds in the test drink had a compensatory or balancing effect on the immune system. Dr Scherr: "We were able to prove that it strengthens an [immune system](#) that has been weakened by physical stress. It also prevents the system from over-performing."

**Prevents Colds:** Runners who drank the non-alcoholic wheat beer were up to three times less susceptible to infection than those in the placebo group. Dr. Scherr: "Drinking the non-alcoholic test beverage reduces your risk of developing a cold by one third."

**Improvement with Upper Respiratory Infections:** People in the active group who did succumb to a cold experienced a milder or briefer infection than those in the placebo group. Dr. Scherr: "Results showed a Number Needed to Treat (NNT) of eight. That means that for every eight people who had the test drink, one of them was prevented from succumbing to a cold."

In summary, Dr. Scherr explains: "The potential for foods containing polyphenols to have a positive effect on athletes' health has already been suggested in several articles. Nevertheless we were ourselves sometimes surprised at how clearly evident this was in the results. We now have

scientific confirmation of those assumptions for this test beverage, with its particular combination of polyphenols, vitamins and minerals."

Dr. Scherr presented this study to the approximately 5,000 scientists, physicians, and trainers attending the world's largest congress for [sports medicine](#) in Denver (USA) hosted by the American College of Sports (ACSM) at the beginning of June 2011. The study will be published in the January printed edition of the professional journal *Medicine & Science in Sports & Exercise* (MSSE).

Peter Liebert, Managing Director for Technology, Purchasing, Human Resources and Logistics for Erdinger Weissbräu, is pleased about the study results: "In brief, the Be-MaGIC study confirms the benefits for sport athletes and proves new health-promoting effects. Thus, Erdinger alcohol-free is proven to be more than just an isotonic thirst-quencher."

Provided by Technische Universitaet Muenchen

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