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### **Повышенные уровни тестостерона у мужчин: предварительные наблюдения при тестировании лизата *Bacillus cereus* Strain F**

#### **Elevated Testosterone Level in Man: Preliminary Observations on Testing for Lysate of *Bacillus cereus* Strain F**

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**Objective:** We examined Lysate of *Bacillus cereus* Strain F, which was isolated from ancient permafrost, on human.

**Method and materials:** From April, 2014 to July, 2017, there were eighteen participants included in this study. All participants underwent daily taking of lysate of 10E9 bacterial cells, in 40% alcohol solution (about 2-4 ml) in the morning for one month. Two of the eighteen participants took supplement twice with interval of 6 months between tests. The changes were monitored by blood sampling, including the levels of white blood cell (WBC) count, red blood cell (RBC) count, hemoglobin, Platelet count, Bilirubin Total, Bilirubin direct, Protein Total, Albumine, Tryglycerides, Cholesterol, HDL Cholesterol, LDL Cholesterol, TSH, Glucose for both female and male participants. Level of Testosterone and prostate specific antigen (PSA) Total were checked in male participants; level of carbohydrate antigen 125 (CA125) was checked in female participants.

**Results:** Among the parameters, WBC count, Tryglycerides, Testosterone are different significantly for changes after one month daily taking of lysate of *Bacillus cereus*. No negative effects were detected. No significant differences were noted between female and male or between age <65 or >=65.

**Conclusion:** There was no negative effect detected, but positive results have been showed in this study. This work is captivating to inspire further research to identify biochemical features of permafrost microorganism and more efficient application on human.