5. TEST REVIEW FROM WALTER H. MEDINGER, MSc, PhD



International Institute for Research on Electromagnetic Compatibility



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Review of: Test report for energy influence on human organism

for the product Foam with Biocrystal® mixture

Manufacturer:

Biocrystal Technologies d.o.o., Školjić 10, 51000 Rijeka, Croatia

Research institution:

Bion, Institute for Bioelectromagnetics and New Biology Ltd., Stegne 21, SI 1000 Ljubljana, Slovenia (Report no. 6/17 of Feb. 10th, 2017)

Having reviewed the report by Bion institute on the product »Foam with Biocrystal® mixture« I have come to the following **opinion**:

The tests were conducted with 10 volunteers after a *well-designed test plan* and *fulfilled the scientific standards* of a prospective, double-blind, and randomised study, ruling out placebo effect. Two tests series were run (i) with Biocrystal foam (BF), and (ii) with control foam (CF, without Biocrystals). The *physiological parameters* measured during the tests, namely: heart rate and its variability (HRV), muscle activity (EMG), skin conductance, external body temperature, respiration rate, and breathing depth, are *well defined and established*.

A specific trait of the report by Bion is the *careful statistical analysis* that was applied to the first and to the second half of the tests separately. It comprised the Wilcoxon signed-rank test for differences between median values of the parameters between the BF and the CF, as well as Levene's test for equality of variances. The Holm-Bonferroni correction for multiple comparisons was applied to both kinds of statistical tests. The difference of medians was compared to the standard deviation of each parameter in both half-times of the test. What I consider extremely valuable is the *long-term control (LC) based on a rich experience of Bion in the average course of test parameters* taken from previous tests of the same type within a control group of 7 x 10 volunteers. The standardised evaluation of the BF and CF curves compared to the LC curve *clearly reveals the specific effectiveness of BF* which is explained by two response patterns, namely (i) a bioenergetic influence and (ii) a bioprotective influence.

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