## **Effects of Distant Emotions on the Human Enteric System**

## **Results:**

<u>Objective:</u> Investigate whether the gut feelings of one person, as measured with an electrogastrogram (EGG), respond to the emotions of a distant person.

<u>Design:</u> In a double blind protocol, EGG activity was recorded in an individual relaxing in a heavily shielded chamber while, at a distance, a second person periodically viewed the live video image of the first person along with stimuli designed to evoke positive, negative, calming or neutral emotions. Subjects included 26 pairs of healthy adult volunteers.

<u>Outcome measures:</u> EGG maximum values recorded while the distant person was exposed to emotional stimuli were compared to similar values recorded during exposure to neutral stimuli.

Results: EGG maximums were significantly larger on average when the distant person was experiencing positive (p=0.006) and sad (p=0.0009) emotions, as compared to neutral emotions. Nonparametric bootstrap procedures were employed to evaluate these differences, and the results survive correction for multiple analyses. The conclusion is that EGG activity increases in response to the emotions of a distant person, beyond the influence of ordinary sensory interactions. Relationships commonly reported between gut feelings and intuitive hunches may share a common, poorly understood perceptive origin.

## **Published Work:**

Radin, D. I. & Schlitz, M. J. (2005). Gut feelings, intuition, and emotions: An exploratory study. Journal of Alternative and Complementary Medicine, 11 (4), 85-91.

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