

Research Initiative to Evaluate the Effect of the SafeZone-EM™ on Cognitive Function as Measured by the NeuroCatch®

Dr. George Roth, DC, ND, CMRP

Introduction:

The purpose of this ongoing study is to evaluate the influence of the SafeZone-EM™ device on brain function, using the NeuroCatch® electroencephalography (EEG) platform.

The NeuroCatch® Platform is based on the research of **Ryan D'Arcy, Ph.D.**, a Canadian neuroscientist, and full tenured professor with appointments at both Simon Fraser University and the University of British Columbia. It is an industry-leading medical device that offers an objective evaluation of brain activity, acquired using **event-related potentials (ERPs)**, for objective evaluation of cognitive function.

Method:

The method used in this study involves measuring brain activity of test subjects, using NeuroCatch, in the presence or absence of the normalizing electromagnetic field produced by the SafeZone-EM, using a *back-to-back* protocol.

Results:

Prior experience with *back-to-back* testing using NeuroCatch has typically shown a *decline* in performance, likely attributable to fatigue.

In contrast, preliminary back-to-back results with the SafeZone turned ON, following a scan with the SafeZone OFF, demonstrate a measurable *improvement* in cognitive function:

1. Reduced 'LATENCY' (increased *speed* of processing) was observed in most cases.
2. Reduced 'AMPLITUDE' was similarly demonstrated in many cases, especially for subjects with a history of traumatic brain injury or ADD/ADHD, indicating a moderating effect on the overstimulated, so-called '*noisy brain*'.

Typical results can be reviewed on the **NeuroCatch Example Reports** tab. These illustrate responses that were observed in a majority of cases. Note that the second test (Scan 2, SafeZone ON, **GREEN LINE**), demonstrates a lower '*Latency*' value (faster processing speed), while the '*Brain Vital Signs*' graphics on page 2, show improved patterns, according the '*Reference Range*' (**GREEN SHADED AREA**) as compared to Scan 1 with the SafeZone OFF (**BLUE LINE**).