

PRESS RELEASE

FOR IMMEDIATE RELEASE

Independent Study Led by Renowned Concussion Researcher Dr. Alan Pearce Finds NeuroGuard+ Significantly Reduces Head Acceleration and Preserves Brain Function Following Repetitive Head Impacts

Commercially Available Lower-Jaw Mouthguard Demonstrates Significant Advantages Over Conventional Upper Mouthguards in Controlled Laboratory Study

Traverse City, MI – July 10, 2026 - NeuroGuard+ today announced the results of an independent scientific study led by internationally recognized concussion researcher and neuroscientist **Dr. Alan Pearce**, demonstrating that the NeuroGuard+ lower-jaw mouthguard significantly reduced head acceleration while helping preserve acute neurophysiological and cognitive function following repetitive soccer heading when compared with both a conventional upper-mouth mouthguard and no mouthguard.

Dr. Pearce, one of the world's leading experts in sports-related concussion and repetitive head impacts, has spent more than two decades researching athlete brain health and has authored more than 150 peer-reviewed scientific publications. His work has helped advance the global understanding of concussion assessment, neurophysiology, and the effects of repetitive head impacts.

The study evaluated 22 experienced soccer players who completed a standardized protocol of 20 soccer headers while researchers measured head acceleration, brain function using transcranial magnetic stimulation (TMS), and cognitive performance through reaction-time testing.

Key Findings

Compared with a conventional upper-mouth mouthguard and no mouthguard, athletes wearing NeuroGuard+ demonstrated:

- Approximately **20% lower mean linear head acceleration**
- Approximately **27% lower mean rotational (angular) head acceleration**
- Better preservation of normal neurophysiological function following repeated heading
- Better preservation of reaction time immediately following repetitive head impacts

Rotational head acceleration is widely regarded by researchers as particularly important because rotational forces are believed to contribute substantially to brain tissue strain. The study found NeuroGuard+ reduced both linear and rotational head acceleration compared with the conventional upper-mouth mouthguard.