

## A Stronger, Safer Football Helmet

By: Jenny Vrentas

For decades, football players have worn the same kind of head protection: hard, plastic helmets. But, that may change soon. About four years ago, Sam Browd, a pediatric neurosurgeon, started thinking about how to approach helmets differently. "I love football, but I know about all the case studies that show that playing too long can have major effects later in life," Sam replied. "But I wondered, what if the outer shell were made of a flexible substance instead? What would the effect be?"



Sam decided to test his idea out. He sketched a prototype on a napkin and brought it to contacts at a startup, VICIS, to make it a reality. "We wanted to build the safest helmet ever made," says Dave Marver, the company's CEO. The result, made possible by some \$40 million in investments, is the Zero1, which earned top marks in the NFL's annual helmet testing for its ability to reduce the forces that cause brain injury.

The helmet works well to reduce force trauma. "It's kinda like a bumper car," says Browd, "bumper cars reduce force and the sound of a collision immediately on impact." The reduction in force has worked so well, that is now being used by 18 NFL teams, including the Kansas City Chiefs quarterback Alex Smith, and about 20 college teams.

So, what's the next step for this company? "A version for younger athletes," says Dave Marver. "Our youth's safety is very important."