Overview
Haley, a female youth athlete came to the GAMEspeed™ program in El Segundo, CA wanting to improve her speed for soccer. Like many young athletes, she wants to play in college. Her parents wanted to give her every opportunity to be her best and earn a college scholarship. The GAMEspeed™ program utilizes the FORCE 2.0 treadmill, which allows for virtual sprinting, variable resistance interval training, computerized data measurement, and augmented feedback.

Client Needs
Excited to start training, Haley took part in the GAMEspeed™ PROfile. She warmed up and was familiarized with running on the FORCE 2.0. Her assessment was completed using the unique data collection capabilities of the FORCE 2.0 in a simple 20 minute testing session.

When Ken Vick, her performance coach, sat down with her and her parents, he went over the results of the PROfile assessment. He showed her how she compared to other female soccer players in high school, as well as where collegiate and elite players were at. It turned out her speed was slightly above average for her age already, but she needed to improve the acceleration phase.

The FORCE 2.0 treadmill and software provided in-depth analysis of her sprint times and speed, power output, rate of force development, and stride patterns. Her first 5-10 steps were targeted for improvement in her sprint times, and more importantly, to have an impact on the field. She also saw her video technique analysis, which identified she needed to improve her posture when sprinting, as well as her foot strike, and arm action.

Program
With the GAMEspeed™ PROfile, and the corresponding program recommendations she started a 6 week, 2 sessions per week program. She trained with a group of 3 other athletes, 2 boys and 1 girl, from soccer, football, and baseball. They performed a dynamic warm-up and targeted stretching exercises to begin. Then they worked in a circuit fashion were the primary work was done with turns on the FORCE 2.0 treadmill. They also did core, stabilization, and computerized mental speed training exercises.

To meet Haley’s needs, she first worked on developing better sprinting posture through enhanced feedback from the FORCE 2.0. A small resistance load and special drills allowed her to improve rapidly. She also had continual coaching feedback, since Ken could stand beside her on the treadmill instead of running down a track.

They also used starting drills that focused on developing greater power output. The FORCE provided both peak and average power output on every rep. This augmented feedback helped keep her focused and improving. The resistance load were set according to her PROfile results and helped to encourage a positive shin angle on each foot strike.

Client Success
After just 12 training sessions, Haley improved her acceleration significantly over both 10 and 20 yd distances. “You could really see a difference in her getting a jump on the ball” commented her father Joe. She dropped her 40yd time by an important 0.4 sec. Her technique score increased from 15 out of 40 to 28/40 because she improved her posture, leg drive angles, and arm action.
Sprinting Analysis Capabilities
Thanks to the computerized data collection on the FORCE 2.0, the GAMEspeed program thoroughly analyzed Haley’s speed, acceleration rates, stride length & rate, force and power in each step. The graph below shows the improvements Haley made. The steeper graph at the very start post training shows how she improved her acceleration. Haley got up to speed faster. She also had a higher top speed.

The Force 2.0 is well suited for this type of analysis. It’s computer interface to the treadmill and load cell allows precise measurement of an athlete’s speed capabilities. The stable platform allows coaches to analyze technique visually and through video.

![Graph showing improvements in speed and acceleration](image-url)