

## Gift Guide: Get better at sports with smart gear

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This Sunday, Nov. 30, 2014 photo shows the 94Fifty basketball, in Atlanta. The regulation-size ball contains built-in sensors that measure the speed, arc and rotation of the ball and transmits that information wirelessly to a companion app installed on a smartphone or tablet computer. (AP Photo/Ron Harris)

Advances in technology present sports enthusiasts with plenty of options to train better and smarter.

High-level gear and biometric-analysis software are no longer limited to elite professional athletes. The weekender can now use some tech-savvy



approaches to get better, perhaps, at a multitude of sports. Practice makes perfect, but technology can make practice better:

- Hexoskin shirt (\$400):

I felt like Batman in his form-fitting bat suit. It's a snug, black sleeveless shirt with a brain. Two bandage-width strips containing sewn-in sensors run across the chest and abdomen areas. They were held tight against my body by adjustable straps. A rechargeable pack about the size of a mint tin fits nicely near my waist. Once I started working out, the weirdness subsided and the hard work and perspiration took over.

The shirt communicated wirelessly with a phone app to give me realtime feedback about my breathing, <u>heart rate</u>, running cadence and calories burned.

What did I learn? Well, I need to run more to get in better shape, lower my heart rate and smooth out my breathing. All of these things are connected in exercise. Hexoskin did an excellent job illustrating that with smart on-screen graphics. Once I remembered to record my sessions, it stored all that data so I could measure improvements.

- Babolat Play Pure Drive <u>tennis racket</u> (\$400):

This tennis racket logged every shot I hit, in or out, over multiple practice and competitive sessions. Sensors are integrated into the frame.

Through a companion <u>phone app</u>, the racket told me a lot, including things I'll need to build on if I hope to get better. After nearly a half-hour



against a ball machine, I hit 191 shots: 106 backhands, 67 forehands, 15 serves and three overheads that were probably out of bounds. But those numbers mean nothing without the underlying metrics the racket also measured.

Hitting a tennis ball with topspin allows you to swing harder, but keep the ball in the court. Even though I thought I hit nearly everything with a fair amount of topspin, the racket stats told me otherwise. Of those 106 backhands, only 18 registered as being hit with topspin. Thirty weighed in as slice backhands, and 58 were flat strikes.

The on-screen statistics were primarily displayed with numbers and percentages, though the "impact locator" gave a graphical representation of a racket and showed the location of my off-center hits. This was helpful and gave me valuable information for future hitting sessions.

The data from the Babolat Play Pure Drive could be useful for mid-level to advanced players. The best part is that Babolat put the smarts into one of the best-selling rackets available, and not some odd outlier model that nobody uses.

- 94Fifty basketball (\$250):

This smart basketball is primarily designed to help you develop better mechanics and fundamental hoops skills. It won't tell you, though, whether you made the shot. Arc and rotation are the primary metrics the ball calculates.

After stretching and dribbling around, I began a pretty lengthy shootaround session at a local court. When I launched the companion app, I took the option of setting my desired shooting range at 15 feet. That's



how far away the free-throw line is, and anything beyond that was going to nibble away at my confidence and cause me to miss more.

During one session, I took 26 shots from that range. The ball and app told me that the arc was too low on 14 of those shots and too high on another four. I made a few adjustments to my style and got more shots in during the next session later that day.

But it's hard to tell whether the advice from the app helped me make more shots or whether I was just getting warmed up.

Still, the technological heft of the ball is for real, and it can measure dribble power, the number of consecutive dribbles and the amount of backspin on my shots.

**More information:** Hexoskin: <u>www.hexoskin.com</u> Babolat: <u>www.babolat.us</u> 94Fifty: <u>www.94fifty.com</u>

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