



**WINDUP //**  
Young pitchers often pull the ball out of their gloves too early.

The windup includes all movement up to the "balance point," when the knee reaches its maximum height.

# Perfect Pitch

A pro baseball pitch is the most violent human motion ever measured in a lab. That's according to Glenn Fleisig, research director at the American Sports Medicine Institute, who has studied more than 1,000 pitchers to learn what they do right and wrong. Now a company called 3P Sports is using that research to teach youngsters how to throw heat. The kids upload footage of themselves pitching for comparison against 3-D video of big league perfection. Here's a model fastball. —*Josh Dean*



ANIMATION BY

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## Beyond the Printed Page

- Built-in interactive, reader controlled multimedia