

## Bat Speed / Nutrition & Conditioning

August 19, 2009

### Warm-Up Bat Weight and Bat Speed

My newsletter from 7/14/09 talked about 10 ways to increase bat speed (Click the link below):

[www.completechiropractichealthcare.com/base/documents/349/Pitching\\_Newsletters/Bat\\_Speed\\_Curveballs.Red\\_Bull\\_7.14.09.pdf](http://www.completechiropractichealthcare.com/base/documents/349/Pitching_Newsletters/Bat_Speed_Curveballs.Red_Bull_7.14.09.pdf)

This study looked at bat weight used during warm-up and bat speed:

Montoya BS. **Effect of warm-up with different weighted bats on normal baseball bat velocity.** J Strength Cond Res 2009 Aug;23(5):1566-9

They had college kids swing a light bat (9.6 ounces), a normal bat (31.5 oz), or a heavy bat (55.2 oz) 5 times. The kids rested for 30 seconds and then swung the normal bat to check bat speed.

#### What Did They Find?

During warm-up, the light bat speed was 20% greater (63.57 mph) than the normal bat group (51.25 mph) and 34% faster than those in the heavy bat group (41.79 mph).

When all 3 groups then swung the normal bat, the light bat group was still 4% faster than the normal group (52.29 mph vs 50.60 mph) and 8% faster than the heavy bat group. The normal group was 5% faster than the heavy group.

SO...STOP USING A DONUT WHEN WARMING UP!

*"...it is suggested that when preparing to hit, 5 warm-up swings with either a light or normal bat will allow a player to achieve the greatest velocity of their normal bat."*

### Nutrition Myths & A Great Conditioning Exercise

A nice article by the National Strength and Conditioning Association confronts 10 myths about Nutrition:

<http://www.nscs-lift.org/Perform/articles/080406.pdf>

**2 of the most important to take note of are:**

**Myth:** The more protein I eat, the better.

**Truth:** While protein is necessary to support increased protein oxidation during endurance training as well as muscle growth for athletes participating in strength training activities, there is insufficient evidence to support the notion that "the more I exercise, the more protein I need." Athletes should consume between 1.2 – 1.8 grams per kg of body weight or 10 – 35% of total calories (4,7,8).

**Myth:** Diluting sport drinks is a good idea to reduce my calorie intake.

**Truth:** Sport drinks are designed to provide a 6 – 8% carbohydrate solution and a reference amount of electrolytes to replace both fluids and electrolytes for athletes who lose these thru sweat. For exercises lasting 60 minutes or longer, taking in a sport drink, without diluting it is appropriate for optimal hydration (6).

**FOCUS ON YOUR PROTEIN INTAKE  
(1.2-1.8 GRAMS /KG BODYWEIGHT/DAY)**

**WATCH YOUR GATORADE INTAKE  
AS THE #2 INGREDIENT IS THE SAME  
AS THAT FOUND IN SODA  
(HIGH FRUCTOSE CORN SYRUP)  
([Click here to learn more](#))**

Another NSCA article looked at balance, speed conditioning:

<http://www.nasca-lift.org/Perform/articles/080401.pdf>

Here is the MOST IMPORTANT exercise I would recommend:



Figure 3. Balance on Wobble Board with Weighted Ball

**I would make 1 change:** Get the head up higher, resulting in more back extension to mimic the back extension needed during the throw/pitch like in these 3 pictures on the next page (notice how the back is extended and the chest is out front):



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If you want to increase your velocity,  
**STRENGTHEN YOUR BACK!**

Hope that helps. Best of luck.

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