

It seems like everyone is talking about "it" - performance enhancement - these days. Whether it's Barry Bonds breaking the 755 home run record - or the multiple positive doping tests in this year's Tour de France - or even going back to Ben Johnson's 100m performance in the 1988 Summer Olympics - the topic of "performance enhancement" swirls about our culture.

When sport performance equates to dollars and cents, then there are always the questions of "how to do it - and if it's not legal, how to do it without getting caught". It is pervasive in our culture - and it's not just the athletes and coaches in whom this exists. Athletes are always worried about finding the "magic bullet", the extra-super-special workout that is going to solve their problem of "getting faster" or "going longer". It's the way our society has evolved, isn't it? "There must be some kind of instant gratification workout that will lead to immediate success". Athletes go looking for perceived instantaneous (or certainly fast acting!) solutions. When it's all about the dollars and cents, it's all about finding something to give you that edge - now, if not sooner. Again, this is a cultural issue and not just an athletic one.

But instead of looking high and low for the next "performance enhancer" (undetected or otherwise), we simply need to look within. The solutions are there in all of us - and they start inside that grey thing between your ears.

First off, we impose perceived mental limitations for our sport events. For any of the sport examples that I listed above, you've probably heard the hue and cry of "performances like that can't be done without drugs". Instant limiter #1.

Ford once said that "If you believe you can or believe you can't - either way, you are correct". Our first example leads us to the ultimate self-limiter, a self-fulfilling prophecy of sorts. If you believe it can't, then there's no way that it can.

But if you leave the limiters on the doorstep - or at least this most elemental of them - then anything is possible. The slate is clean.

Secondly - all of these examples require a significant degree of enhanced neurological function. To hit a home run in the Majors, you have to have great eye-hand coordination - the ability to fire the right muscles at the right time. It requires good vision and depth perception. I would suggest that if you've been able to place the sweet spot of the bat directly in front of a baseball moving 90 mph, chances are good it's going a long ways into left field.

To run a sub-10 second 100m, you have to have a high power output, which can only be accomplished by contracting the right muscles at the right time - and sustaining that power output as long as possible. In the world of the 100m, he who can't sustain his top speed - loses. Contracting those muscle fibers forcefully comes down to the function of my central nervous system.

And in the Tour de France, you have to be able to, once again, contract the right muscles, but maintain power output over time - and do it day in and day out. Fatigue of the nervous system precedes fatigue in all other systems. This sounds like another neurological issue to me.

Written by Allan Besselink
Friday, 10 August 2007 19:00

I was in Olympic Stadium on August 1, 1996 when Michael Johnson broke the world record in the 200m final. Hold on - he didn't break it, he obliterated it. He ran 19.32 seconds, and if my math is correct, that was 0.4 seconds faster than Pietro Mennea's at-altitude world record from 1979. A 2% improvement - certainly not so incremental! Based on reaction time, power output, and running mechanics, I would suggest that Johnson's world record performance wasn't outrageous - just a better use of his central nervous system. And in all fairness, nobody seemed to be too concerned about "performance enhancement" for THAT performance.

Of course, people also say these things "can't be done without drugs" assuming that the training methods to this date have been optimal. This is a big assumption - and perhaps the quantum leap that prevents us from getting over this whole "performance enhancement" scenario. The naysayers in our world assume (incorrectly, I might add) that things are already being done optimally - and the only way to get better is with some external aid. Perhaps that would be the only way to improve - if in fact athletes were training optimally. But I would propose that we're currently nowhere near the capacity of the human body to adapt and perform at higher levels. It all comes down to providing the necessary stimulus for adaptation - and providing an environment in which the body can do so. Simple physiology - optimized. Just because something is being done doesn't make it right - and training is a perfect example of this.

Are things like steroids necessary for optimizing performance? When you examine the physiology behind "performance-enhancement", do the costs (and negative effects on training) outweigh the benefits? Here's a simple task - ask anyone that's been on high dose steroids for a medical condition. Ask them how they fared with them. Ask them the adverse effects associated with them. Go ahead - ask me. Yes ... I've experienced high dose steroids for a condition called Crohn's disease. All that high dose steroids did was to make me cranky, prevent minor ailments like the common cold from resolving quickly, and make me retain fluid. Oh, but they did help the medical condition - though I guess we'll continue to monitor the long-term effects as I get older. But I was no closer to climbing Alpe d'Huez ...

Here's an idea - crazy as it may sound: how much does the placebo effect play a part? The statistics would indicate that 70% of people are positively influenced by the placebo effect. The power of the mind - if you think you're getting stronger, then you probably are.

Do these limits exist anywhere but in our heads?

Let's just forget about the problems that are created when the organizing body "turns the other cheek" to this attitude. As they say, you made your bed, now sleep in it. For years, baseball has turned a blind eye to drug use, as have the worlds of track and field and cycling. Now, the commonly held belief system is out of control - and they are paying the price for it. That's a separate issue.

And it's another separate issue when you look at the personalities involved. A lot of people take issue with Bonds' attitude. Well, last time I looked, nobody was praising Ty Cobb's personality either. Love them or leave them but, again, personality is not at issue here.

Written by Allan Besselink
Friday, 10 August 2007 19:00

I've always seen sport as a metaphor, a microcosm of all we experience in life. If we're looking at promoting sport for all of its virtues, we need to look at the power of the human body - and especially of the human mind - and it needs to start early on in the development of the athlete - early in the development of the person as a whole. It needs to start with the internal belief system and self image - and build through good, sports-science based training programs.

I think these are true ideological concepts that limit our very function on a day-to-day basis. We don't spend anywhere near the same amount of time training our brains as we do training our heart, our lungs, our musculoskeletal system - in training, in rehab, or in life.

And based on that alone, we are nowhere near the limits of our abilities and potential - given the limitless capacity of the brain.

{mos?smf?discuss}