Interview with Mike Boyle

Michael Boyle has just published his second book, *Designing Strength Training Programs and Facilities* and also just released new DVD's on Designing Personal Training Programs, Medicine Ball Training and Sled Training from Perform Better,. Mike's client list reads like a Who's Who of athletic success both in New England and across the country. Mike has been involved in training and rehabilitation with a wide range of athletes, from stars in every major professional sport, to the US Women's Olympic teams in soccer and ice hockey. Mike brings a depth and breadth of knowledge that is unmatched in the industry. Mike has ten years of experience at the professional level combined with over twenty years at the collegiate level. During that time Mike has trained and rehabilitated some of the biggest stars on the Boston sports scene. Mike's work has been featured in the media on HBO RealSports, ESPN, CNNSI, as well as in Sports Illustrated and USA today.

In addition Mike is the author of *Functional Training for Sports* from Human Kinetics publishers. Mike is a featured speaker at numerous strength and conditioning and athletic training clinics across the country and has produced fourteen instructional videos and DVD's in the area of strength and conditioning available through Perform Better at www.performbetter.com.

CB: Mike drawing on years of experience of coaching as well as your own powerlifting years, what are some of the valuable lessons you have learned regarding training for athletes? What can you pass along to trainers to help speed their education process?

MB: KISS. Keep it simple stupid. So many coaches are looking for the next gimmick or the next bandwagon to get on. Things really don't change much, that's why I found it so easy to write Functional Training for Sports. I think it's simple. Do basic things well. One of my book reviewers criticized my lack of references in my book. My feeling is that so much of what I wrote was common knowledge that references weren't necessary. I'm just packaging a lot of what we already know. Everyone has access to the same info. The sciences of physics and anatomy are pretty finite. We know where the muscles are and what they do, now go do it. I spoke with Chris Doyle, U of Iowa Football Strength Coach, and he said something that I have said 100 times. When you look at great programs, don't focus on differences, look for common denominators. What are all the good strength coaches doing? Make sure your doing that. Don't get caught up with muscle mag routines or steroid used routines. Find out what good coaches are doing with clean athletes.

CB: You prefer to use the front squat rather than the back squat? Why? How does the front squat then fit into your training programs (frequency, intensity, stage of training)?

MB: After learning to bodyweight squat the front squat is the next sep in the progression. With our young developmental athletes we will front squat in every phase. It is a basic fundamental competency. We don't back squat at all. There are two

potentially dangerous forces in squatting, torque and compression. Both are present in higher degrees in the back squat than the front squat. Heavier weights cause greater compressive loads on the spine, front squats will always be done with lighter loads. In addition the lean that is so present in back squatting and so notably absent in front squattiing produces a torque that is potentially dangerous to the SI joint. The bottom line as I have said over and over is you can't front squat bad.

CB: You've also written that you don't use too many bilateral leg exercises (i.e. traditional deadlifts, squats) in your training programs anymore. Why is that? And what have you found to be great substitutions? When I first heard you speak, you were using a lot of single-leg squats – are you still doing that?

MB: I'm at the point for my older more experienced professional clients that we do very little bi-lateral exercise. I find that athletes, as they age, have less tolerance for exercises like squats and deadlifts. I routinely use single leg versions of the squat, deadlift and good morning with most of my professional clients. My new book covers all the newer stuff pretty well. I'm really getting close to the point of abandoning conventional two legged exercise. I know it sounds crazy but, I won't be surprised if we do this interview in three years that I tell you I'm still Olympic lifting off two feet but, doing all my strength work on one foot.

CB: What are some of your favorite exercises to build the hamstrings and glutes for athletes? Do you find any exercises to be more important for one sport than another, or are you simply building athletes in similar manners between sports?

MB: I like Slideboard Leg Curls the best. You get great integration of the functions of the glutes and hamstrings. I've been playing with kneeling one leg squats and have always been a big fan of 1 leg straight leg deadlifts and 1 leg good mornings. This is an area of constant experimentation for me as I think we really haven't come up with the best way to really get at the glute max. The interesting point about posterior chain training is that it is difficult to figure out where the line is between core training and glute and hamstring training. I use bridges for core and then use more difficult variations of bridges for glutes and hamstrings. I think we have a really blurry line between what is core work and what is posterior chain work.

CB: What are the most important muscle groups that need strengthening in the athletes you assess? Does this differ by sport or gender?

MB: Deep abdominal muscles, glutes max and glute med, regardless of gender. Also the lats and scapula retractors. Any athlete who has been lifting has been working on the mirror muscles.

CB: Mike, you also do some training on unstable surfaces. When is this appropriate and what are the general goals when using this tool? Have your thoughts on this training method changed over the years?

MB: I use less unstable stuff than before. I think instability is a step in the progression but, certainly not the first step. I like BOSU push-ups and I love unstable versions of the 1 leg squat. I think it's another area where coaches and trainers have gotten way too gimmicky. It goes back to my KISS thought.

CB: Do you still use linear and lateral days for speed development? How much time do you spend working on sprint technique, agility, speed ladder, etc.? Does that differ by age? Any tools that you no longer use?

MB: I haven't changed much here. I use about 30 minutes a day for speed, agility and plyos, as I always have. The one major change is more sled work. I really like heavy specific sled stuff. Not West Side drags but, exercises geared to running or lateral movement. My new sled DVD actually turned out really good and has some interesting ideas. Right now I think sleds would be your best investment ib equipment next to slideboard tops.

CB: Mike, you were also a big proponent against using aerobic training for sports such as hockey. Do you still believe measures like VO2Max are over-rated for hockey, and if so, how should the athlete condition for hockey? Does VO2Max help predict performance or fatigue-resistance in any sport, besides distance running?

MB: I think VO2 max is the most overrated measure for any athlete. We do exclusively interval training with our athletes and almost no conventional aerobic work regardless of age or gender. I actually did a research study this fall that I'm trying to publish. We tested all of our hockey players for VO2 max, Anaerobic Threshold and on a number of performance tests. After analyzing the stats, there was absolutely no correlation of VO2 Max or AT to any test of performance we did. We compared it to a 2 mile run, a 300 yard shuttle, an on-ice shuttle and a treadmill run to exhaustion (approx 2 min). Not one of these correlated to VO2 max. VO2 max test physiology, not heart or will. Athletes can routinely out-compete other athletes with supposedly superior physiology.

CB: Believe it or not, some coaches still use static stretching before training. Mike, what is the best way to warm-up?

MB: We foam roll and static stretch for tissue change and then dynamic warm-up after, There is mounting evidence that if you want real flexibility change, don't warm up first. We stretch for flexibility and use dynamic warm-up for warm-up. There is a place for

static stretching, it just isn't as a pre exercise warm-up

CB: Mike, your posts on sportspecific.com about ab training have been very informative and two thing you have mentioned are the importance of reverse crunches and stabilization exercises. Can you explain to the readers how you structure the ab training of athletes?

MB: That would be a long answer. I wrote 8000 words on core in my new book. It comes down to this. Core stability means that the core doesn't move. Core strength means it does move. We need to do both. I think we all got on the stability bandwagon and neglected strength. We have particularly neglected the action of bringing the hips towards the shoulders as in a reverse crunch. In this case we have athletes with anteriorly rotated pelvises and weak external obliques. The other point I would make is to slow down your core strength. Really concentrate on a 2-0-2 tempo to cut down on substitution.

CB: To finish, what are your thoughts on the terms "functional" and "Sport-specific"?

MB: Another long answer. I like functional and dislike sport specific. I find functional to be overused but descriptive. I find sport specific to be primarily a marketing term that inexperienced coaches use to entice parents. No one should be doing sport specific strength training and everyone should be doing sport specific conditioning.

Mike – thanks a lot for this. You are doing a great job, keep up the great work.

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