REBUTTAL TO AN **OPPOSITE APPROACH**

From Scholastic Coach August and September Issues.

High Intensity Training Ideas.

Tom Kelso (M.S.,C.S.C.S.) wrote a two-article series entitled, "10-Ways to Improve Your Strength Program" in the August and September 1995 issue of Scholastic Coach. Coach Kelso has been the Head Strength and Conditioning Coach at Southeast Missouri State University, a Division I-AA football school for the last five years. His philosophic thrust is very much like the High Intensity Training philosophy and very much the opposite of mainstream training principles and BFS.

It is common knowledge among boxers that if you throw a punch, you should expect one back. I will make a rebuttal in relation to that line of thinking. Therefore, since I will be throwing a "punch", I expect the other side will answer the call, but I honestly believe that is healthy. It helps crystallize a certain position, creates change and gives all readers a chance to weigh both sides and form their own decision as to what's best for them.

The first point of difference is the photos. The lead photo is a man dressed like a bodybuilder doing a body-building squat with the bar placed high on his neck, not on his shoulders like an athlete. His stance is also quite narrow like a bodybuilder. The next photo is a guy doing curls under the careful tutelage of a coach. I have published thousands of photos in the BFS Journal, none of which showed a

bicep curl. The heading accompanying the curl photo stated, "The manner in which your athletes perform each rep can significantly affect the overall development of your team." The statement itself is fine but in conjunction with a guy doing curls is laughable. Why you would need a coach to stand by a guy doing curls is beyond me.

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The next issue featured our bodybuilding guy again doing a dumbbell upperbody exercise followed by a woman doing the same thing. Bodybuilding is different than athletic training. Not bad, just way different.

Kelso's Rule #1 is never confuse strength training with skill training. This was a headline. Later on he chooses to use the phrase "mimicking a skill". I prefer to use the phrase "transfer of skill". One of the key reasons for the huge success of our BFS program is our ability to transfer athletic skills from the weight room to athletic performance. Everything we do is interrelated to sprinting, jumping and forming a power base. I will discuss how we transfer these athletic skills later in this Journal on page 30.

Kelso states, "Always remember the number one priority of the program - injury prevention/longevity." That sounds good but it is quite predictable that a team that does the HIT bodybuilding/body-toning type program will have a significantly greater number of injuries during the season. Kelso's philosophy is to balance the antagonistic muscles. If you work the front of a joint, also work the back. Example: An anterior deltoid exercise should be complimented with a posterior deltoid exercise.

Perhaps to the novice this too sounds good but invariably some muscle groups are missed when you try to isolate a particular muscle group. Thus, the very thing Kelso is trying to avoid (imbalance), he creates. The HIT philosophy and Kelso are against Cleans, Snatches, Olympic Style Lifts, Push Jerks and "Ballistic" type movements. They create "extreme forces on muscles and joint connective tissues." Kelso is worried about the risk for potential injury from such lifts.

Our position is that Olympic lifts like the Power Clean, Power Snatch



and Jerk Presses get practically every muscle and muscle group in the body. These multi-joint movement exercises also accomplish this result while moving in a coordinated athletic path culminating in learning how to create a maximum summation of force such as is used in jumping, sprinting, blocking or tackling.

The benefit of doing free weight Parallel Squats with Olympic Style Lifts is monumental in injury prevention. You have every right to expect an injury-free season.

How did Southeast Missouri State University do on injuries during this 1995 football season? Catastrophic! After just three games, eight players were out for the season with six of them being starters: two shoulders, four knees, one thumb and a foot. The sad thing is that this entire scenario was entirely predictable except for the thumb. Currently, the Southeast Missouri State Indians are 2-4 with a 24-37 record since Kelso began.

Other "HIT" colleges seem to also have problems. The University of Michigan had three veteran football players out before the season even started with low-back injuries. After five games Penn State had four season ending injuries, including one knee and one back injury. Two other players sat out three weeks with knee injuries. The University of Toledo averaged three season ending knee injuries per year while Ken Mannie was the strength coach

-text continues on page 16-

FOOTBALL COMPARISON

Michigan, who uses the HIT philosophy, had a first game nailbiter. Their freshman QB threw a desperation pass on the last play and the receiver caught it and stayed in bounds by one inch to win the game. Does that last play success mean their strength program is successful? If they had missed, would it have meant the program was unsuccessful? I say absolutely "No" on both counts. I have always said that's what makes strength and conditioning so interesting and challenging in football because there are a variety of factors which contribute to both winning and losing. Michigan may have recruiting advantages over some of their opponents. One hundred thousand people sit in Michigan stadium while their opponents average only half of that in their stadiums. Maybe comparisons are invalid.

However, it may be interesting to look at Air Force and Army who have similar recruiting restrictions. Each have an enrollment of 4,400 students. Blue chip athletes generally don't sign with a service academy because they can't turn pro right away. There is a 3-4 year service commitment after graduation. Army does have an advantage over the Air Force Academy because they have lower SAT requirements. That means Army has a larger pool from which to recruit.

Army does the HIT program while Air Force does a highly progressive mainstream strength and conditioning type program. They have both done this for over a decade.

The United States Air Force Academy has won six years in a row and 11 out of the last 14 games. There may be some other factors in this lopsided series but I'll guarantee you, the Air Force isn't at all considering changing to a HIT program.

As of this writing, the Air Force has an overall record of five wins and two losses and are in first place in the Western Athletic Conference standings with a 4-1 record. They have

only had one season ending injury: a knee. Army, who plays an independent schedule, has a 1-3-1 record with their lone victory over Division I-AA Lehigh. Army has had three season ending injuries at this writing: two knees and a lower back.

The Air Force has also beaten the likes of Notre Dame four times in a row in the 1980's with the smallest guys in Division I football. There's no way they should have beaten Notre Dame but they did. They have only lost to Navy once in the last 13 years. Air Force has even had an Outland Trophy winner in Chad Hennings in 1987 something both Penn State and Michigan have not had for 25 years. Chad is the only player in Air Force history to play pro football (Dallas). The Outland Trophy is awarded annually to the best lineman in the nation and lineman can't develop properly without using free weights emphasizing heavy Parallel Squats and Cleans. Maybe Air Force is lucky but I prefer to think that they made their own luck.



PENN STATE AND THE HIT **PROGRAM**

The HIT philosophy of one set of 8-12 reps had its beginnings with Arthur Jones and his Nautilus machines in the early 1970's. Penn State may have been the first college to adopt this philosophy. I was told by a very highranking Penn State official that Coach Joe Paterno was concerned about some of his players who were spending two hours at a time in the weight room. I would guess Coach Paterno wanted these players to spend more time hitting the books and that two hours was too much emphasis in the weight room.

He was correct but in a different way. One hour of intense workout is really all an athlete's ATP system will effectively allow. Anyway, Dan Riley said that he could work the football players in 30 minutes. Coach Paterno agreed to try it. Dan Riley is a motivator. The players worked hard for a short time and worked up a great sweat. Hard work-quicksweat! Joe Paterno was pleased.

It is doubtful that Coach Paterno said, "make my players bigger, faster, stronger and more explosive. Create a winning attitude and develop these players to their absolute physical and mental potential."

Throughout the years, the HIT philosophy has been continued with other strength coaches after Dan Riley went to the Washington Redskins. However, it worked much better in the "old days." In the 1970's, football teams typically began their offseason between Jan 15th and Feb 1st. This program lasted for about 8 weeks before Spring practice began. Then another 4 weeks were put in before summer and before the players left for home. Therefore, plateaus were not really a factor because of the short training periods.

Now, football players typically stay for the summer and essentially train year round. The Penn State weight room is perhaps the smallest in Division I football with perhaps, the lowest ceiling. The track team has their own weight room so they can do Cleans and a mainstream-type program. The football strength program is criticized within the athletic department and by their exercise science people.

They know this, so when the strength job opened up a while ago, they invited three mainstream coaches and three HIT coaches. However, one other official said they had a hard time finding three HIT coaches. The one high-ranking official confided, "Those interviews were real eye-openers," (meaning they really knew they had a problem). However, in the end, they stuck with the High Intensity program. "It was an expediency decision. We were into the off-season and didn't want to change and disrupt the players, plus the expense of new equipment to do the other type program was a big factor." Thus, John Thomas, from Army was hired four years ago.

This high ranking official requested to remain anonymous for obvious reasons but as we parted company he asked, "Isn't there a happy medium in all this?" In other words, some room for compromise.

I looked him squarely in the eye and answered curtly, "No."



(see page 46 on Power Clean Research).

Since it is predictable, one can't really say, "Man, we were unlucky." I coached football for 14 years and never had an injury in the weight room and never had a player out for the season (four years of Division I football and 10 years at the high school level). I have been with the Utah JAZZ since 1981. Our stats on injuries are well documented. We have the NBA record for least amount of missed games for a season (six out of a possible 984: that also includes sickness). We led the NBA eight out of nine years in least amount of injuries on one stretch. A little of it was luck but everyone was told up front that we wouldn't have injuries. It was predictable.

The overwhelming majority of coaches using our BFS program, which consists of hundreds of teams, report back and say the same thing, "Injuries have been dramatically reduced." We teach it and advertise it: Do the BFS Program and you won't get hurt especially with injuries to the knees. It is predictable. For a startling and history making chart on injury prevention turn to page 50.

Kelso also advises against calling some exercises as "Core Lifts" and some "Auxiliary Lifts." He confuses this concept as labeling the Core Lifts as major and Auxiliaries as minor. We never use the terms major-minor. Kelso's point is that you should use all the muscles and an athlete might be tempted to leave out a "minor" exercise thus increasing potential for injury. When kids are left by themselves, the vast majority will concentrate on Benches and Curls. They tend to gravitate towards the easy exercises and away from the hard ones; such as Parallel Squats and Power Cleans. We label these exercises as "Core

Lifts." They are more important than Bicep Curls, Lat Pulls or isolated bodybuilding exercises. They require greater effort, greater intensity, greater coaching and more time.

Kelso also has a different understanding than we do on the order of exercises. He states, "Whatever muscle group is trained first is irrel-

Kelso's 10th guideline states, "Don't expect miracles." I have to thank him for that one, for just the opposite has become our theme for the 1995-1996 school year:

EXPECT A MIRACLE!

evant." That may be true in bodybuilding but not in our program. You do the "Core Lifts" first. If you have a choice, you Power Clean first. Anyone who has ever done heavy Power Cleans for multiple sets clearly understands this reality.

The BFS Set-Rep System allows an athlete to do one or more reps once a month in our 4-week cycle. It isn't perhaps a true max-out cycle, but it gives each athlete a chance to test himself in the one-rep area. It is also only done after a hard 5-rep and 3-rep max attempt. Kelso says deemphasize the "max" and maintains a one maximum effort has little significance.

One-rep max days may have little significance from a physical development point of view but has huge significance in mental development. It's fun. It's something to brag about. It creates positive attitudes, loyalty, belief in the program and plays a role in our highest priority

goal and that is to WIN. Ask yourself if a kid would rather say: "I Bench 150 pounds for 10-15 reps or I Bench 215 pounds." Probably the biggest difference between the two varying philosophies is that I always think first like a football coach, I want to build team pride which leads to winning football.

Kelso believes reps on upperbody exercises should be in the 5 to 12 range. While lower body exercises should be in the 7 to 15 range. He claims these ranges are "safe". How different we are on this subject. It is my firm belief that poor technique causes safety problems not by how many reps you do or don't do. However, I do have an opposite point of view on higher reps on the Trap Bar Lift, Dead Lift or Power Cleans. Doing 7-15 reps on these lifts would be disastrous. Doing high reps with the demanding intensity required by Kelso would most likely cause an injury. The lower back would become so fatigued that maintaining proper technique would become increasingly difficult with each rep over 5 reps.

Kelso's 10th guideline states, "Don't expect miracles." I have to thank him for that one, for just the opposite has become our theme for the 1995-1996 school year:

EXPECT A MIRACLE!

If Southeast Missouri State
University were to totally adopt a
mainstream/BFS type program, with
the WHAT, HOW and IMPLEMENTATION done correctly, I
would expect a dramatic decrease in
injuries for 1996. I would expect a
winning season. I would expect all
sports to improve their records. I
would expect good players to be
developed into bonafide proprospects. I would expect a frenetic
positive energy to flow rampant
everyday. I would

EXPECT A MIRACLE!.....□



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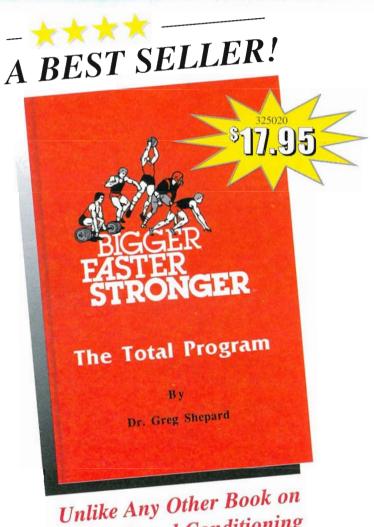
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