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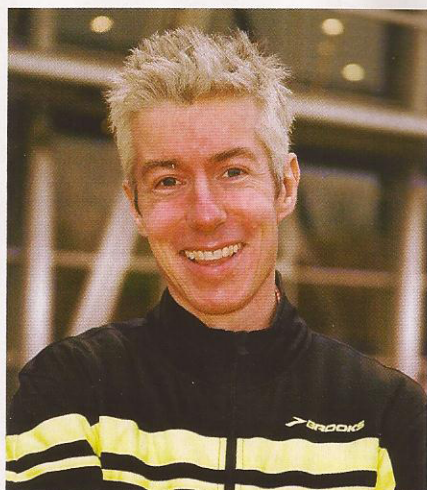
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LESSONS FROM THE LEGENDS: STEVE BRACE





A MONTH IN MY WORDS

Welcome

The news that Nike was pulling its support of fallen cycling icon, Lance Armstrong, was the last nail in the coffin of the troubled sports star. Anyone who has been reading the media coverage of the scandal will no doubt be appalled by what was clearly a highly-organised, cynical and underhand operation designed purely to cheat the system.

Drug taking at the upper echelons of sport is, of course, nothing new. In cycling, it's been an open secret for years and the number of 'legends' who have subsequently tested positive or admitted to taking banned substances is legion. Athletics has worked longer and harder to clean up its act. So it was with genuine shock – and some sadness – that I learned of the current rumours of widespread doping in Kenyan athletics. Four Kenyans were sanctioned in the first eight months of this year by track and field's governing body for doping offences, according to the international federation. That compared with one in 2010 and one last year.

Another Kenyan, Mathew Kisorio, a former African junior champion over 5,000 and 10,000 metres, tested positive for an anabolic steroid at the Kenyan Olympic trials in June and has been suspended by Athletics Kenya. Kisorio, who in 2011 ran the fourth-fastest half-marathon, subsequently said many of his compatriots were doping. Just how endemic drugs are in Kenyan athletics waits to be seen. I hope for the sports sake that the rumours are just that, and that we don't have another 'Lance' on our hands. When the sport has come so far, a scandal like that could set it back years. In the US, cycling, which has always struggled to get a toe-hold, might never recover. Calling someone a Lance is now an insult. How sad is that.

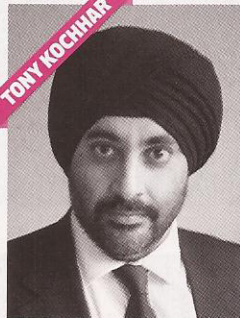
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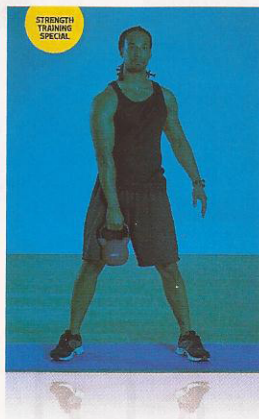
David Castle, Editor, rf.ed@kelsey.co.uk

This month's contributors

TONY KOCHHAR



Tony, aka 'The Shoulder Doctor', is one of the UK's leading shoulder trauma and orthopaedic consultants and an expert in the treatment, prevention and recovery of shoulder injuries. This month he reveals why building upper body strength is so important for runners



IT'S NOT ALL ABOUT THE LEGS!

Think running is all about leg strength? Think again. Tony Kochhar, aka 'The Shoulder Doctor', is one of the UK's leading shoulder trauma and orthopaedic consultants and an expert in the treatment, prevention and recovery of a wide range of shoulder injuries. Here he reveals just why upper body strength is so important for runners

MARTIN YELLING



"Regular strength training can improve running economy and running speed, so it makes sense for runners to build up leg strength," says Martin, who explains just why building up your leg muscles can improve consistency of training and performance

SARAH RUSSELL



If you build a house without foundations, it will wobble and eventually fall down. The same applies to runners. Sarah takes a look at the importance of strength and core training for beginners and why it's important to factor it early into a training programme

P33 ASK THE EXPERTS: OUR TEAM TACKLE ALL YOUR RUNNING-RELATED QUESTIONS



DON'T FORGET YOUR UPPER BODY!

About the author

TONY KOCHHAR

Tony completed his training at the Royal National Orthopaedic Hospital in London. He has furthered his shoulder and upper limb training by working with some of the best surgeons in the world, having completed specialist fellowships at worldwide centres of excellence in New York and the Alps Surgery Institute in Annecy, France.

He specialises in injuries and disorders of the shoulder, elbow, wrist and hand as well. He also concentrates on the treatment of fractures especially of the shoulder and upper limb.

Tony is the country's leading authority on Repetitive Strain Injuries, and advises patients and International companies on how to prevent and treat these problems.

We know about the importance of leg strength, but what about the rest of the body? **Tony Kochhar**, aka 'The Shoulder Doctor' is one of the UK's leading shoulder trauma and orthopaedic consultants and an expert in the treatment, prevention and recovery of a wide range of shoulder injuries. Here he reveals just why upper body strength is so important for runners

Runners don't just need to train their legs to be the best; their upper body and arms are just as important. If you need any evidence, just look at the shoulders and arms of the world's top runners (and not just the sprinters!).

The forces generated to propel us forward all start in the core of the body (the area from the chest down to the top of the hips) but to generate these forces the swing of the arms is essential. The opposite arm generates the force for the opposite leg (right arm for left leg) and this swing of the arm creates energy which spreads across the core and into the hip on the other side. The arms also provide a counter-balance for us when we run. Just try running with your hands in your pockets - it is impossible to run as fast and it feels much less rhythmic and more clunky. You also tire more quickly as you have to burn more energy to run the same distance.

All the top runners devote a large proportion of their time in the gym for core and upper body/arm training. The aim of this

upper body training is different to other sports people - big muscles increase body weight and slow you down. The aim for all runners is to develop the energy/force chains from the arms, across the core and into the opposite legs, to maximise the forces that can be generated by driving the arms. Furthermore, runners not only need strength, they also need stamina as well as the explosive forces required when they 'kick' in their final sprint.

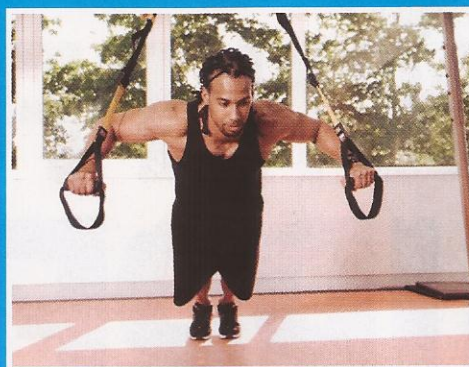
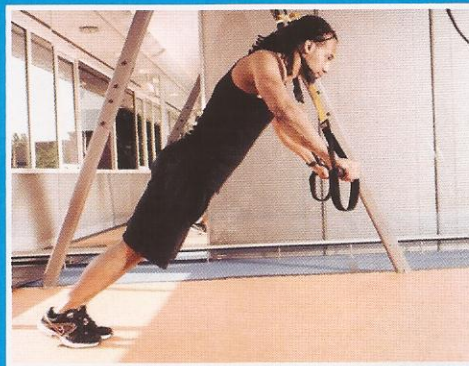
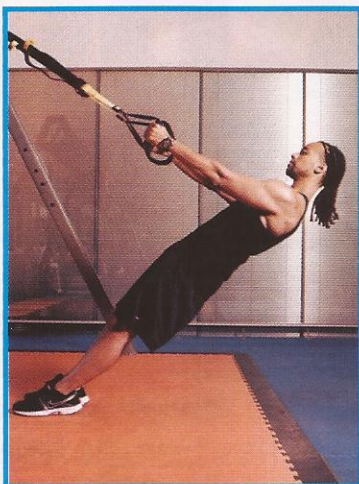
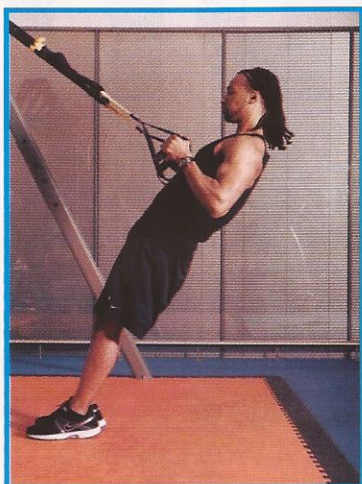
Essentially there are two types of muscle fibre. The slow twitch fibres are those we use for repetitive actions without fast high driving forces; these are much more efficient. The second are fast twitch fibres, which develop high forces very quickly, but fatigue quickly as well.

All runners need both, but clearly sprinters need more fast twitch fibres and long distance runners need more slow twitch ones. Sprinters need to work more on the explosive forces (plyometrics) and less on the endurance, and vice versa for longer distance runners. There are specific types of exercises that work on each.

STRENGTH TRAINING SPECIAL

SUSPENSION CABLE ROW

- Grip a suspension cable in each hand at shoulder width apart, with the cables slack and your feet together.
- Lean back, keeping your feet where they were until you are at 45 degrees and the cable is taut.
- Keeping your body straight, pull yourself forward by pulling your elbows to your sides. Then lower yourself back to the starting position.
- Perform three sets of 8-12 repetitions.

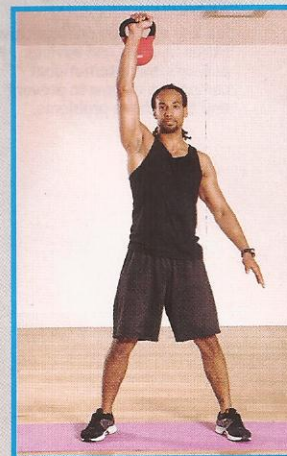
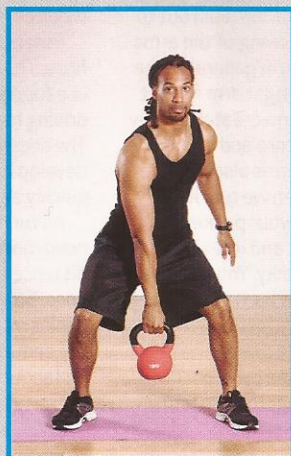
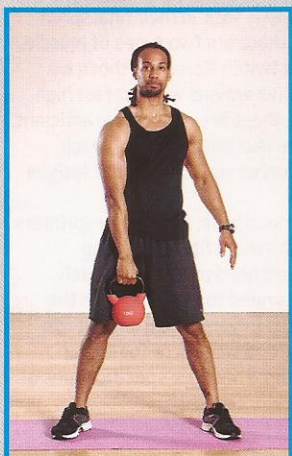


SUSPENSION PUSH-UP

- Stand with your feet together with the cables hanging in front of you. Grip a suspension cable in each hand.
- Lean forward, keeping the balls of your feet on the ground and keeping your body straight and your hands at one and a half shoulder widths apart.
- Perform a push-up by bringing your chest in line with your hands. Push yourself back until your arms are almost straight. Don't arch your back or bend at the waist.
- Aim for three sets of 10-30 repetitions depending on ability.

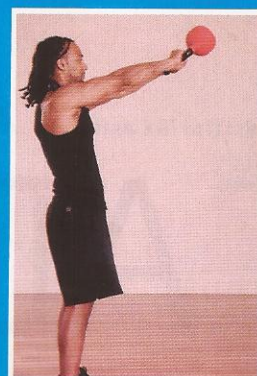
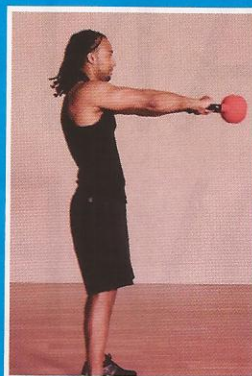
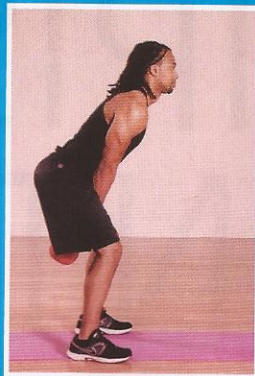
KETTLEBELL SQUAT PRESS

- Stand with your legs apart and hold the kettlebell in one hand. Your arm should be hanging down in front of you, towards the centre line of your body.
- Bend at the knees, push your backside out, bend at the hips slightly and keep your back straight. The kettlebell will lower to just above ankle height in-between your legs. Keep it in the centre line of your body.
- Push upwards by straightening your legs. Bending at the elbow, lift your forearm and swing the kettlebell to the outside of the shoulder of the arm that is holding it. It should swing backwards and come to rest on the back of your forearm. Now push upwards with your arm until it is nearly straight.
- Return to the starting position, letting the kettlebell swing forwards in your hand.



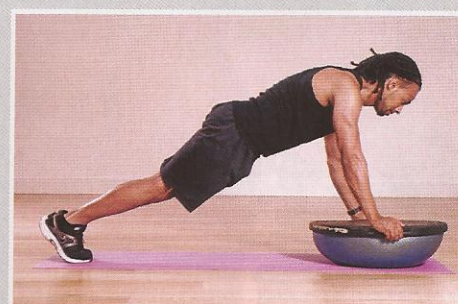
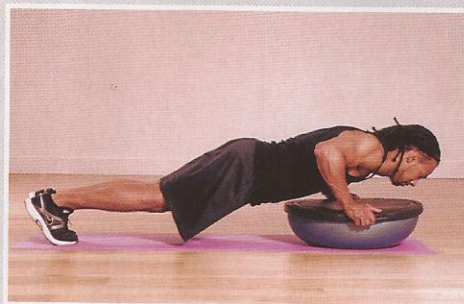
KETTLEBELL SWING

- Stand with your legs just over shoulder width apart. Hold the kettlebell between your legs with both hands and bend at the knees, push your backside out and keep your back straight.
- Drive up with your legs so you stand straight up and swing the kettlebell forward in front of you.
- Your arms should be straight and your hands should reach face level. Let the kettlebell swing back down and return to the start position.



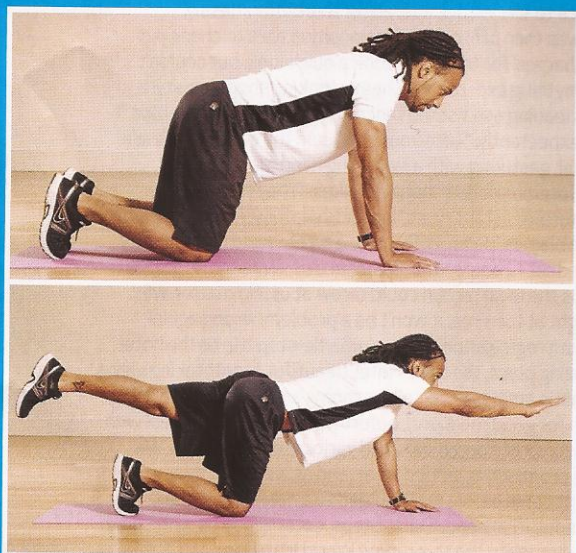
BOSU PRESS UP

- Grip both sides of the Bosu balance trainer and position yourself in the normal push-up position. Your arms and body should both be straight. Make sure you are not bending at the hips and that your back is not arched.
- Bend at the elbows and lower your chest to a few centimetres from the flat surface of the flat side of the Bosu.
- Push back up by straightening your elbows to return to the start position.
- Aim for three sets of 10-30 repetitions depending on ability.



SUPERMAN

- Kneel down with your body leaning forward, resting on your hands. Your palms need to be flat on the floor.
- Stretch out your left arm forwards as if reaching for something in front of you, level with your head. At the same time, push your right leg back and straighten it. Your heel should be level with your backside. Balance on your other arm and leg.
- Return to the start position and this time lift the right arm and left leg.



MEDICINE BALL TWIST AND LUNGE

- Stand up straight holding the medicine ball. Your arms should be in front of you, and the medicine ball resting against you.
- Take a large step forward with your left leg but keep the ball of your right foot on the ground. Bend your left leg at the knee so that your right knee nearly touches the ground.
- At the same time twist your body to the right and lift the ball out to the right, arms outstretched.
- Return to the start position by pushing back up and. Now do the same again but this time twist to the left and step forward with your right leg.

