



## PRESS RELEASE

### **Why footballers need to step up to the Plate**

Using a Power Plate® machine at half-time could help footballers improve physical performance and reduce the risk of injury in the second half, according to research by the University of Hull.

The Power Plate® machine is used by some Premier League teams as part of pre-match training programmes, but these new studies advocate their use during the half-time interval itself to keep muscles warm and active.

The results of two studies using the Power Plate® machine were presented as part of the British Association of Sport and Exercise Sciences (BASES) 2009 Annual Student Conference, hosted by the University of Hull on 31<sup>st</sup> March and 1<sup>st</sup> April 2009.

Daryl Carter and Stephen Barrett, both in their final year at Hull, say their research could have implications for how football teams utilise the half-time break, especially as regulations do not allow players on the pitch during the interval.

Daryl said: “At the moment, most footballers come in at half-time and just sit down for 15 minutes while their coach talks tactics. Previous research has found that performance is then reduced when they go out for the second half, and there is more risk of injury.

“No study before has looked at the impact of a half-time ‘re-warm up’ in a controlled and specific environment, and how that can affect muscular performance and lower limb stability in footballers.

“We found that using the Power Plate® machine at half-time affected the usual markers of hamstring injury early in the second half, suggesting it could be used to reduce the risk of this kind of complaint. What’s more, using the machines had no negative effects on performance in the latter stages of the game, suggesting this half-time strategy did not cause additional fatigue.”

Stephen added: "The message is simple; in a game where the smallest of margins can win or lose a game, football players must keep their muscles moving and warm, or risk a greater chance of injury and reduced physical performance when they go back out for the second half."

The research found players' muscular strength and jump performance were decreased by 6 and 7% respectively, after a typical resting half-time period. However, by using the Power Plate® machine in the final few minutes of the half-time interval, jump performance did not deteriorate and strength was only reduced by 3%.

The research, commissioned by Power Plate International, took place at the University's Sports and Exercise Science laboratories, using a specially-designed programme which simulates a soccer match.

The BASES conference included workshops and addresses led by world-class sports scientists from Australia, America, Italy and the UK, on subjects ranging from how training in heat affects the body, to the impact of new technology such as video analysis on the relationship between players and coaches. More than 300 delegates attended from universities in the UK and as far as Poland, Nigeria and the Philippines.

## **Ends**

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**<<insert your local Power Plate® machine press contact details>>**

## **Notes to Editors**

### *About the Power Plate® machine*

Acceleration Training™ exercise on the Power Plate® machine offers a wide range of benefits, and you can notice the difference in as little as three short sessions per week. When used as part of a healthy lifestyle, regular exercise can help to improve muscle strength and tone, fitness, power, flexibility, range of motion, balance, coordination and relaxation. It can reduce the appearance of cellulite and encourage weight loss. It is also used by sports professionals from a range of disciplines for stretching, warming up and relaxation purposes.

A wide range of people use the Power Plate® machine: from athletes looking to improve their performance and power, to individuals attempting to improve their fitness and well-being. In Premier League football, it is used by teams including Chelsea and Manchester United. The Power Plate® machine works by transferring vibrations to muscles, which

naturally activates reflexive muscle contractions. Different poses such as a squat, bicep curl or stomach crunch are held on the machine's vibrating platform for up to 60 seconds at a time, activating multiple muscle groups simultaneously to stretch, tone or strengthen, and enabling the user to target particular areas of their body.

### *About the University of Hull*

The University of Hull is one of the world's top 500 universities and is well known for the discovery of liquid crystals, for which the Department of Chemistry received the Queen's Award for evolutionary biology. Philip Larkin, one of the greatest English poets of the twentieth century, was the University's librarian for 30 years and he wrote some of his most celebrated works at the University. Famous alumni include: Lord Dearing, Roger McGough CBE, John McCarthy and Anthony Minghella.