

Journal of Sports Sciences >  
Volume 31, 2013 - Issue 15

635 Views | 16 CrossRef citations to date | 10 Altmetric

Articles

# Leg mass characteristics of accurate and inaccurate kickers – an Australian football perspective

Nicolas H. Hart , Sophia Nimphius, Jodie L. Cochrane & Robert U. Newton

Pages 1647-1655 | Accepted 03 Apr 2013, Published online: 20 May 2013

 Cite this article  <https://doi.org/10.1080/02640414.2013.793377>

Sample our  
Engineering & Technology  
Journals  
>> **Sign in here** to start your access  
to the latest two volumes for 14 days

 Full Article  Figures & data  References  Citations  Metrics Reprints & Permissions[Read this article](#)

## Abstract

Athletic profiling provides valuable information to sport scientists, assisting in the optimal design of strength and conditioning programmes. Understanding the influence these physical characteristics may have on the generation of kicking accuracy is advantageous. The aim of this study was to profile and compare the lower limb mass characteristics of accurate and inaccurate kickers. Twenty Australian football players were recruited and divided into two groups: accurate (n = 15) and inaccurate (n = 15). Anthropometric data were collected, including whole body mass, limb mass, and relative fat mass. A significant difference was observed in the relative fat mass of the lower limbs (P = 0.009). Inaccurate kickers also produced significantly larger

### About Cookies On This Site

We and our partners use cookies to enhance your website experience, learn how our site is used, offer personalised features, measure the effectiveness of our services, and tailor content and ads to your interests while you navigate on the web or interact with us across devices. You can choose to accept all of these cookies or only essential cookies. To learn more or manage your preferences, click "Settings". For further information about the data we collect from you, please see our [Privacy Policy](#).

Accept All

Essential Only

Settings

asymmetries between limbs than accurate kickers ( $P \leq 0.028$ ), showing considerably lower lean mass in their support leg. These results illustrate a difference in leg mass characteristics between accurate and inaccurate kickers, highlighting the potential influence these may have on technical proficiency of the drop punt.

Keywords: lean fat relative muscle mass asymmetry drop punt

## Acknowledgements

The authors would like to thank and acknowledge Chris Dorman (strength and conditioning coach, West Perth Football Club) and his athletes for their participation in this project. No external funding was received for this work.

## Related research

People also read


Recommended articles

Cited by  
16



### About Cookies On This Site

We and our partners use cookies to enhance your website experience, learn how our site is used, offer personalised features, measure the effectiveness of our services, and tailor content and ads to your interests while you navigate on the web or interact with us across devices. You can choose to accept all of these cookies or only essential cookies. To learn more or manage your preferences, click “Settings”. For further information about the data we collect from you, please see our [Privacy Policy](#).

Accept All 

Essential Only

Settings

## Information for

Authors

R&D professionals

Editors

Librarians

Societies

## Opportunities

Reprints and e-prints

Advertising solutions

Accelerated publication

Corporate access solutions

## Open access

Overview

Open journals

Open Select

Dove Medical Press

F1000Research

## Help and information

Help and contact

Newsroom

All journals

Books

## Keep up to date

Register to receive personalised research and resources by email



Sign me up



Copyright © 2024 Informa UK Limited [Privacy policy](#) [Cookies](#) [Terms & conditions](#)

[Accessibility](#)



Taylor & Francis Group  
an informa business

Registered in England & Wales No. 3099067  
5 Howick Place | London | SW1P 1WG

### About Cookies On This Site

We and our partners use cookies to enhance your website experience, learn how our site is used, offer personalised features, measure the effectiveness of our services, and tailor content and ads to your interests while you navigate on the web or interact with us across devices. You can choose to accept all of these cookies or only essential cookies. To learn more or manage your preferences, click “Settings”. For further information about the data we collect from you, please see our [Privacy Policy](#).

Accept All

Essential Only

Settings