

# Pharmacology, Doping and Sports

A Scientific Guide for Athletes, Coaches, Physicians,  
Scientists and Administrators

Jean L. Fourcroy, Walter Reed Army Hospital, USA

The work of dope testers is constantly being obstructed by the development of ever harder to trace new forms of banned substances. Organisations such as the World Anti-Doping Association and the United States Anti-Doping Agency are pioneering cutting-edge techniques designed to keep competition at the highest level fair and safe, and must ensure that their drug testing laboratories adhere to the highest scientific standards. In *Pharmacology, Doping and Sports* these techniques and procedures are explained by the anti-doping experts who practice them.

Broad-ranging in scope, this book examines the effects of performance-enhancing substances on the athlete's health; the role of anti-doping procedures as an ethical question, and explains the background to, and the emergence of, the anti-doping movement. The book also offers in-depth analysis of key scientific matters, such as:

- Standard analytical and diagnostic tests for sports doping
- Regulatory standards for laboratory proficiency
- Common performance-enhancing techniques such as anabolic and designer steroids, blood doping, growth hormones, and gene doping
- Carbon-isotope ratio testing

Written by some of the world's leading authorities on the science of sports doping, *Pharmacology, Doping and Sports* provides an invaluable study of up-to-the-minute anti-doping techniques. This book is essential reading for all sports scientists, coaches, policy-makers, students and athletes interested in the science or ethics of doping in sport.

## Selected Contents:

Acknowledgements  
 Abbreviations  
 Preface author - Fourcroy  
 Preface Athlete - Swenson Board U.S. Anti-Doping Agency  
 Preface Tygart CEO U.S. Anti-Doping Agency  
 Historical and Scientific Background - Fourcroy/ Pittinger  
 Ensuring Quality Results in a Global Testing System - Bowers  
 Anabolic Steroids - Clark  
 Testing for Anabolic Agents - Ayotte  
 THG, Gestrinone, and Trenbolone the Art of Ferreting out a Designer steroid - Bowers  
 Isotope Ratio Mass Spectrometry: Carbon Isotope Ratio Analysis - Aguilera  
 Stimulants, diuretics and Masking of Doping in Sports - Hildebrand  
 The Development of the Erythropoietin (EPO) Tests - Lasne  
 Erythrocyte Volume and Human Performance - Sawka, Muza, Young  
 Growth Hormone, Secretagogues, and related issues - Holt, Sonksen  
 Gene Doping - Friedmann  
 Therapeutic Gene Use - Fourcroy  
 Doping and its Impact on the Healthy Athlete - Pipe  
 Summary - Fourcroy

October 2008

HB: 978-0-415-42845-3: £85.00

# PRIORITY ORDER FORM

Ordering Methods

If ordering after the book launch, please return this form to:

Social Sciences Marketing  
Routledge  
FREEPOST  
2 Park Square  
Milton Park  
Abingdon  
Oxon  
OX14 4BR

\*Please affix stamp if posting from outside the UK

**Fax:** +44 (0) 20 7017 6699

- Please tick here if you would like receive any mailings from Taylor & Francis Group companies
- Please tick here if you would like receive our Education e-Update (please supply email address below)

Ordering

Title	ISBN	Qty.	Price	Subtotal

P&P

**UK**  
5% of total order  
MIN CHARGE £1.00  
MAX CHARGE £10.00  
NEXT DAY +£6.50\*  
\* We only guarantee next day delivery for orders

**EUROPE**  
10% of total order  
MIN CHARGE £2.95  
MAX CHARGE £20.00  
AIRMAIL +£6.50

**REST OF WORLD**  
15% of total order  
MIN CHARGE £6.50  
MAX CHARGE £30.00

For other options call customer services on:  
**+44 (0)1264 343071**

**POSTAGE**

**GRAND TOTAL**


Personal Details

SURNAME	FIRST NAME
DEPARTMENT	
INSTITUTION	VAT NUMBER (EU MEMBER STATES)
ADDRESS	
TOWN	COUNTY
POSTCODE	COUNTRY
TELEPHONE	FAX
EMAIL	

SIGNATURE: \_\_\_\_\_ DATE:   /   /   (eg 01/01/05)

PAYMENT

SELECT PAYMENT METHOD (please tick or fill appropriate boxes & select card type)

**Cheque** payable to Taylor & Francis £        **Cash** £

**Credit Card No** (no spaces)     Mastercard     Visa     Amex     Switch

   EXPIRY DATE     /     Month/year

   **Security Code—last 3 digits on back of card**    Issue Number        (only applies to Switch)