'Run, Swim, Throw, Cheat' discusses doping in sports

"If anyone competes as an athlete, he does not receive the victor's crown unless he competes according to the rules." — 2 Timothy 2:5

This quote is found at the beginning of "Run, Swim, Throw, Cheat: The Science Behind Drugs in Sports," the new book by Chris Cooper, a biochemist who has devoted the last 20 years of his life to studying how performance-enhancing drugs are used to gain an edge in athletic competition. Given the recent high-profile case involving Lance Armstrong and his world-class peers in the international cycling community, the tome is particularly relevant and timely.

Cooper is a professor in the Centre for Sports and Exercise Science at the University of Essex who consults extensively on issues related to sports science. A regular contributor to several media outlets, he is working on, among other things, developing an artificial blood substitute capable of replacing red cell transfusions.

"Run, Swim, Throw, Cheat" is obviously written for a broad audience. The author's ability to explain relatively complicated processes in a way that makes the material accessible to readers who have no more than a rudimentary background in the science upon which much of the book is based is a testament to Cooper's literary prowess. At the same time, it is very apparent that he is a biochemist with an intimate and detailed understanding of his subject matter – right down to the molecular level.

Witness this passage from Chapter 5, "Muscling Up": "The two signaling pathways key for muscle growth are called mTOR and myostatin; both have such protein phosphorylation at their core. One pathway signals for an increase in protein synthesis and the other signals a decrease. Altering these pathways with drugs has the potential to build up muscle mass and hence power."

Cooper then proceeds to make clear what this means in such a way that virtually anyone can appreciate the implications of this seemingly mysterious chemical interaction.

Within the context of the present discussion, perhaps a fundamental definition is in order. The World Anti-Doping Agency considers doping to be: "1. the use of a substance or method that represents an actual or potential health risk to the athlete; 2. the use of a substance or method – alone or in combination with other substances or methods – that has the potential to enhance or enhances sport performance; 3. the use of a substance or method that violates the spirit of sport."

Cooper argues that the implications of doping in the sports are both far-reaching and cross many lines that may not be self-evident upon initial reflection.

"What would the sporting world look like in which there was no attempt to restrict chemical and genetic enhancements?" Cooper asks poignantly. "In terms of male sport perhaps not too different, at least on the surface. But in terms of female sport widespread anabolic steroid use would affect both the spectacle of the sport and the nature of the people taking part."

Although Cooper does a masterful job of explaining the complexities associated with the use of drugs to improve physical performance, he is perhaps at his best when addressing the ethical dimensions intrinsic to the issue. He argues persuasively that the problem of doping to enhance athletic capability mirrors the larger societal problem of illicit drug use in general. The author feels both are culturally embedded in our way of life and equally difficult – if not impossible – to eradicate.

In Chapter 9 – "What is Cheating?" – Cooper lays out the basic arguments against the use of artificial substances and practices to gain a competitive edge.

"Firstly doping harms athletes; secondly, doping is unfair to the athlete's competitors; thirdly, doping undermines sports in society," Cooper explains. "Contrast this with the arguments against recreational drugs. Firstly drugs harm an individual; secondly, drugs harm those with whom an individual interacts; thirdly drugs harm the moral structure of society."

It should be noted that "Run, Swim, Throw, Cheat" is extensively researched, with no less than 14 pages of "Notes and References" at the conclusion of the 10 chapters that make up the main text. What sets this book apart from many in the same genre is the fact that it is written by a scientist with expertise in the technical aspects of the equation. Cooper also takes a fairly balanced approach to his primary thesis; at times it is ambiguous as to whether he is for or against doping as a means of enhancing athletic proficiency.

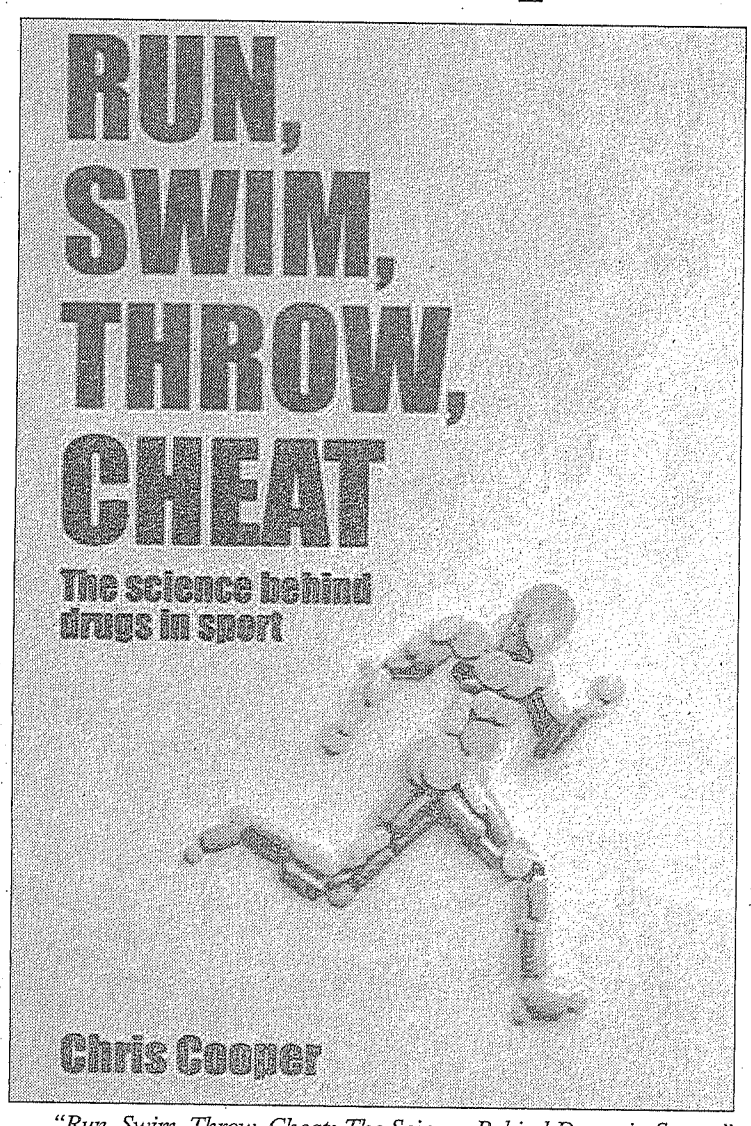
In the final analysis, Cooper is guardedly optimistic that we will be able to effectively come to terms with the dilemmas we are currently facing.

"As I hope this book makes clear, we can no more 'win' a war on drugs in sport than we can 'win' a war on drugs in society," Cooper concludes. "There are no simple solutions, but improvements can be made to enhance fairness."

If you want to better understand why doping has, and will continue to be, such a significant concern in the sporting world, you could do a lot worse than read "Run, Swim, Throw, Cheat."

I recommend it highly.

— Reviewed by Aaron W. Hughey, Department of Counseling and Student Affairs, Western Kentucky University.



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