

References

- American College of Sports Medicine, 1975 "Position statement on prevention of heat injuries during distance running". *Med. Sci.Sports* 7: vii-ix.
- Beal, H. T., 1974 "An operational windchill index". *Atmosphere* 12: 18-30.
- Costill, D. L., Kammer, W. F. and Fisher, A., 1970 "Fluid ingestion during distance running". *Arch.Environ.Health* 21: 520-525.
- Cotes, J. E., 1979 "Lung function throughout life; determinants and reference values". Blackwell Scientific Papers, Oxford.
- Dancaster, C. P., Duckworth, W. C. and Roper, C. J., 1969 "Nephropathy in marathon runners". *S.Afr.Med.J.* 43: 758-760.
- England, A. C., Fraser, D. W., Hightower, A. W., Tirinnanzi, R., Greenberg, D. J., Powell, K. E., Slovis, C. M., Varsha, R. A., 1982 "Preventing severe heat injury in runners: suggestions from the 1979 Peachtree road race experience". *Ann.Int.Med.* 97: 196-201.
- Falconer, R., 1968 "Windchill, a useful wintertime weather variable". *Weatherwise* 21: 227-229.
- Ganong, W. F., 1981 "Review of medical physiology". Lang Medical Publications, Los Altos.
- Hanson, P. G. and Zimmerman, S. W., 1979 "Exertional heat stroke in novice runners". *J.Amer.Med.Ass.* 242: 154-157.
- Hart, L. E., Egier, B. P., Shimizu, A. G., Tandan, P. J., Sutton, J. R., 1980 "Exertional heat stroke: the runner's nemesis". *Canadian Medical Association J.* 122: 1144-1150.
- Holdcroft, A., 1980 "Body temperature control". Ballière-Tindall, London.
- Kavanagh, T. and Shephard, R. J., 1977 "On the choice of fluid for the hydration of middle-aged marathon runners". *Br.J. Sports Med.* 11: 26-35.
- Minassian, D. C., Mehra, V. and Jones, B. R., 1984 "Dehydrational crises from severe diarrhoea or heat stroke and risk of cataract". *Lancet* 1: 751-753.
- Nicholson, M. R. and Somerville, K. W., 1978 "Heat stroke in a 'run for fun' ". *Brit.Med.J.* 1: 1525.
- O'Donnell, T. F., 1977 "The haemodynamic and metabolic alterations associated with acute heat stress injury in marathon runners". *Ann.N.Y.Acad.Sci.* 301: 262-269.
- Porter, A. M. W., 1984 "How do marathon runners fare?" *Brit. J.Sports Med.* 18: 46.
- Pugh, L. G. C. E., Corbett, J. L. and Johnson, R. H., 1967 "Rectal temperature, weight losses and sweat rates in marathon running". *J.Appl.Physiol.* 23: 347-352.
- Steadman, R. G., 1971 "Indices of windchill of clothed persons". *J.Appl.Met.* 10: 674-683.
- Sutton, J., Coleman, M. J., Millar, A. P., Lazarus, L. and Russo, P., 1972 "The medical problems of mass participation in athletic competition". *Med.J.Australia* 2: 127-133.
- Watt, G. A., 1967 "An index of comfort for Bahrein". *Met. Magazine* 96: 321.
- Williams, B., 1984. Personal communication.
- Wyndham, C. H., 1977 "Heat stroke and hyperthermia in marathon runners". *Ann.N.Y.Acad.Sci.* 301: 128-138.

BOOK REVIEW

Title: **PHYSIQUE OF FEMALE OLYMPIC FINALISTS**
Authors: T. Khosla and V. C. McBroom
Publisher: Welsh National School of Medicine, Health Park, Cardiff
Price: £2.45 or \$5.00 in USA

This 70 page book lists the height, weight, age and other physical characteristics of 824 women finalists in the 1972 and 1976 Olympic Games.

Quantitative information on human structure, especially top-class performers, is all too rare, and any contributions of this nature are to be commended. On the other hand however, I feel that the authors, in the preface, make an unwarranted and rather naive attempt to "sell" the book on the grounds that it holds some sort of key to choosing one's ideal event. The norm in most physical activities is difficult to define, the ideal probably impossible, particularly when there are so many variables contributing to successful performance.

The data are of general interest and they may be of special interest to people involved in sport and/or research but they really do no more than spell out the already obvious to the coach and aspiring athlete. For example, if you are below average height you are unlikely to make a top basketball player; if you are small and skinny do not expect to take on Geoff Capes at shot; if you are big and fat do not look for success in marathons, and so on.

There are inherent dangers of misinterpretation when dealing with group data. Top-class sport is about individuals, and descriptive statistics such as mean and standard deviation, even when understood, are of little use to the performer or coach who is interested in personal performance of one athlete at one moment in time, not generalisations. On examining the 100 metres table in the text you can see height differences of 17 cms and weight differences of 20 kg among the finalists in 1972 and 1976. These ranges are so large that very few women of "average" height would be excluded.

Although it might appear that I would not recommend this text, this is not the case. It will obviously be of interest to sportswomen, coaches, trainers, equipment designers and research workers, but I am rather sceptical about some of the claims regarding the direct application of such data.

F. M. Holliday