

UNIVERSITY OF MINNESOTA Laboratory of Physiological Hygiene School of Public Health

Laboratory of Physiological Hygiene School of Public Health Stadium Gate 27 Minneapolis, Minnesota 55455

March 31, 1977

Dr. Howard Burchell Department of Medicine Stanford University School of Medicine Palo Alto, CA

١,

Dear Howard:

I'm sorry the Blackburn's and Burchell's missed contact all round in California. Nelly is in Palo Alto this week. I will be going to the encampment in July and look forward to this much.

Many thanks for the chance to read your contribution to <u>Controversy</u>. My response is not blah. It is just the sort of reading, and touch, which <u>Controversy</u> needs.

First, you have correctly stated the problem about vigorous exercise, after the event, and your approach and tone tend to reconcile the issues in controversy.

Were you aware of our little perceived exertion scale? In healthy middle age the number x 10 correlates well with heart rate. I've not seen it tried in patients. I guess your personalized viewpoints of the specialists got under my skin. I dearly love to see characterizations of different approaches, and professional blunders and foibles. But they still bother me. Maybe that's a reason to leave them!

I would love the reference to the concept of "monstrous certainty."

You omitted the highly personal conviction and view of the <u>Jogging Practitioner</u> (Sheehan?).

Cordially-

More emphasis might be considered on the very real accomplishments to performance and MVO_2 of brisk walking, increasingly documented in those with low initial capacity, where time and efficiency are not as urgent (A. Leon has references and I enclose an unpublished comment from B. Saltin).

All will be grateful to you for discovering the O. Henry story.

Cordially,

Henry Blagkburn

HB:gk

P.S. I have taken the liberty of letting Art Leon read your draft.

Note: Unpublished observations of B. Saltin in sedentary Swedish men: 50 minutes, once a week, at 90% of maximal oxygen uptake, was enough to give an improvement of 15% in maximal oxygen uptake, in two months of physical conditioning. The intensity can be reduced at the cost of much more time. Sixty minutes, three times a week, at 60% of maximal, that is a heart rate of around 130 beats/minute, gave the same improvement. The intensity can be as low as 30% of maximal oxygen uptake and a heart rate about 100 beats/minute, but requires two hours, five times a week, for comparable improvement in oxygen uptake in sedentary men.

bpc R. Rappupart.