

# Editorial



## Research in Clinical Nutrition

The field of research in clinical nutrition is fraught with difficulties. A moment's reflection will reveal the hurdles and barriers to the apparently simple matter of obtaining data.

Unlike antibiotic research, for example (and this in no way is meant to imply that antibiotic research is *easy*), where one can pinpoint the problem, e.g., "the effect of X antibiotic on infections with Y organisms," in nutritional research we are dealing with a situation which perhaps can be described as follows:

We administer precisely known quantities (sometimes) into bodies of uncertain functional status which have evolved from years of equally uncertain stresses and nutriture; something happens inside and we can only guess what by measuring what comes out or what circulates in the blood. Sometimes we try for a higher goal and attempt to discover whether feeding something to one group of persons will produce detectable differences as compared to a similar group not so supplemented. When the variability of the human species is considered, and when the absence of unmistakable end points in our crude testing systems is appreciated, we then can understand why nutrition literature is so replete with erroneous data or misinterpreted conclusions. While it may be manifestly impossible to "control" all the countless factors impinging on the human animal, it is mandatory that every effort be expended in that direction.

This is brilliantly exemplified in the elaborate study by the U. S. Army Medical Nutrition Laboratory, the first part of which appears elsewhere in this issue.

The question that Col. Ryer and his associ-

ates attempted to answer was essentially: "Will supplementation with large amounts of vitamins B complex and C be of benefit to well-nourished, healthy persons engaged in vigorous activity under stressful conditions?" The implications are large. For example, if vitamin supplementation were to enhance physical performance, this finding would significantly alter the nutritional programs not only of the Armed Forces, but of our civilian population as well.

The meticulousness of the project can be appreciated by the description (page 99) of the "control of test subjects' food intake," Table IX (page 107), and the description of the forced marches (page 121 *et seq.*). That vitamin supplementation did not make more "iron men" out of the already rugged group of soldiers may have been expected. But what was needed was a clean-cut, definitive study, which (as the authors point out) "under the conditions of this experiment" would answer once and for all the question posed by the authors. This has been done.

Few clinical scientists have the facilities to study a nutritional problem in man with even a fraction of the cost and labor of this work. Yet all can profit from this example of careful consideration of the modifying factors in human experimentation of any type. It appears that research in clinical nutrition is impeded by great but not unsurmountable difficulties.

To the stalwart 87 enlisted men and officers who volunteered for this ten-week experiment in mid-winter in the mountains of Wyoming goes the appreciation of all of us.

—S. O. WAIFE, M.D.