



UNIVERSITY OF MINNESOTA
TWIN CITIES

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Theodore Goodfriend, M.D.
Wm. S. Middleton Memorial Veteran's Adm. Hospital
2500 Overlook Terrace
Madison, WI 53705

Dear Dr. Goodfriend:

You are to be commended for soliciting ideas in your capacity leading the Advisory Committee on Atherosclerosis and Hypertension of the NHLBI.

I feel that neglected areas in these researches include the following:

- 1) Applied physiological studies, in which are controlled the several variables associated with hypertension including weight, fluid volume, salt intake and physical activity.
- 2) Applied physiological studies in which the several variables are controlled which contribute to blood lipid changes including calorie intake, energy expenditure, and dietary composition.
- 3) Applied physiological studies in which the systematic effect of physical activity is explored as anti-diabetic and anti-atherogenic.
- 4) Applied behavioral studies in which intervention strategies are tested and compared for influencing health-related behavior.

Between large scale drug and prevention trials on the one hand and study of basic mechanisms, cell biology and so forth on the other, there is an important area which provides information on mechanisms, on preventive hypotheses, and on practical applications. These areas are often neither fish nor fowl to NIH review groups. The Applied Physiology review group may not understand fully the wider preventive implications of the proposals. The Epidemiology-Prevention review group may not see such studies as within their purview and the "Basic" and Cardiology review groups do not really regard such undertakings in man as serious research.

But the fact is, we simply do not know for example, the effect of dietary composition change on serum lipids in situations that are not isocaloric. We simply do not know the relative contribution of salt restriction and potassium supplementation to drug dosage required in anti-hypertensive therapy. We simply

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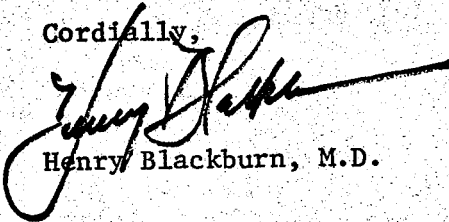
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do not know the relative contribution of systematic physical activity to several anti-diabetogenic mechanisms, insulin requirements and so on, and on, and on. Systematic well-designed applications in this field do not usually find a receptive audience at NIH.

I have no comments about your point 2. about scarce resources, or 3. about novel hypotheses. With regard to imbalance in federally supported research programs, it seems to me that your question is inviting heavy (and perhaps uninformed) comment. I like the idea of Paul Meyer of Chicago who suggests that the costs of categorical medical research should not be tied to the level of NIH budgets (and perhaps not to the opinions of many NIH review and advisory groups) but rather to the magnitude and cost of the problem. In this regard there is clearly a serious imbalance (inadequacy) in the Federal funding for atherosclerosis research. I do believe that preventive efforts and clinical trials and NIH-initiated targeted research areas should all continue and, along with behavioral researches, should grow. I do not feel that they should grow at the expense of investigator-originated research.

To be quite frank and perhaps depart from the opinion of the majority of the scientific community, I do not think that there is a large imbalance now between the proportionate funds going to preventive and applied efforts and those going to "basic" research in the area of atherosclerosis or any Heart, Lung and Blood Institute's program. I believe that the activities of the last quadrennium have served to redress the previously seriously distorted balance in favor of "pure", non-applied research.

Cordially,


Henry Blackburn, M.D.

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