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Imbalanced Diet vs. Sedentary Lifestyle: The burden of history

We thank Professor Antronette K. (Toni) Yancey for inviting, assembling, and serving as Guest Editor of (as well as a contributing author to) the set of 23 papers appearing in this themed issue of *Preventive Medicine* entitled: "Forum on Physical Activity Research and Funding: Prioritizing Physical Activity Promotion: A Public Health Imperative" (Bauman et al., 2009; Finegood and Matsudo, 2009; Bleich and Sturm, 2009; Brownson and Jones 2009; Donnelly et al., 2009; Dorfman and Yancey, 2009; Doyle et al. 2009; Eaton et al., 2009; Garcia et al., 2009; Haskell et al., 2009; Hooker and Buchner, 2009; King and Sallis, 2009; Maibach et al., 2009; Morandi, 2009; Pratt et al., 2009; Pronk and Kottke, 2009; Simon et al., 2009; Solomon et al., 2009; Whitt-Glover et al., 2009; Yancey, 2009; Yancey and Sallis, 2009; Yancey et al., 2009; Zimmerman; 2009). The Forum is focused on the role of physical activity research in the current US scientific environment.

This initiative is founded on an intriguing observation: why is physical activity receiving much less public, institutional, and academic attention than diet? It's certainly not because diet is a more important health determinant than exercise. Consider the following statement written at the turn of the 18th century by Giorgio Baglivi (1668-1707), a doctor who practiced medicine in Italy:

"Length of life does not depend so much on a good physical constitution as it does on the best use of the six non-natural things, which if we rule right, we shall live long and healthy lives: to divide the day properly between sleep and waking; to adjust our air to the needs of the body; to take more or less food and drink according to our age, our temperament, and whether we live an active or inactive life; to take exercise or rest according to the quantity of our food and whether we are lean or fat; to know ourselves; and be able to rule our emotions, and subject them to our reason. Whoever handles these wisely will live long and seldom need a doctor." (quoted by Porter (1997), p. 229)

For Baglivi, as for most physicians of his time, diet and exercise were two sides of the same coin: eat according to your activity level, and exercise according to your dietary consumption. This makes perfect sense.

From a historical perspective, however, there is a great difference between diet and physical activity. Dietary imbalances have plagued human societies, at least since they began to rely essentially on agriculture and animal husbandry. They have been a burden for the large majority of the population throughout history and continue to be a burden today, even if the nature of the imbalance has changed dramatically. On the other hand, the large majority of the population had always been active until around the beginning of the 20th century. It's been only since around a hundred years ago that exercise has been progressively eliminated, first from domestic chores, then from transportation, and, finally, from most occupational activity. Mass sedentary lifestyle is therefore a relatively recent public health concern, whereas mass dietary misconsumption has existed from practically immemorial times.

However, even if problems related to diet are older than those related to being sedentary, that does not mean they are more essential. In addition, physical activity seems to be modifiable by changes to the built environment, which is mostly under public control, whereas dietary modification requires changes in the way that food is produced and distributed, which involves more actors, some of which do not prioritize the health of the public.

We hope that this themed issue of *Preventive Medicine* will contribute towards re-evaluating the role of physical activity as a positive health determinant through its fundamental importance and its amenability to prevention policy.

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