

【Review Article】

Scoring Protocol for Calculation of Total Energy Expenditure by Physical Activity Questionnaires Used in Japanese Cohort Studies

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Abstract

With regard to public health, it is essential to assess physical activity and to reduce physical inactivity. Physical activity questionnaires (PAQs) are a common method of assessing physical activity. If PAQs can be used to obtain information about 24-hour behaviors and metabolic equivalents (METs), then total energy expenditure (TEE) can be estimated. TEE is an important measure to test dose-response relationships with health outcomes. If TEE can be calculated from various PAQs, comparability among cohort studies is improved. The purpose of the present study is to collect PAQs used in major Japanese cohort studies, and to show the scoring protocol for TEE estimation through the PAQs. With cooperation from principal investigators of each cohort study, 21 PAQs were collected. Of these, 7 PAQs were detailed enough to calculate TEE, and the scoring protocols for TEE estimation were shown. It remains a matter of debate as to how to assign METs to some questionnaire items, as consistency among PAQs needs to be taken into account. And also, in some PAQs, METs were not officially assigned. Further discussion of these points and further studies to test the validity of the scoring protocol for TEE estimation are necessary.

Key words: questionnaire, exercise habit, integrated analysis, standardization

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