



Research article

Level of physical activity and barriers to exercise in adults with type 2 diabetes

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Appendice 1

1. The International Physical Activity Questionnaire (IPAQ), short version

This questionnaire assesses the PA in the last 7 days in four generic items through seven questions related to work, physical-sports, and transport (walking) activities and to the time the person remains seated or lying down. It is designed to be administered by telephone or self-administered, in young and middle-aged adults (15–69 years), and has been validated both in Spanish [1] and in people with T2DM [2]. Based on the results of the IPAQ, individuals can be classified into three categories: those who perform low, intermediate and high level of PA (Table 1).

Table 1. Physical activity categories determined by the results of the IPAQ [1].

| Category | PA level | Activity performed |
|----------|----------|--|
| 1 | Low | The person does not perform any PA or the one he/she performs is not sufficient to correspond to categories 2 or 3 of the IPAQ. |
| 2 | Moderate | 3 or more days of vigorous PA for at least 20 min a day, or 5 or more days of moderate PA and/or walking at least 30 min a day, or 5 or more days of any combination of walking and/or PA of moderate and/or vigorous intensity, reaching an energy expenditure of at least 600 Mets-min/week. |
| 3 | High | The person performs vigorous PA for at least 3 days, reaching an energy expenditure of 1,500 Mets-min/week, or 7 or more days (sessions) of any combination of walking and/or PA of moderate intensity and/or vigorous PA, reaching an energy expenditure of at least 3,000 Mets-min/week. |

2. Questionnaire of barriers to being active

This questionnaire assesses the reasons that prevent a person from being more active. It has been developed by the U.S. Centers for Disease Control (CDC) [3] and validated in Spanish [4]. It explores the reasons for not performing PA, using 21 questions to be answered with one of the following four options: very likely, somewhat likely, somewhat unlikely, and highly unlikely (3, 2, 1 and 0 points respectively), grouped into seven areas or categories (lack of time, social influences, lack of energy, lack of willpower, fear of injury, lack of skills, and lack of resources), with three questions per area. In this questionnaire, a barrier is defined as that when the score of the three questions of each area is equal to or greater than 5. Social influences (or social support) refer to social interaction and the influence of the PA performed by people in the nearest social environment and involves enjoying and committing to others (i.e. “to be active with others”).

References

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