# HOW ACTIVE ARE WE?

## LEVELS OF PHYSICAL ACTIVITY IN ADULT BARBADIANS EVIDENCE BRIEF, JUNE 2016



#### WHAT IS PHYSICAL ACTIVITY & HOW DO WE MEASURE IT?

Physical activity refers to any movement of the body that results in energy being expended. We can be active throughout our day, making activity difficult to measure accurately. Questionnaires can assess recreational activities quite well, as they are easily recalled, but they are less good at estimating energy expenditure in other contexts, such as in the home or at work. Because of this limitation, objective measures are increasingly being used for physical activity research. Ideally, objective measures should be used alongside questionnaires, which provide valuable information on the type of activity performed.

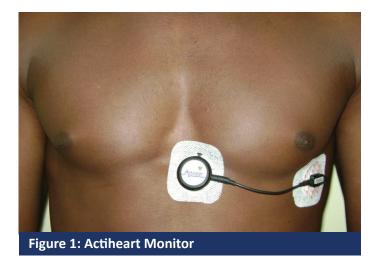
#### THE BURDEN OF BEING INACTIVE

We know that not getting enough activity is harmful to health, contributing to an increased risk of diabetes, cardiovascular diseases, and cancer. The World Health Organization (WHO) estimates that physical inactivity independently accounted for 9% of premature mortality in 2008, which works out to 5.3 million people dying early worldwide.

The WHO guidelines recommend a minimum of 150 minutes of moderate intensity aerobic activity<sup>1</sup> every week for adults. Prior to 2012, we did not know how many Barbadians met this target, and how many were inactive. The Barbados Physical Activity Study aimed to estimate physical inactivity in young and middle-aged Barbadian adults, and to provide information on physical activity patterns in our population.

### THE BARBADOS PHYSICAL ACTIVITY STUDY: A SUB-STUDY OF THE HEALTH OF THE NATION

- Undertaken by the Chronic Disease Research
  Centre and Faculty of Medical Sciences, Cave Hill
- Aimed to recruit a representative sample of young to middle aged Barbadian adults (25-54 years) from the Health of the Nation survey
- Data collected in 2012 and 2013
- 354 participants: 216 women, 138 men
- The most complete assessment of activity in a Caribbean population to date. A combined movement and heart rate monitor (Actiheart; figure 1) was used to measure activity objectively, and a questionnaire provided information on where people accumulate their activity and the types of activities carried out.



<sup>&</sup>lt;sup>1</sup> Moderate intensity aerobic activity is any physical activity that makes you sweat, causes you to breathe harder and gets your heart beating faster than at rest.

#### **MAIN FINDINGS**



- Over half the population spends over 8 hours a day sitting or lying down, excluding time spent sleeping.
   Barbadians reported spending an average of 2 ½ hours watching TV and 1 hour on the computer outside of work every day.
- Similar to other parts of the world, we found that physical activity decreases with age. In the Barbadian population, we found that socially advantaged groups, in terms of education and job type, are the least active.
- Almost two-thirds of Barbadians consider themselves to be sufficiently active, but do not get enough activity according to objective measurements.
- Two-thirds of all activity takes place at work, with one-fifth taking place during recreation (figure 2).

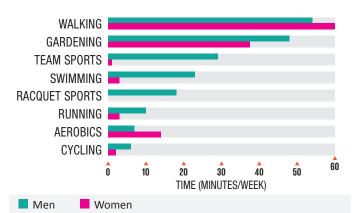


Figure 2: Time spent participating in recreational activities each week, reported by adult Barbadians

- Around 1 in 10 Barbadians reported doing no recreational activity in the previous month. Men reported spending more time doing recreational activity than women (155 vs 68 minutes/week).
- The most popular activities for both genders were gardening and walking. Very few women at all reported spending time playing sports (figure 3).



Figure 3: Proportions of physical activity occurring in different contexts in adult Barbadians

#### IMPLICATIONS FOR POLICY & FUTURE RESEARCH

Public health programmes to increase activity and reduce time spent sitting are needed urgently for much of the population. However, interventions of this scale may be prohibitively expensive, and a more pragmatic approach may be to target groups that are particularly inactive. Our data highlight that women and older adults could be priorities for targeted interventions to increase activity. Encouraging recreational activities that are already popular, such as walking, is a promising strategy. Interventions to increase walking have been successfully implemented in other populations. Conversely, there is scope for increasing currently unpopular activities, for example, by encouraging more women to participate in sports. This approach is likely to be more challenging, and would perhaps require implementation in school age girls. Further work is needed to understand the possible uptake of different types of activity, and on how best to encourage uptake.

Our data emphasize the need to improve people's awareness of their own activity levels. A large part of the population overestimates their activity level. This group is of particular public health importance, as people who believe they are sufficiently active are unlikely to see the need to increase their activity. Public education should be a part of future efforts to increase activity in Barbadians.

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