

ASSESSMENT OF PHYSICAL ACTIVITY

Prof. ULF EKELUND

Preparatory activities

Learning objectives (200 characters max):

To understand how to assess physical activity in epidemiological research and the advantages and disadvantages with different assessment methods.

Online Learning resources:

Reading material:

Dowd, K. P., Szeklicki, R., Minetto, M. A., Murphy, M. H., Polito, A., Ghiqo, E., ... Donnelly, A. E. (2018). A systematic literature review of reviews on techniques for physical activity measurement in adults: A DEDIPAC study. *International Journal of Behavioral Nutrition and Physical Activity*, 15(1), 15. <https://doi.org/10.1186/s12966-017-0636-2>

Warren et al, Assessment of Physical Activity Eur J Cardiovasc Prev Rehabil 2010
<https://www.ncbi.nlm.nih.gov/pubmed/20215971>

Video (web link):

Using wearable technology to measure physical activity

https://www.youtube.com/watch?v=nPbEuGrxoSQ&ab_channel=JohnsHopkinsMedicine

Core activities

Learning objectives (200 characters max):

To understand the importance of accuracy when measuring physical activity in epidemiological research and to choose a specific method for a specific research question

Online Learning resources:

Presentation to be distributed following lecture

Reading material:

Miguelles, J. H., Cadenas-Sanchez, C., Ekelund, U., Nyström, C. D., Mora-Gonzalez, J., Löf, M., ... Ortega, F. B. (2017). Accelerometer data collection and processing criteria to assess physical activity and other outcomes: A systematic review and practical considerations. *Sports Medicine*, 47(9), 1821-1845. <https://doi.org/10.1007/s40279-017-0716-0>

<https://link.springer.com/article/10.1007%2Fs40279-017-0716-0>

Helmerhorst et al, A systematic review of reliability and objective criterion-related validity of physical activity questionnaires. IJBNPA 2012

<https://www.ncbi.nlm.nih.gov/pmc/articles/PMC3492158/>

Web resources (link):

DAPA measurement toolkit <http://dapa-toolkit.mrc.ac.uk/>

Physical Activity and Physical Function Assessment tools <http://www.parcph.org/assess.aspx>