

## UK physical activity guidelines: Draft review and recommendations for Adults (aged 19-64 years)

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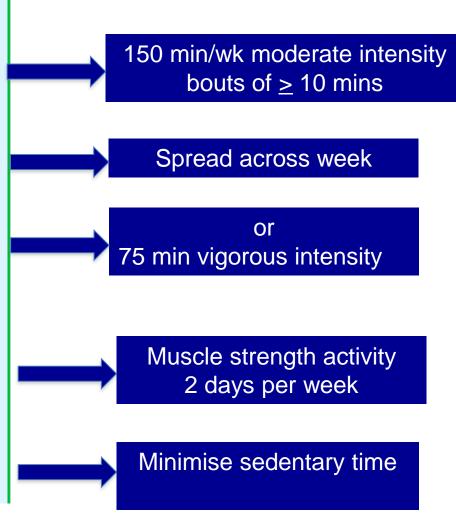
Dylan Thompson, David R Broom, Jason MR Gill, Cindy M Gray, Andy Jones, James Steele, Jet Veldhuijzen van Zanten

+ reviews on MSB by Foster et al. (2018) and disability by Smith et al. (2018)

### (Current) CMO 2011 Recommendations

#### ADULTS (19-64 years)

- Adults should aim to be active daily. Over a week, activity should add up to at least 150 minutes (2½ hours) of moderate intensity activity in bouts of 10 minutes or more – one way to approach this is to do 30 minutes on at least 5 days a week.
- Alternatively, comparable benefits can be achieved through 75 minutes of vigorous intensity activity spread across the week or a combination of moderate and vigorous intensity activity.
- Adults should also undertake physical activity to improve muscle strength on at least two days a week.
- All adults should minimise the amount of time spent being sedentary (sitting) for extended periods.



### Evidence since 2011 - key issues identified

- Light physical activity / MVPA below 150min/wk?
- Minimum bout length?
- Frequency?
- Prominence of muscle strength recommendation?
- Emergence of HIIT evidence?
- Adults with disability?

### Does the scientific evidence continue to support the current Physical Activity Guidelines for adults?

- Evidence continues to broadly support current guidelines
- Evidence suggests benefits may be derived from lower volumes (<150 min/wk), intensities (<moderate) and frequencies (1-2 session pw)
- Evidence suggests that bouts <10 min beneficial</li>
- Short duration but high intensity interval exercise may bring equivalent or greater health benefit
- Recommendation based on individual's current PA and/or fitness, description of intensity which refers to effort

Some good....more better (from 2011 Older Adult guidelines)

### Muscle strength guideline

- Evidence (Foster et al 2018) continues to support activity to maintain or improve muscle strength at least twice per week
- Specific examples of resistance activity (training methods and everyday activities) for different starting levels
- Muscle strength activity given <u>equal prominence</u> to 150 min MVPA message

## How should current guidelines address PA and weight management?

- Evidence suggests that >150 min/wk MVPA required for weight loss
- Given inter-dependency of energy intake and expenditure it is not possible to specify volume of PA for weight loss
- Importance of increasing PA and restricting energy intake simultaneously should be emphasised
- Role of physical activity in maintaining weight after weight loss should be emphasised.

### Population group variations

- Insufficient evidence to vary adult guidelines for male /female (exception pregnancy and postpartum)
- Insufficient evidence to vary adult guidelines by ethnicity

### Implications for surveillance

- Recognition of benefit of light intensity
- Removal of bout length threshold
  - both likely to increase the proportion self-reporting meeting the guidelines
- Greater clarity on what constitutes muscular strength activity
   likely to influence (reduce?) the proportion self-reporting meeting the guidelines
- Limitations for surveillance

lack of consistency in methodologies (irrespective of guidelines) limits surveillance



#### Recommendations

- Accumulation of activity in different ways/combinations, including 150 min/wk MVPA, high intensity lower duration...
- 2. No minimum bout length
- 3. Recognition of value of PA below and above recommended levels
- Resistance training major muscle groups 2x pw expanded to include specific examples (including everyday activities)
- 5. Recognition that PA can contribute to weight loss and maintenance

### Research Recommendations (before next guidelines!)

- Equivalencies of different combinations of duration and intensity and differences in health benefits?
- Most appropriate population level surveillance methods?
- Resistance training at lower frequency (1x pw)?
- Recommendations by sex, disability, ethnicity?
- Dose-response relationship for different health conditions/ disease outcomes?
- Use of technology to self-assess PA?



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