

Dutch physical activity advice for children aged 0-4 years

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Executive summary

Health Council of the Netherlands



Getting enough and varied physical activity is an important part of good health. In 2017, the Health Council of the Netherlands issued physical activity guidelines for adults and children aged 4 and over. According to various parties, including childcare and youth health care providers, there is a need for similar guidelines for younger children. Therefore, the Minister for Medical Care and Sport asked the Health Council to prepare an advisory report about this.

To this end, the Health Council's Advisory Committee Dutch physical activity advice for children up to age 4 years reviewed scientific studies on the potential link between physical activity versus sitting still (sedentary behaviour) among children aged 0 to 4 and various outcomes that are relevant to children's health and development, such as bone health, fitness, and motor and cognitive development.

The committee also reviewed international guidelines for this age group, including those issued by the World Health Organisation (WHO).

Physical activity recommendations for children aged 4

For children aged 4, the committee recommends combining the *Physical Activity Guidelines 2017* – which apply from the age of 4 – with the insights of the WHO expert panels. The current review of available studies and the expert panels indicates that physical activity is linked to higher bone density, greater fitness and better motor development. The committee recommends that children spend at least 180 minutes, spread out over the day, doing various types of physical activity, including at least 60 minutes of moderate to vigorous activity. Other recommendations include doing three weekly sessions of muscle and bone strengthening activities, avoiding sitting still

for long periods, and limiting screen time to a maximum of one hour a day.

Physical activity recommendations for children aged 0 to 3

Regular physical activity and avoiding that children sit still for long periods is also important for children aged 0 to 3. Although limited research has been done among this age group, the studies that find a link mostly show that more physical activity and less time spent sitting still are linked to better health and development in young children. This reflects the insights of the expert panels in various countries where physical activity guidelines have already been prepared for this age group. Based on the research and the opinions of the experts, the committee recommends encouraging physical activity among children aged 3 and under and discouraging that they sit still for long periods.



The number of scientific studies done into many of the studied outcomes among children aged 0 to 3 is limited, and physical activity versus sedentary behaviour was measured very differently and very different outcome measures were applied in these studies. These studies often find no significant links between physical activity versus sedentary behaviour and the health and development of young children. The committee has concluded that this limited data does not provide an adequate basis for setting minimum periods for physical activity or maximum periods for sedentary behaviour, such as sitting in front of screen or sitting restrained in a seat, for children aged 0 to 3.

Pending a stronger scientific basis, parties in the field (childcare, youth health care) can refer to the WHO's quantitative guidelines. The WHO recommends placing children under the age of 1 down on their tummy several times a day, for a total of at least 30 minutes, and playing with them on the floor. For children aged 1 to 3, the WHO recommends 180 minutes of daily

physical activity, including moderate to vigorous activity. This can take the form of varying activities throughout the day, but more physical activity is preferable. The WHO also recommends that children in both age groups should not be restrained in a seat for more than 60 minutes at a time and should not sit still for long periods. For this reason, screen time should also be limited. The WHO recommends that children under the age of 2 should not have any screen time at all. For children aged 2 and 3, the WHO recommends limiting screen to one hour per day, with less being better.

Encouraging targeted research

The committee believes that more research is needed before a quantitative physical activity guideline for children aged 0 to 4 can be prepared in future without relying heavily on the insights of expert panels. This will also be necessary in order to develop guidelines on the type and optimal frequency of physical activity and restrictions on the period and frequency of sedentary behaviour. This will require that

reliable methods are available to measure and analyse the physical activity and sedentary behaviour of children aged 0 to 4.

The committee recommends designing studies in a way that enables researchers to deduce a relationship between the number of minutes of physical activity and sedentary behaviour and the various outcomes. It also recommends setting up a national monitoring system to gain insight into the physical activity and sedentary behaviour of children aged 0 to 4.



The Health Council of the Netherlands, established in 1902, is an independent scientific advisory body. Its remit is “to advise the government and Parliament on the current level of knowledge with respect to public health issues and health (services) research...” (Section 22, Health Act).

The Health Council receives most requests for advice from the Ministers of Health, Welfare and Sport, Infrastructure and Water Management, Social Affairs and Employment, and Agriculture, Nature and Food Quality. The Council can publish advisory reports on its own initiative. It usually does this in order to ask attention for developments or trends that are thought to be relevant to government policy.

Most Health Council reports are prepared by multidisciplinary committees of Dutch or, sometimes, foreign experts, appointed in a personal capacity. The reports are available to the public.

This publication can be downloaded from www.healthcouncil.nl.

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