



A ONE-OFF HEALTH CHECK OF 1,800 AUSTRALIAN CHILDREN, AGED 11 TO 12 YEARS

A one-off health check of 1,800 Australian children, aged 11 to 12 years, has found most youngsters are healthy with the information to help governments, health workers and researchers come up with strategies to help keep it that way.

Led by the Murdoch Children's Research Institute, the Child Health CheckPoint study assessed the health of 1800 biological parent/child pairs with researchers travelling to 30 Australian cities and regional areas over a year.

SUMMARY OF FINDINGS FROM CHILD HEALTH CHECKPOINT RESEARCH STUDIES

1. The physical activity of children and their parents was measured using a physical activity monitor worn on the wrist. Children's moderate or vigorous physical activity level was low – 32 minutes a day – while they were sedentary for more than 11 hours a day.

The study indicates that Australian children are not sufficiently active. In contrast, most adults had the recommended amount of moderate and vigorous physical activity each day, and their sedentary time tended to be broken up into bouts of 30 minutes or less.

2. Sleep was measured by an accelerometer worn on the wrist for a week. The study found that while most children and parents had adequate sleep duration, poor quality sleep was common.

3. Food intake patterns or more particularly snacking habits were measured through a food choices study. Halfway through the Child Health CheckPoint visit, parents and children had a 15-minute break to visit the Food Stop station. They were given a box of snack food items, and researchers monitored what and how much they ate. The aim of the study was to determine connections between child and parent snack food consumption – the grams and calories eaten as well as the food's nutrients (for example, macronutrients and sodium). The researchers concluded that teaching parents to snack less may be one way to improve children's diets, but other influences (like peers, advertising and individual preferences) also influence food choices.

4. Children reported their health-related quality of life by completing the Child Health Utility questionnaire, which asked about key aspects of their lives: feeling

worried, sad, in pain, tired, annoyed; and problems with school/work, sleep, daily routine and ability to join in activities. Parents also completed a health utility survey. **The study found a small intergenerational concordance for health-related quality of life between parents and children.** The researchers believe this is the first study of its kind to show evidence that children's health-related quality of life is related to their parents'. The researchers call on health services to consider individuals as members of a wider family.

5. Hearing and language development was measured. Children and their parents underwent a hearing test (pure-tone audiometry). To measure language development, they were asked to recall sentences and link the meanings of words to pictures. The children had much better hearing than their parents, but similar levels of speech reception.

6. Children and parents' height, weight, body composition and waist circumference were assessed at the Measure Up station. Approximately one-quarter of children and two-thirds of parents were overweight or obese. However, there was only modest concordance suggesting children are not bound to inherit their parent's body shape or weight.

7. Bone health was measured by scanning the participant's lower leg in a CT scanner. Osteoporosis and osteopenia can begin in childhood but are not usually diagnosed until a bone fracture occurs in later life. About half of all adult over 50 years around the world have osteoporosis and osteopenia. The study found that children's bone size and shape was more strongly associated with their parents than other bone characteristics such as bone density and strength.