

Consequences of the COVID-19 pandemic on child physical activity and nutrition in Northern Ireland

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Background

Childhood is a crucial time in the formation of lifelong healthy eating and activity patterns. Children have faced unprecedented changes to daily routines due to the COVID-19 pandemic.

Aims

To examine the impact of COVID-19 and associated mitigation measures from March 2020-June 2021 on the weight, physical activity levels and diet of Northern Ireland (N.I.) school children aged 5-11 years.

20 primary schools randomly selected from N.I Education authority database & headteachers approached to participate in study.

2 Schools (A&B) opted to participate. School A has < 10% pupils eligible for free school meals (FSME) and School B >60% FSME.

A parental written questionnaire was issued to 480 children via class teachers in June 2021

Completed questionnaires returned & data transcribed into excel database for detailed analysis

Results

220 questionnaires returned (114 school A, 106 school B. Return rate: 46%.
Mean age: 8 years. 48% female, 52% male.
30% of children were FSME

Weight Change

168 (76%) parents reported there was no change in their child's weight. 44 (20%) of children had increased weight since the start of the COVID-19 pandemic. 8 (4%) had a decrease in their weight- all 8 of these parents reported their child had mental health issues as a result of the pandemic.

34% of children in the FSME group had increased weight compared to 21% in the non- FSME group. Of the children who had increased weight:

- 70% less active
- 41% consuming a less healthy diet
- 61% consuming more treat foods

Impact on Child Mental Health



Physical Activity

108 (49%) of parents reported their child was less active now compared to the start of the COVID-19 pandemic. 77 (35%) reported their child's activity levels were unchanged. 35 (16%) reported their child was more active.

Chart showing Child Daily Activity Levels

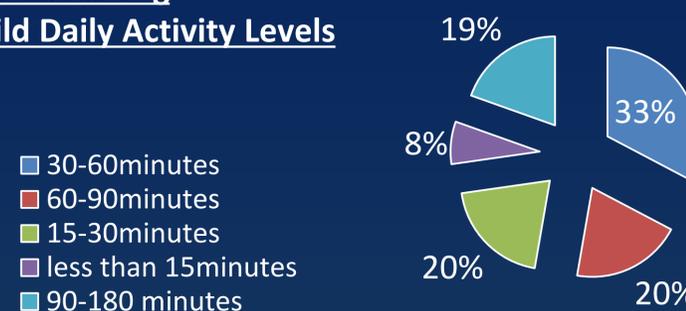


Table showing physical activity themes reported by parents

Less Active	Unchanged Activity Levels	More Active
Lack of child motivation	Online activities	Activity was a priority
Lack of adult motivation	Family walks	More outdoor play
Low mood	Parental motivation	Parental motivation
Less structure	Outdoor play	Youtube workouts
Increased screentime	Conscious effort	Keeping routine
fearful	Keeping structure	
Everywhere closed		

Diet and Shopping Habits

- 41% of children consuming more daily treat foods
 - 12% of children eating less daily fruit/ vegetables
- 84 (38%) families reported shopping habits changed. 40% of these reported more online shopping, 25% reported purchasing more treats and 7% reported financial pressure and increased budgeting

Screentime

82% of children had > 2 hours of daily screentime
77 (35%) of parents reported screentime as a barrier to their child doing physical activity

Conclusion

Pre-pandemic 27% of children in N.I. were classified as overweight/obese¹. In this study 1 in 5 parents reported their child's weight to have increased beyond expected. More children in the FSME group had increased weight than the non-FSME group suggesting existing health inequalities are worsening. The WHO recommends children 5-11 years spend 60 minutes daily doing moderate-vigorous activity². 61% of children in our study were not meeting this target. 64% of children engaging in sedentary screen time >2 hours a day. Increasing our knowledge of the impact of the COVID-19 pandemic on child health in N.I. is essential for post-pandemic recovery planning.