

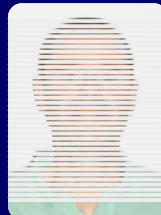


Who is Meeting Lifestyle Guidelines?

Clustering of (Un)Healthy Behaviours and Weight Status in Dunedin Adolescents



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Clustering of (Un)Healthy Behaviours



BEATS Study

Built Environment and Active
Transport to School



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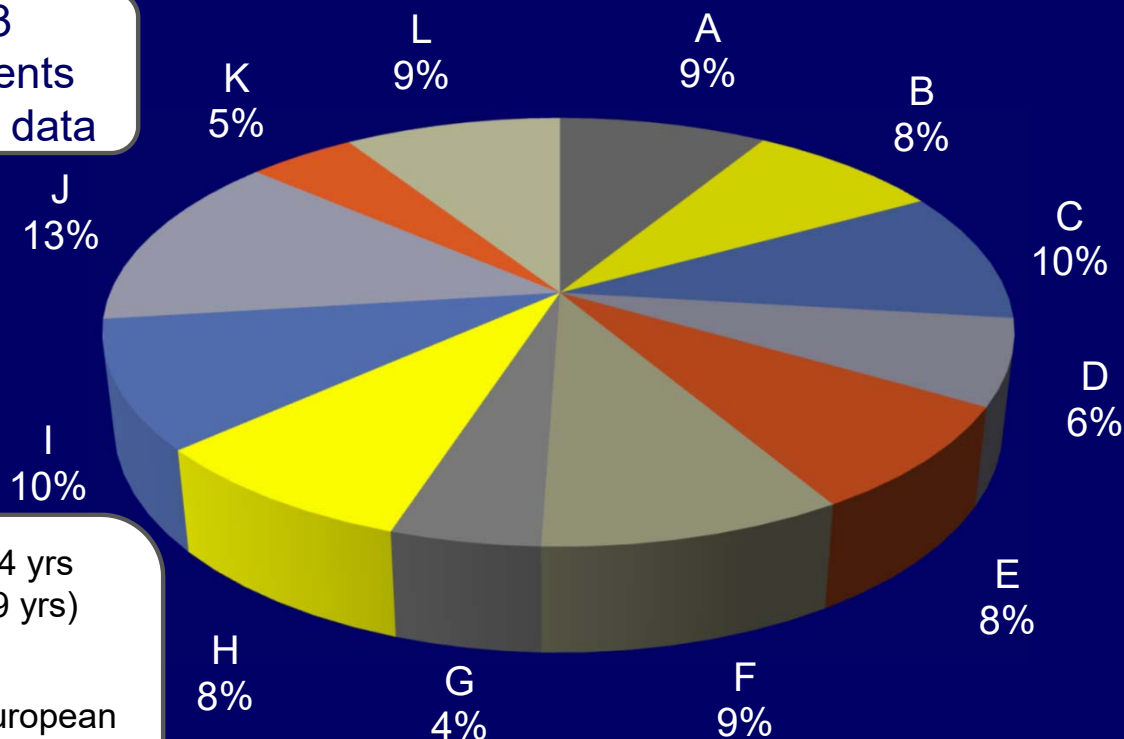


BEATS Study School Recruitment: 100% (12 schools in Dunedin)



Schools' Representation in the BEATS Student Survey 2014/15

1,663
adolescents
with valid data



Age: 15.3 ± 1.4 yrs
(range: 13-19 yrs)

44.4% Boys
73.2% NZ European
10.4% Māori
10.2% boarders
4.1% international

12 out of 12 secondary schools
in Dunedin

Survey



Anthropometry



n=1,300

Physical Activity



Guidelines: ≥ 60 min per day

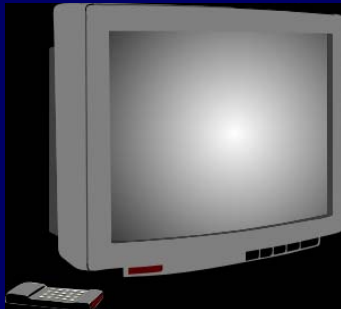
Average: 4.2 ± 2.1 days/week

17.9% met guidelines

Source: BEATS Student Survey 2014/2015
n=1,300 (self-reported data)

Mandic et al. Am J Health Behav. 2017;41(3):266-275

Screen Time



Guidelines: ≤ 2 hours per day

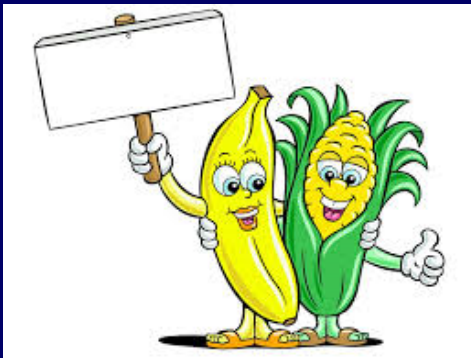
Average: 5.4 ± 2.9 hours/day

14.2% met guidelines

Source: BEATS Student Survey 2014/2015
n=1,300 (self-reported data)

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Fruit and Vegetable Intake

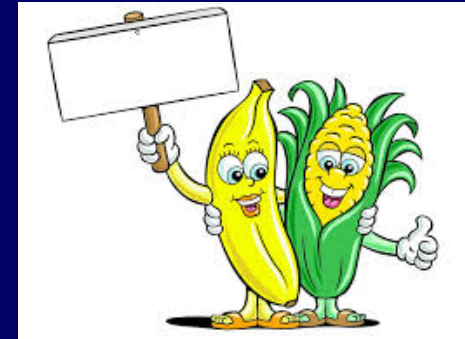


Guidelines: More than once a day for both fruit and vegetables

28.8% met guidelines

Source: BEATS Student Survey 2014/2015
n=1,300 (self-reported data)

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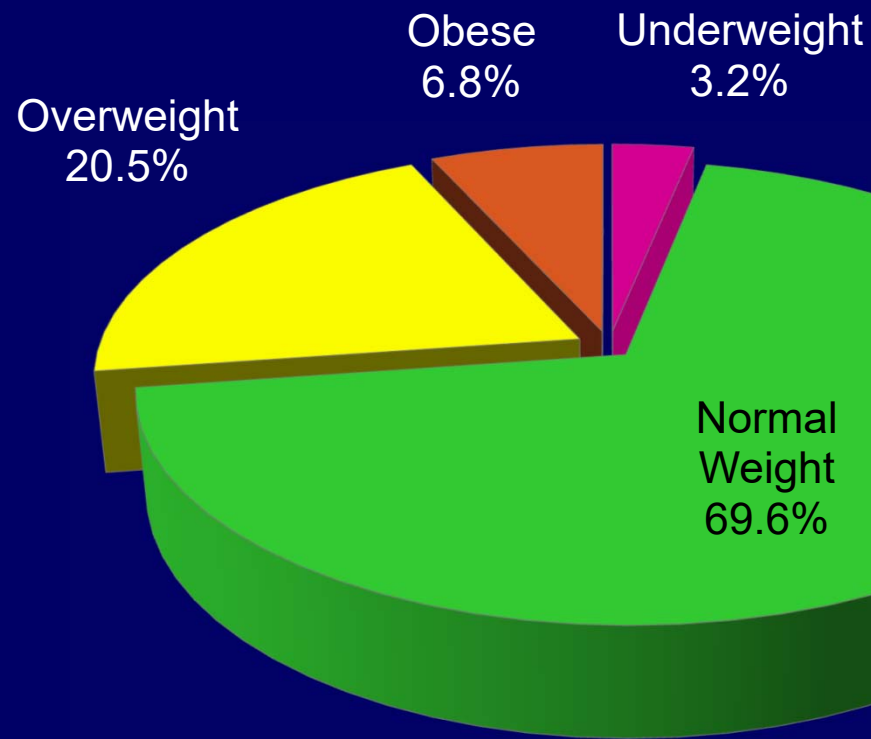


Less than 1/3 of adolescents met individual guidelines

2.5% Met all three guidelines

86.3% Had multiple risk behaviours

Weight Status of Dunedin Adolescents

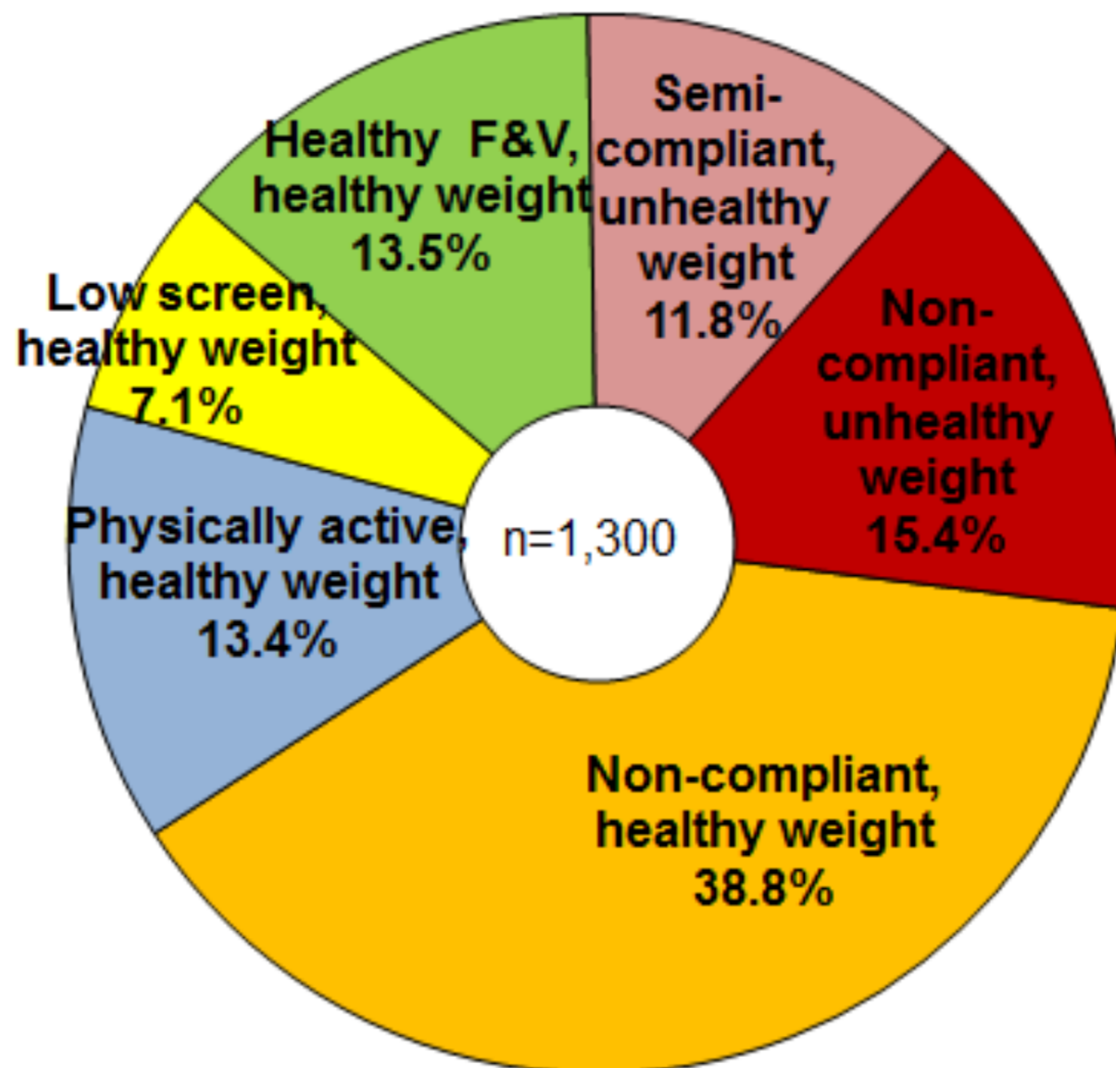


Source: BEATS Student Survey 2014/2015
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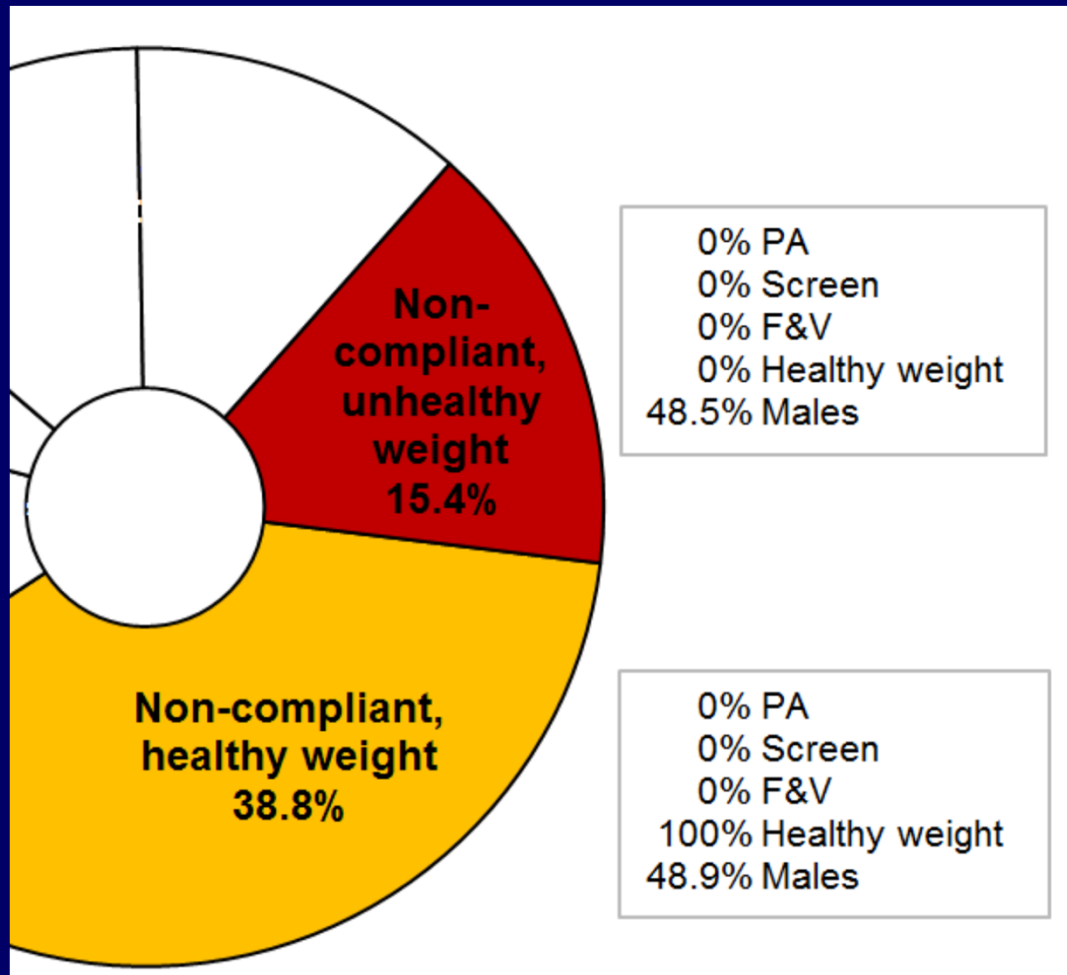
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Six Clusters Identified

Clusters were associated with distinct sociodemographic and psychosocial characteristics



Non-Adherent Clusters



- Lowest SES cluster
- 27% obese
- Lowest perceived personal health
- Lowest sport participation rate outside school
- Highest daily screen time

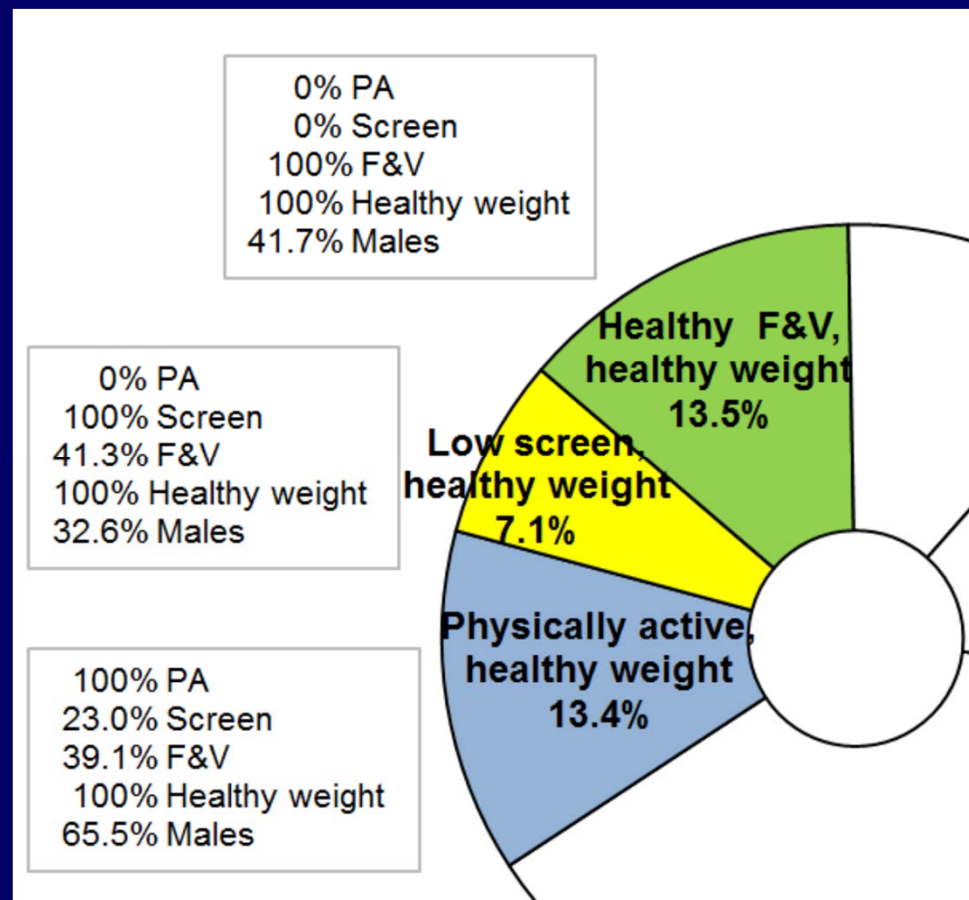
- The largest cluster
- Second most deprived cluster
- Compared to semi-adherent clusters:
 - Lower sport participation rates
 - Higher screen time

Semi-Adherent Clusters with Healthy Weight

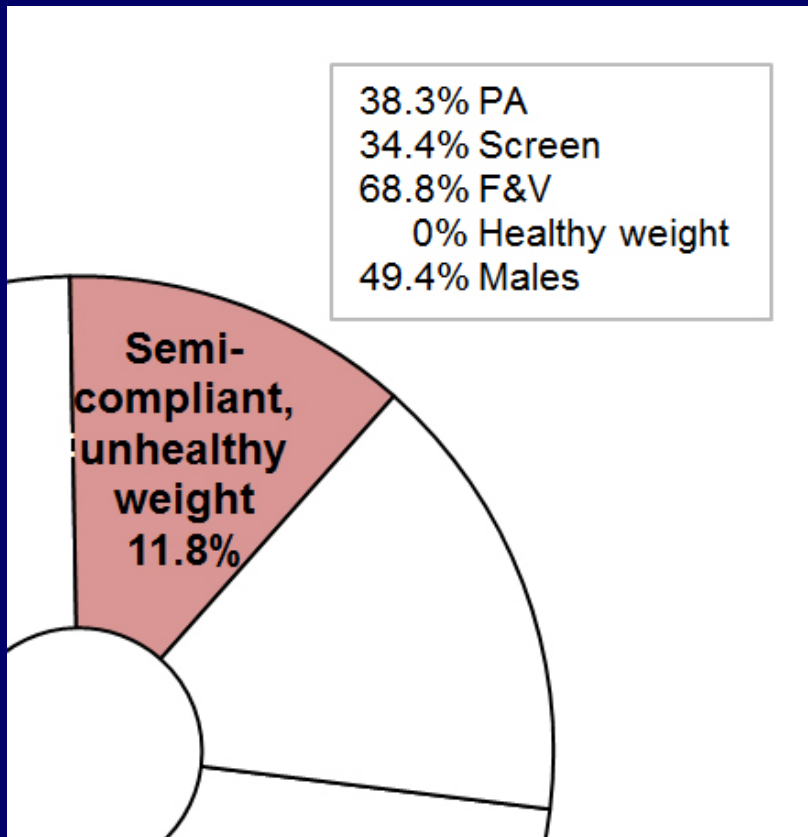
- More girls than boys
- Second highest SES cluster
- Higher levels of perceived personal health (vs. other clusters, except PA)

- Highest proportion of girls
- Youngest
- Healthier dietary patterns

- More boys than girls
- Highest SES cluster
- Highest levels of perceived personal health



Semi-Adherent Cluster with Unhealthy Weight



- Met some lifestyle recommendations
- 77.9% overweight
- 22.1% obese

Implications

Health promotion strategies in adolescents need to:

Address
multiple
behavioural
risk factors

Take into
account
gender and
socioeconomic
factors

Address
obesogenic
risk factors in
adolescents
with both
healthy and
unhealthy
weight

Clustering of (Un)Healthy Behaviors in Adolescents from Dunedin, New Zealand

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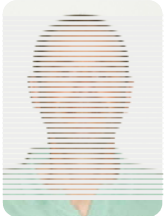
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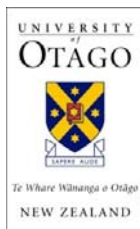
BEATS Study Students Research Assistants, and Volunteers





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