

The changing face of Fruit in Schools: Technical report

Final Healthy Futures evaluation report

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1. Introduction to the Healthy Futures evaluation technical report

1.1 Introduction

This technical report is one component of the final Healthy Futures 2009 evaluation report. Healthy Futures is the evaluation of the Ministry of Health's Fruit in Schools (FiS) initiative. The final evaluation report is in three parts. *The changing face of Fruit in Schools: 2009 overview report* (Boyd, Dingle, Hodgen, King, and Moss, 2009), brings together the main findings from the evaluation. A separate case study report (Boyd and Moss, 2009), summarises the findings from the case study component of Healthy Futures and contains six school case studies completed in 2008. The third component is this technical report.

The overview report tells the story carried in the data and this technical report describes the methodology used to analyse the quantitative survey data (and the software used to do so), and provides more detail of the results. This technical report contains frequency tables from four surveys:

- Students at FiS and comparison schools
- FiS lead teachers
- classroom teachers
- FiSC and regional interagency stakeholders.

The main school survey datasets focused on in the overview report are the baseline (completed at the start of 2006, prior to Phase 2 and 3 schools joining FiS) and the end of 2008 follow up surveys. Most of the school data reported compares these two time periods. Earlier Healthy Futures reports have summarised the findings from the follow up surveys at the end of 2006 (Boyd, Dingle, Campbell, King, and Corter, 2007) and 2007 (Boyd, King, and Dingle, 2008). Therefore this data is not included in this report. This report also contains the data from a start of 2009 survey of FiSC and regional interagency partners.

1.2 Survey sampling and design

This section of the technical report overviews the methods used to select the samples for the different surveys, and the design of these surveys.

Surveys of school staff and students

The main method used in the Healthy Futures study to collect data from schools was a survey of FiS and comparison schools. We used a quasi-experimental survey approach, that is, the initial survey included a group of FiS schools and a comparison group of non-FiS schools. It was planned that this would give two points of comparison; it would enable us to track changes over time within FiS schools as well as compare differences between FiS schools and non-FiS schools. Phase 1 of FiS started too early for us to gather baseline information, therefore the school survey data collection was initially focused around the cohort of Phase 2 schools. At Phase 2 schools we planned to track one cohort of students (that is, those students who were in Year 4 in 2006, Year 5 in 2007, and Year 6 in 2008). We invited all 54 Phase 2 schools to take part in the student survey. A total of 35 schools returned baseline student data.

Three main questionnaires were developed for use within school settings: one each for students, FiS lead teachers, and classroom teachers. We sent the classroom teacher survey to the teacher who taught the largest group of students we were tracking.

Selecting a comparison group for the school survey

To provide a comparison group for the student survey, we developed a sample list of schools that broadly matched Phase 2 FiS schools by decile, roll size, and geographical location. For the baseline survey we approached about 60 schools (aiming to get 40 participating schools). In total, in Term 1 of 2006, 34 schools completed the baseline survey as part of a comparison group. In general, these schools matched FiS schools in terms of roll size and geographical location. There were small differences between the student population of FiS and comparison schools, with FiS schools having a higher percentage of Māori or Pasifika students.

Since the baseline survey, the coverage of FiS was widened to include nearly all decile 1 schools. This resulted in all but seven of the comparison schools becoming part of Phase 3 of FiS, reducing their ability to function as a comparison group. We continued tracking all the students for whom we had baseline data, but analysed the data as three groups. One group is the students in Phase 2; the second group is the students originally in the comparison group who are now part of Phase 3; and the third group contains the remaining students in the comparison group.

Sampling for the lead teacher survey

As well as focusing on the approximately 70 schools which were part of the student survey, to explore any similarities or differences between the first three cohorts of FiS, we also send surveys to FiS lead teachers from Phases 1–3 schools. Given the small numbers of FiS schools in Phases 1 and 2 (60 in Phase 1 and 54 in Phase 2), lead teacher surveys were sent to all lead teachers who were willing to take part in the evaluation.

We used different methods to select a sample of Phase 3 lead teachers. Some Phase 3 lead teachers had already completed a baseline survey at the start of 2006 (as part of the comparison

group). As Phase 3 contained a larger number of schools than prior phases of FiS, we decided to sample the remaining schools. National and regional interagency partners identified that the large number of Phase 3 schools could create staffing capacity issues. Given this, we used a purposeful sampling approach (Patton, 2002) to top up our comparison group sample so that it included a larger proportion of schools from the two groups in Phase 3 likely to experience capacity issues: schools in areas that did not have an existing Phase 1 or 2 FiS infrastructure, and schools in areas with over 15 Phase 3 schools. We sent surveys to an 80 additional Phase 3 schools. Owing to the way many different groups of lead teachers were added into the survey sample over time, some did not complete the full set of baseline questions. In this report, we have only included baseline lead teacher data if it is complete.

Design of the surveys

Design of the student survey

To collect data on students' knowledge, attitudes, and behaviours in relation to the four health areas, we developed a student survey that could be repeated over time. The survey was designed to be completed as a classroom activity with teacher support; and teacher guidelines were included with the surveys. The survey contained questions about students' in- and out-of-school behaviours and mostly focused on their activities the day before completing the survey. We asked school staff to ensure that the data were collected on Tuesday to Friday so that students could answer the questions about what happened at school the day before.

Students were asked to give identification data on the survey, and each student and school was allocated a unique code number to enable them to be tracked over time. The student questionnaire includes demographic questions to ensure that our analyses could include the experiences of the three main groups of students in FiS schools: Māori; Pasifika; and NZ European.

To develop questions in the student survey about vegetable and fruit intake, we obtained permission to use the Day in the Life Questionnaire (DILQ) (Edmunds and Ziebland, no date). This self-report questionnaire has been validated as a measure to assess the vegetable and fruit intake of students aged 7–9, and collects data which are comparable to observations (Edmunds and Ziebland, 2002). The DILQ also includes questions about physical activity. Minor adjustments were made to the DILQ questions to suit the New Zealand setting. Utilising the instruments from related studies, we also developed a number of additional questions about students' knowledge, attitudes, and behaviours in relation to the four health areas.

Along with changes connected to the four health areas, we were also interested in the leadership opportunities offered to students, and approaches which promote student empowerment. In 2007 and 2008 we included some questions pertaining to these areas in the follow up student surveys.

Each student survey was translated into te reo Māori so that students in kura and immersion units could complete it, and each year the student survey was piloted by a group of students of different

ethnicities and gender, some of whom attended Kura Kaupapa Māori. All schools were offered the option of being sent either or both versions of the survey.

At the baseline and end of 2008, with the exception of one question, students at the comparison schools were sent the same survey as students at FiS schools. Further details about the development, piloting, and reviewing of the student survey are outlined in the first main Healthy Futures report (Boyd et al., 2007).

The student survey questions were in the form of Likert-type scales, yes or no possibilities or knowledge questions where the correct answer was required. All of these types of questions were used to construct the outcome measures reported in this analysis.

Following each school survey round, each participating school is sent a confidential profile of their student data. Regional profiles of the student data are also sent to the FiSC in that region.

Frequency tables for the baseline and end of 2008 student survey data are included in Section 2.

Design of the school staff surveys

We developed two main generic questionnaires for staff at FiS schools: FiS lead teachers; and classroom teachers (of the students whom we were tracking). To ascertain changes over time, each questionnaire contained some questions that could be repeated. To develop the survey questions we used: the HPS continuums for the four health areas developed by the partner agencies; ideas from prior NZ and international research about HPS; examples of school policies; understandings about the factors that influence change in school settings; as well as other information and research about initiatives in each of the four health areas. This information was used to develop a list of likely policies, initiatives, and activities that could occur in a school community in relation to each of the health areas.

The staff questionnaires include some common areas such as questions about the impacts of FiS on students and school practices. In addition questions for lead teachers focused on: whole-school approaches to health and community consultation; particular initiatives in the four health areas; and sustainability. Questions for classroom teachers centred on: activities in the classroom related to the four FiS areas; use of practices that promote student empowerment; and access to resources and PD. Similar surveys were developed for staff at the comparison schools. These were sent to the lead health teacher and a classroom teacher.

The staff surveys were in English. Staff at kura kaupapa Māori were given the option of responding by telephone in te reo Māori. Further details about the development of the staff surveys can be found in the first main Healthy Futures report (Boyd et al., 2007). Frequency tables for the baseline and end of 2008 lead and classroom teacher data are included in Section 4. Owing to the small size number of returns from the seven comparison schools, this data is not included in tables. Instead selected findings are presented in the overview report.

Design of the FiSC and interagency stakeholder online survey

The FiS initiative is designed to connect school staff with a range of partners in the health and education sectors. To capture the perspectives of a wide range of interagency stakeholders, and to build on the findings from the Healthy Futures agency stakeholder interviews, an online survey of all FiSC and regional interagency representatives was conducted at the end of 2007 and start of 2009. The 2009 online survey covered agency partners' roles in FiS, impacts of FiS, areas of effective practice, and sustainability. An invitation to participate in the online survey was sent to FiSC and via the national offices of regional interagency staff. Frequency tables for the start of 2009 online interagency survey are included in Section 5.

1.3 Response rates and survey demographics

Survey response rates

In the overview and technical report we summarised the data from the total cohort of students who took part in the surveys. In earlier reports, we reported data only from the students we were able to track over time. In general, at the end of 2006 and 2007, the data from the tracked students showed very similar patterns to the full cohort. In this reporting round we used data from the total cohort because, as we predicted, the high mobility of students in low-decile schools meant that the number we were able to track decreased over time. This means that some of the students who completed the follow up surveys may have only been at a FiS school for a short period of time. The total number of students who completed baseline and end of 2008 surveys are shown in Table 1. Unless otherwise stated all student data is reported as a percentage of these numbers.

Table 1 **Student survey returns**

School group	Start 2006	End 2008
	Baseline survey	Follow up survey
	Year 4 students	Year 6 students
	Total surveys returned	Total surveys returned
	N	N
Phase 2 FiS	832	790
Phase 3 FiS (was comparison)	695	600
Comparison	217	205

Table 2 shows the number of schools which returned student surveys, and the number of staff who responded to the staff surveys.

Table 2 **School response rates to surveys**

	Start 2006 Baseline survey		End 2008 Follow up survey	
	School N	School response rate %	School N	School response rate %
Phase 2 FiS school surveys				
Student	35/54	65%	33/54	61%
Classroom teacher	33/54	61%	24/54	44%
FiS lead teacher	31/54	57%	21/54	39%
Phase 3 FiS school surveys				
Student	27	NA*	23/27	85%
Classroom teacher	19	NA*	22/27	81%
FiS lead teacher	60	NA*	48	NA*
Phase 1 FiS schools				
Phase 1 FiS lead teacher	31/60	52%	35/60	58%
Remaining comparison school surveys				
Student	7	NA*	7/7	NA*
Classroom teacher	7	NA*	4/7	NA*
Principal/Health teacher	4	NA*	4/7	NA*

* A response rate is not applicable due to the sampling method used or small sample sizes.

In total, 122 FiS lead teachers completed a baseline survey, and 104 a 2008 follow up survey. The figures for classroom teachers are 52 (baseline) and 46 (2008 follow up). Unless otherwise stated, all lead teacher and classroom teacher survey data is reported as a percentage of these numbers.

Because of the method used to recruit participants for the online interagency survey, it was not possible to calculate a response rate for this survey. The start of 2009 online survey was completed by a total of 72 FiSC and regional interagency staff.

Survey demographic data

Student survey demographic data

For each of the three student groups, approximately half of the students were girls and half, boys (See Table 3).

Table 3 **Student gender**

	Baseline Year 4 students		End 2008 Year 6 students	
	Boys %	Girls %	Boys %	Girls %
Phase 2	49	51	51	49
Phase 3	49	51	53	47
Comparison	52	48	51	49

A breakdown of the student data by ethnicity is show in Table 4. Students were asked to self-identity their ethnicity. As the population becomes more diverse, the placement of people in one

ethnic group is becoming increasingly problematic. For example, how do you classify a person with Māori, Pasifika, Asian, and NZ European heritage? Schools tend to record one ethnicity for each student (based on self-identification), thus requiring students' parents and whānau to choose. The Healthy Futures study uses students' self-identification as a basis to report the student data by ethnicity. As noted in Callister (2004), in recognition of the increasingly multi-ethnic makeup of NZ society, similar nonprioritised approaches to the analysis of data by ethnicity are becoming increasingly common. As a number of the students in this study identified as more than one ethnicity this results in, for the purposes of analysis, some being placed in more than one group.

Table 4 **Student data by ethnicity**

Ethnicity	Phase 2 students		Phase 3 students		Comparison students	
	Baseline %	End 2008 %	Baseline %	End 2008 %	Baseline %	End 2008 %
Māori	47	54	35	36	47	40
Pasifika	38	42	40	47	10	12
NZ European	23	18	29	22	62	57
Asian	2	1	7	9	6	4
Other	3	5	3	8	6	8
TOTAL	113	120	114	122	131	121

A breakdown of the characteristics of the schools returning student surveys is shown in Table 5. This shows the school characteristics as a percentage of the number of students.

Table 5 Student survey school characteristics

Location	Baseline			End 2008		
	Phase 2 %	Phase 3 %	Comparison Group %	Phase 2 %	Phase 3 %	Comparison Group %
Urban	92	96	87	91	97	89
Rural	8	4	13	9	3	11
Decile						
1	92	86	85	85	66	-
2	8	14	15	11	21	73
3	-	-	-	2	13	27
4	-	-	-	2	-	-
% Māori enrolment						
0%	-	-	-	-	-	-
1–7%	-	9	-	-	4	-
8–14%	1	4	9	-	15	-
15–29%	17	46	34	28	37	43
30%+	81	41	57	72	45	57
% Pasifika enrolment						
0%	12	8	40	18	5	36
1–7%	23	16	52	20	15	53
8–14%	8	2	-	5	5	2
15–29%	6	16	-	7	14	-
30%+	51	58	9	50	62	9
Size						
1–99	10	8	13	5	4	11
100–199	32	33	9	41	36	9
200–299	15	13	-	14	16	-
300–499	31	46	44	37	44	45
500+	12	-	34	3	-	34
Type						
Full primary	33	25	39	29	24	39
Contributing	63	75	61	64	74	61
Composite	4	1	-	6	2	-
Authority						
State	100	96	91	100	92	91
State-integrated	-	4	9	-	8	9
Definition						
Kura	4	-	-	6	1	-
Bilingual	3	6	-	2	8	-
Mainstream	94	94	100	92	91	100

School staff surveys demographic data

Demographic information from FiS lead and classroom teachers is provided in Tables (6–9).

Table 6 **FiS lead teacher backgrounds**

	Lead teachers (Phase 1–3)	
	Baseline (N=122) %	End 2008 (N=104) %
Length of time teaching at current school		
Less than 2 years	9	14
2–5 years	33	33
6–10 years	33	26
11–20 years	17	16
More than 20 years	7	11
Position		
1 st or 2 nd year teacher	3	4
Teacher	35	35
Middle management	11	9
DP or AP	25	19
Principal	25	33
Gender		
Female	75	74
Male	24	24

Table 7 **FiS lead teacher ethnicity**

	Lead teachers (Phase 1–3)	
	Baseline (N=122) %	End 2008 (N=104) %
Ethnicity		
Māori	22	19
Pasifika	3	5
NZ European	70	74
Asian	-	1
Other	-	12

Note: Total may add to more than 100% because respondents could choose more than one option.

Table 8 **Classroom teacher backgrounds**

	Classroom teachers (Phase 2–3)	
	Year 4 Baseline (N=52) %	Year 6 End 2008 (N=46) %
Length of time teaching at current school		
Less than 2 years	13	18
2–5 years	44	32
6–10 years	17	27
11–20 years	17	16
More than 20 years	4	5
Position		
1 st or 2 nd year teacher	6	11
Teacher	63	36
Middle management	15	32
Principal, DP or AP	12	18
Gender		
Female	87	86
Male	10	11

Table 9 **Classroom teacher ethnicity**

	Classroom teachers (Phase 2–3)	
	Year 4 Baseline (N=52) %	Year 6 End 2008 (N=46) %
Ethnicity		
Māori	27	39
Pasifika	12	9
NZ European	52	57
Asian	2	-
Other	8	5

Note: Total may add to more than 100% because respondents could choose more than one option.

Interagency survey demographic data

A total of 72 people responded to the regional interagency survey. Respondents came from a range of agencies, roles, regions, and phases of FiS (as shown in Tables 10–13).

Table 10 **Interagency respondents' roles in FiS**

Role in FiS	Interagency respondents Start 2009 (N=72) %
FiS Coordinator	32
Sports Trust Representative	18
National Heart Foundation Representative	15
HPS Advisor	11
Cancer Society Representative	8
School Support Services Advisor	3
Other/No response	13

Table 11 **Interagency respondents' DHB districts for FiS**

District	Interagency respondents Start 2009 (N=72) %
Canterbury	11
Auckland	8
Bay of Plenty	8
Counties Manukau	8
Waikato	8
Whanganui	8
Northland	7
Otago	7
MidCentral	6
Southland	6
Tairāwhiti	6
Capital and Coast	4
Hawkes Bay	4
Hutt Valley	4
Lakes	4
Taranaki	4
Nelson Marlborough	3
Wairarapa	3
Waitemata	3
South Canterbury	1
West Coast	1

Note: Total adds to more than 100% because some respondents worked in more than one district.

Table 12 **Interagency respondents' years of involvement in FiS**

Time	Interagency respondents Start 2009 N=72) %
Less than 1 year	35
1–2 years	40
3 years or longer	22
No response	3

Table 13 **Phase of FiS interagency respondents were involved with**

Phase of FiS	Interagency respondents Start 2009 (N=72) %
Phase 1	38
Phase 2	51
Phase 3	65
New Phases (e.g., 4–5)	56
Not working directly with schools	7
No response	3

Note: Total adds to more than 100% because some respondents were working with more than one Phase.

1.4 Details of analysis

This section overviews the methods used to analysis the survey data. There were three main types of questions included in the surveys: fixed-choice questions which were in the form of Likert-type scales or yes or no responses and which resulted in categorical data; knowledge or behaviour questions which could be described using means or quasi-continuous data; and open-ended responses which were coded into categories.

The data from the fixed-choice questions in the student and staff surveys were captured using SAS software (SAS Institute Inc, 2002–2003). The interagency survey data was entered into an Excel spreadsheet. All respondents replied to most questions in the surveys but most questions had a small amount of missing data. Non response figures are reported in the tables in the technical report but not in the overview report. In some cases because of rounding, percentages do not always total to 100. For ease of viewing, some of the data are presented in graphs or figures.

Codes for the open-ended responses to school teacher surveys were developed using the Health Promoting Schools (HPS) framework as a base. A number of questions in the student survey asked students to write and draw what they had eaten the day before. Codes for these questions

were developed from the categories used in the 2002 NZ National Children’s Nutrition Survey (Parnell, Scragg, Wilson, Schaff, and Fitzgerald, 2003), FiS pilot (Ashfield-Watt, 2005), DILQ (Edmunds and Ziebland, no date), and food and nutrition guidelines for healthy children (Ministry of Health, 1997). The number of times each student reported consuming each food type was then calculated, and overall means were derived from this data. In reporting the consumption of vegetables, fruit, and other foods we have shown both the percentage of students who reported eating each food type along with the mean amount of each food type consumed by *all* students. Students who did not report eating a food type were counted as eating an amount of zero. This is a different approach to that taken in earlier reports, where we reported data from only those students who reported consuming each food type.

Frequency tables were produced for all data. For the student and teacher data, chi-square statistics from contingency tables were used to test for statistically significant differences between groups. Where statistical differences were found, this is indicated in each table in **bold** and with a symbol that represents the *p*-value associated with the difference. All significance probabilities reported are equal to or less than 0.05. Table 14 shows the symbols used to indicated statistical significance in this technical report.

Table 14 **Key to *p*-values**

Symbol	Probability
+	$0.02 < p < 0.05$
*	$0.01 < p < 0.02$
**	$0.001 < p < 0.01$
***	$p < 0.001$

For the student data that are continuous (that is, the data are described using means), confidence intervals are reported in the tables for each mean. The same *p*-value symbols (see Table 14) are used to indicate statistically significant differences between groups.

Reporting means and confidence intervals is not applicable for categorical data such as yes or no responses or attitude scales. For this type of data, statistically significant differences are indicated by *p*-values only. Although there are smaller numbers of school teacher responses, we used the same approach for completeness. However, smaller numbers of respondents mean that use of *p*-values could overinflate the importance of these statistics. Most of these calculations were carried out using SAS software (SAS Institute Inc, 2002–2003).

Taking into account the clustered nature of the student data

For the student data, significance tests were adjusted (see Lumley, 2004) to take into account the clustered nature of these data, that is, the way students were grouped within schools. These adjustments were calculated using functions in the package `survey` (Lumley, 2008) that is part of R (R Development Core Team, 2008). The grouping of students within schools meant there is

likely to be less variance between responses from students attending the same school than between responses from students attending different schools. The small size of the comparison group, and the clustered nature of the data, means that some of these significance tests may show counter-intuitive results. The small size of the comparison group also means that some differences, that are similar in magnitude to those shown by FiS students, may not be statistically significant.

For the student data that are continuous (that is, the data are described using means), the means and 95 percent confidence intervals were also calculated taking into account the clustered nature of the data (Lumley, 2008). This does not affect the values of the means, but more accurately estimates the standard errors which in turn will mean that the confidence intervals may be slightly wider than they would be without taking the structure of the data into account. Using the same R *survey* package, the *p*-values in the tests of significance were derived from fitting linear models taking into account the clustered nature of the data. The quoted confidence intervals should be read as giving an indication of the relative variability in the data, and 95 percent should be taken as an upper bound on the confidence level.

To enable similarities and differences between schools to be identified, we compared the three sets of student data: Phase 2 and 3 FiS and comparison students. We also explored the student data for differences related to student ethnicity and gender, and compared students' responses about liking school to key items about the four health areas and school practices. This tested the association reported between young peoples' sense of connection to school and improved health and wellbeing (Resnick et al., 1997; Libbey, 2004). We analysed the data to see if there was a school effect (that is, if students with more positive attitudes went to the same school). This was done by calculating the clustering of students saying they liked school "A lot" within each school and using this measure to split the schools into three groups: most positive (a large cluster of students who reported liking school); positive; and least positive. Only FiS schools were in the most positive school group. For these analyses we have reported only the end of 2008 data.

For key questions in the teacher surveys we compared FiS lead teacher and classroom teacher views. We also compared responses from Phase 1, 2, and 3 FiS lead teachers.

1.5 What does this report contain?

The next four sections of this report provide frequency tables for the survey data. These sections are as follows:

- Section 2 contains frequency tables from the baseline (start 2006) and end of 2008 student surveys. Data from three student groups are reported: Phase 2 and 3 FiS, and comparison.
- Section 3 contains the student data analysed by three sub-groups: gender; ethnicity; and "liking school". Only the end of 2008 data is reported.

- Section 4 contains data from the baseline and end of 2008 surveys of lead and classroom teachers at FiS schools.
- Section 5 contains frequency tables from the start of 2009 online follow up survey of FiSC and regional interagency partners.

2. Student survey data

This section of the technical report presents the data from the student survey. Data from three groups of students are reported in most tables and figures. All student data is reported as a percentage of these numbers:

- Phase 2 students: Baseline N=832; End 2008 N=790
- Phase 3 students: Baseline N=695; End 2008 N=600
- Comparison students: Baseline N=217; End 2008 N=205.

The footnote at the bottom of each table indicates what the tests of significance refer to.

2.1 Student data

Student learning and liking of school

Table 15 **Student views on coverage of the health priority areas (in 2008): Phase 2**

How much did you learn about:	Healthy eating** %	Physical activity %	Sunsmart*** %	Smokefree+ %
A lot	79	63	62	34
Some things	16	30	29	25
Nothing	2	5	6	37
No response	3	2	3	4

- Items in bold show a statistically significant difference between FIS and comparison students.

Table 16 **Student views on coverage of the health priority areas (in 2008): Phase 3**

How much did you learn about:	Healthy eating** %	Physical activity %	Sunsmart*** %	Smokefree+ %
A lot	83	63	59	47
Some things	15	31	34	27
Nothing	2	5	6	26
No response	1	1	1	1

- Items in bold show a statistically significant difference between FIS and comparison students.

Table 17 **Student views on coverage of the health priority areas (in 2008): Comparison**

How much did you learn about:	Healthy eating** %	Physical activity %	Sunsmart*** %	Smokefree ⁺ %
A lot	70	55	38	30
Some things	24	40	44	32
Nothing	5	5	17	37
No response	1	<1	1	1

- Items in bold show a statistically significant difference between FiS and comparison students.

Table 18 **Student views on their input into school health activities/decisions (in 2008):**

Phase 2

How often do these things happen at school?	A lot %	Sometimes %	Never %	No response %
I learn about making healthy choices***	64	29	2	5
We work together to make our school healthier***	61	26	8	6
We work together to make our community healthier***	48	33	13	6
We set goals for ourselves about our health**	47	36	11	5
I help make decisions about things to do with health	43	39	12	6
I help lead things to do with health⁺	33	37	25	6

- Items in bold show a statistically significant difference between FiS and comparison students.

Table 19 **Student views on their input into school health activities/decisions (in 2008):**

Phase 3

How often do these things happen at school?	A lot %	Sometimes %	Never %	No response %
I learn about making healthy choices***	68	28	3	1
We work together to make our school healthier***	58	32	9	1
We work together to make our community healthier***	52	34	13	1
We set goals for ourselves about our health**	54	37	8	1
I help make decisions about things to do with health	46	41	12	1
I help lead things to do with health⁺	35	42	22	1

- Items in bold show a statistically significant difference between FiS and comparison students.

Table 20 **Student views on their input into school health activities/decisions (in 2008): Comparison**

How often do these things happen at school?	A lot %	Sometimes %	Never %	No response %
I learn about making healthy choices***	47	47	5	1
We work together to make our school healthier***	37	46	15	2
We work together to make our community healthier***	29	42	28	1
We set goals for ourselves about our health**	32	48	19	1
I help make decisions about things to do with health	32	48	18	1
I help lead things to do with health⁺	18	46	34	2

- Items in bold show a statistically significant difference between FiS and comparison students.

Table 21 **How have you or your class helped make your school healthier (in 2008)?**

	Phase 2 %	Phase 3 %	Comparison %
Engage in healthy eating behaviours***	48	51	32
Engage in physical activity behaviours***	6	6	14
Engage in sunsmart behaviours	4	2	2
Engage in smokefree behaviours	1	1	-
Engage in environmental behaviours***	14	17	26
Engage in other behaviours	3	3	1
Lead healthy eating behaviours	2	3	2
Lead physical activity behaviours	1	1	1
Lead sunsmart behaviours	<1	-	-
Lead smokefree behaviours	<1	-	-
Lead environmental behaviours***	9	2	2
Peer leaders/mediators	1	<1	1
Promote health	1	1	1
Other types of role models or leaders	<1	-	1
Health team/school council	1	1	-
Classroom/curriculum decision-making	<1	-	-
Other decision-making	-	<1	1

- Items in bold show a statistically significant difference between FiS and comparison students.

Note: This table shows coded responses from an open-ended question.

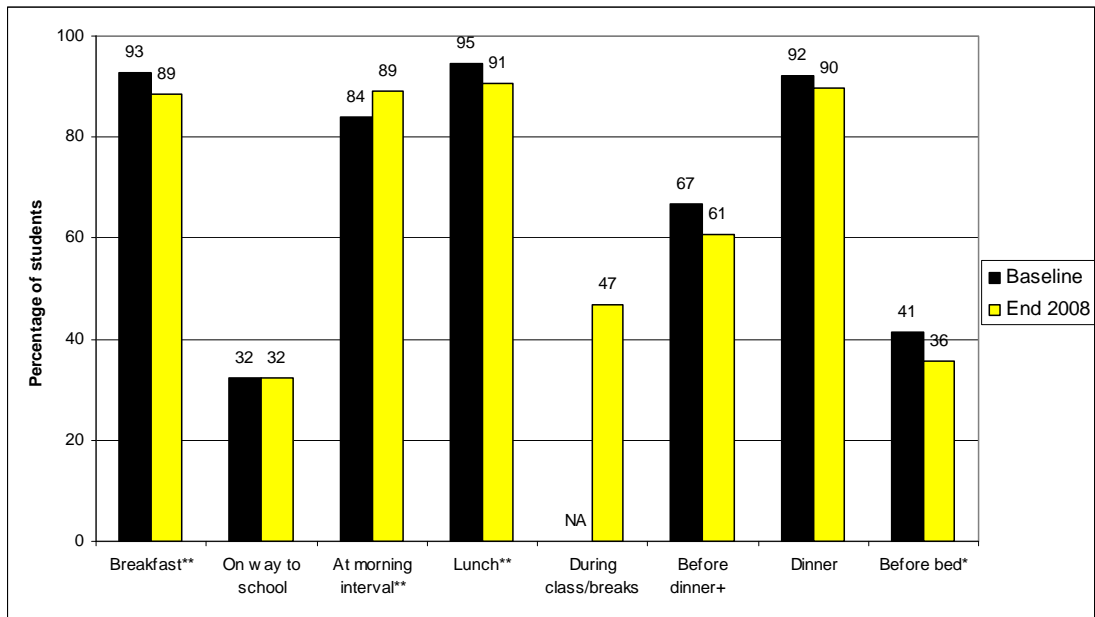
Table 22 **How much do you like being at school (in 2008)?**

	Phase 2*** %	Phase 3*** %	Comparison*** %
A lot	57	61	31
A bit	23	22	30
Middle	7	8	15
Not much	5	5	11
Not much at all	5	4	12
No response	3	1	1

- Items in bold show a statistically significant difference between FiS and comparison students.

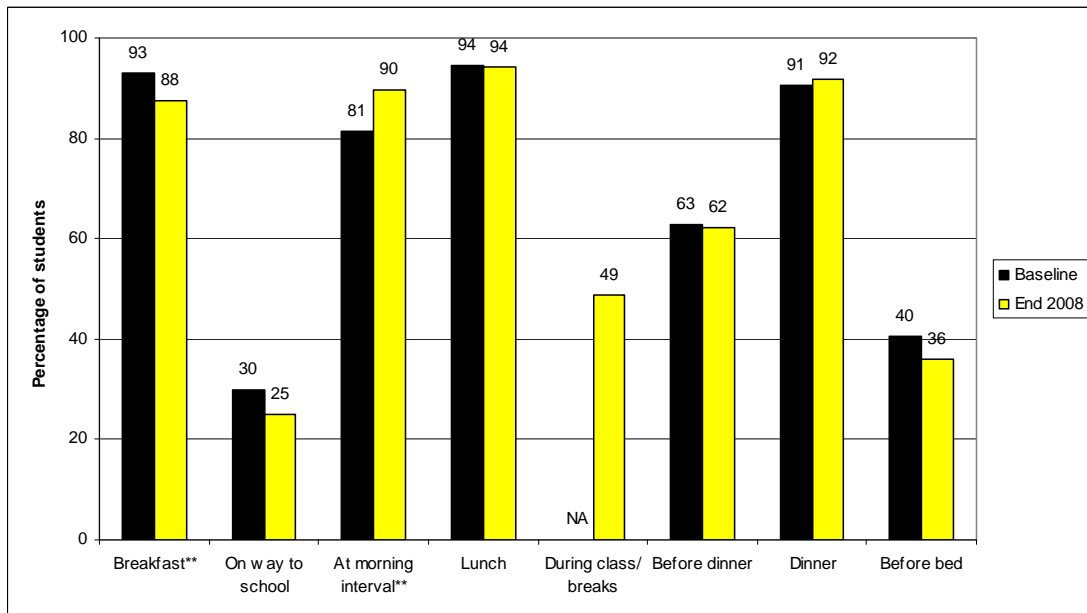
Healthy eating

Figure 1 **Phase 2 students' eating times**



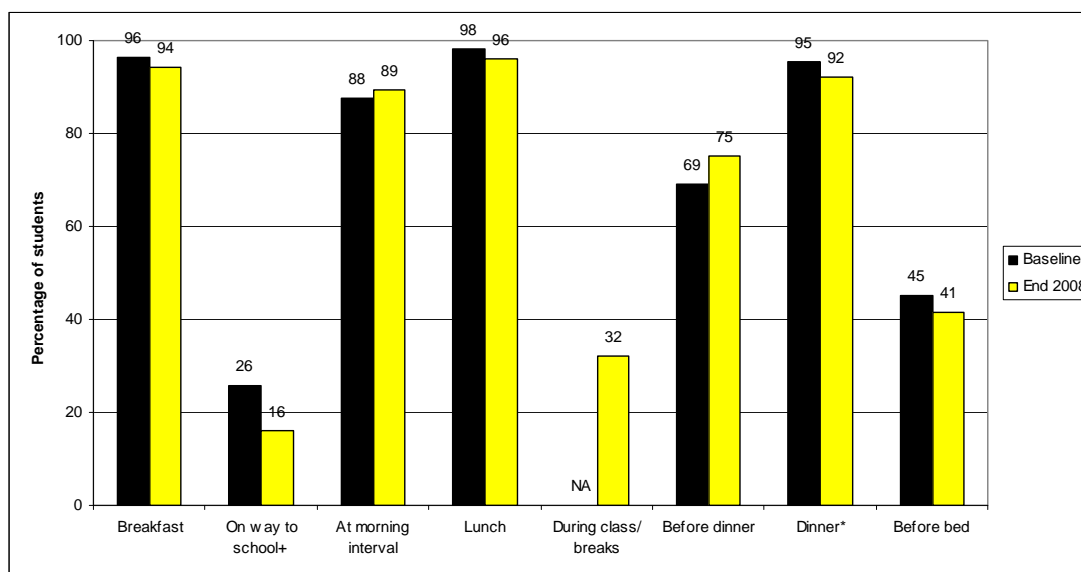
- Items marked show a statistically significant shift from 2006–8.

Figure 2 **Phase 3 students' eating times**



- Items marked show a statistically significant shift from 2006–8.

Figure 3 Comparison students' eating times



- Items marked show a statistically significant shift from 2006–8.

Table 23 Lunch behaviours

	Phase 2***		Phase 3		Comparison	
	Baseline %	End 2008 %	Baseline %	End 2008 %	Baseline %	End 2008 %
Lunch from home	60	57	62	60	79	80
Buy/given lunch at school	18	14	20	18	12	12
Buy lunch at dairy/shop	17	19	13	16	7	5
Didn't have lunch	3	7	2	4	1	3
No response	3	3	3	2	<1	1

- Items in bold show a statistically significant shift from 2006–8.

Table 24 How important is it that you eat vegetables and fruit every day?

	Phase 2***		Phase 3**		Comparison**	
	Baseline %	End 2008 %	Baseline %	End 2008 %	Baseline %	End 2008 %
Very important	73	68	75	76	85	73
Important	18	25	16	21	12	22
Not important	6	2	5	2	1	4
No response	4	5	5	1	1	<1

- Items in bold show a statistically significant shift from 2006–8.

Table 25 **How much do you like eating vegetables?**

	Phase 2 ^{***}		Phase 3 ^{***}		Comparison ^{**}	
	Baseline %	End 2008 %	Baseline %	End 2008 %	Baseline %	End 2008 %
A lot	54	37	58	41	58	34
A bit	23	33	20	36	21	36
Middle	7	15	9	11	6	16
Not much	5	8	5	8	7	8
Not much at all	9	6	5	4	8	5
No response	2	1	3	1	<1	<1

- Items in bold show a statistically significant shift from 2006–8.

Table 26 **How much do you like eating fruit?**

	Phase 2 ^{**}		Phase 3		Comparison ⁺	
	Baseline %	End 2008 %	Baseline %	End 2008 %	Baseline %	End 2008 %
A lot	84	78	81	79	82	67
A bit	8	14	10	14	11	23
Middle	3	4	3	4	5	7
Not much	2	2	1	1	2	2
Not much at all	1	<1	1	1	-	<1
No response	2	1	4	1	<1	<1

- Items in bold show a statistically significant shift from 2006–8.

Table 27 **How much do you like getting fruit to eat at school (in 2008)?**

	Phase 2 %	Phase 3 %
A lot	76	74
A bit	14	16
Middle	3	4
Not much	2	2
Not much at all	1	1
No response	5	4

Table 28 Which food is the most healthy?

	Phase 2		Phase 3		Comparison	
	Baseline	End 2008	Baseline	End 2008	Baseline	End 2008
	%	%	%	%	%	%
Fizzy drink	4	4	3	2	1	3
Water or milk	89	89	89	93	95	96
No response	7	7	8	5	3	1
Egg sandwich	70	77**	67	84***	78	92
Sausage roll	16	8	17	7	12	4
No response	13	14	16	9	10	4
Fruit	86	89	84	91	92	95
Ice-cream	7	4	6	4	4	3
No response	8	6	10	5	4	1
Chocolate biscuit	6	3⁺	5	3	4	3
Banana	86	88	85	91	90	96
No response	8	8	10	7	6	1
Hot chips	15	6***	15	6**	9	3*
Boiled potato, kumara, or taro	73	81	73	85	80	91
No response	12	13	13	9	11	6
Carrot sticks	72	82***	72	87***	83	92⁺
Potato chippies	15	7	14	5	8	5
No response	13	12	14	8	9	3
Fried chicken	40	20***	41	24***	28	16**
Grilled chicken	45	64	43	65	59	78
No response	15	16	16	11	13	6
Apple	77	83**	76	87**	86	86
Fruit pie	13	7	11	5	8	9
No response	10	11	13	8	6	5
Sausage	22	13***	21	12***	18	9**
Baked fish or kaimoana	64	72	63	79	73	87
No response	14	15	16	10	10	3

- Items in bold show a statistically significant shift from 2006–8.

Table 29 **Mean healthy eating knowledge scores (Maximum=9)**

Student group	Year 4 students	Year 6 students	Shift from baseline
	Baseline Mean (confidence interval)	End 2008 Mean (confidence interval)	
Phase 2**	6.62 (6.29, 6.95)	7.24 (6.93, 7.54)	0.62
Phase 3**	6.53 (6.05, 7.01)	7.62 (7.26, 7.98)	1.09
Comparison*	7.37 (6.97, 7.77)	8.12 (7.91, 8.32)	0.75

- Items in bold show a statistically significant shift from 2006–8.

Table 30 **How many pieces of vegetables and fruit SHOULD you eat a day? (5+aDay)**

Student group	Year 4 students	Year 6 students	Shift from baseline
	Baseline % selecting 5–8 (% selecting 5)	End 2008 % selecting 5–8 (% selecting 5)	% points
Phase 2***	65 (44)	80 (67)	15 (23)
Phase 3***	59 (29)	80 (66)	21 (37)
Comparison	71 (50)	80 (65)	9 (15)

- Items in bold show a statistically significant shift from 2006–8.

Physical activity

Table 31 **Mean engagement in mild to moderate physical activity (Maximum=8)**

Student group	Year 4 students	Year 6 students	Shift from baseline
	Baseline Mean (confidence interval)	End 2008 Mean (confidence interval)	
Phase 2**	4.51 (4.32, 4.70)	4.82 (4.65, 4.99)	0.31
Phase 3**	4.54 (4.33, 4.75)	4.64 (4.42, 4.87)	0.10
Comparison	4.38 (4.03, 4.74)	4.35 (3.69, 5.01)	-0.03

- Items in bold show a statistically significant shift from 2006–8.

Table 32 **Mean amount of TV watching and computer gaming (Maximum=3)**

Student group	Year 4 students	Year 6 students	Shift from baseline
	Baseline Mean (confidence interval)	End 2008 Mean (confidence interval)	
Phase 2 [†]	2.05 (1.97, 2.13)	1.91 (1.80, 2.02)	-0.14
Phase 3	1.90 (1.78, 2.02)	1.78 (1.68, 1.88)	-0.12
Comparison**	2.07 (1.96, 2.19)	1.78 (1.73, 1.83)	-0.29

- Items in bold show a statistically significant shift from 2006–8.

Table 33 **At home do you do exercise or active things with your family at the weekend?**

	Phase 2*		Phase 3		Comparison	
	Baseline	End 2008	Baseline	End 2008	Baseline	End 2008
	%	%	%	%	%	%
Yes	77	81	81	84	79	80
No	16	12	13	12	17	16
No response	7	7	6	5	4	4

- Items in bold show a statistically significant shift from 2006–8.

Table 34 **At home did you do exercise or active things with your family last weekend?**

	Phase 2**		Phase 3		Comparison	
	Baseline	End 2008	Baseline	End 2008	Baseline	End 2008
	%	%	%	%	%	%
Yes	69	71	68	72	79	76
No	27	20	26	22	20	18
No response	4	9	5	6	1	6

- Items in bold show a statistically significant shift from 2006–8.

Table 35 **At home do you do exercise or active things with your family during the week?**

	Phase 2**		Phase 3		Comparison	
	Baseline	End 2008	Baseline	End 2008	Baseline	End 2008
	%	%	%	%	%	%
Yes	65	72	66	72	72	68
No	24	20	25	23	24	28
No response	11	8	10	5	5	3

- Items in bold show a statistically significant shift from 2006–8.

Table 36 **Did you watch TV yesterday morning?**

	Phase 2*		Phase 3*		Comparison***	
	Baseline	End 2008	Baseline	End 2008	Baseline	End 2008
	%	%	%	%	%	%
Yes	68	63	64	56	69	54
No	29	33	35	41	30	45
No response	3	4	1	3	1	1

- Items in bold show a statistically significant shift from 2006–8.

Table 37 **How did you get to school yesterday morning?**

	Phase 2		Phase 3		Comparison	
	Baseline	End 2008	Baseline	End 2008	Baseline	End 2008
	%	%	%	%	%	%
Walk	48	46	44	52	33	30
cycle (or skateboard/scooter)	3	4	3	2	4	6
by bus	6	6	5	4	12	11
by car (or motorbike)	41	42	46	40	48	52
No response	2	3	2	2	2	1

Table 38 **In class-time at school yesterday, did you do active things like PE, dance, or kapa haka?**

	Phase 2		Phase 3		Comparison	
	Baseline	End 2008	Baseline	End 2008	Baseline	End 2008
	%	%	%	%	%	%
Yes	64	66	67	59	70	64
No	32	32	32	40	27	36
No response	4	2	1	1	3	-

Table 39 **What did you do at playtime yesterday morning?**

	Phase 2**		Phase 3		Comparison*	
	Baseline	End 2008	Baseline	End 2008	Baseline	End 2008
	%	%	%	%	%	%
sit around	8	6	5	7	4	3
stand around	3	2	3	2	<1	4
walk around	29	36	37	35	32	41
active things	54	53	52	56	58	50
No response	6	3	3	1	5	1

- Items in bold show a statistically significant shift from 2006–8.

Table 40 **What did you do at lunchtime yesterday?**

	Phase 2 ⁺		Phase 3		Comparison	
	Baseline	End 2008	Baseline	End 2008	Baseline	End 2008
	%	%	%	%	%	%
sit around	10	7	4	6	4	5
stand around	2	1	3	2	2	4
walk around	24	29	30	28	20	21
active things	55	57	58	63	67	68
No response	9	6	5	2	7	1

- Items in bold show a statistically significant shift from 2006–8.

Table 41 **How did you get home after school yesterday?**

	Phase 2		Phase 3		Comparison	
	Baseline	End 2008	Baseline	End 2008	Baseline	End 2008
	%	%	%	%	%	%
Walk	53	55	51	56	33	38
cycle (or skateboard/scooter)	3	4	3	2	4	6
by bus	6	8	6	6	16	11
by car (or motorbike)	34	31	36	35	42	44
No response	4	2	3	1	5	1

- Items in bold show a statistically significant shift from 2006–8.

Table 42 **What did you do after school yesterday?**

	Phase 2		Phase 3		Comparison	
	Baseline %	End 2008 %	Baseline %	End 2008 %	Baseline %	End 2008 %
played outside	70	76**	64	69	73	76
played inside	54	53	49	57**	66	59
played sports at school, for a club, or with friends	35	37	31	35	33	26
went to a dance group, gym, or kapa haka practice	14	16	14	11	11	7
went to after-school care, music, or a youth group	16	10**	15	12	17	8
read or did homework	64	43***	70	62*	64	61
Watched TV	78	75	72	73	78	75
played computer games	59	53⁺	54	49	60	49
helped with jobs	64	66	66	70	71	62⁺

- Items in bold show a statistically significant shift from 2006–8.

Table 43 **How important is it for you to exercise every day?**

	Phase 2**		Phase 3*		Comparison	
	Baseline %	End 2008 %	Baseline %	End 2008 %	Baseline %	End 2008 %
Very important	66	70	69	73	72	65
Important	25	24	21	24	21	32
Not important	6	2	5	2	4	2
No response	4	5	4	1	3	-

- Items in bold show a statistically significant shift from 2006–8.

Table 44 **How much do you like doing exercise?**

	Phase 2***		Phase 3*		Comparison	
	Baseline %	End 2008 %	Baseline %	End 2008 %	Baseline %	End 2008 %
A lot	76	75	76	70	79	71
A bit	13	17	12	21	14	20
Middle	4	5	4	5	3	6
Not much	3	1	2	3	1	1
Not much at all	3	1	3	1	3	1
No response	1	1	3	1	<1	<1

- Items in bold show a statistically significant shift from 2006–8.

Sunsmart

Table 45 **Students' sunsmart practices at school**

When you are outside in summer at school do you:	Phase 2		Phase 3		Comparison	
	Baseline %	End 2008 %	Baseline %	End 2008 %	Baseline %	End 2008 %
Wear clothes that protect you from the sun?						
Most of the time	35	28***	38	36***	51	34***
Sometimes	35	48	34	48	33	44
Hardly ever	20	16	19	15	12	21
No response	10	8	8	2	5	<1
Wear a sunhat?						
Most of the time	33	30	42	40	55	39
Sometimes	28	38	34	40	25	33
Hardly ever	29	25	16	19	14	27
No response	11	7	9	2	6	1
Wear sunscreen?						
Most of the time	20	18*	21	17	33	23**
Sometimes	26	33	29	33	23	31
Hardly ever	44	41	41	47	38	44
No response	11	8	9	2	6	1
Stay out of the sun in the middle of the day?						
Most of the time	21	14***	22	21	24	17
Sometimes	42	48	43	49	42	48
Hardly ever	27	31	27	28	29	34
No response	10	7	9	2	5	1
Get sunburnt?						
Most of the time	12	8***	10	8**	11	6
Sometimes	25	23	26	23	24	25
Hardly ever	52	62	56	68	60	68
No response	11	7	8	2	5	<1

- Items in bold show a statistically significant shift from 2006–8.

Table 46 **Students' sunsmart practices at home**

When you are outside in summer at home do you:	Phase 2		Phase 3		Comparison	
	Baseline %	End 2008 %	Baseline %	End 2008 %	Baseline %	End 2008 %
Wear clothes that protect you from the sun?						
Most of the time	30	29⁺	33	34	49	31^{***}
Sometimes	36	43	36	44	29	46
Hardly ever	21	20	21	19	14	22
No response	13	8	10	3	7	1
Wear a sunhat?						
Most of the time	23	16^{***}	23	20	32	22
Sometimes	31	35	34	42	35	37
Hardly ever	32	40	31	35	25	40
No response	13	9	12	3	9	1
Wear sunscreen?						
Most of the time	26	20^{**}	23	21	34	25[*]
Sometimes	29	30	34	38	33	40
Hardly ever	33	42	33	39	27	34
No response	13	8	10	3	6	1
Stay out of the sun in the middle of the day?						
Most of the time	22	17^{***}	23	23	25	21
Sometimes	43	42	41	49	41	50
Hardly ever	24	33	28	27	29	28
No response	12	9	8	2	5	<1
Get sunburnt?						
Most of the time	13	9^{**}	13	7^{**}	12	10
Sometimes	25	27	27	27	29	30
Hardly ever	49	56	52	64	54	60
No response	12	7	9	2	5	<1

- Items in bold show a statistically significant shift from 2006–8.

Table 47 **Students' family sunsmart practices**

When they are outside in summer do the people in your family:	Phase 2		Phase 3		Comparison	
	Baseline %	End 2008 %	Baseline %	End 2008 %	Baseline %	End 2008 %
Wear clothes that protect them from the sun?						
Most of the time	40	36*	42	42**	45	39**
Sometimes	33	42	34	44	33	42
Hardly ever	18	13	16	11	18	17
No response	9	8	8	3	4	2
Wear sunhats?						
Most of the time	32	24***	35	32*	38	27
Sometimes	33	47	35	47	33	42
Hardly ever	28	22	24	19	28	29
No response	7	7	6	2	1	1
Wear sunscreen?						
Most of the time	29	27	31	29	42	33**
Sometimes	35	39	35	40	33	38
Hardly ever	28	26	28	28	22	28
No response	8	8	7	3	3	1

- Items in bold show a statistically significant shift from 2006–8.

Table 48 **How important is it that you wear a sunhat, sunscreen, and clothes in the sun?**

	Phase 2		Phase 3		Comparison**	
	Baseline %	End 2008 %	Baseline %	End 2008 %	Baseline %	End 2008 %
Very important	68	67	70	68	78	52
Important	20	23	17	25	17	42
Not important	7	5	7	6	5	6
No response	5	5	6	1	<1	-

- Items in bold show a statistically significant shift from 2006–8.

Table 49 **How much do you like sun bathing?**

	Phase 2	Phase 3	Comparison
	End 2008 %	End 2008 %	End 2008 %
A lot	15	13	19
A bit	19	17	14
Middle	16	19	17
Not much	17	21	27
Not much at all	31	29	22
No response	3	1	<1

Table 50 **Which hat BEST protects you from the sun?**

	Phase 2**		Phase 3***		Comparison	
	Baseline %	End 2008 %	Baseline %	End 2008 %	Baseline %	End 2008 %
cap	27	13	32	21	18	10
hat with brim	67	79	59	76	80	86
beanie	1	-	1	<1	-	<1
visor	4	3	5	2	2	1
No response	2	6	3	<1	-	2

- Items in bold show a statistically significant shift from 2006–8.

Table 51 **Which shirt BEST protects you from the sun?**

	Phase 2*		Phase 3***		Comparison ⁺	
	Baseline %	End 2008 %	Baseline %	End 2008 %	Baseline %	End 2008 %
tee-shirt	28	37	26	41	41	34
sleeveless tee	8	5	6	4	3	3
vest	15	12	16	11	11	4
long-sleeved shirt	48	40	48	43	45	54
No response	2	6	3	1	<1	4

- Items in bold show a statistically significant shift from 2006–8.

Table 52 **Which cream BEST protects you from the sun?**

	Phase 2***		Phase 3***		Comparison**	
	Baseline %	End 2008 %	Baseline %	End 2008 %	Baseline %	End 2008 %
body lotion	17	7	18	7	11	2
factor 15 sunscreen	15	6	12	7	6	2
factor 30 sunscreen	62	81	64	84	80	93
body glitter	3	1	2	1	3	1
No response	3	5	4	1	-	1

- Items in bold show a statistically significant shift from 2006–8.

Table 53 **Mean sunsmart knowledge (Maximum=3)**

Student group	Year 4 students	Year 6 students	Shift from baseline
	Baseline Mean (confidence interval)	End 2008 Mean (confidence interval)	
Phase 2	1.77 (1.65, 1.90)	1.99 (1.80, 2.18)	0.22
Phase 3	1.71 (1.55, 1.87)	2.04 (1.93, 2.16)	0.33
Comparison***	2.05 (1.92, 2.18)	2.33 (2.19, 2.47)	0.28

- Items in bold show a statistically significant shift from 2006–8.

Smokefree

Table 54 **Students' smokefree behaviours**

	Baseline			End 2008		
	Yes %	No %	No response %	Yes %	No %	No response %
Tried smoking						
Phase 2*	10.2	86.9	2.9	15.4	81.1	3.4
Phase 3***	6.9	88.8	4.3	14.3	84.5	1.2
Comparison	7.8	91.7	0.5	11.2	87.8	1.0
Smokes more than one cigarette a week						
Phase 2***	4.5	90.1	5.4	1.7	95.2	3.2
Phase 3	3.6	90.7	5.8	2.3	95.2	2.5
Comparison⁺	3.2	95.9	0.9	1.5	97.6	1.0

- Items in bold show a statistically significant shift from 2006–8.

Table 55 **Do any of the people you live with smoke?**

Do any of the people you live with smoke?	Phase 2 ⁺		Phase 3		Comparison**	
	Baseline	End 2008	Baseline	End 2008	Baseline	End 2008
	%	%	%	%	%	%
No	25.8	28.6	29.1	31.3	33.2	28.8
Yes – outside the house	48.2	51.4	47.5	55.5	43.3	56.6
Yes – inside the house	20.6	15.3	17.0	11.7	23.0	13.2
No response	5.4	4.7	6.5	1.5	0.5	1.5

- Items in bold show a statistically significant shift from 2006–8.

Table 56 **How important is it that people around you do not smoke?**

	Phase 2***		Phase 3***		Comparison	
	Baseline	End 2008	Baseline	End 2008	Baseline	End 2008
	%	%	%	%	%	%
Very important	46	68	55	73	65	63
Important	12	9	9	10	12	18
Not important	38	18	30	16	22	19
No response	4	5	6	1	1	<1

- Items in bold show a statistically significant shift from 2006–8.

Table 57 How much do you like it when the people around you smoke?

	Phase 2		Phase 3**		Comparison***	
	Baseline %	End 2008 %	Baseline %	End 2008 %	Baseline %	End 2008 %
A lot	4	2	3	2	4	1
A bit	3	2	2	2	1	1
Middle	3	4	3	2	3	13
Not much	7	10	4	12	7	18
Not much at all	81	80	84	81	83	67
No response	3	3	5	1	1	-

- Items in bold show a statistically significant shift from 2006–8.

2.2 Student food choices

Table 58 Student food choices overall

Key food type	Phase 2		Phase 3		Comparison	
	Baseline %	End 2008 %	Baseline %	End 2008 %	Baseline %	End 2008 %
Vegetables and fruit	65	76***	66	78***	74	77
Fruit only	56	68***	54	70***	65	68
Vegetables only	23	33***	33	38⁺	35	42
Chips and chippies	58	67***	52	56	57	60
Fizzy drinks	31	43***	29	33	38	28***
Sweets and treats	18	26***	18	23⁺	23	26
Muesli bars/plain biscuits	37	38	35	28⁺	52	51
Cakes and puddings	25	32	27	37***	31	25⁺
Takeaways	38	36	35	27***	27	20
Protein	58	65***	62	76***	70	68
Grains & cereals	91	91	91	93	96	95
Dairy	43	44	38	41	54	55

- Items in bold show a statistically significant shift from 2006–8.

Table 59 **Student food choices at school**

Key food type	Phase 2		Phase 3		Comparison	
	Baseline %	End 2008 %	Baseline %	End 2008 %	Baseline %	End 2008 %
Vegetables and fruit	43	61***	41	66***	57	60
Fruit only	42	59***	39	63***	54	58
Vegetables only	1	8***	4	10***	5	4
Chips and chippies	44	55***	36	42	41	47
Fizzy drinks	6	9	6	5	4	2
Sweets and treats	8	13⁺	10	11	8	10
Muesli bars/plain biscuits	26	29	25	22	41	41
Cakes and puddings	12	17⁺	13	20***	12	16
Takeaways	17	12	16	10***	11	5
Protein	9	17***	17	28***	11	25**
Grains & cereals	48	59***	54	69***	66	66
Dairy	13	11	12	16	15	22

- Items in bold show a statistically significant shift from 2006–8.

Table 60 **Student food choices at home**

Key food type	Phase 2		Phase 3		Comparison	
	Baseline %	End 2008 %	Baseline %	End 2008 %	Baseline %	End 2008 %
Vegetables and fruit	45	45	50	48	50	58⁺
Fruit only	29	26	30	25⁺	30	34
Vegetables only	22	29***	31	33	31	41
Chips and chippies	29	32	27	27	27	31
Fizzy drinks	28	40***	27	31	36	27***
Sweets and treats	13	16***	10	14	17	19
Muesli bars/plain biscuits	18	14	16	10**	23	23
Cakes and puddings	16	19	16	23***	21	12**
Takeaways	28	28	25	19***	19	16
Protein	53	59***	57	68***	67	58
Grains & cereals	87	83***	88	88	91	92
Dairy	35	39	31	33	46	44

- Items in bold show a statistically significant shift from 2006–8.

Table 61 **Mean amount of each food consumed overall**

Key food type	Phase 2		Phase 3		Comparison	
	Baseline	End 2008	Baseline	End 2008	Baseline	End 2008
	Mean number of times eaten (confidence interval)	Mean number of times eaten (confidence interval)	Mean number of times eaten (confidence interval)	Mean number of times eaten (confidence interval)	Mean number of times eaten (confidence interval)	Mean number of times eaten (confidence interval)
Vegetables and fruit	1.40 (1.23, 1.57)	1.92 (1.67, 2.16)***	1.59 (1.33, 1.84)	2.15 (1.89, 2.40)***	1.76 (1.52, 2.01)	2.28 (1.98, 2.58)
Fruit only	1.06 (0.93, 1.19)	1.35 (1.14, 1.55)*	1.04 (0.89, 1.19)	1.44 (1.25, 1.63)*	1.20 (0.95, 1.44)	1.50 (1.32, 1.68)*
Vegetables only	0.34 (0.26, 0.43)	0.57 (0.45, 0.69)**	0.55 (0.40, 0.69)	0.71 (0.57, 0.85)**	0.57 (0.38, 0.76)	0.78 (0.55, 1.01)
Chips and chippies	0.91 (0.82, 1.01)	1.16 (1.02, 1.31)**	0.78 (0.66, 0.90)	0.91 (0.80, 1.03)**	0.86 (0.61, 1.11)	0.90 (0.69, 1.10)
Fizzy drinks	0.47 (0.38, 0.55)	0.69 (0.56, 0.82)**	0.45 (0.35, 0.56)	0.47 (0.39, 0.56)**	0.54 (0.32, 0.76)	0.43 (0.39, 0.48)
Sweets and treats	0.24 (0.18, 0.30)	0.37 (0.29, 0.45)**	0.24 (0.18, 0.29)	0.32 (0.25, 0.39)**	0.29 (0.17, 0.41)	0.33 (0.26, 0.41)
Muesli bars/plain biscuits	0.54 (0.43, 0.64)	0.56 (0.43, 0.69)	0.50 (0.40, 0.61)	0.39 (0.30, 0.48)	0.91 (0.68, 1.14)	0.93 (0.70, 1.15)
Cakes and puddings	0.35 (0.26, 0.44)	0.43 (0.32, 0.53)	0.36 (0.28, 0.44)	0.58 (0.50, 0.66)	0.39 (0.26, 0.51)	0.31 (0.23, 0.40)
Takeaways	0.52 (0.43, 0.61)	0.50 (0.40, 0.61)	0.49 (0.37, 0.61)	0.34 (0.28, 0.40)	0.35 (0.20, 0.49)	0.25 (0.18, 0.32)
Protein	0.78 (0.71, 0.86)	1.06 (0.98, 1.14)***	0.95 (0.83, 1.07)	1.39 (1.19, 1.60)***	0.98 (0.88, 1.08)	1.01 (0.87, 1.15)
Grains & cereals	2.03 (1.88, 2.17)	2.27 (2.11, 2.43)+	2.16 (2.02, 2.29)	2.60 (2.36, 2.85)+	2.23 (2.05, 2.41)	2.40 (2.21, 2.60)
Dairy	0.56 (0.47, 0.66)	0.60 (0.51, 0.68)	0.50 (0.38, 0.61)	0.58 (0.46, 0.70)	0.70 (0.58, 0.82)	0.73 (0.61, 0.84)

- Items in bold show a statistically significant shift from 2006–8.

Table 62 **Mean amount of each food consumed at school**

Key food type	Phase 2		Phase 3		Comparison	
	Baseline	End 2008	Baseline	End 2008	Baseline	End 2008
	Mean number of times eaten (confidence interval)	Mean number of times eaten (confidence interval)	Mean number of times eaten (confidence interval)	Mean number of times eaten (confidence interval)	Mean number of times eaten (confidence interval)	Mean number of times eaten (confidence interval)
Vegetables and fruit	0.65 (0.56, 0.73)	1.05 (0.90, 1.19)***	0.65 (0.53, 0.76)	1.19 (1.02, 1.36)***	0.87 (0.65, 1.08)	1.08 (0.88, 1.27)+
Fruit only	0.63 (0.55, 0.71)	0.95 (0.82, 1.08)***	0.59 (0.49, 0.69)	1.06 (0.89, 1.22)***	0.81 (0.59, 1.03)	1.02 (0.86, 1.19)*
Vegetables only	0.02 (0.00, 0.03)	0.10 (0.05, 0.14)**	0.06 (0.02, 0.09)	0.14 (0.10, 0.18)**	0.06 (0.01, 0.10)	0.05 (0.02, 0.09)
Chips and chippies	0.55 (0.47, 0.62)	0.75 (0.65, 0.85)**	0.46 (0.35, 0.57)	0.57 (0.46, 0.69)**	0.53 (0.31, 0.76)	0.55 (0.42, 0.68)
Fizzy drinks	0.07 (0.04, 0.11)	0.11 (0.06, 0.16)	0.06 (0.03, 0.09)	0.06 (0.03, 0.09)	0.05 (0.02, 0.07)	0.03 (-0.01, 0.08)
Sweets and treats	0.09 (0.06, 0.11)	0.16 (0.10, 0.21)+	0.11 (0.07, 0.15)	0.16 (0.11, 0.20)+	0.10 (0.03, 0.17)	0.12 (0.06, 0.18)
Muesli bars/plain biscuits	0.32 (0.26, 0.38)	0.40 (0.29, 0.50)	0.32 (0.25, 0.38)	0.27 (0.20, 0.34)	0.61 (0.41, 0.82)	0.59 (0.48, 0.71)
Cakes and puddings	0.14 (0.10, 0.19)	0.20 (0.14, 0.26)	0.16 (0.11, 0.20)	0.26 (0.20, 0.32)	0.14 (0.05, 0.22)	0.16 (0.08, 0.24)
Takeaways	0.19 (0.13, 0.25)	0.14 (0.09, 0.19)	0.18 (0.12, 0.25)	0.12 (0.08, 0.16)	0.12 (0.07, 0.16)	0.06 (0.01, 0.11)
Protein	0.10 (0.07, 0.13)	0.21 (0.17, 0.26)***	0.20 (0.13, 0.27)	0.36 (0.27, 0.45)***	0.12 (0.03, 0.22)	0.28 (0.15, 0.41)
Grains & cereals	0.60 (0.49, 0.70)	0.78 (0.69, 0.87)*	0.68 (0.61, 0.75)	0.90 (0.78, 1.02)*	0.74 (0.64, 0.83)	0.81 (0.76, 0.86)
Dairy	0.15 (0.10, 0.20)	0.12 (0.09, 0.16)	0.14 (0.10, 0.17)	0.19 (0.14, 0.25)	0.17 (0.10, 0.24)	0.24 (0.15, 0.33)

- Items in bold show a statistically significant shift from 2006–8.

Table 63 **Mean amount of each food consumed at home**

Key food type	Phase 2		Phase 3		Comparison	
	Baseline	End 2008	Baseline	End 2008	Baseline	End 2008
	Mean number of times eaten (confidence interval)	Mean number of times eaten (confidence interval)	Mean number of times eaten (confidence interval)	Mean number of times eaten (confidence interval)	Mean number of times eaten (confidence interval)	Mean number of times eaten (confidence interval)
Vegetables and fruit	0.75 (0.63, 0.88)	0.87 (0.72, 1.02)	0.94 (0.78, 1.11)	0.96 (0.80, 1.12)	0.90 (0.71, 1.09)	1.20 (0.95, 1.45)
Fruit only	0.43 (0.36, 0.50)	0.39 (0.30, 0.49)	0.45 (0.36, 0.55)	0.38 (0.32, 0.45)	0.39 (0.33, 0.45)	0.47 (0.44, 0.51)
Vegetables only	0.33 (0.25, 0.41)	0.48 (0.37, 0.58)+	0.49 (0.35, 0.62)	0.57 (0.45, 0.70)+	0.51 (0.36, 0.67)	0.73 (0.49, 0.96)
Chips and chippies	0.37 (0.32, 0.42)	0.42 (0.34, 0.49)	0.33 (0.28, 0.37)	0.34 (0.29, 0.40)	0.33 (0.27, 0.38)	0.35 (0.26, 0.44)
Fizzy drinks	0.39 (0.32, 0.46)	0.58 (0.49, 0.67)**	0.39 (0.30, 0.49)	0.41 (0.34, 0.48)**	0.50 (0.29, 0.71)	0.40 (0.36, 0.44)
Sweets and treats	0.16 (0.11, 0.20)	0.21 (0.17, 0.26)	0.13 (0.08, 0.17)	0.16 (0.11, 0.22)	0.19 (0.06, 0.31)	0.21 (0.15, 0.28)
Muesli bars/plain biscuits	0.22 (0.16, 0.28)	0.16 (0.13, 0.20)	0.19 (0.14, 0.24)	0.12 (0.09, 0.15)	0.29 (0.19, 0.40)	0.34 (0.21, 0.46)
Cakes and puddings	0.21 (0.15, 0.26)	0.23 (0.16, 0.29)	0.20 (0.14, 0.27)	0.32 (0.25, 0.38)	0.25 (0.18, 0.32)	0.15 (0.11, 0.19)
Takeaways	0.33 (0.28, 0.39)	0.36 (0.29, 0.43)	0.31 (0.21, 0.40)	0.22 (0.18, 0.26)	0.23 (0.12, 0.34)	0.19 (0.15, 0.23)
Protein	0.69 (0.61, 0.76)	0.85 (0.78, 0.91)***	0.75 (0.65, 0.85)	1.03 (0.91, 1.16)***	0.86 (0.73, 0.99)	0.73 (0.60, 0.86)
Grains & cereals	1.43 (1.36, 1.50)	1.49 (1.37, 1.61)	1.48 (1.38, 1.58)	1.70 (1.54, 1.87)	1.49 (1.29, 1.70)	1.60 (1.43, 1.76)
Dairy	0.42 (0.34, 0.50)	0.47 (0.41, 0.53)	0.36 (0.26, 0.46)	0.39 (0.31, 0.46)	0.53 (0.46, 0.60)	0.49 (0.41, 0.56)

- Items in bold show a statistically significant shift from 2006–8.

3. Student data by gender, ethnicity and liking school

This section of the technical report includes an analysis of the end of 2008 student data by gender, ethnicity, and “liking school”. Data from three groups of students (Phase 2 FiS, Phase 3 FiS, and comparison students) are reported in most tables and figures. The footnote at the bottom of each table indicates what the tests of significance refer to.

3.1 Student data by gender

This section includes an analysis of the end of 2008 student data by gender. All student data is reported as a percentage of these numbers:

- Phase 2 students: Boys N=404; Girls N=384
- Phase 3 students: Boys N=315; Girls N=282
- Comparison students: Boys N=104; Girls N=100.

Student learning and liking of school

Table 64 **Student views on coverage of the health priority areas: Phase 2**

How much did you learn about:	Healthy eating	Physical activity	Sunsmart	Smokefree⁺
	%	%	%	%
Boys				
A lot	79	62	62	38
Some things	16	31	29	23
Nothing	2	5	6	34
No response	3	2	3	4
Girls				
A lot	80	65	61	30
Some things	17	28	30	28
Nothing	1	5	7	40
No response	2	2	2	2

- Items in bold show a statistically significant difference between genders.

Table 65 **Student views on coverage of the health priority areas: Phase 3**

How much did you learn about:	Healthy eating ⁺ %	Physical activity %	Sunsmart %	Smokefree %
Boys				
A lot	78	66	57	48
Some things	18	30	36	26
Nothing	2	4	6	25
No response	1	1	1	1
Girls				
A lot	87	61	61	45
Some things	11	33	33	28
Nothing	1	5	6	26
No response	<1	1	1	1

- Items in bold show a statistically significant difference between genders.

Table 66 **Student views on coverage of the health priority areas: Comparison**

How much did you learn about:	Healthy eating %	Physical activity %	Sunsmart* %	Smokefree %
Boys				
A lot	68	50	38	25
Some things	23	43	38	33
Nothing	7	6	24	41
No response	2	1	1	1
Girls				
A lot	72	60	37	35
Some things	24	35	52	31
Nothing	3	5	10	32
No response	1	-	1	2

- Items in bold show a statistically significant difference between genders.

Table 67 **Student views on their input into school health activities/decisions: Phase 2**

How often do these things happen at school?	A lot	Sometimes	Never	No response
	%	%	%	%
Boys				
I learn about making healthy choices	61	31	3	5
We work together to make our school healthier	61	24	9	6
We work together to make our community healthier	46	34	14	6
We set goals for ourselves about our health	49	35	12	5
I help make decisions about things to do with health	42	41	11	5
I help lead things to do with health	33	34	27	6
Girls				
I learn about making healthy choices	66	27	2	5
We work together to make our school healthier	60	27	7	5
We work together to make our community healthier	51	32	11	6
We set goals for ourselves about our health	46	39	10	5
I help make decisions about things to do with health	45	38	12	6
I help lead things to do with health	33	40	22	5

Table 68 **Student views on their input into school health activities/decisions: Phase 3**

How often do these things happen at school?	A lot	Sometimes	Never	No response
	%	%	%	%
Boys				
I learn about making healthy choices	68	28	3	1
We work together to make our school healthier	57	31	10	2
We work together to make our community healthier	52	33	14	2
We set goals for ourselves about our health	52	40	6	2
I help make decisions about things to do with health	42	44	12	2
I help lead things to do with health	38	40	20	2
Girls				
I learn about making healthy choices	68	29	2	<1
We work together to make our school healthier	59	33	7	<1
We work together to make our community healthier	52	36	11	1
We set goals for ourselves about our health	57	34	9	<1
I help make decisions about things to do with health	50	37	13	<1
I help lead things to do with health	31	45	24	1

Table 69 **Student views on their input into school health activities/decisions: Comparison**

How often do these things happen at school?	A lot	Sometimes	Never	No response
	%	%	%	%
Boys				
I learn about making healthy choices***	36	53	10	2
We work together to make our school healthier	31	47	19	3
We work together to make our community healthier	21	43	34	2
We set goals for ourselves about our health	29	46	23	2
I help make decisions about things to do with health	30	46	22	2
I help lead things to do with health	18	40	38	3
Girls				
I learn about making healthy choices***	59	41	-	-
We work together to make our school healthier	43	45	11	1
We work together to make our community healthier	36	40	24	-
We set goals for ourselves about our health	35	51	14	-
I help make decisions about things to do with health	35	50	14	1
I help lead things to do with health	17	53	29	1

- Items in bold show a statistically significant difference between genders.

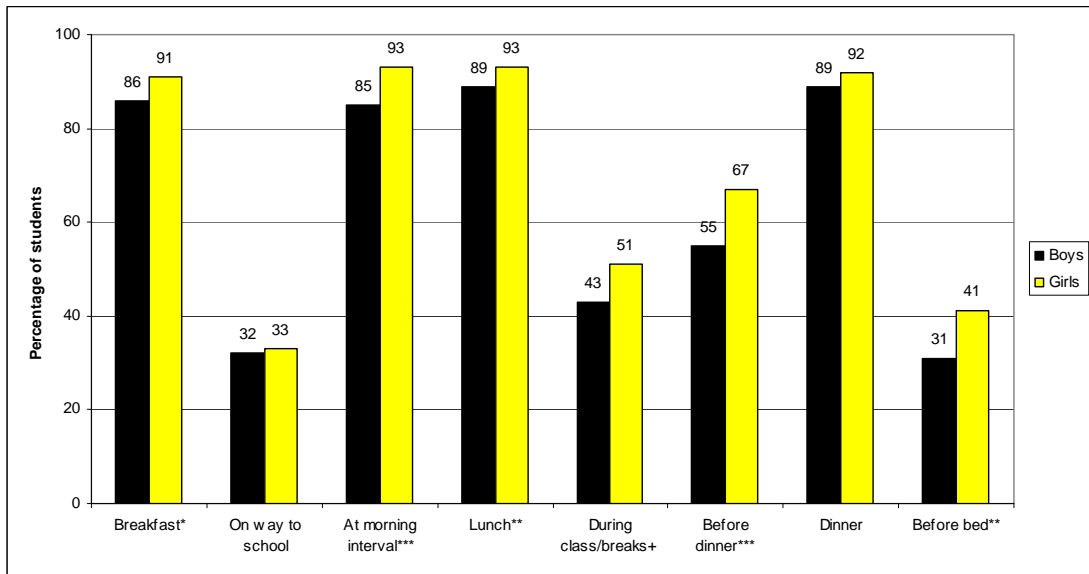
Table 70 **How much do you like being at school?**

	Phase 2**		Phase 3***		Comparison***	
	Boys	Girls	Boys	Girls	Boys	Girls
	%	%	%	%	%	%
A lot	50	65	54	69	20	43
A bit	26	20	26	17	30	31
Middle	8	6	8	8	13	16
Not much	5	4	5	4	15	7
Not much at all	7	3	6	1	20	3
No response	4	2	1	1	2	-

- Items in bold show a statistically significant difference between genders.

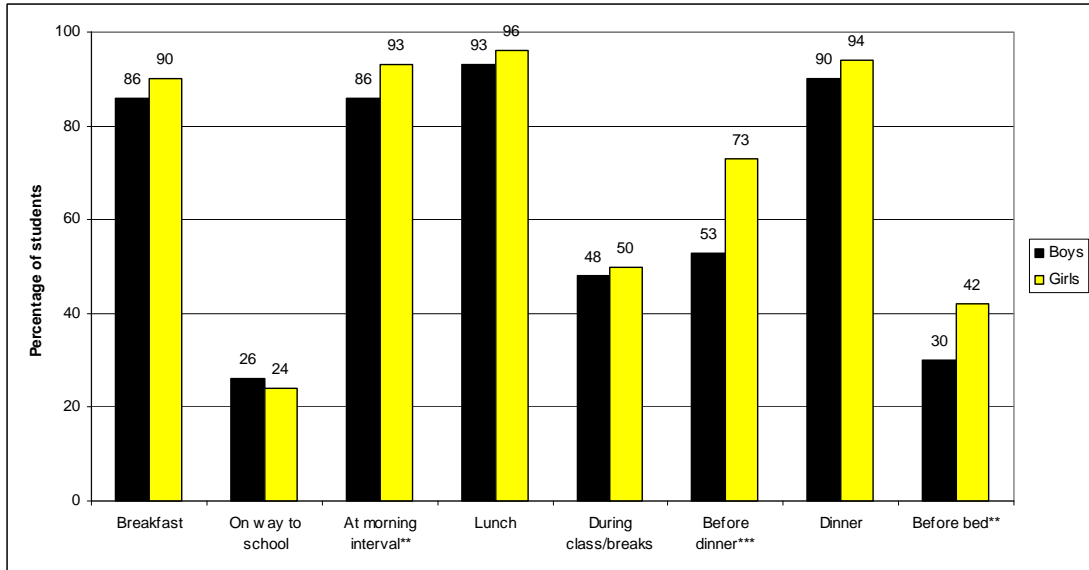
Healthy eating

Figure 4 **Phase 2 students' eating times by gender**



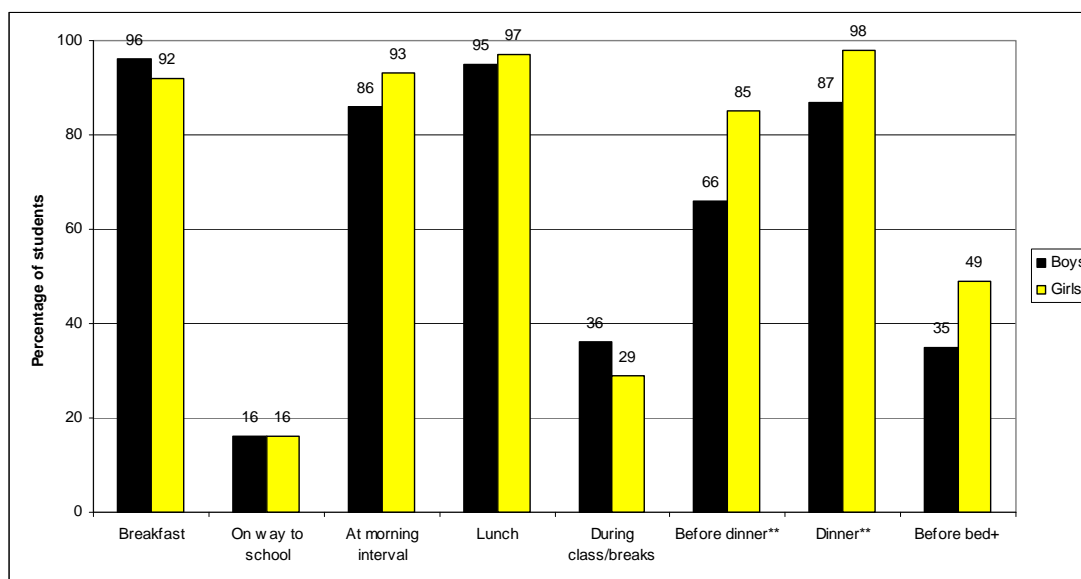
- Items marked show a statistically significant difference between genders.

Figure 5 **Phase 3 students' eating times by gender**



- Items marked show a statistically significant difference between genders.

Figure 6 Comparison students' eating times by gender



- Items marked show a statistically significant difference between genders.

Table 71 Lunch behaviours

	Phase 2**		Phase 3		Comparison	
	Boys %	Girls %	Boys %	Girls %	Boys %	Girls %
Lunch from home	56	59	60	61	77	82
Buy/given lunch at school	16	12	16	20	12	12
Buy lunch at dairy/shop	16	23	17	15	7	3
Didn't have lunch	9	4	5	3	4	2
No response	3	2	2	1	1	1

- Items in bold show a statistically significant difference between genders.

Table 72 How important is it that you eat vegetables and fruit every day?

	Phase 2**		Phase 3 ⁺		Comparison	
	Boys %	Girls %	Boys %	Girls %	Boys %	Girls %
Very important	64	72	71	81	69	76
Important	29	22	24	17	25	20
Not important	3	1	3	1	6	3
No response	4	5	2	1	-	1

- Items in bold show a statistically significant difference between genders.

Table 73 **How much do you like eating vegetables?**

	Phase 2**		Phase 3 ⁺		Comparison	
	Boys %	Girls %	Boys %	Girls %	Boys %	Girls %
A lot	31	43	40	43	26	43
A bit	33	33	32	40	36	35
Middle	17	12	13	9	19	12
Not much	9	7	10	5	12	5
Not much at all	8	4	4	2	7	4
No response	1	1	1	1	-	1

- Items in bold show a statistically significant difference between genders.

Table 74 **How much do you like eating fruit?**

	Phase 2		Phase 3**		Comparison ⁺	
	Boys %	Girls %	Boys %	Girls %	Boys %	Girls %
A lot	75	82	73	85	60	74
A bit	16	12	18	10	24	22
Middle	4	4	5	3	12	2
Not much	2	1	2	<1	3	1
Not much at all	1	-	1	<1	1	-
No response	1	1	1	1	-	1

- Items in bold show a statistically significant difference between genders.

Table 75 **How much do you like getting fruit to eat at school?**

	Phase 2 ⁺		Phase 3 ⁺	
	Boys %	Girls %	Boys %	Girls %
A lot	72	80	70	78
A bit	16	11	17	15
Middle	4	2	6	2
Not much	2	2	3	2
Not much at all	1	<1	1	<1
No response	4	5	4	2

- Items in bold show a statistically significant difference between genders.

Table 76 Which food is the most healthy?

	Phase 2		Phase 3		Comparison	
	Boys %	Girls %	Boys %	Girls %	Boys %	Girls %
Fizzy drink	6	2**	3	1	5	1
Water or milk	87	91	91	96	94	97
No response	7	8	6	3	1	2
Egg sandwich	75	80**	81	87	93	91
Sausage roll	11	6	9	6	3	6
No response	14	14	10	7	4	3
Fruit	87	92**	87	97***	93	97
Ice-cream	6	2	6	1	5	2
No response	6	5	7	2	2	1
Chocolate biscuit	5	1**	3	2	5	1
Banana	86	91	88	94	93	98
No response	8	8	9	4	2	1
Hot chips	9	3***	9	4**	4	2
Boiled potato, kumara, or taro	78	84	81	90	88	95
No response	12	13	10	7	9	3
Carrot sticks	80	84⁺	85	91⁺	90	94
Potato chippies	9	5	7	3	6	4
No response	11	11	9	6	4	2
Fried chicken	24	16**	27	22	13	20
Grilled chicken	62	66	61	69	80	76
No response	14	18	13	9	8	4
Apple	80	86***	86	87	84	88
Fruit pie	10	4	5	6	11	8
No response	11	10	9	7	6	4
Sausage	15	11	15	7**	10	9
Baked fish or kaimoana	71	73	75	84	86	89
No response	15	16	10	9	5	2

- Items in bold show a statistically significant difference between genders.

Table 77 **Mean healthy eating knowledge scores (Maximum=9)**

Student group	Year 6 students	
	Boys Mean (<i>confidence interval</i>)	Girls Mean (<i>confidence interval</i>)
Phase 2	7.06 (6.80,7.32)	7.48 (7.24,7.72)
Phase 3***	7.35 (7.08,7.62)	7.95 (7.73,8.17)
Comparison	8.01 (7.63,8.39)	8.25 (7.97,8.53)

- Items in bold show a statistically significant difference between genders.

Table 78 **How many pieces of vegetables and fruit SHOULD you eat a day? (5+aDay)**

Student group	Boys % selecting 5–8 (% selecting 5)	Girls % selecting 5–8 (% selecting 5)
Phase 2**	78 (61)	83 (73)
Phase 3	76 (61)	86 (72)
Comparison	79 (63)	81 (66)

- Items in bold show a statistically significant difference between genders.

Physical activity

Table 79 **Mean engagement in mild to moderate physical activity (Maximum=8)**

Student group	Year 6 students	
	Boys Mean (<i>confidence interval</i>)	Girls Mean (<i>confidence interval</i>)
Phase 2	4.89 (4.73,5.05)	4.73 (4.57,4.89)
Phase 3	4.68 (4.51,4.85)	4.67 (4.50,4.84)
Comparison	4.29 (3.98,4.60)	4.42 (4.11,4.73)

Table 80 **Mean amount of TV watching and computer gaming (Maximum=3)**

Student group	Year 6 students	
	Boys Mean (<i>confidence interval</i>)	Girls Mean (<i>confidence interval</i>)
Phase 2***	2.06 (1.96,2.16)	1.77 (1.67,1.87)
Phase 3***	1.93 (1.82,2.04)	1.60 (1.48,1.72)
Comparison***	2.10 (1.94,2.26)	1.44 (1.24,1.64)

- Items in bold show a statistically significant difference between genders.

Table 81 **At home do you do exercise or active things with your family at the weekend?**

	Phase 2		Phase 3**		Comparison ⁺	
	Boys %	Girls %	Boys %	Girls %	Boys %	Girls %
Yes	81	80	80	88	73	87
No	13	11	15	8	22	10
No response	6	8	5	4	5	3

- Items in bold show a statistically significant difference between genders.

Table 82 **At home did you do exercise or active things with your family last weekend?**

	Phase 2		Phase 3**		Comparison	
	Boys %	Girls %	Boys %	Girls %	Boys %	Girls %
Yes	72	70	68	76	72	79
No	19	21	25	18	23	13
No response	9	9	6	6	5	8

- Items in bold show a statistically significant difference between genders.

Table 83 **At home do you do exercise or active things with your family during the week?**

	Phase 2		Phase 3		Comparison ⁺	
	Boys %	Girls %	Boys %	Girls %	Boys %	Girls %
Yes	74	71	70	75	61	77
No	18	22	23	21	36	20
No response	8	8	7	4	4	3

- Items in bold show a statistically significant difference between genders.

Table 84 **Did you watch TV yesterday morning?**

	Phase 2***		Phase 3		Comparison***	
	Boys %	Girls %	Boys %	Girls %	Boys %	Girls %
Yes	69	58	59	53	64	43
No	27	39	37	45	34	57
No response	4	3	3	2	2	-

- Items in bold show a statistically significant difference between genders.

Table 85 **How did you get to school yesterday morning?**

	Phase 2 ⁺		Phase 3		Comparison	
	Boys %	Girls %	Boys %	Girls %	Boys %	Girls %
walk	46	46	51	54	28	33
cycle (or skateboard/scooter)	5	2	3	1	6	7
by bus	6	7	4	4	12	10
by car (or motorbike)	39	44	40	40	53	50
No response	3	2	1	1	2	-

- Items in bold show a statistically significant difference between genders.

Table 86 **In class-time at school yesterday, did you do active things like PE, dance, or kapa haka?**

	Phase 2		Phase 3		Comparison	
	Boys %	Girls %	Boys %	Girls %	Boys %	Girls %
Yes	65	67	62	56	60	70
No	33	31	38	43	40	30
No response	2	2	1	1	-	-

Table 87 **What did you do at playtime yesterday morning?**

	Phase 2**		Phase 3**		Comparison	
	Boys %	Girls %	Boys %	Girls %	Boys %	Girls %
sit around	5	7	8	5	4	2
stand around	1	2	2	2	5	4
walk around	31	42	28	42	35	48
active things	60	47	60	50	57	44
No response	3	2	2	1	-	2

- Items in bold show a statistically significant difference between genders.

Table 88 **What did you do at lunchtime yesterday?**

	Phase 2		Phase 3**		Comparison	
	Boys %	Girls %	Boys %	Girls %	Boys %	Girls %
sit around	6	7	7	4	6	5
stand around	1	1	3	1	4	5
walk around	27	32	21	35	17	26
active things	60	54	67	59	73	62
No response	5	6	3	1	-	2

- Items in bold show a statistically significant difference between genders.

Table 89 **How did you get home after school yesterday?**

	Phase 2 ⁺		Phase 3		Comparison	
	Boys %	Girls %	Boys %	Girls %	Boys %	Girls %
walk	54	55	55	57	37	39
cycle (or skateboard/scooter)	6	2	3	1	7	5
by bus	8	8	6	6	10	12
by car (or motorbike)	28	33	34	36	45	43
No response	3	1	2	1	2	1

- Items in bold show a statistically significant difference between genders.

Table 90 **What did you do after school yesterday?**

	Phase 2		Phase 3		Comparison	
	Boys %	Girls %	Boys %	Girls %	Boys %	Girls %
played outside	76	77	68	71	75	77
played inside	56	49	55	58	61	57
played sports at school, for a club, or with friends	43	31***	39	31⁺	31	22
went to a dance group, gym, or kapa haka practice	15	18	10	11	5	9
went to after-school care, music, or a youth group	10	10	13	10	11	5
read or did homework	37	50***	56	68**	52	72**
watched TV	74	76	74	71	81	68⁺
played computer games	63	44***	60	35***	64	33***
helped with jobs	64	69	65	76**	60	66

- Items in bold show a statistically significant difference between genders.

Table 91 **How important is it for you to exercise every day?**

	Phase 2		Phase 3*		Comparison	
	Boys %	Girls %	Boys %	Girls %	Boys %	Girls %
Very important	69	72	71	76	64	67
Important	26	22	24	23	33	31
Not important	2	2	3	<1	3	2
No response	4	5	1	1	-	-

- Items in bold show a statistically significant difference between genders.

Table 92 **How much do you like doing exercise?**

	Phase 2		Phase 3		Comparison	
	Boys %	Girls %	Boys %	Girls %	Boys %	Girls %
A lot	77	73	66	74	70	71
A bit	15	20	22	19	18	23
Middle	5	4	5	4	8	4
Not much	2	1	3	2	2	1
Not much at all	1	1	2	<1	2	-
No response	1	1	1	<1	-	1

Sunsmart

Table 93 **Students' sunsmart practices at school**

When you are outside in summer at school do you:	Phase 2		Phase 3		Comparison	
	Boys %	Girls %	Boys %	Girls %	Boys %	Girls %
Wear clothes that protect you from the sun?						
Most of the time	28	29	32	40⁺	24	43^{**}
Sometimes	47	51	48	47	46	43
Hardly ever	17	14	18	12	29	14
No response	8	7	2	1	1	-
Wear a sunhat?						
Most of the time	34	25⁺	40	40	36	43
Sometimes	35	42	37	42	32	33
Hardly ever	24	27	20	17	31	23
No response	7	7	2	1	2	1
Wear sunscreen?						
Most of the time	12	24^{***}	15	20[*]	14	33^{***}
Sometimes	30	36	30	37	18	45
Hardly ever	50	32	52	41	65	22
No response	9	7	3	2	2	-
Stay out of the sun in the middle of the day?						
Most of the time	15	13	23	18	13	20⁺
Sometimes	45	51	49	50	41	56
Hardly ever	32	30	25	31	42	24
No response	8	6	3	1	3	-
Get sunburnt?						
Most of the time	8	8	7	8	5	7
Sometimes	22	25	23	24	24	27
Hardly ever	62	61	68	67	70	66
No response	8	6	2	1	1	-

- Items in bold show a statistically significant difference between genders.

Table 94 **Students' sunsmart practices at home**

When you are outside in summer at home do you:	Phase 2		Phase 3		Comparison	
	Boys %	Girls %	Boys %	Girls %	Boys %	Girls %
Wear clothes that protect you from the sun?						
Most of the time	30	28	32	36*	30	32
Sometimes	41	46	41	47	41	52
Hardly ever	21	18	24	15	28	15
No response	8	8	3	2	1	1
Wear a sunhat?						
Most of the time	17	15	21	19**	24	21
Sometimes	35	34	36	48	31	44
Hardly ever	38	42	40	30	44	34
No response	9	9	4	2	1	1
Wear sunscreen?						
Most of the time	15	26***	17	26***	16	34***
Sometimes	26	34	32	44	33	47
Hardly ever	51	32	47	29	49	18
No response	8	8	4	1	2	1
Stay out of the sun in the middle of the day?						
Most of the time	17	17	23	22	19	24
Sometimes	42	42	50	47	47	53
Hardly ever	32	33	24	30	33	23
No response	9	8	2	1	1	-
Get sunburnt?						
Most of the time	10	9	6	7	9	11
Sometimes	26	29	26	29	28	32
Hardly ever	57	55	65	62	63	57
No response	7	7	3	1	1	-

- Items in bold show a statistically significant difference between genders.

Table 95 **Students' family sunsmart practices**

When they are outside in summer do the people in your family:	Phase 2		Phase 3		Comparison	
	Boys %	Girls %	Boys %	Girls %	Boys %	Girls %
Wear clothes that protect them from the sun?						
Most of the time	37	35	37	47	36	42
Sometimes	40	46	47	42	41	44
Hardly ever	14	13	11	11	21	11
No response	10	7	4	1	2	3
Wear sunhats?						
Most of the time	26	21	29	35	29	26
Sometimes	44	51	48	46	37	49
Hardly ever	23	21	20	17	33	24
No response	7	7	3	2	2	1
Wear sunscreen?						
Most of the time	24	30*	23	35**	25	41*
Sometimes	37	42	43	38	38	36
Hardly ever	31	22	30	26	35	22
No response	9	7	4	2	2	1

- Items in bold show a statistically significant difference between genders.

Table 96 **How important is it that you wear a sunhat, sunscreen, and clothes in the sun?**

	Phase 2*		Phase 3**		Comparison**	
	Boys %	Girls %	Boys %	Girls %	Boys %	Girls %
Very important	63	71	62	74	40	64
Important	26	20	28	22	50	34
Not important	6	3	9	3	10	2
No response	4	5	1	1	-	-

- Items in bold show a statistically significant difference between genders.

Table 97 **How much do you like sun bathing?**

	Phase 2		Phase 3		Comparison	
	Boys %	Girls %	Boys %	Girls %	Boys %	Girls %
A lot	16	14	15	12	17	21
A bit	18	21	16	18	14	14
Middle	17	15	18	19	15	18
Not much	18	16	20	22	26	29
Not much at all	30	32	30	28	26	18
No response	2	3	1	1	1	-

Table 98 Which hat BEST protects you from the sun?

	Phase 2		Phase 3		Comparison	
	Boys %	Girls %	Boys %	Girls %	Boys %	Girls %
cap	12	14	21	21	13	8
hat with brim	81	77	76	77	83	89
beanie	-	-	1	-	1	-
visor	3	3	3	2	-	2
No response	4	6	1	-	4	1

Table 99 Which shirt BEST protects you from the sun?

	Phase 2***		Phase 3**		Comparison	
	Boys %	Girls %	Boys %	Girls %	Boys %	Girls %
tee-shirt	32	41	35	48	33	36
sleeveless tee	5	5	5	3	4	2
vest	17	8	14	7	7	2
long-sleeved shirt	41	40	45	41	52	56
No response	5	6	1	<1	5	4

- Items in bold show a statistically significant difference between genders.

Table 100 Which cream BEST protects you from the sun?

	Phase 2**		Phase 3 ⁺		Comparison	
	Boys %	Girls %	Boys %	Girls %	Boys %	Girls %
body lotion	9	4	9	4	2	2
factor 15 sunscreen	6	7	8	7	3	2
factor 30 sunscreen	79	83	80	89	91	94
body glitter	1	1	1	<1	2	1
No response	4	6	2	-	2	1

- Items in bold show a statistically significant difference between genders.

Table 101 Mean sunsmart knowledge (Maximum=3)

Student group	Year 6 students	
	Boys Mean (confidence interval)	Girls Mean (confidence interval)
Phase 2	2.00 (1.91,2.09)	2.00 (1.91,2.09)
Phase 3	2.00 (1.90,2.10)	2.07 (1.97,2.17)
Comparison	2.26 (2.09,2.43)	2.39 (2.25,2.53)

Smokefree

Table 102 **Students' smokefree behaviours**

	Boys			Girls		
	Yes %	No %	No response %	Yes %	No %	No response %
Tried smoking						
Phase 2**	19	78	3	12	85	3
Phase 3**	18	80	2	10	89	<1
Comparison	15	84	1	7	92	1
Smokes more than one cigarette a week						
Phase 2	2	95	3	1	96	3
Phase 3	3	93	4	1	98	1
Comparison	2	97	1	1	98	1

- Items in bold show a statistically significant difference between genders.

Table 103 **Do any of the people you live with smoke?**

Do any of the people you live with smoke?	Phase 2		Phase 3		Comparison**	
	Boys	Girls	Boys	Girls	Boys	Girls
	%	%	%	%	%	%
No	27	30	32	31	25	33
Yes – outside the house	49	54	53	58	53	61
Yes – inside the house	18	13	12	11	20	5
No response	5	4	3	<1	2	1

- Items in bold show a statistically significant difference between genders.

Table 104 **How important is it that people around you do not smoke?**

	Phase 2**		Phase 3*		Comparison*	
	Boys %	Girls %	Boys %	Girls %	Boys %	Girls %
Very important	63	73	70	76	54	74
Important	12	7	9	11	22	13
Not important	22	15	20	11	23	13
No response	4	5	1	2	1	-

- Items in bold show a statistically significant difference between genders.

Table 105 **How much do you like it when the people around you smoke?**

	Phase 2		Phase 3**		Comparison ⁺	
	Boys %	Girls %	Boys %	Girls %	Boys %	Girls %
A lot	1	2	4	<1	2	1
A bit	2	3	2	1	2	-
Middle	5	2	3	1	15	9
Not much	10	11	13	11	23	13
Not much at all	80	80	77	87	58	77
No response	2	2	1	1	-	-

- Items in bold show a statistically significant difference between genders.

3.2 Student food choices by gender

Table 106 Student food choices overall

Key food type	Phase 2		Phase 3		Comparison	
	Boys %	Girls %	Boys %	Girls %	Boys %	Girls %
Vegetables and fruit	68	85***	71	85***	71	83
Fruit only	59	77***	65	76***	61	77
Vegetables only	27	41**	29	47***	37	49
Chips and chippies	65	69	48	64***	57	64
Fizzy drinks	42	43	37	28**	25	30
Sweets and treats	19	33***	19	27	26	27
Muesli bars/plain biscuits	34	41	20	37***	45	56
Cakes and puddings	23	41***	32	42⁺	23	27
Takeaways	35	36	30	25	19	19
Protein	64	67⁺	75	77	66	70
Grains & cereals	89	93	91	95	93	97
Dairy	39	49**	33	51***	47	63

- Items in bold show a statistically significant difference between genders.

Table 107 Student food choices at school

Key food type	Phase 2		Phase 3		Comparison	
	Boys %	Girls %	Boys %	Girls %	Boys %	Girls %
Vegetables and fruit	54	69***	59	74***	55	65
Fruit only	52	66**	58	70***	52	64
Vegetables only	5	10⁺	6	14**	5	4
Chips and chippies	52	58*	35	50**	43	51
Fizzy drinks	9	9	7	3*	1	3
Sweets and treats	8	17***	10	12	12	7
Muesli bars/plain biscuits	29	29	15	29***	37	44
Cakes and puddings	12	22**	17	23	14	17
Takeaways	12	12	12	8	7	4
Protein	13	22**	25	31	21	29
Grains & cereals	57	61	68	68	62	70
Dairy	8	14**	13	19	19	25

- Items in bold show a statistically significant difference between genders.

Table 108 **Student food choices at home**

Key food type	Phase 2		Phase 3		Comparison	
	Boys %	Girls %	Boys %	Girls %	Boys %	Girls %
Vegetables and fruit	35	55***	38	59***	52	65
Fruit only	18	34***	18	33***	28	40
Vegetables only	24	35**	25	41**	35	48
Chips and chippies	32	32	21	34**	32	30
Fizzy drinks	39	41	34	28	25	28
Sweets and treats	14	19⁺	11	17	17	20
Muesli bars/plain biscuits	10	18**	6	13*	21	26
Cakes and puddings	13	26***	19	27	11	14
Takeaways	28	29	20	18	13	17
Protein	58	59	66	70	58	58
Grains & cereals	80	86	86	90	90	93
Dairy	35	44⁺	26	41**	38	50

- Items in bold show a statistically significant difference between genders.

Table 109 **Mean amount of each food consumed overall**

Key food type	Phase 2		Phase 3		Comparison	
	Boys	Girls	Boys	Girls	Boys	Girls
	Mean number of times eaten (confidence interval)	Mean number of times eaten (confidence interval)	Mean number of times eaten (confidence interval)	Mean number of times eaten (confidence interval)	Mean number of times eaten (confidence interval)	Mean number of times eaten (confidence interval)
Vegetables and fruit	1.49 (1.24, 1.72)	2.38 (2.07, 2.68)***	1.61 (1.35, 1.89)	2.77 (2.46, 3.06)***	1.97 (1.73, 2.21)	2.62 (2.00, 3.24)+
Fruit only	1.05 (0.86, 1.24)	1.66 (1.40, 1.92)***	1.15 (0.95, 1.34)	1.78 (1.53, 2.03)***	1.31(1.08, 1.53)	1.71 (1.28, 2.14)
Vegetables only	0.43 (0.32, 0.55)	0.72 (0.56, 0.88)***	0.47 (0.32, 0.63)	0.98 (0.80, 1.16)***	0.66 (0.42, 0.90)	0.91 (0.66, 1.16)
Chips and chippies	1.09 (0.94, 1.24)	1.25 (1.06, 1.42)	0.73 (0.62, 0.85)	1.10 (0.92, 1.30)***	0.84 (0.67, 1.00)	0.96 (0.72, 1.20)
Fizzy drinks	0.70 (0.55, 0.85)	0.68 (0.54, 0.83)	0.52 (0.44, 0.61)	0.41 (0.30, 0.52)	0.42 (0.32, 0.53)	0.44 (0.37, 0.51)
Sweets and treats	0.25 (0.20, 0.32)	0.49 (0.34, 0.63)***	0.26 (0.19, 0.33)	0.38 (0.25, 0.52)+	0.36 (0.21, 0.50)	0.31 (0.26, 0.36)
Muesli bars/plain biscuits	0.48 (0.38, 0.60)	0.64 (0.45, 0.82)*	0.28 (0.18, 0.36)	0.52 (0.39, 0.65)***	0.79 (0.61, 0.97)	1.07 (0.79, 1.35)
Cakes and puddings	0.29 (0.20, 0.34)	0.60 (0.44, 0.75)***	0.45 (0.40, 0.55)	0.69 (0.55, 0.84)**	0.28 (0.16, 0.40)	0.35 (0.25, 0.45)
Takeaways	0.50 (0.37, 0.63)	0.50 (0.39, 0.63)	0.38 (0.32, 0.45)	0.30 (0.21, 0.39)	0.25 (0.14, 0.36)	0.24 (0.18, 0.30)
Protein	0.96 (0.88, 1.04)	1.16 (1.05, 1.29)**	1.33 (1.08, 1.57)	1.49 (1.27, 1.67)	1.02 (0.82, 1.22)	1.01 (0.75, 1.27)
Grains & cereals	2.12 (1.95, 2.27)	2.44 (2.22, 2.67)**	2.50 (2.25, 2.76)	2.73 (2.39, 3.03)	2.30 (2.04, 2.56)	2.52 (2.32, 2.72)
Dairy	0.49 (0.40, 0.58)	0.71 (0.60, 0.81)***	0.46 (0.32, 0.61)	0.72 (0.61, 0.83)***	0.66 (0.46, 0.86)	0.80 (0.67, 0.93)

- Items in bold show a statistically significant difference between genders.

Table 110 Mean amount of each food consumed at school

Key food type	Phase 2		Phase 3		Comparison	
	Boys	Girls	Boys	Girls	Boys	Girls
	Mean number of times eaten (confidence interval)	Mean number of times eaten (confidence interval)	Mean number of times eaten (confidence interval)	Mean number of times eaten (confidence interval)	Mean number of times eaten (confidence interval)	Mean number of times eaten (confidence interval)
Vegetables and fruit	0.86 (0.69, 1.01)	1.24 (1.05, 1.44)***	0.94 (0.76, 1.15)	1.48 (1.28, 1.66)***	0.99 (0.84, 1.14)	1.18 (0.79, 1.57)
Fruit only	0.79 (0.65, 0.92)	1.12 (0.95, 1.30)***	0.88 (0.70, 1.07)	1.26 (1.06, 1.45)***	0.93 (0.78, 1.08)	1.13 (0.78, 1.48)
Vegetables only	0.07 (0.03, 0.11)	0.12 (0.06, 0.19)	0.07 (0.04, 0.10)	0.22 (0.15, 0.28)***	0.06 (0.01, 0.11)	0.05 (0.01, 0.09)
Chips and chippies	0.68 (0.58, 0.77)	0.83 (0.70, 0.95)**	0.46 (0.36, 0.58)	0.68 (0.55, 0.83)***	0.49 (0.35, 0.63)	0.61 (0.49, 0.73)
Fizzy drinks	0.10 (0.05, 0.15)	0.11 (0.06, 0.18)	0.07 (0.03, 0.10)	0.05 (0.01, 0.08)	0.01 (-0.01, 0.03)	0.06 (-0.01, 0.13)
Sweets and treats	0.10 (0.06, 0.14)	0.23 (0.12, 0.31)***	0.13 (0.08, 0.18)	0.17 (0.11, 0.27)	0.15 (0.07, 0.23)	0.08 (0.02, 0.14)
Muesli bars/plain biscuits	0.37 (0.27, 0.48)	0.41 (0.30, 0.54)	0.20 (0.12, 0.26)	0.35 (0.25, 0.45)***	0.50 (0.36, 0.64)	0.68 (0.56, 0.80)
Cakes and puddings	0.14 (0.09, 0.18)	0.28 (0.20, 0.35)***	0.21 (0.16, 0.28)	0.30 (0.21, 0.40)	0.14 (0.06, 0.23)	0.18 (0.09, 0.27)
Takeaways	0.14 (0.09, 0.19)	0.15 (0.09, 0.21)	0.15 (0.09, 0.21)	0.09 (0.05, 0.13)	0.08 (0.01, 0.14)	0.04 (0.01, 0.07)
Protein	0.17 (0.13, 0.22)	0.25 (0.20, 0.32)+	0.33 (0.23, 0.43)	0.40 (0.26, 0.52)	0.25 (0.20, 0.30)	0.32 (0.09, 0.55)
Grains & cereals	0.74 (0.66, 0.82)	0.82 (0.70, 0.94)	0.90 (0.78, 1.03)	0.90 (0.74, 1.06)	0.81 (0.71, 0.90)	0.81 (0.75, 0.87)
Dairy	0.08 (0.05, 0.12)	0.16 (0.12, 0.22)**	0.16 (0.11, 0.20)	0.24 (0.17, 0.31)+	0.22 (0.12, 0.33)	0.26 (0.12, 0.40)

- Items in bold show a statistically significant difference between genders.

Table 111 Mean amount of each food consumed at home

Key food type	Phase 2		Phase 3		Comparison	
	Boys	Girls	Boys	Girls	Boys	Girls
	Mean number of times eaten (confidence interval)	Mean number of times eaten (confidence interval)	Mean number of times eaten (confidence interval)	Mean number of times eaten (confidence interval)	Mean number of times eaten (confidence interval)	Mean number of times eaten (confidence interval)
Vegetables and fruit	0.63 (0.49, 0.77)	1.13 (0.94, 1.32)***	0.67 (0.48, 0.84)	1.29 (1.09, 1.49)***	0.98 (0.76, 1.20)	1.44 (1.07, 1.81)*
Fruit only	0.26 (0.17, 0.36)	0.53 (0.42, 0.65)***	0.26 (0.19, 0.33)	0.53 (0.41, 0.64)***	0.38 (0.25, 0.50)	0.58 (0.44, 0.72)
Vegetables only	0.37 (0.27, 0.46)	0.60 (0.46, 0.73)***	0.40 (0.27, 0.54)	0.76 (0.60, 0.93)***	0.61 (0.35, 0.86)	0.86 (0.62, 1.10)
Chips and chippies	0.41 (0.34, 0.49)	0.42 (0.33, 0.50)	0.27 (0.17, 0.36)	0.42 (0.33, 0.51)**	0.35 (0.27, 0.42)	0.35 (0.21, 0.49)
Fizzy drinks	0.59 (0.47, 0.72)	0.56 (0.46, 0.68)	0.46 (0.38, 0.53)	0.37 (0.26, 0.46)	0.41 (0.31, 0.52)	0.38 (0.35, 0.41)
Sweets and treats	0.16 (0.12, 0.20)	0.27 (0.19, 0.35)**	0.13 (0.08, 0.18)	0.21 (0.12, 0.29)+	0.20 (0.11, 0.30)	0.23 (0.17, 0.29)
Muesli bars/plain biscuits	0.11 (0.08, 0.15)	0.22 (0.15, 0.29)***	0.08 (0.03, 0.12)	0.16 (0.12, 0.22)*	0.29 (0.21, 0.37)	0.39 (0.21, 0.57)
Cakes and puddings	0.15 (0.09, 0.18)	0.33 (0.23, 0.42)***	0.26 (0.19, 0.32)	0.39 (0.27, 0.51)**	0.13 (0.08, 0.19)	0.17 (0.10, 0.24)
Takeaways	0.36 (0.26, 0.46)	0.35 (0.28, 0.44)	0.23 (0.18, 0.28)	0.22 (0.14, 0.29)	0.17 (0.12, 0.23)	0.20 (0.15, 0.25)
Protein	0.79 (0.71, 0.87)	0.91 (0.83, 0.99)	1.00 (0.81, 1.18)	1.09 (0.96, 1.20)	0.77 (0.56, 0.98)	0.69 (0.59, 0.79)
Grains & cereals	1.38 (1.26, 1.48)	1.62 (1.44, 1.80)**	1.59 (1.43, 1.78)	1.83 (1.60, 2.03)+	1.49 (1.29, 1.69)	1.71 (1.52, 1.90)
Dairy	0.41 (0.33, 0.48)	0.54 (0.46, 0.62)**	0.30 (0.21, 0.41)	0.47 (0.41, 0.54)***	0.44 (0.33, 0.55)	0.54 (0.47, 0.61)

- Items in bold show a statistically significant difference between genders.

3.3 Student data by ethnicity

This section of the technical report shows an analysis of the end of 2008 student data by ethnicity. Students could self-select to be more than one ethnicity. Therefore significant differences are shown between the group of interest and all other students. For example, we can show a significant difference between Pasifika students and all other students, but not between Pasifika students and NZ European students. All student data is reported as a percentage of these numbers:

Table 112 **Student numbers by ethnicity**

Group	Māori students	All other students	Pasifika students	All other students	NZ European students	All other students
	N	N	N	N	N	N
Phase 2	429	361	335	455	146	644
Phase 3	218	382	279	321	134	466
Comparison	82	123	25	180	116	89

Student learning and liking of school

Table 113 **Student views on coverage of the health priority areas: Phase 2**

How much did you learn about:	Healthy eating %	Physical activity %	Sunsmart %	Smokefree %
Māori				
A lot	79	67	62	36
Some things	18	27	30	28
Nothing	1	4	7	34
No response	2	2	2	3
Pasifika				
A lot	82	64	64	37
Some things	14	29	27	22
Nothing	1	6	7	39
No response	2	2	2	3
NZ European (NZE)				
A lot	77	59	55	31
Some things	18	34	36	29
Nothing	3	5	7	38
No response	2	2	2	2

Table 114 **Student views on coverage of the health priority areas: Phase 3**

How much did you learn about:	Healthy eating %	Physical activity %	Sunsmart %	Smokefree %
Māori				
A lot	78	62	56	42
Some things	20	31	39	29
Nothing	1	6	4	27
No response	1	<1	1	1
Pasifika				
A lot	86⁺	60	57	46
Some things	11	33	34	25
Nothing	2	6	8	27
No response	1	1	1	1
NZ European (NZE)				
A lot	81	69	54	46
Some things	18	27	38	32
Nothing	1	4	6	21
No response	-	-	1	1

- Items in bold show a statistically significant difference between an ethnic group and all other students.

Table 115 **Student views on coverage of the health priority areas: Comparison**

How much did you learn about:	Healthy eating %	Physical activity %	Sunsmart %	Smokefree %
Māori				
A lot	73	54	39	27
Some things	17	41	46	30
Nothing	7	4	12	40
No response	2	1	2	2
Pasifika				
A lot	76	52	44	20
Some things	24	48	52	20
Nothing	-	-	4	60
No response	-	-	-	-
NZ European (NZE)				
A lot	65	55	38*	33
Some things	28	37	38	33
Nothing	5	7	23	34
No response	2	1	1	1

- Items in bold show a statistically significant difference between an ethnic group and all other students.

Table 116 **Student views on their input into school health activities/decisions: Phase 2**

How often do these things happen at school?	A lot %	Sometimes %	Never %	No response %
Māori				
I learn about making healthy choices	61	29	3	7
We work together to make our school healthier	58	26	9	7
We work together to make our community healthier**	46	30	16	7
We set goals for ourselves about our health	48	35	9	7
I help make decisions about things to do with health	42	40	12	7
I help lead things to do with health	33	34	26	7
Pasifika				
I learn about making healthy choices	67	27	3	2
We work together to make our school healthier	64	25	7	3
We work together to make our community healthier	49	35	12	4
We set goals for ourselves about our health	50	36	11	3
I help make decisions about things to do with health	45	40	10	4
I help lead things to do with health	34	39	24	3
NZE				
I learn about making healthy choices	64	32	3	2
We work together to make our school healthier	55	31	11	3
We work together to make our community healthier⁺	40	39	18	3
We set goals for ourselves about our health**	38	43	16	2
I help make decisions about things to do with health[*]	35	46	17	2
I help lead things to do with health⁺	25	42	30	3

- Items in bold show a statistically significant difference between an ethnic group and all other students.

Table 117 **Student views on their input into school health activities/decisions: Phase 3**

How often do these things happen at school?	A lot	Sometimes	Never	No response
	%	%	%	%
Māori				
I learn about making healthy choices	66	31	3	-
We work together to make our school healthier	60	30	9	<1
We work together to make our community healthier	54	33	13	1
We set goals for ourselves about our health	53	40	6	1
I help make decisions about things to do with health	50	39	11	<1
I help lead things to do with health	36	43	20	1
Pasifika				
I learn about making healthy choices	68	28	3	<1
We work together to make our school healthier	63	29	8	<1
We work together to make our community healthier⁺	54	36	9	1
We set goals for ourselves about our health⁺	59	32	8	<1
I help make decisions about things to do with health	45	44	10	1
I help lead things to do with health	38	42	20	<1
NZE				
I learn about making healthy choices	73	25	2	-
We work together to make our school healthier	57	36	7	1
We work together to make our community healthier	52	38	10	-
We set goals for ourselves about our health	50	43	7	-
I help make decisions about things to do with health	47	40	13	-
I help lead things to do with health	38	40	22	-

- Items in bold show a statistically significant difference between an ethnic group and all other students.

Table 118 **Student views on their input into school health activities/decisions:**
Comparison

How often do these things happen at school?	A lot %	Sometimes %	Never %	No response %
Māori				
I learn about making healthy choices	49	45	5	1
We work together to make our school healthier	32	46	20	2
We work together to make our community healthier	34	32	33	1
We set goals for ourselves about our health	38	39	22	1
I help make decisions about things to do with health	30	44	23	2
I help lead things to do with health	18	40	40	1
Pasifika				
I learn about making healthy choices	48	48	4	-
We work together to make our school healthier	44	48	8	-
We work together to make our community healthier	28	48	24	-
We set goals for ourselves about our health	40	44	16	-
I help make decisions about things to do with health**	48	52	-	-
I help lead things to do with health	16	48	32	4
NZE				
I learn about making healthy choices	44	49	5	2
We work together to make our school healthier	41	41	15	3
We work together to make our community healthier	28	43	27	2
We set goals for ourselves about our health	26	50	21	2
I help make decisions about things to do with health	33	46	20	2
I help lead things to do with health	21	44	33	3

- Items in bold show a statistically significant difference between an ethnic group and all other students.

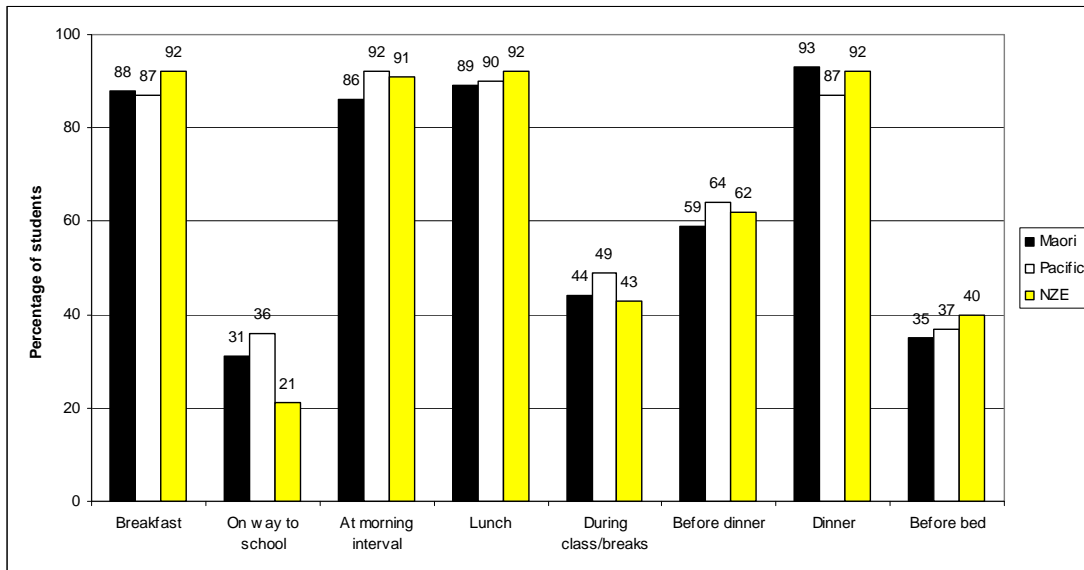
Table 119 **How much do you like being at school?**

	Phase 2			Phase 3			Comparison		
	Māori %	Pasifika %	NZE %	Māori %	Pasifika %	NZE %	Māori %	Pasifika %	NZE %
A lot	49***	70***	40***	59	66*	50*	20	40	29
A bit	28	16	31	23	21	25	35	28	27
Middle	8	4	13	9	6	12	16	12	16
Not much	6	4	7	4	3	8	13	4	14
Not much at all	6	4	6	5	3	4	15	16	13
No response	3	2	3	<1	1	-	1	-	2

- Items in bold show a statistically significant difference between an ethnic group and all other students.

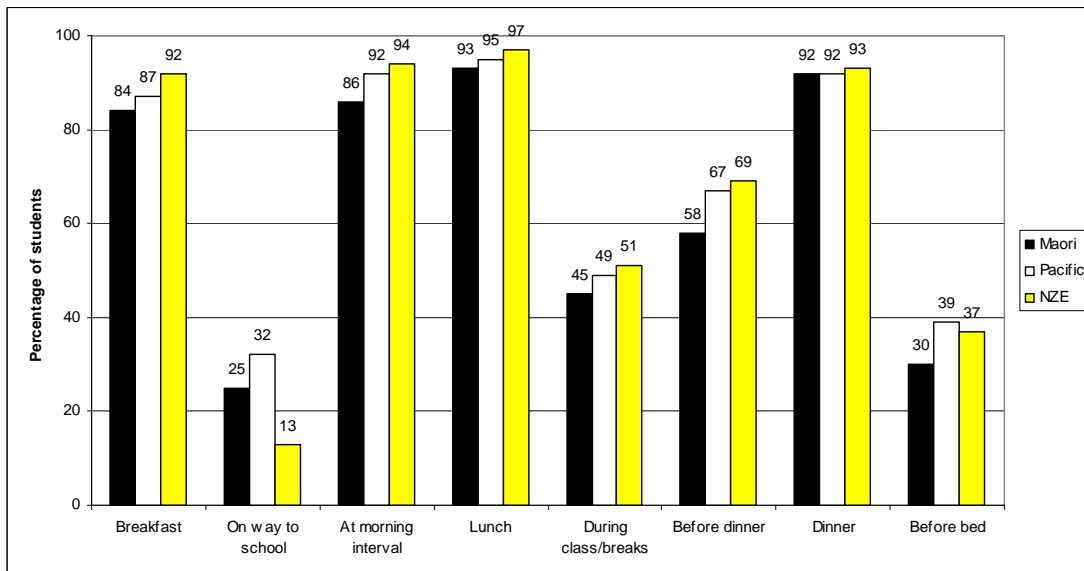
Healthy eating

Figure 7 **Phase 2 students' eating times by ethnicity**



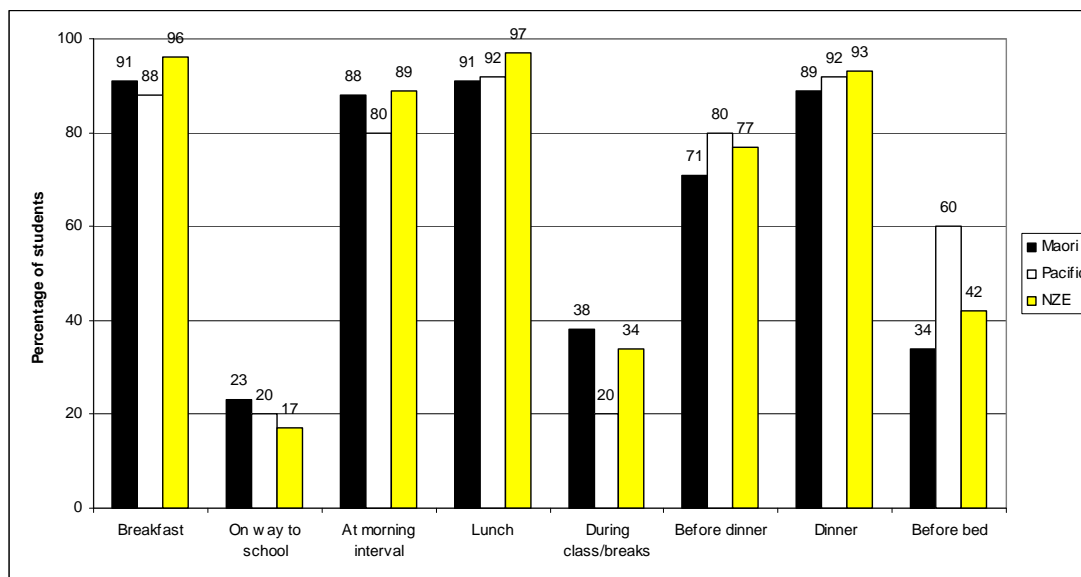
- 'At morning interval**' and 'Dinner***' are statistically significantly different between Māori students and all other students.
- 'On way to school', 'At morning interval+' and 'Dinner***' are statistically significantly different between Pasifika students and all other students.
- 'On way to school***' is statistically significantly different between NZE students and all other students.

Figure 8 **Phase 3 students' eating times by ethnicity**



- 'Breakfast+' and 'Before bed+' are statistically significantly different between Māori students and all other students.
- 'On way to school***' and 'Before dinner+' are statistically significantly different between Pasifika students and all other students.
- 'On way to school***' is statistically significantly different between NZE students and all other students.

Figure 9 Comparison students' eating times by ethnicity



- 'On way to school'⁺ is statistically significantly different between Māori students and all other students.
- 'Before bed'⁺ is statistically significantly different between Pasifika students and all other students.

Table 120 Lunch behaviours

	Phase 2			Phase 3			Comparison		
	Māori %	Pasifika %	NZE %	Māori %	Pasifika %	NZE %	Māori %	Pasifika %	NZE %
Lunch from home	61**	49***	72***	59	56*	66	73	64***	84
Buy/given lunch at school	13	16	12	19	17	14	13	4	11
Buy lunch at dairy/shop	16	25	9	14	22	17	5	24	3
Didn't have lunch	8	7	5	6	4	2	6	8	2
No response	3	3	2	2	1	1	2	-	1

- Items in bold show a statistically significant difference between an ethnic group and all other students.

Table 121 How important is it that you eat vegetables and fruit every day?

	Phase 2			Phase 3			Comparison		
	Māori %	Pasifika %	NZE %	Māori %	Pasifika %	NZE %	Māori %	Pasifika %	NZE %
Very important	66	70	67	76	77	77	72	72	72
Important	24	26	28	22	19	21	23	24	22
Not important	3	1	3	1	3	1	5	-	5
No response	7	2	2	1	1	1	-	4	-

Table 122 **How much do you like eating vegetables?**

	Phase 2			Phase 3			Comparison		
	Māori %	Pasifika %	NZE %	Māori %	Pasifika %	NZE %	Māori %	Pasifika %	NZE %
A lot	39	37	33	41	42	40	28	40	36
A bit	32	34	32	34	38	36	33	40	37
Middle	13	16	18	11	10	13	20	12	11
Not much	9	7	10	8	6	9	10	4	9
Not much at all	7	6	6	6	3	2	9	4	6
No response	1	1	1	-	1	-	1	-	-

Table 123 **How much do you like eating fruit?**

	Phase 2			Phase 3			Comparison		
	Māori %	Pasifika %	NZE %	Māori %	Pasifika %	NZE %	Māori %	Pasifika %	NZE %
A lot	79	81	67**	78	87***	70	65	84	62
A bit	14	12	21	15	8	21	26	16	24
Middle	4	4	8	5	3	4	6	-	11
Not much	2	1	2	1	1	2	2	-	2
Not much at all	<1	1	-	<1	1	1	-	-	1
No response	1	1	1	<1	1	1	1	-	-

- Items in bold show a statistically significant difference between an ethnic group and all other students.

Table 124 **How much do you like getting fruit to eat at school?**

	Phase 2			Phase 3		
	Māori %	Pasifika %	NZE %	Māori %	Pasifika %	NZE %
A lot	76	78	71	79⁺	76⁺	71
A bit	14	12	16	10	16	19
Middle	3	2	6	5	1	5
Not much	2	2	4	2	2	3
Not much at all	<1	<1	1	1	<1	1
No response	5	5	3	3	4	1

- Items in bold show a statistically significant difference between an ethnic group and all other students.

Table 125 Which food is the most healthy?

	Phase 2			Phase 3			Comparison		
	Māori %	Pasifika %	NZE %	Māori %	Pasifika %	NZE %	Māori %	Pasifika %	NZE %
Fizzy drink	5⁺	2⁺	-**	2	1	1	2	-	5⁺
Water or milk	87	90	95	95	93	96	95	100	95
No response	8	8	5	3	5	3	2	-	-
Egg sandwich	78	74⁺	87⁺	88	82	87	90	92	95
Sausage roll	8	11	4	6	8	9	6	4	3
No response	14	15	9	6	10	4	4	4	2
Fruit	87**	91	97**	94	91	96	95	100	94
Ice-cream	6	3	-	4	4	2	2	-	5
No response	7	7	3	2	5	2	2	-	1
Chocolate biscuit	4	3	-**	1	3	2	2	-	4
Banana	87	88	97	95	89	94	95	100	95
No response	9	9	3	4	8	4	2	-	1
Hot chips	7	5	3⁺	5	6	4	2	4	3
Boiled potato, kumara, or taro	81	81	90	89	84	91	89	96	92
No response	12	14	7	6	10	4	9	-	4
Carrot sticks	81	81	91**	94**	84	94	88	100	92
Potato chippies	9	6	1	2	6	3	7	-	6
No response	10	13	8	4	10	3	5	-	2
Fried chicken	24**	16**	18	22	27	26	15	12	16
Grilled chicken	61	67	73	70	61	69	77	88	79
No response	15	17	9	8	13	5	9	-	4
Apple	80**	85	88	90	84	92	80	92	87
Fruit pie	9	5	4	4	6	4	11	4	11
No response	11	10	8	6	10	4	8	4	2
Sausage	14	11	10	8*	15**	12	7	12	11
Baked fish or kaimoana	72	71	80	88	72	84	88	88	87
No response	14	18	10	5	13	4	5	-	2

- Items in bold show a statistically significant difference between an ethnic group and all other students.

Table 126 **Mean healthy eating knowledge scores (Maximum=9)**

Student group	Year 6 students		
	Māori Mean (<i>confidence interval</i>)	Pasifika Mean (<i>confidence interval</i>)	NZE Mean (<i>confidence interval</i>)
Phase 2	7.14 (6.90,7.38)	7.28 (7.00,7.56)	7.99 (7.68,8.30)***
Phase 3	8.03 (7.79,8.27)***	7.39 (7.11,7.67)⁺	8.01 (7.72,8.30)*
Comparison	7.98 (7.58,8.38)	8.56 (8.24,8.88)	8.16 (7.85,8.47)

- Items in bold show a statistically significant difference between an ethnic group and all other students.

Table 127 **How many pieces of vegetables and fruit SHOULD you eat a day? (5+aDay)**

Student group	Māori % selecting 5–8 (% selecting 5)	Pasifika % selecting 5–8 (% selecting 5)	NZE % selecting 5–8 (% selecting 5)
Phase 2	78 (65)	82 (70)	88 (71)*
Phase 3	83 (72)	80 (65)	84 (74)
Comparison	77 (67)	72 (56)	80 (64)

- Items in bold show a statistically significant difference between an ethnic group and all other students.

Physical activity

Table 128 **Mean engagement in mild to moderate physical activity (Maximum=8)**

Student group	Year 6 students		
	Māori Mean (<i>confidence interval</i>)	Pasifika Mean (<i>confidence interval</i>)	NZE Mean (<i>confidence interval</i>)
Phase 2	4.87 (4.72,5.02)	4.86 (4.69,5.03)	4.53 (4.25,4.81)+
Phase 3	4.92 (4.70,5.14)**	4.58 (4.41,4.75)	4.85 (4.59,5.11)
Comparison	4.30 (3.92,4.68)	4.08 (3.41,4.75)	4.30 (4.00,4.60)

- Items in bold show a statistically significant difference between an ethnic group and all other students.

Table 129 **Mean amount of TV watching and computer gaming (Maximum=3)**

Student group	Year 6 students		
	Māori Mean (<i>confidence interval</i>)	Pasifika Mean (<i>confidence interval</i>)	NZE Mean (<i>confidence interval</i>)
Phase 2	2.09 (2.00,2.18)***	1.73 (1.62,1.84)***	1.97 (1.81,2.13)
Phase 3	1.89 (1.76,2.02)+	1.75 (1.63,1.87)	1.82 (1.66,1.98)
Comparison	1.83 (1.61,2.05)	1.76 (1.35,2.17)	1.79 (1.61,1.97)

- Items in bold show a statistically significant difference between an ethnic group and all other students.

Table 130 **At home do you do exercise or active things with your family at the weekend?**

	Phase 2			Phase 3			Comparison		
	Māori %	Pasifika %	NZE %	Māori %	Pasifika %	NZE %	Māori %	Pasifika %	NZE %
Yes	81	81	82	84	83	84	72⁺	88	85[*]
No	11	13	14	11	12	13	22	12	10
No response	8	5	4	5	5	3	6	-	4

Table 131 **At home did you do exercise or active things with your family last weekend?**

	Phase 2			Phase 3			Comparison		
	Māori %	Pasifika %	NZE %	Māori %	Pasifika %	NZE %	Māori %	Pasifika %	NZE %
Yes	73	66^{**}	75	73	67	77	71	84	77
No	18	25	15	22	24	19	23	8	15
No response	9	9	10	5	9	4	6	8	9

Table 132 **At home do you do exercise or active things with your family during the week?**

	Phase 2			Phase 3			Comparison		
	Māori %	Pasifika %	NZE %	Māori %	Pasifika %	NZE %	Māori %	Pasifika %	NZE %
Yes	73	70	73	69	76⁺	71	68	52⁺	72
No	20	20	23	26	18	24	27	48	24
No response	7	10	4	5	6	5	5	-	4

- Items in bold show a statistically significant difference between an ethnic group and all other students.

Table 133 **Did you watch TV yesterday morning?**

	Phase 2			Phase 3			Comparison		
	Māori %	Pasifika %	NZE %	Māori %	Pasifika %	NZE %	Māori %	Pasifika %	NZE %
Yes	69^{***}	58^{**}	65	62⁺	54	56	59	56	56
No	27	39	34	37	42	43	40	40	44
No response	4	3	1	1	4	1	1	4	-

- Items in bold show a statistically significant difference between an ethnic group and all other students.

Table 134 **How did you get to school yesterday morning?**

	Phase 2			Phase 3			Comparison		
	Māori %	Pasifika %	NZE %	Māori %	Pasifika %	NZE %	Māori %	Pasifika %	NZE %
walk	43^{***}	55^{***}	35^{***}	51^{***}	56^{***}	54	30	20	28⁺
cycle (or skateboard/scooter)	5	-	10	4	-	3	5	4	10
by bus	11	1	4	9	1	4	15	8	8
by car (or motorbike)	38	42	49	34	42	38	49	68	53
No response	3	2	3	1	1	1	1	-	1

- Items in bold show a statistically significant difference between an ethnic group and all other students.

Table 135 **In class-time at school yesterday, did you do active things like PE, dance, or kapa haka?**

	Phase 2			Phase 3			Comparison		
	Māori %	Pasifika %	NZE %	Māori %	Pasifika %	NZE %	Māori %	Pasifika %	NZE %
Yes	67	64	71	69***	49***	70**	65	80	52***
No	31	35	27	29	51	29	35	20	48
No response	2	1	1	2	1	1	-	-	-

- Items in bold show a statistically significant difference between an ethnic group and all other students.

Table 136 **What did you do at playtime yesterday morning?**

	Phase 2			Phase 3			Comparison		
	Māori %	Pasifika %	NZE %	Māori %	Pasifika %	NZE %	Māori %	Pasifika %	NZE %
sit around	7*	6	8	9*	5	4	2	8*	3
stand around	1	1	2	2	2	1	5	-	4
walk around	41	32	36	40	32	39	39	20	46
active things	49	58	52	46	60	54	52	69	47
No response	2	2	2	3	1	1	1	4	1

- Items in bold show a statistically significant difference between an ethnic group and all other students.

Table 137 **What did you do at lunchtime yesterday?**

	Phase 2			Phase 3			Comparison		
	Māori %	Pasifika %	NZE %	Māori %	Pasifika %	NZE %	Māori %	Pasifika %	NZE %
sit around	8*	6*	11	7	4*	9*	6	8	5
stand around	1	2	1	3	3	3	7	-	3
walk around	32	27	26	31	23	34	15	24	22
active things	51	63	58	56	69	54	71	64	68
No response	8	1	4	2	1	1	1	4	2

- Items in bold show a statistically significant difference between an ethnic group and all other students.

Table 138 **How did you get home after school yesterday?**

	Phase 2			Phase 3			Comparison		
	Māori %	Pasifika %	NZE %	Māori %	Pasifika %	NZE %	Māori %	Pasifika %	NZE %
Walk	52***	64***	45***	55***	58***	56	37	28	37
cycle (or skateboard/scooter)	6	-	11	4	-	4	5	4	9
by bus	13	1	10	12	2	7	13	4	9
by car (or motorbike)	28	33	31	27	39	31	41	60	44
No response	2	1	3	2	1	1	4	4	1

- Items in bold show a statistically significant difference between an ethnic group and all other students.

Table 139 What did you do after school yesterday?

	Phase 2			Phase 3			Comparison		
	Māori %	Pasifika %	NZE %	Māori %	Pasifika %	NZE %	Māori %	Pasifika %	NZE %
played outside	83***	72*	72	80***	65*	74	74	72	76
played inside	56*	48*	59	54	56	63	60	60	57
played sports at school, for a club, or with friends	41*	32*	32	43**	35	35	29	24	30
went to a dance group, gym, or kapa haka practice	17	18	7***	12	12	9	9	-	6
went to after-school care, music, or a youth group	10	13	10	11	14*	9	9	12	7
read or did homework	41	46	40	59	63	72**	54	60	60
watched TV	80***	70**	73	74	72	75	74	80	74
played computer games	60***	46***	59	52	48	51	50	40	49
helped with jobs	66	68	62	67	75*	71	56	72	60

- Items in bold show a statistically significant difference between an ethnic group and all other students.

Table 140 How important is it for you to exercise every day?

	Phase 2			Phase 3			Comparison		
	Māori %	Pasifika %	NZE %	Māori %	Pasifika %	NZE %	Māori %	Pasifika %	NZE %
Very important	68	74	68	80*	75	73	62	80	67
Important	23	24	29	19	22	27	34	16	32
Not important	2	1	1	1	2	-	4	4	1
No response	7	1	1	<1	1	-	-	-	-

- Items in bold show a statistically significant difference between an ethnic group and all other students.

Table 141 How much do you like doing exercise?

	Phase 2			Phase 3			Comparison		
	Māori %	Pasifika %	NZE %	Māori %	Pasifika %	NZE %	Māori %	Pasifika %	NZE %
A lot	76	80	60***	67	75	63*	68	76	73
A bit	17	13	28	22	18	25	22	16	21
Middle	4	4	7	6	3	8	7	4	3
Not much	1	1	2	4	3	2	1	4	2
Not much at all	1	1	2	1	1	-	-	-	2
No response	1	1	1	<1	1	1	1	-	-

- Items in bold show a statistically significant difference between an ethnic group and all other students.

Sunsmart

Table 142 **Students' sunsmart practices at school**

When you are outside in summer at school do you:	Phase 2			Phase 3			Comparison		
	Māori %	Pasifika %	NZE %	Māori %	Pasifika %	NZE %	Māori %	Pasifika %	NZE %
Wear clothes that protect you from the sun?									
Most of the time	27	29⁺	29	36	35	41	32	24	36
Sometimes	47	53	49	47	49	43	44	56	44
Hardly ever	17	12	18	16	14	14	23	20	19
No response	9	6	3	1	1	1	1	-	1
Wear a sunhat?									
Most of the time	28	28	39⁺	39	37*	43	43	16⁺	44
Sometimes	35	44	38	39	46	38	23	48	27
Hardly ever	28	23	20	21	15	16	32	36	28
No response	9	4	3	1	1	3	2	-	2
Wear sunscreen?									
Most of the time	18	16	18	19	13***	22⁺	20	24	28
Sometimes	29	38	29	36	29	38	34	20	30
Hardly ever	43	40	49	43	55	38	45	56	41
No response	10	6	4	2	3	2	1	-	1
Stay out of the sun in the middle of the day?									
Most of the time	14	15**	15	22	18	22	16	8	18
Sometimes	44	56	46	47	52	49	45	44	47
Hardly ever	32	25	35	29	27	27	37	48	32
No response	10	4	4	1	2	2	2	-	3
Get sunburnt?									
Most of the time	7	7	6	10	4**	10	2	4	9
Sometimes	23	24	21	28	20	23	29	20	27
Hardly ever	60	64	71	62	73	65	67	76	64
No response	10	4	3	<1	2	1	1	-	1

- Items in bold show a statistically significant difference between an ethnic group and all other students.

Table 143 **Students' sunsmart practices at home**

When you are outside in summer at home do you:	Phase 2			Phase 3			Comparison		
	Māori %	Pasifika %	NZE %	Māori %	Pasifika %	NZE %	Māori %	Pasifika %	NZE %
Wear clothes that protect you from the sun?									
Most of the time	29	28	33	35	32	40	24	36	32
Sometimes	42	45	43	45	44	43	51	48	44
Hardly ever	19	21	21	20	20	16	22	16	23
No response	10	6	3	1	3	2	2	-	1
Wear a sunhat?									
Most of the time	17	14	23	24	15**	24	21	16	25
Sometimes	34	37	32	38	46	40	41	36	36
Hardly ever	37	43	41	36	35	33	35	48	38
No response	11	7	4	2	4	3	2	-	1
Wear sunscreen?									
Most of the time	22	17*	23	22	16**	23	16*	16	33*
Sometimes	30	29	36	40	38	42	50	36	36
Hardly ever	38	47	37	36	45	32	32	48	30
No response	10	7	3	2	1	3	2	-	1
Stay out of the sun in the middle of the day?									
Most of the time	15	19	18	22	23	22	20	24	22
Sometimes	43	44	40	51	48	51	50	40	50
Hardly ever	31	32	39	26	28	25	29	36	27
No response	11	6	3	1	2	1	1	-	1
Get sunburnt?									
Most of the time	10	8	12	12***	3***	11***	6	12	11
Sometimes	28	27	29	30	25	37	35	20	31
Hardly ever	52	61	55	57	70	49	57	68	57
No response	10	4	3	1	3	3	1	-	1

- Items in bold show a statistically significant difference between an ethnic group and all other students.

Table 144 **Students' family sunsmart practices**

When they are outside in summer do the people in your family:	Phase 2			Phase 3			Comparison		
	Māori %	Pasifika %	NZE %	Māori %	Pasifika %	NZE %	Māori %	Pasifika %	NZE %
Wear clothes that protect them from the sun?									
Most of the time	37	34	40	42	41	45	38	52	37
Sometimes	40	46	41	42	46	44	43	40	40
Hardly ever	13	16	15	13	10	10	17	8	20
No response	11	5	3	3	3	1	2	-	3
Wear sunhats?									
Most of the time	25	21	23	31	30	29	30	20	29
Sometimes	45	53	49	47	50	52	46	56	37
Hardly ever	21	22	25	20	18	15	21	24	32
No response	9	4	3	2	2	4	2	-	2
Wear sunscreen?									
Most of the time	27	22**	34	35	22***	36⁺	29	20	38
Sometimes	37	44	38	37	43	40	46	48	34
Hardly ever	26	29	26	25	33	21	22	32	26
No response	10	5	3	3	3	3	2	-	2

- Items in bold show a statistically significant difference between an ethnic group and all other students.

Table 145 **How important is it that you wear a sunhat, sunscreen, and clothes in the sun?**

	Phase 2			Phase 3			Comparison		
	Māori %	Pasifika %	NZE %	Māori %	Pasifika %	NZE %	Māori %	Pasifika %	NZE %
Very important	63	73	66	66	66	68	54	56	49
Important	25	20	26	27	25	28	41	44	42
Not important	5	4	5	6	8	4	5	-	9
No response	7	3	2	1	1	1	-	-	-

Table 146 **How much do you like sun bathing?**

	Phase 2			Phase 3			Comparison		
	Māori %	Pasifika %	NZE %	Māori %	Pasifika %	NZE %	Māori %	Pasifika %	NZE %
A lot	15	15	10	11	14	13	23	20	22
A bit	18	20	16	19	20	17	10	28	14
Middle	17	15	19	17	18	18	16	20	20
Not much	17	16	23	22	20	22	26	28	22
Not much at all	29	33	31	31	27	28	24	4	22
No response	4	1	1	1	1	1	1	-	-

Table 147 Which hat BEST protects you from the sun?

	Phase 2			Phase 3			Comparison		
	Māori %	Pasifika %	NZE %	Māori %	Pasifika %	NZE %	Māori %	Pasifika %	NZE %
Cap	16**	11	10	18	19	17	15	20	8
hat with brim	73	84	86	79	78	80	78	80	89
Beanie	-	-	-	-	<1	-	-	-	1
Visor	4	2	1	2	3	2	1	-	1
No response	8	3	3	<1	-	1	6	-	2

- Items in bold show a statistically significant difference between an ethnic group and all other students.

Table 148 Which shirt BEST protects you from the sun?

	Phase 2			Phase 3			Comparison		
	Māori %	Pasifika %	NZE %	Māori %	Pasifika %	NZE %	Māori %	Pasifika %	NZE %
tee-shirt	36⁺	17	37	46	41	45	35	40	29
Sleeveless tee	7	5	5	5	4	2	4	8	3
Vest	14	12	8	11	13	5	7	4	3
long-sleeved shirt	35	40	47	39	42	47	46	48	60
No response	8	2	3	<1	1	1	7	-	4

- Items in bold show a statistically significant difference between an ethnic group and all other students.

Table 149 Which cream BEST protects you from the sun?

	Phase 2			Phase 3			Comparison		
	Māori %	Pasifika %	NZE %	Māori %	Pasifika %	NZE %	Māori %	Pasifika %	NZE %
body lotion	7	9	7	5	8⁺	4	2	8	3
factor 15 sunscreen	6	6	6	6	10	5	4	4	3
factor 30 sunscreen	79	81	84	89	81	89	89	84	92
body glitter	1	1	-	-	<1	1	1	4	1
No response	7	3	3	1	1	1	4	-	2

- Items in bold show a statistically significant difference between an ethnic group and all other students.

Table 150 Mean sunsmart knowledge (Maximum=3)

Student group	Year 6 students		
	Māori Mean (confidence interval)	Pasifika Mean (confidence interval)	NZE Mean (confidence interval)
Phase 2	1.87 (1.78,1.96)***	2.06 (1.97,2.15)	2.17 (2.03,2.31)*
Phase 3	2.07 (1.96,2.18)	2.01 (1.91,2.11)	2.16 (2.02,2.30)
Comparison	2.13 (1.93,2.32)**	2.12 (1.78,2.46)	2.41 (2.27,2.55)

- Items in bold show a statistically significant difference between an ethnic group and all other students.

Smokefree

Table 151 **Students' smokefree behaviours**

Tried smoking	Māori			Pasifika			NZE		
	Yes %	No %	No response %	Yes %	No %	No response %	Yes %	No %	No response %
Phase 2	22***	75	3	8***	89	3	16	82	3
Phase 3	19⁺	80	1	13	85	2	16	84	1
Comparison	16	82	2	-	100	-	9	90	1
Smokes more than one cigarette a week									
Phase 2	2	95	3	1⁺	97	2	1	97	3
Phase 3	1	96	2	2	95	3	1	96	2
Comparison	-	98	2	4	96	-	2	97	1

- Items in bold show a statistically significant difference between an ethnic group and all other students.

Table 152 **Do any of the people you live with smoke?**

Do any of the people you live with smoke?	Phase 2			Phase 3			Comparison		
	Māori %	Pasifika %	NZE %	Māori %	Pasifika %	NZE %	Māori %	Pasifika %	NZE %
No	18***	36***	36**	19***	32**	30	20*	32	32
Yes – outside the house	55	52	40	63	59	54	68	60	52
Yes – inside the house	22	8	23	17	6	16	10	8	15
No response	5	4	2	1	3	1	2	-	2

- Items in bold show a statistically significant difference between an ethnic group and all other students.

Table 153 **How important is it that people around you do not smoke?**

	Phase 2			Phase 3			Comparison		
	Māori %	Pasifika %	NZE %	Māori %	Pasifika %	NZE %	Māori %	Pasifika %	NZE %
Very important	64	72	67	77	69	78	61⁺	64	62**
Important	10	9	13	6	11	8	12	8	24
Not important	19	18	18	16	18	13	27	28	13
No response	7	2	1	1	2	1	-	-	1

- Items in bold show a statistically significant difference between an ethnic group and all other students.

Table 154 How much do you like it when the people around you smoke?

	Phase 2			Phase 3			Comparison		
	Māori %	Pasifika %	NZE %	Māori %	Pasifika %	NZE %	Māori %	Pasifika %	NZE %
A lot	3*	1	1	2	2	1	4	4	1
A bit	3	2	2	2	2	-	1	-	1
Middle	4	2	5	3	2	2	17	12	10
Not much	12	8	14	17	12	14	20	16	21
Not much at all	76	85	76	76	82	81	59	68	67
No response	3	1	1	<1	<1	1	-	-	-

- Items in bold show a statistically significant difference between an ethnic group and all other students.

3.4 Student food choices by ethnicity

Table 155 Student food choices overall

Key food type	Phase 2			Phase 3			Comparison		
	Māori %	Pasifika %	NZE %	Māori %	Pasifika %	NZE %	Māori %	Pasifika %	NZE %
Vegetables and fruit	74	78	75	72	81	75	74	72	78
Fruit only	66	71	64	63	73	69	65	56	71
Vegetables only	34⁺	32*	41	39**	36	43	40	32	47
Chips and chippies	69	34	68	58	53	62	67	56	62
Fizzy drinks	43	43	36	35	35	25	35⁺	32	25
Sweets and treats	27	25	30	23	26	26	27	36	22
Muesli bars/plain biscuits	38	33	52***	32	29	32	44	44	58
Cakes and puddings	28	36	34	35	39	38	24	32	26
Takeaways	37	36	30	32	32*	23	26	16	18
Protein	67	65	68	77	80⁺	75	70	72	67
Grains & cereals	92	87*	92	93	93	94	91	100	96
Dairy	50**	40	47	50***	39*	43⁺	56	60	53

- Items in bold show a statistically significant difference between an ethnic group and all other students.

Table 156 **Student food choices at school**

Key food type	Phase 2			Phase 3			Comparison		
	Māori %	Pasifika %	NZE %	Māori %	Pasifika %	NZE %	Māori %	Pasifika %	NZE %
Vegetables and fruit	60	65	56	57*	71	63	55	40	61
Fruit only	57**	63**	52	55⁺	67⁺	60	52	36⁺	59
Vegetables only	9	6	10	9	9	8	4	4	6
Chips and chippies	56	56	50	45	37	51*	54	28	53
Fizzy drinks	9	8	7	5	6	4	5	4	2
Sweets and treats	13	11	12	12	13	13	10	4	8
Muesli bars/plain biscuits	29	25	45***	26	20	25	34	36	46
Cakes and puddings	14	20	26	19	23	22	16	20	18
Takeaways	13	10	7	11	12	11	7	0	5
Protein	18	15	18	25	30	31	24	24	23
Grains & cereals	59	57	64	64	72*	74	68	68	64
Dairy	13	9	14	22**	13⁺	19	24	28	20

- Items in bold show a statistically significant difference between an ethnic group and all other students.

Table 157 **Student food choices at home**

Key food type	Phase 2			Phase 3			Comparison		
	Māori %	Pasifika %	NZE %	Māori %	Pasifika %	NZE %	Māori %	Pasifika %	NZE %
Vegetables and fruit	45	43	49	48	47	53	55	64	62
Fruit only	27	24	25	24	25	28	28	40	39
Vegetables only	28	28*	35	34*	32	39⁺	40	28	45
Chips and chippies	35	28	37	27	31	28	23	32	33
Fizzy drinks	41	39	34	33	34	22	33⁺	18	25
Sweets and treats	16	17	21	12	17	15	18	32⁺	17
Muesli bars/plain biscuits	15	12	17	10	12	11	20	20	29
Cakes and puddings	17	20	23	12	23	22	11	12	13
Takeaways	29	30	24	34	23	16	22	16	13
Protein	61⁺	58	61⁺	70	70	69	60	64	57
Grains & cereals	83	81*	88	89	87	90⁺	87	96	92
Dairy	44**	35	41	40⁺	31	34⁺	45	44	43

- Items in bold show a statistically significant difference between an ethnic group and all other students.

Table 158 Mean amount of each food consumed overall

Key food type	Phase 2			Phase 3			Comparison		
	Māori	Pasifika	NZE	Māori	Pasifika	NZE	Māori	Pasifika	NZE
	Mean number of times eaten (Confidence Interval)	Mean number of times eaten (Confidence Interval)	Mean number of times eaten (Confidence Interval)	Mean number of times eaten (Confidence Interval)	Mean number of times eaten (Confidence Interval)	Mean number of times eaten (Confidence Interval)	Mean number of times eaten (Confidence Interval)	Mean number of times eaten (Confidence Interval)	Mean number of times eaten (Confidence Interval)
Vegetables and fruit	1.86 (1.77, 1.91)	1.99 (1.67, 2.31)	1.98 (1.56, 2.42)	2.16 (2.10, 2.27)	2.24 (1.98, 2.50)	2.25 (1.63, 2.81)	2.06 (1.89, 2.24)	1.88 (1.27, 2.49)	2.48 (1.99, 2.97)
Fruit only	1.23 (1.02, 1.42)*	1.52 (1.26, 1.79)**	1.23 (0.91, 1.55)	1.30 (1.05, 1.57)	1.59 (1.33, 1.86)*	1.31 (1.02, 1.58)	1.28 (1.03, 1.53)	1.44 (0.80, 2.08)	1.57 (1.30, 1.84)
Vegetables only	0.64 (0.45, 0.80)	0.47 (0.37, 0.57)**	0.75 (0.52, 1.00)*	0.86 (0.63, 1.13)*	0.65 (0.54, 0.75)	0.94 (0.53, 1.31)**	0.78 (0.51, 1.05)	0.44 (0.01, 0.87)	0.91 (0.69, 1.14)*
Chips and chippies	1.21 (1.02, 1.41)	1.15 (0.89, 1.41)	1.10 (0.92, 1.26)	0.97 (0.77, 1.19)	0.91 (0.75, 1.09)	0.97 (0.85, 1.12)	1.04 (0.70, 1.37)	0.76 (0.52, 1.00)	0.98 (0.79, 1.17)
Fizzy drinks	0.71 (0.66, 0.77)	0.67 (0.47, 0.88)	0.58 (0.46, 0.71)	0.49 (0.40, 0.58)	0.53 (0.37, 0.68)	0.31 (0.25, 0.39)*	0.63 (0.54, 0.72)**	0.48 (0.21, 0.75)	0.40 (0.34, 0.45)
Sweets and treats	0.38 (0.28, 0.49)	0.35 (0.27, 0.43)	0.46 (0.33, 0.56)	0.31 (0.18, 0.43)	0.37 (0.24, 0.51)	0.36 (0.26, 0.50)	0.34 (0.18, 0.50)	0.36 (0.17, 0.55)	0.29 (0.22, 0.36)
Muesli bars/plain biscuits	0.57 (0.49, 0.67)	0.47 (0.25, 0.69)*	0.84 (0.62, 1.08)***	0.45 (0.37, 0.51)	0.39 (0.28, 0.50)	0.46 (0.34, 0.59)	0.84 (0.76, 0.93)	0.88 (0.60, 1.16)	1.11 (0.78, 1.44)
Cakes and puddings	0.37 (0.25, 0.45)	0.53 (0.34, 0.71)**	0.45 (0.27, 0.57)	0.54 (0.48, 0.68)	0.59 (0.51, 0.68)	0.63 (0.52, 0.78)	0.30 (0.14, 0.47)	0.32 (0.17, 0.47)	0.34 (0.22, 0.47)
Takeaways	0.50 (0.35, 0.66)	0.50 (0.31, 0.70)	0.35 (0.24, 0.48)*	0.42 (0.19, 0.64)*	0.43 (0.33, 0.52)**	0.33 (0.18, 0.45)	0.33 (0.18, 0.48)	0.16 (0.11, 0.21)	0.23 (0.18, 0.29)
Protein	1.07 (1.06, 1.08)	1.09 (0.99, 1.20)	0.99 (0.84, 1.16)	1.34 (1.33, 1.35)	1.54 (1.28, 1.79)*	1.39 (0.90, 1.82)	1.06 (1.06, 1.06)	1.00 (0.89, 1.11)	0.98 (0.82, 1.15)
Grains & cereals	2.18 (2.12, 2.22)	2.32 (2.06, 2.58)	2.40 (2.11, 2.74)	2.56 (2.54, 2.60)	2.65 (2.33, 2.96)	2.67 (2.18, 3.10)	2.35 (2.24, 2.47)	2.56 (2.28, 2.84)	2.30 (2.07, 2.53)
Dairy	0.68 (0.60, 0.74)**	0.52 (0.41, 0.64)*	0.66 (0.54, 0.79)	0.78 (0.62, 0.95)***	0.50 (0.43, 0.56)*	0.68 (0.38, 0.98)	0.74 (0.65, 0.83)	0.76 (0.42, 1.10)	0.72 (0.55, 0.88)

- Items in bold show a statistically significant difference between an ethnic group and all other students.

Table 159 Mean amount of each food consumed at school

Key food type	Phase 2			Phase 3			Comparison		
	Māori	Pasifika	NZE	Māori	Pasifika	NZE	Māori	Pasifika	NZE
	Mean number of times eaten (Confidence Interval)	Mean number of times eaten (Confidence Interval)	Mean number of times eaten (Confidence Interval)	Mean number of times eaten (Confidence Interval)	Mean number of times eaten (Confidence Interval)	Mean number of times eaten (Confidence Interval)	Mean number of times eaten (Confidence Interval)	Mean number of times eaten (Confidence Interval)	Mean number of times eaten (Confidence Interval)
Vegetables and fruit	0.96 (0.74, 1.16)	1.20 (1.02, 1.39)**	0.96 (0.73, 1.16)	1.08 (0.80, 1.40)	1.33 (1.11, 1.55)**	1.04 (0.86, 1.25)	0.94 (0.71, 1.16)	1.00 (0.48, 1.52)	1.11 (0.82, 1.40)
Fruit only	0.84 (0.73, 0.93)*	1.13 (0.98, 1.28)***	0.84 (0.63, 1.03)	0.94 (0.85, 1.06)*	1.19 (0.96, 1.41)**	0.92 (0.73, 1.11)	0.89 (0.82, 0.96)	0.96 (0.47, 1.45)	1.03 (0.80, 1.26)
Vegetables only	0.12 (-0.04, 0.28)	0.07 (0.01, 0.14)	0.12 (0.04, 0.19)	0.14 (-0.06, 0.36)	0.15 (0.08, 0.22)	0.13 (0.04, 0.23)	0.05 (-0.21, 0.31)	0.04 (0.00, 0.08)	0.08 (0.00, 0.16)
Chips and chippies	0.77 (0.67, 0.85)	0.79 (0.63, 0.96)	0.65 (0.51, 0.76)	0.65 (0.60, 0.72)*	0.51 (0.38, 0.64)	0.62 (0.51, 0.76)	0.65 (0.44, 0.85)	0.32 (0.07, 0.57)	0.63 (0.47, 0.79)
Fizzy drinks	0.12 (0.02, 0.22)	0.10 (0.02, 0.19)	0.08 (0.01, 0.14)	0.05 (-0.02, 0.11)	0.08 (0.03, 0.12)	0.04 (0.00, 0.08)	0.09 (-0.13, 0.30)*	0.12 (-0.15, 0.39)	0.03 (0.00, 0.05)
Sweets and treats	0.17 (0.12, 0.23)	0.12 (0.07, 0.17)	0.16 (0.04, 0.22)	0.16 (0.11, 0.21)	0.17 (0.10, 0.23)	0.19 (0.10, 0.34)	0.12 (0.02, 0.23)	0.04 (0.00, 0.08)	0.09 (0.05, 0.13)
Muesli bars/plain biscuits	0.39 (0.35, 0.45)	0.32 (0.16, 0.48)*	0.66 (0.49, 0.87)***	0.33 (0.27, 0.38)*	0.24 (0.17, 0.31)	0.30 (0.19, 0.40)	0.56 (0.41, 0.71)	0.56 (0.43, 0.69)	0.66 (0.47, 0.86)*
Cakes and puddings	0.16 (0.09, 0.21)	0.27 (0.20, 0.34)	0.16 (0.04, 0.26)	0.26 (0.17, 0.39)	0.28 (0.20, 0.38)	0.31 (0.23, 0.42)	0.16 (0.05, 0.27)	0.20 (0.08, 0.32)	0.19 (0.12, 0.26)
Takeaways	0.16 (0.10, 0.21)	0.11 (0.03, 0.19)	0.09 (0.04, 0.15)	0.12 (0.06, 0.19)	0.14 (0.08, 0.21)	0.13 (0.05, 0.19)	0.07 (0.03, 0.12)	–	0.06 (0.00, 0.12)
Protein	0.22 (0.14, 0.29)	0.20 (0.15, 0.25)	0.22 (0.12, 0.32)	0.33 (0.13, 0.51)	0.41 (0.29, 0.53)	0.40 (0.20, 0.57)	0.28 (0.10, 0.46)	0.24 (0.09, 0.39)	0.28 (0.08, 0.49)
Grains & cereals	0.76 (0.65, 0.87)	0.76 (0.65, 0.87)	0.79 (0.67, 0.94)	0.83 (0.55, 1.11)	1.00 (0.86, 1.14)**	0.96 (0.75, 1.14)	0.84 (0.62, 1.06)	0.80 (0.65, 0.95)	0.76 (0.71, 0.81)
Dairy	0.15 (0.07, 0.23)*	0.10 (0.05, 0.15)	0.14 (0.08, 0.22)	0.30 (0.17, 0.41)***	0.15 (0.11, 0.19)*	0.23 (0.11, 0.33)	0.26 (0.13, 0.38)	0.28 (-0.05, 0.61)	0.22 (0.12, 0.33)

- Items in bold show a statistically significant difference between an ethnic group and all other students.

Table 160 Mean amount of each food consumed at home

Key food type	Phase 2			Phase 3			Comparison		
	Māori	Pasifika	NZE	Māori	Pasifika	NZE	Māori	Pasifika	NZE
	Mean number of times eaten (Confidence Interval)	Mean number of times eaten (Confidence Interval)	Mean number of times eaten (Confidence Interval)	Mean number of times eaten (Confidence Interval)	Mean number of times eaten (Confidence Interval)	Mean number of times eaten (Confidence Interval)	Mean number of times eaten (Confidence Interval)	Mean number of times eaten (Confidence Interval)	Mean number of times eaten (Confidence Interval)
Vegetables and fruit	0.90 (0.83, 0.96)	0.79 (0.59, 0.98)	1.02 (0.73, 1.37)	1.07 (1.02, 1.15)	0.91 (0.78, 1.03)	1.20 (0.70, 1.63)*	1.12 (1.07, 1.17)	0.88 (0.36, 1.40)	1.37 (1.11, 1.64)*
Fruit only	0.39 (0.09, 0.69)	0.39 (0.25, 0.54)	0.39 (0.24, 0.56)	0.36 (-0.12, 0.83)	0.41 (0.30, 0.52)	0.39 (0.21, 0.55)	0.39 (0.15, 0.63)	0.48 (0.27, 0.69)	0.53 (0.46, 0.61)
Vegetables only	0.52 (0.37, 0.64)	0.39 (0.31, 0.47)*	0.63 (0.39, 0.91)*	0.72 (0.54, 0.92)**	0.50 (0.42, 0.58)	0.81 (0.47, 1.10)**	0.73 (0.54, 0.93)	0.40 (-0.06, 0.86)	0.84 (0.64, 1.03)
Chips and chippies	0.45 (0.32, 0.58)	0.36 (0.25, 0.46)*	0.45 (0.37, 0.54)	0.33 (0.19, 0.45)	0.41 (0.33, 0.49)*	0.35 (0.28, 0.42)	0.39 (0.05, 0.73)	0.44 (0.29, 0.59)	0.35 (0.32, 0.39)
Fizzy drinks	0.60 (0.47, 0.72)	0.56 (0.42, 0.71)	0.50 (0.41, 0.60)	0.44 (0.36, 0.53)	0.45 (0.32, 0.58)	0.28 (0.22, 0.34)*	0.55 (0.30, 0.80)*	0.36 (0.22, 0.50)	0.37 (0.31, 0.43)
Sweets and treats	0.21 (0.09, 0.33)	0.23 (0.17, 0.29)	0.30 (0.23, 0.40)*	0.15 (0.06, 0.22)	0.20 (0.11, 0.30)	0.16 (0.08, 0.23)	0.22 (0.10, 0.34)	0.32 (0.14, 0.50)	0.21 (0.17, 0.25)
Muesli bars/plain biscuits	0.18 (0.07, 0.29)	0.15 (0.08, 0.22)	0.18 (0.10, 0.25)	0.12 (-0.01, 0.24)	0.15 (0.09, 0.21)	0.16 (0.07, 0.27)	0.28 (-0.02, 0.58)	0.32 (0.05, 0.59)	0.45 (0.31, 0.59)*
Cakes and puddings	0.21 (0.11, 0.28)	0.26 (0.14, 0.37)	0.28 (0.18, 0.36)	0.28 (0.16, 0.44)	0.31 (0.24, 0.39)	0.32 (0.23, 0.43)	0.15 (0.05, 0.24)	0.12 (0.04, 0.20)	0.16 (0.09, 0.22)
Takeaways	0.34 (0.27, 0.42)	0.39 (0.27, 0.52)	0.26 (0.18, 0.36)	0.29 (0.20, 0.38)*	0.28 (0.21, 0.35)**	0.20 (0.09, 0.29)	0.26 (0.20, 0.31)	0.16 (0.11, 0.21)	0.17 (0.14, 0.21)
Protein	0.85 (0.74, 0.97)	0.90 (0.79, 1.00)	0.77 (0.67, 0.88)	1.03 (0.72, 1.31)	1.13 (0.97, 1.28)	0.99 (0.69, 1.26)	0.78 (0.61, 0.95)	0.76 (0.57, 0.95)	0.70 (0.57, 0.83)
Grains & cereals	1.42 (1.23, 1.59)*	1.56 (1.36, 1.76)	1.61 (1.40, 1.84)	1.74 (1.38, 2.10)	1.64 (1.44, 1.84)	1.71 (1.36, 2.03)	1.51 (1.23, 1.80)	1.76 (1.46, 2.06)	1.54 (1.30, 1.78)
Dairy	0.53 (0.41, 0.62)*	0.42 (0.34, 0.50)	0.52 (0.43, 0.59)	0.48 (0.30, 0.69)**	0.35 (0.30, 0.40)	0.45 (0.24, 0.67)	0.49 (0.34, 0.64)	0.48 (0.22, 0.74)	0.49 (0.38, 0.60)

- Items in bold show a statistically significant difference between an ethnic group and all other students.

3.5 Student data by liking school

This section of the technical report shows an analysis of the end of 2008 student data by “liking school”. All student data is reported as a percentage of these numbers:

- Phase 2 students: “Likes school a lot” N=452; Other students N=338
- Phase 3 students: “Likes school a lot” N=366; Other students N=234
- Comparison students: “Likes school a lot” N=64; Other students N=141.

Student learning and liking of school

Table 161 **Student views on coverage of the health priority areas: Phase 2**

How much did you learn about:	Healthy eating** %	Physical activity*** %	Sunsmart** %	Smokefree** %
Likes school a lot				
A lot	85	71	68	40
Some things	14	26	25	23
Nothing	1	3	6	35
No response	1	<1	1	2
Other				
A lot	72	54	53	27
Some things	20	35	35	28
Nothing	2	6	7	39
No response	5	5	5	6

- Items in bold show a statistically significant difference between students liking school a lot and other students.

Table 162 **Student views on coverage of the health priority areas: Phase 3**

How much did you learn about:	Healthy eating** %	Physical activity*** %	Sunsmart* %	Smokefree* %
Likes school a lot				
A lot	87	70	63	51
Some things	11	26	30	25
Nothing	2	4	6	24
No response	<1	<1	1	1
Other				
A lot	76	53	51	40
Some things	21	39	41	30
Nothing	2	7	6	29
No response	1	1	2	1

- Items in bold show a statistically significant difference between students liking school a lot and other students.

Table 163 **Student views on coverage of the health priority areas: Comparison**

How much did you learn about:	Healthy eating** %	Physical activity*** %	Sunsmart* %	Smokefree+ %
Likes school a lot				
A lot	86	77	44	42
Some things	11	22	50	27
Nothing	3	2	6	30
No response	-	-	-	2
Other				
A lot	62	45	35	24
Some things	30	48	42	34
Nothing	6	7	22	40
No response	2	1	1	1

- Items in bold show a statistically significant difference between students liking school a lot and other students.

Table 164 **Student views on their input into school health activities/decisions: Phase 2**

How often do these things happen at school?	A lot %	Sometimes %	Never %	No response %
Likes school a lot				
I learn about making healthy choices***	72	24	1	3
We work together to make our school healthier***	67	24	5	3
We work together to make our community healthier***	55	33	8	4
We set goals for ourselves about our health***	54	35	7	4
I help make decisions about things to do with health***	50	39	7	4
I help lead things to do with health**	37	38	21	4
Other				
I learn about making healthy choices	52	35	5	8
We work together to make our school healthier	51	27	13	9
We work together to make our community healthier	39	33	19	9
We set goals for ourselves about our health	38	38	16	8
I help make decisions about things to do with health	34	40	17	9
I help lead things to do with health	27	34	30	9

- Items in bold show a statistically significant difference between students liking school a lot and other students.

Table 165 **Student views on their input into school health activities/decisions: Phase 3**

How often do these things happen at school?	A lot %	Sometimes %	Never %	No response %
Likes school a lot				
I learn about making healthy choices***	73	25	1	1
We work together to make our school healthier***	65	26	8	1
We work together to make our community healthier***	58	30	11	1
We set goals for ourselves about our health***	61	31	7	1
I help make decisions about things to do with health*	50	39	10	1
I help lead things to do with health	36	43	19	1
Other				
I learn about making healthy choices	61	33	6	1
We work together to make our school healthier	47	41	11	2
We work together to make our community healthier	42	41	16	1
We set goals for ourselves about our health	42	48	9	1
I help make decisions about things to do with health	39	44	16	1
I help lead things to do with health	32	41	27	1

- Items in bold show a statistically significant difference between students liking school a lot and other students.

Table 166 **Student views on their input into school health activities/decisions: Comparison**

How often do these things happen at school?	A lot %	Sometimes %	Never %	No response %
Likes school a lot				
I learn about making healthy choices***	70	27	2	2
We work together to make our school healthier***	56	39	3	2
We work together to make our community healthier⁺	41	38	20	2
We set goals for ourselves about our health	42	44	13	2
I help make decisions about things to do with health***	50	36	11	3
I help lead things to do with health**	31	42	23	3
Other				
I learn about making healthy choices	36	57	6	1
We work together to make our school healthier	28	49	21	2
We work together to make our community healthier	23	44	32	1
We set goals for ourselves about our health	27	50	22	1
I help make decisions about things to do with health	24	54	21	1
I help lead things to do with health	11	48	39	1

- Items in bold show a statistically significant difference between students liking school a lot and other students.

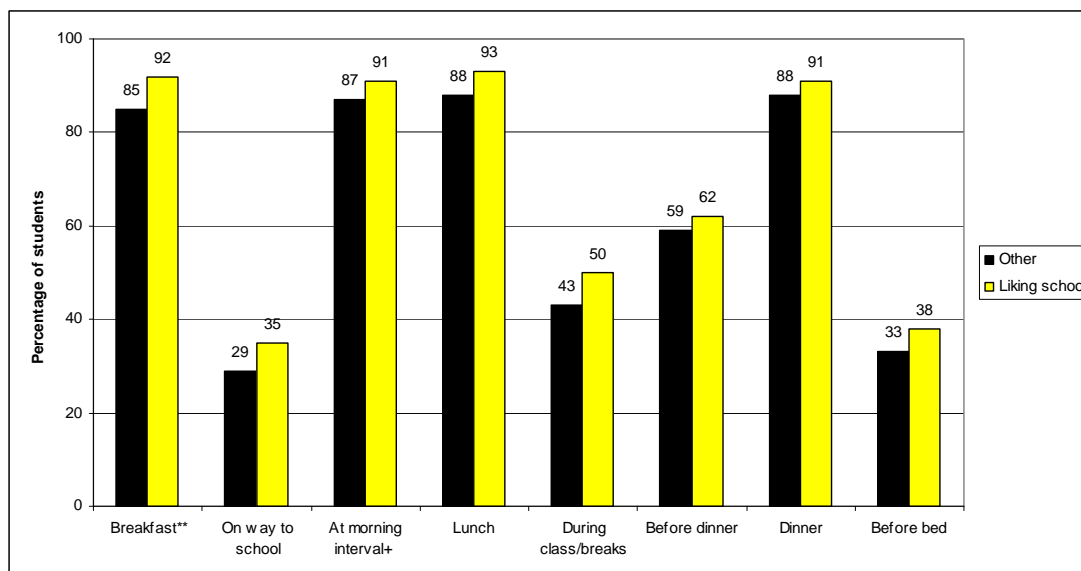
Table 167 **How much do you like being at school in 2008?**

	Phase 2***		Phase 3***		Comparison***	
	Likes school a lot %	Other %	Likes school a lot %	Other %	Likes school a lot %	Other %
A lot	100	-	100	-	100	-
A bit	-	53	-	56	-	44
Middle	-	16	-	21	-	21
Not much	-	11	-	12	-	16
Not much at all	-	12	-	10	-	17
No response	-	8	-	2	-	1

- Items in bold show a statistically significant difference between students liking school a lot and other students.

Healthy eating

Figure 10 **Phase 2 students' eating times by liking school**



- Items marked show a statistically significant difference between students liking school a lot and other students.

Figure 11 Phase 3 students' eating times by liking school

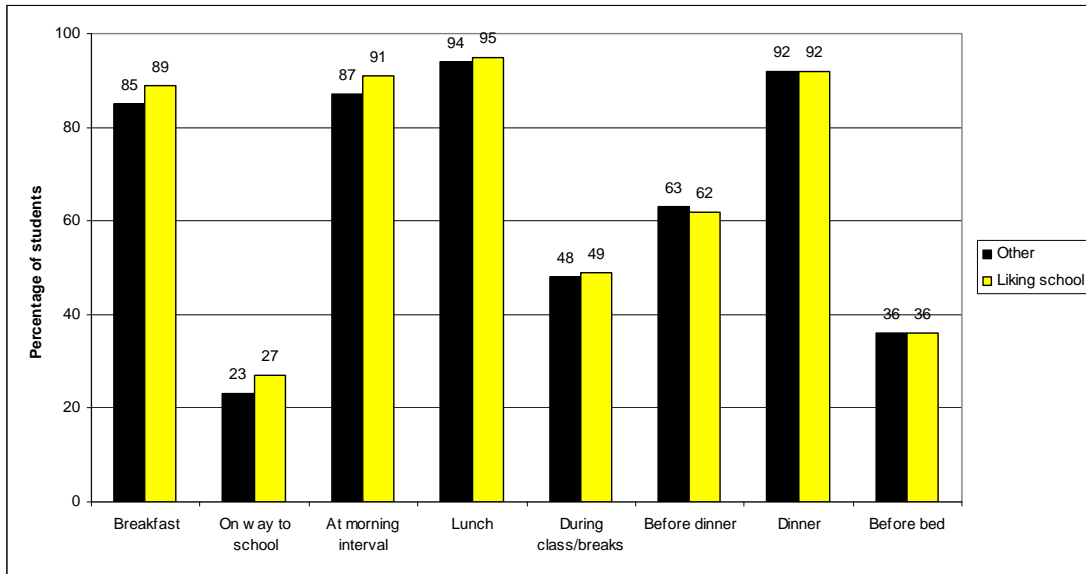
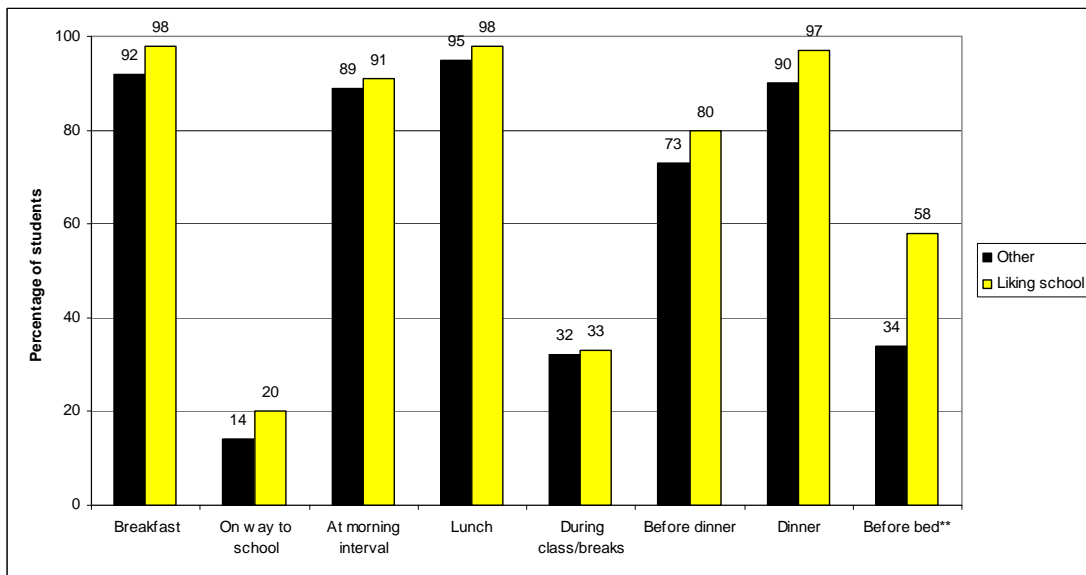


Figure 12 Comparison students' eating times by liking school



- Items marked show a statistically significant difference between students liking school a lot and other students.

Table 168 **Lunch behaviours**

	Phase 2		Phase 3		Comparison	
	Likes school a lot %	Other %	Likes school a lot %	Other %	Likes school a lot %	Other %
Lunch from home	57	58	62	57	81	79
Buy/given lunch at school	15	12	17	19	13	11
Buy lunch at dairy/shop	21	17	16	17	5	5
Didn't have lunch	6	8	4	5	2	4
No response	2	4	2	2	0	1

- Items in bold show a statistically significant difference between students liking school a lot and other students.

Table 169 **How important is it that you eat vegetables and fruit every day?**

	Phase 2		Phase 3**		Comparison	
	Likes school a lot %	Other %	Likes school a lot %	Other %	Likes school a lot %	Other %
Very important	71	62	81	68	83	68
Important	23	28	16	28	14	26
Not important	2	3	2	3	2	6
No response	4	7	1	1	2	-

- Items in bold show a statistically significant difference between students liking school a lot and other students.

Table 170 **How much do you like eating vegetables?**

	Phase 2***		Phase 3***		Comparison***	
	Likes school a lot %	Other %	Likes school a lot %	Other %	Likes school a lot %	Other %
A lot	45	26	52	25	61	22
A bit	33	33	36	36	25	41
Middle	11	20	7	18	8	19
Not much	6	10	4	13	6	9
Not much at all	4	9	2	6	-	8
No response	1	2	1	1	-	1

- Items in bold show a statistically significant difference between students liking school a lot and other students.

Table 171 **How much do you like eating fruit?**

	Phase 2***		Phase 3***		Comparison***	
	Likes school a lot %	Other %	Likes school a lot %	Other %	Likes school a lot %	Other %
A lot	87	67	85	68	91	56
A bit	8	22	10	20	9	29
Middle	2	6	3	6	-	11
Not much	1	2	<1	3	-	3
Not much at all	<1	<1	-	2	-	1
No response	1	2	1	1	-	1

- Items in bold show a statistically significant difference between students liking school a lot and other students.

Table 172 **How much do you like getting fruit to eat at school?**

	Phase 2***		Phase 3*	
	Likes school a lot %	Other %	Likes school a lot %	Other %
A lot	87	60	82	61
A bit	8	22	11	24
Middle	1	6	2	8
Not much	-	5	1	3
Not much at all	<1	1	<1	1
No response	4	7	4	3

- Items in bold show a statistically significant difference between students liking school a lot and other students.

Table 173 Which food is the most healthy?

	Phase 2		Phase 3		Comparison	
	Likes school a lot %	Other %	Likes school a lot %	Other %	Likes school a lot %	Other %
Fizzy drink	4	3	1	4**	3	3
Water or milk	88	89	96	90	95	96
No response	8	7	4	6	2	1
Egg sandwich	76	79	85	82	91	92
Sausage roll	10	7	7	9	6	4
No response	15	14	8	9	3	4
Fruit	89	90	93	88+	94	96
Ice-cream	5	4	2	6	3	4
No response	6	7	4	6	3	1
Chocolate biscuit	4	3	2	4	3	3
Banana	89	88	92	89	95	96
No response	7	10	6	7	2	1
Hot chips	6	6	4	9*	5	2
Boiled potato, kumara, or taro	80	82	87	81	89	91
No response	14	12	8	10	6	6
Carrot sticks	82	81	87	87	97	90
Potato chippies	7	7	5	6	2	6
No response	11	12	8	7	2	4
Fried chicken	20	20	24	25	20	14
Grilled chicken	64	64	65	63	75	79
No response	16	16	11	12	5	7
Apple	84	81	87	85	92	83
Fruit pie	6	8	4	7	6	11
No response	10	12	8	8	2	6
Sausage	12	14	10	14	13	8
Baked fish or kaimoana	71	72	81	76	84	89
No response	16	14	9	11	3	4

- Items in bold show a statistically significant difference between students liking school a lot and other students.

Table 174 **Mean healthy eating knowledge scores (Maximum=9)**

Student group	Year 6 students	
	Likes school a lot Mean (confidence interval)	Other Mean (confidence interval)
Phase 2	7.24 (7.00,7.48)	7.26 (6.99,7.53)
Phase 3	7.74 (7.52,7.96)	7.41 (7.10,7.72)
Comparison	8.13 (7.70,8.56)	8.11 (7.83,8.39)

Table 175 **How many pieces of vegetables and fruit SHOULD you eat a day? (5+aDay)**

Student group	Likes school a lot % selecting 5–8 (% selecting 5)	Other % selecting 5–8 (% selecting 5)
Phase 2	80 (67)	81 (67)
Phase 3	76 (61)	83 (70)
Comparison	80 (69)	80 (63)

Physical activity

Table 176 **Mean engagement in mild to moderate physical activity (Maximum=8)**

Student group	Year 6 students	
	Likes school a lot Mean (confidence interval)	Other Mean (confidence interval)
Phase 2**	4.93 (4.79,5.07)	4.63 (4.45,4.81)
Phase 3**	4.80 (4.64,4.96)	4.46 (4.27,4.65)
Comparison	4.48 (4.10,4.86)	4.29 (4.02,4.56)

- Items in bold show a statistically significant difference between students liking school a lot and other students.

Table 177 **Mean amount of TV watching and computer gaming (Maximum=3)**

Student group	Year 6 students	
	Likes school a lot Mean (confidence interval)	Other Mean (confidence interval)
Phase 2***	1.80 (1.71,1.89)	2.06 (1.96,2.16)
Phase 3	1.72 (1.61,0.83)	1.85 (1.73,1.97)
Comparison**	1.47 (1.22,1.72)	1.92 (1.76,2.08)

- Items in bold show a statistically significant difference between students liking school a lot and other students.

Table 178 **At home do you do exercise or active things with your family at the weekend?**

	Phase 2**		Phase 3***		Comparison	
	Likes school a lot %	Other %	Likes school a lot %	Other %	Likes school a lot %	Other %
Yes	85	75	88	77	88	77
No	9	16	8	18	9	19
No response	6	9	4	6	3	4

- Items in bold show a statistically significant difference between students liking school a lot and other students.

Table 179 **At home did you do exercise or active things with your family last weekend?**

	Phase 2 ⁺		Phase 3**		Comparison	
	Likes school a lot %	Other %	Likes school a lot %	Other %	Likes school a lot %	Other %
Yes	74	66	76	65	84	72
No	17	23	18	28	11	21
No response	8	11	6	6	5	7

- Items in bold show a statistically significant difference between students liking school a lot and other students.

Table 180 **At home do you do exercise or active things with your family during the week?**

	Phase 2 ⁺		Phase 3***		Comparison	
	Likes school a lot %	Other %	Likes school a lot %	Other %	Likes school a lot %	Other %
Yes	75	68	77	64	80	63
No	17	23	17	31	20	32
No response	7	9	6	5	-	5

- Items in bold show a statistically significant difference between students liking school a lot and other students.

Table 181 **Did you watch TV yesterday morning?**

	Phase 2 ⁺		Phase 3		Comparison*	
	Likes school a lot %	Other %	Likes school a lot %	Other %	Likes school a lot %	Other %
Yes	60	68	54	59	42	60
No	36	29	43	38	58	39
No response	4	3	3	3	-	1

- Items in bold show a statistically significant difference between students liking school a lot and other students.

Table 182 **How did you get to school yesterday morning?**

	Phase 2		Phase 3		Comparison	
	Likes school a lot %	Other %	Likes school a lot %	Other %	Likes school a lot %	Other %
walk	48	43	53	52	34	28
cycle (or skateboard/scooter)	2	5	3	<1	8	6
by bus	6	7	4	5	9	11
by car (or motorbike)	42	41	40	41	47	54
No response	2	3	1	2	2	1

Table 183 **In class-time at school yesterday, did you do active things like PE, dance, or kapa haka?**

	Phase 2		Phase 3		Comparison	
	Likes school a lot %	Other %	Likes school a lot %	Other %	Likes school a lot %	Other %
Yes	66	66	57	62	66	64
No	33	31	42	38	34	36
No response	2	2	1	1	-	-

Table 184 **What did you do at playtime yesterday morning?**

	Phase 2 ⁺		Phase 3		Comparison	
	Likes school a lot %	Other %	Likes school a lot %	Other %	Likes school a lot %	Other %
sit around	4	8	6	8	3	3
stand around	1	2	2	2	2	6
walk around	35	38	33	37	36	44
active things	57	48	57	53	58	47
No response	2	4	1	1	2	1

- Items in bold show a statistically significant difference between students liking school a lot and other students.

Table 185 **What did you do at lunchtime yesterday?**

	Phase 2**		Phase 3		Comparison	
	Likes school a lot %	Other %	Likes school a lot %	Other %	Likes school a lot %	Other %
sit around	4	10	4	7	5	6
stand around	1	1	2	3	-	6
walk around	28	30	28	28	19	23
active things	62	50	65	60	75	65
No response	4	8	1	3	2	1

- Items in bold show a statistically significant difference between students liking school a lot and other students.

Table 186 **How did you get home after school yesterday?**

	Phase 2 ⁺		Phase 3		Comparison	
	Likes school a lot %	Other %	Likes school a lot %	Other %	Likes school a lot %	Other %
walk	55	54	58	52	39	38
cycle (or skateboard/scooter)	3	5	2	1	6	6
by bus	7	10	5	9	13	10
by car (or motorbike)	34	26	33	38	41	45
No response	1	4	2	1	2	1

- Items in bold show a statistically significant difference between students liking school a lot and other students.

Table 187 **What did you do after school yesterday?**

	Phase 2		Phase 3		Comparison	
	Likes school a lot %	Other %	Likes school a lot %	Other %	Likes school a lot %	Other %
played outside	79	73	71	67	81	74
played inside	53	53	55	59	59	59
played sports at school, for a club, or with friends	39	36	39	29*	17	31*
went to a dance group, gym, or kapa haka practice	18	14	13	6**	9	6
went to after-school care, music, or a youth group	12	8	12	11	6	9
read or did homework	49	36***	67	53**	72	57*
watched TV	72	78*	71	75	70	77
played computer games	49	60**	47	50	34	56**
helped with jobs	71	59***	76	62***	75	57*

- Items in bold show a statistically significant difference between students liking school a lot and other students.

Table 188 **How important is it for you to exercise every day?**

	Phase 2**		Phase 3**		Comparison ⁺	
	Likes school a lot %	Other %	Likes school a lot %	Other %	Likes school a lot %	Other %
Very important	75	63	79	65	77	60
Important	20	28	19	32	20	38
Not important	1	2	2	3	3	2
No response	3	7	1	1	-	-

- Items in bold show a statistically significant difference between students liking school a lot and other students.

Table 189 **How much do you like doing exercise?**

	Phase 2***		Phase 3***		Comparison	
	Likes school a lot %	Other %	Likes school a lot %	Other %	Likes school a lot %	Other %
A lot	81	66	80	54	78	67
A bit	14	22	16	27	17	22
Middle	2	8	2	9	3	7
Not much	1	1	1	6	-	2
Not much at all	<1	1	1	3	2	1
No response	1	1	1	1	-	1

- Items in bold show a statistically significant difference between students liking school a lot and other students.

Sunsmart

Table 190 **Students' sunsmart practices at school**

When you are outside in summer at school do you:	Phase 2		Phase 3		Comparison	
	Likes school a lot %	Other %	Likes school a lot %	Other %	Likes school a lot %	Other %
Wear clothes that protect you from the sun?						
Most of the time	33	22**	42	26***	45	28**
Sometimes	47	51	43	55	45	44
Hardly ever	14	18	14	18	9	27
No response	6	9	2	2	-	1
Wear a sunhat?						
Most of the time	31	28	43	35	52	33*
Sometimes	39	37	38	43	31	33
Hardly ever	25	25	17	21	16	32
No response	5	10	2	2	2	1
Wear sunscreen?						
Most of the time	22	11***	19	15⁺	31	20*
Sometimes	36	28	36	29	38	28
Hardly ever	34	51	43	53	27	51
No response	7	9	2	2	2	1
Stay out of the sun in the middle of the day?						
Most of the time	16	11⁺	20	23	28	11*
Sometimes	50	44	50	47	47	49
Hardly ever	28	34	28	27	25	38
No response	5	10	1	3	-	2
Get sunburnt?						
Most of the time	8	7	5	12**	6	6
Sometimes	24	23	22	25	17	29
Hardly ever	62	61	72	61	77	65
No response	6	9	1	2	-	1

- Items in bold show a statistically significant difference between students liking school a lot and other students.

Table 191 **Students' sunsmart practices at home**

When you are outside in summer at home do you:	Phase 2		Phase 3		Comparison	
	Likes school a lot %	Other %	Likes school a lot %	Other %	Likes school a lot %	Other %
Wear clothes that protect you from the sun?						
Most of the time	35	22***	37	29	47	23**
Sometimes	42	44	43	45	34	52
Hardly ever	17	24	17	23	17	24
No response	7	10	3	3	2	1
Wear a sunhat?						
Most of the time	18	13**	22	17	31	18
Sometimes	38	30	43	39	36	38
Hardly ever	36	46	32	40	31	43
No response	8	11	2	4	2	1
Wear sunscreen?						
Most of the time	25	15***	24	17**	34	21⁺
Sometimes	32	27	41	33	39	40
Hardly ever	36	49	33	47	23	38
No response	7	9	2	3	3	1
Stay out of the sun in the middle of the day?						
Most of the time	17	17	23	23	28	18
Sometimes	45	37	49	47	44	52
Hardly ever	31	35	26	28	28	28
No response	7	11	2	2	-	1
Get sunburnt?						
Most of the time	9	10	5	9***	9	10
Sometimes	26	29	23	34	25	33
Hardly ever	59	51	70	53	66	57
No response	6	10	2	4	-	1

- Items in bold show a statistically significant difference between students liking school a lot and other students.

Table 192 **Students' family sunsmart practices**

When they are outside in summer do the people in your family:	Phase 2		Phase 3		Comparison	
	Likes school a lot %	Other %	Likes school a lot %	Other %	Likes school a lot %	Other %
Wear clothes that protect them from the sun?						
Most of the time	43	26***	46	35**	56	31***
Sometimes	38	47	42	48	34	46
Hardly ever	12	16	9	15	6	21
No response	6	11	2	3	3	2
Wear sunhats?						
Most of the time	28	18***	35	27	36	23⁺
Sometimes	49	46	46	50	45	41
Hardly ever	18	27	17	21	17	34
No response	5	10	2	2	2	1
Wear sunscreen?						
Most of the time	29	23*	33	22**	47	26**
Sometimes	42	35	40	41	34	39
Hardly ever	23	31	24	34	17	33
No response	6	11	3	2	2	1

- Items in bold show a statistically significant difference between students liking school a lot and other students.

Table 193 **How important is it that you wear a sunhat, sunscreen, and clothes in the sun?**

	Phase 2***		Phase 3***		Comparison***	
	Likes school a lot %	Other %	Likes school a lot %	Other %	Likes school a lot %	Other %
Very important	74	58	75	57	70	44
Important	19	29	21	31	27	48
Not important	4	6	3	11	-	9
No response	4	7	1	1	-	-

- Items in bold show a statistically significant difference between students liking school a lot and other students.

Table 194 **How much do you like sun bathing?**

	Phase 2		Phase 3		Comparison	
	Likes school a lot %	Other %	Likes school a lot %	Other %	Likes school a lot %	Other %
A lot	17	12	13	13	20	18
A bit	21	17	18	14	17	13
Middle	15	17	18	20	14	18
Not much	15	20	21	20	34	24
Not much at all	32	30	28	32	13	27
No response	1	5	1	1	2	-

Table 195 Which hat BEST protects you from the sun?

	Phase 2		Phase 3		Comparison	
	Likes school a lot %	Other %	Likes school a lot %	Other %	Likes school a lot %	Other %
Cap	14	13	20	23	14	9
hat with brim	79	78	77	75	83	87
Beanie	-	-	<1	<1	-	1
Visor	3	2	3	2	2	1
No response	4	8	<1	<1	2	3

Table 196 Which shirt BEST protects you from the sun?

	Phase 2		Phase 3		Comparison	
	Likes school a lot %	Other %	Likes school a lot %	Other %	Likes school a lot %	Other %
tee-shirt	39	33	40	42	41	31
Sleeveless tee	5	7	4	4	2	4
Vest	12	13	10	13	-	6
long-sleeved shirt	40	40	45	41	52	55
No response	4	8	1	1	6	4

Table 197 Which cream BEST protects you from the sun?

	Phase 2		Phase 3		Comparison	
	Likes school a lot %	Other %	Likes school a lot %	Other %	Likes school a lot %	Other %
body lotion	6	7	6	8	3	1
factor 15 sunscreen	5	8	7	7	3	2
factor 30 sunscreen	84	76	85	82	92	93
body glitter	1	1	1	1	2	1
No response	4	7	1	1	-	2

Table 198 Mean sunsmart knowledge (Maximum=3)

Student group	Year 6 students	
	Likes school a lot Mean (confidence interval)	Other Mean (confidence interval)
Phase 2	2.04 (1.96,2.12)	1.93 (1.83,2.03)
Phase 3	2.07 (1.98,2.16)	1.98 (1.86,2.10)
Comparison	2.27 (2.07,2.47)	2.35 (2.22,2.48)

Smokefree

Table 199 **Students' smokefree behaviours**

	Likes school a lot			Other		
	Yes %	No %	No response %	Yes %	No %	No response %
Tried smoking						
Phase 2***	12	87	2	20	74	6
Phase 3***	10	89	1	21	78	1
Comparison[†]	5	95	-	14	84	1
Smokes more than one cigarette a week						
Phase 2	2	97	1	1	93	7
Phase 3	2	96	2	3	94	3
Comparison	3	97	-	1	98	1

- Items in bold show a statistically significant difference between students liking school a lot and other students.

Table 200 **Do any of the people you live with smoke?**

Do any of the people you live with smoke?	Phase 2***		Phase 3		Comparison	
	Likes school a lot %	Other %	Likes school a lot %	Other %	Likes school a lot %	Other %
No	34	22	33	29	34	26
Yes – outside the house	52	51	56	55	55	57
Yes – inside the house	12	20	10	14	9	15
No response	3	7	1	2	2	1

- Items in bold show a statistically significant difference between students liking school a lot and other students.

Table 201 **How important is it that people around you do not smoke?**

	Phase 2***		Phase 3		Comparison**	
	Likes school a lot %	Other %	Likes school a lot %	Other %	Likes school a lot %	Other %
Very important	74	59	76	68	80	56
Important	6	14	8	12	8	22
Not important	16	21	14	19	13	21
No response	3	7	2	1	-	1

- Items in bold show a statistically significant difference between students liking school a lot and other students.

Table 202 **How much do you like it when the people around you smoke?**

	Phase 2 ^{***}		Phase 3 ^{***}		Comparison ^{**}	
	Likes school a lot %	Other %	Likes school a lot %	Other %	Likes school a lot %	Other %
A lot	1	2	1	4	-	2
A bit	2	2	1	2	2	1
Middle	1	7	1	4	3	17
Not much	8	12	9	17	13	21
Not much at all	86	72	87	71	83	60
No response	2	4	1	1	-	2

- Items in bold show a statistically significant difference between students liking school a lot and other students.

3.6 Student food choices by liking school

Table 203 **Student food choices overall**

Key food type	Phase 2		Phase 3		Comparison	
	Likes school a lot %	Other %	Likes school a lot %	Other %	Likes school a lot %	Other %
Vegetables and fruit	78	74	80	73⁺	80	75
Fruit only	70	65^{**}	72	66[*]	78	64
Vegetables only	35	32	40	34	45	41
Chips and chippies	66	68	53	59	59	61
Fizzy drinks	40	45	30	38	22	31
Sweets and treats	23	30	23	24	27	26
Muesli bars/plain biscuits	37	39	31	23	61	46
Cakes and puddings	33	30	37	35	23	26
Takeaways	37	34	28	27	16	21
Protein	65	65	76	76	72	66
Grains & cereals	93	88	93	93	100	93
Dairy	44	44	43	39	61	52

- Items in bold show a statistically significant difference between students liking school a lot and other students.

Table 204 **Student food choices at school**

Key food type	Phase 2		Phase 3		Comparison	
	Likes school a lot %	Other %	Likes school a lot %	Other %	Likes school a lot %	Other %
Vegetables and fruit	64	59*	70	60	66	57
Fruit only	61	56**	66	59	64	55
Vegetables only	8	7	12	6	2	6
Chips and chippies	55	55	39	47	45	48
Fizzy drinks	9	9	5	5	-	3
Sweets and treats	10	16	11	12	13	9
Muesli bars/plain biscuits	28	30	24	18	48	38
Cakes and puddings	16	18	19	21	14	16
Takeaways	12	12	10	11	5	6
Protein	17	17	31	23	30	23
Grains & cereals	63	54	69	68	70	65
Dairy	10	12	16	16	23	21

- Items in bold show a statistically significant difference between students liking school a lot and other students.

Table 205 **Student food choices at home**

Key food type	Phase 2		Phase 3		Comparison	
	Likes school a lot %	Other %	Likes school a lot %	Other %	Likes school a lot %	Other %
Vegetables and fruit	48	41	51	44	69	53
Fruit only	30	20	27	23	47	28
Vegetables only	30	29	34	30	44	40
Chips and chippies	30	35	27	28	31	31
Fizzy drinks	37	43	28	36	22	29
Sweets and treats	16	17	14	14	16	20
Muesli bars/plain biscuits	13	15	11	7	28	21
Cakes and puddings	22	16	25	21	11	13
Takeaways	29	28	20	18	14	16
Protein	60	57	67	69	66	54
Grains & cereals	86	80	90	85	98	89
Dairy	40	39	34	31	48	42

- Items in bold show a statistically significant difference between students liking school a lot and other students.

Table 206 Mean amount of each food consumed overall

Key food type	Phase 2		Phase 3		Comparison	
	Likes school a lot	Other	Likes school a lot	Other	Likes school a lot	Other
	Mean number of times eaten (confidence interval)	Mean number of times eaten (confidence interval)	Mean number of times eaten (confidence interval)	Mean number of times eaten (confidence interval)	Mean number of times eaten (confidence interval)	Mean number of times eaten (confidence interval)
Vegetables and fruit	2.13 (1.93,2.33)	1.64 (1.47,1.81)***	2.32 (2.12,2.52)	1.88 (1.64,2.12)**	2.56 (2.04,3.08)	2.15 (1.82,2.48)
Fruit only	1.55 (1.39,1.71)	1.07 (0.94,1.20)***	1.55 (1.41,1.69)	1.27 (1.09,1.45)*	1.80 (1.42,2.18)	1.36 (1.10,1.62)
Vegetables only	0.58 (0.49,0.67)	0.57 (0.46,0.68)	0.77 (0.65,0.89)	0.61 (0.47,0.75)	0.77 (0.52,1.02)	0.79 (0.61,0.97)
Chips and chippies	1.16 (1.05,1.27)	1.17 (1.05,1.29)	0.87 (0.76,0.98)	0.95 (0.82,1.08)	0.94 (0.71,1.17)	0.88 (0.74,1.02)
Fizzy drinks	0.63 (0.54,0.72)	0.77 (0.66,0.88)⁺	0.42 (0.34,0.50)	0.56 (0.45,0.67)⁺	0.33 (0.16,0.50)	0.48 (0.34,0.62)
Sweets and treats	0.33 (0.27,0.39)	0.43 (0.34,0.52)	0.29 (0.23,0.35)	0.35 (0.25,0.45)	0.34 (0.18,0.50)	0.33 (0.23,0.43)
Muesli bars/plain biscuits	0.53 (0.45,0.61)	0.59 (0.49,0.69)	0.44 (0.36,0.52)	0.31 (0.23,0.39)⁺	1.03 (0.75,1.31)	0.88 (0.67,1.09)
Cakes and puddings	0.49 (0.41,0.57)	0.38 (0.31,0.45)⁺	0.58 (0.49,0.67)	0.54 (0.43,0.65)	0.25 (0.13,0.37)	0.34 (0.23,0.45)
Takeaways	0.51 (0.44,0.58)	0.48 (0.40,0.56)	0.33 (0.27,0.39)	0.37 (0.28,0.46)	0.20 (0.08,0.32)	0.27 (0.17,0.37)
Protein	1.08 (0.98,1.18)	1.01 (0.90,1.12)	1.47 (1.33,1.61)	1.31 (1.16,1.46)	1.13 (0.90,1.36)	0.96 (0.80,1.12)
Grains & cereals	2.46 (2.32,2.60)	2.02 (1.88,2.16)***	2.69 (2.53,2.85)	2.48 (2.29,2.67)	2.69 (2.39,2.99)	2.28 (2.07,2.49)⁺
Dairy	0.58 (0.51,0.65)	0.62 (0.53,0.71)	0.59 (0.50,0.68)	0.56 (0.45,0.67)	0.73 (0.56,0.90)	0.72 (0.58,0.86)

- Items in bold show a statistically significant difference between liking school a lot and other students.

Table 207 Mean amount of each food consumed at school

Key food type	Phase 2		Phase 3		Comparison	
	Likes school a lot	Other	Likes school a lot	Other	Likes school a lot	Other
	Mean number of times eaten (confidence interval)	Mean number of times eaten (confidence interval)	Mean number of times eaten (confidence interval)	Mean number of times eaten (confidence interval)	Mean number of times eaten (confidence interval)	Mean number of times eaten (confidence interval)
Vegetables and fruit	1.18 (1.06,1.30)	0.88 (0.77,0.99)***	1.31 (1.19,1.43)	1.00 (0.87,1.13)**	1.23 (0.95,1.51)	1.01 (0.80,1.22)
Fruit only	1.07 (0.96,1.18)	0.80 (0.70,0.90)***	1.13 (1.03,1.23)	0.94 (0.81,1.07)⁺	1.22 (0.94,1.50)	0.94 (0.74,1.14)
Vegetables only	0.10 (0.06,0.14)	0.09 (0.05,0.13)	0.18 (0.12,0.24)	0.06 (0.03,0.09)**	0.02 (-0.01,0.05)	0.07 (0.02,0.12)
Chips and chippies	0.77 (0.70,0.84)	0.72 (0.64,0.80)	0.53 (0.45,0.61)	0.62 (0.52,0.72)	0.55 (0.39,0.71)	0.55 (0.45,0.65)
Fizzy drinks	0.11 (0.07,0.15)	0.11 (0.07,0.15)	0.05 (0.02,0.08)	0.06 (0.02,0.10)	-	0.05 (0.00,0.10)
Sweets and treats	0.12 (0.08,0.16)	0.22 (0.15,0.29)*	0.13 (0.09,0.17)	0.18 (0.10,0.26)	0.14 (0.04,0.24)	0.11 (0.05,0.17)
Muesli bars/plain biscuits	0.37 (0.31,0.43)	0.42 (0.34,0.50)	0.30 (0.24,0.36)	0.23 (0.16,0.30)	0.66 (0.46,0.86)	0.56 (0.41,0.71)
Cakes and puddings	0.21 (0.16,0.26)	0.20 (0.15,0.25)	0.25 (0.19,0.31)	0.25 (0.18,0.32)	0.14 (0.05,0.23)	0.17 (0.10,0.24)
Takeaways	0.14 (0.10,0.18)	0.14 (0.10,0.18)	0.11 (0.07,0.15)	0.13 (0.08,0.18)	0.05 (0.00,0.10)	0.06 (0.02,0.10)
Protein	0.21 (0.16,0.26)	0.20 (0.15,0.25)	0.40 (0.33,0.47)	0.31 (0.23,0.39)	0.31 (0.19,0.43)	0.27 (0.18,0.36)
Grains & cereals	0.87 (0.78,0.96)	0.66 (0.59,0.73)***	0.92 (0.84,1.00)	0.88 (0.78,0.98)	0.86 (0.69,1.03)	0.79 (0.68,0.90)
Dairy	0.12 (0.09,0.15)	0.13 (0.09,0.17)	0.19 (0.14,0.24)	0.20 (0.13,0.27)	0.25 (0.13,0.37)	0.23 (0.15,0.31)

- Items in bold show a statistically significant difference between liking school a lot and other students.

Table 208 Mean amount of each food consumed at home

Key food type	Phase 2		Phase 3		Comparison	
	Likes school a lot	Other	Likes school a lot	Other	Likes school a lot	Other
	Mean number of times eaten (confidence interval)	Mean number of times eaten (confidence interval)	Mean number of times eaten (confidence interval)	Mean number of times eaten (confidence interval)	Mean number of times eaten (confidence interval)	Mean number of times eaten (confidence interval)
Vegetables and fruit	0.95 (0.82,1.08)	0.76 (0.63,0.89)⁺	1.01 (0.86,1.16)	0.88 (0.71,1.05)	1.33 (1.01,1.65)	1.14 (0.91,1.37)
Fruit only	0.48 (0.39,0.57)	0.28 (0.21,0.35)^{***}	0.43 (0.34,0.52)	0.33 (0.23,0.43)	0.58 (0.41,0.75)	0.43 (0.29,0.57)
Vegetables only	0.47 (0.39,0.55)	0.49 (0.39,0.59)	0.58 (0.47,0.69)	0.55 (0.42,0.68)	0.75 (0.50,1.00)	0.72 (0.55,0.89)
Chips and chippies	0.39 (0.33,0.45)	0.45 (0.38,0.52)	0.34 (0.27,0.41)	0.34 (0.256,0.42)	0.39 (0.24,0.54)	0.33 (0.25,0.41)
Fizzy drinks	0.52 (0.44,0.60)	0.66 (0.57,0.75)⁺	0.36 (0.29,0.43)	0.50 (0.40,0.60)⁺	0.33 (0.16,0.50)	0.43 (0.31,0.55)
Sweets and treats	0.21 (0.16,0.26)	0.21 (0.16,0.26)	0.16 (0.12,0.20)	0.18 (0.12,0.24)	0.20 (0.08,0.32)	0.22 (0.14,0.30)
Muesli bars/plain biscuits	0.16 (0.12,0.20)	0.17 (0.12,0.22)	0.14 (0.09,0.19)	0.08 (0.04,0.12)	0.38 (0.21,0.55)	0.32 (0.20,0.44)
Cakes and puddings	0.27 (0.22,0.32)	0.18 (0.13,0.23)[*]	0.33 (0.26,0.40)	0.29 (0.21,0.37)	0.11 (0.03,0.19)	0.17 (0.08,0.26)
Takeaways	0.37 (0.31,0.43)	0.34 (0.27,0.41)	0.22 (0.17,0.27)	0.24 (0.17,0.31)	0.16 (0.06,0.26)	0.21 (0.12,0.30)
Protein	0.87 (0.78,0.96)	0.81 (0.72,0.90)	1.07 (0.96,1.18)	1.00 (0.87,1.13)	0.81 (0.63,0.99)	0.69 (0.56,0.82)
Grains & cereals	1.59 (1.49,1.69)	1.36 (1.25,1.47)^{**}	1.77 (1.65,1.89)	1.60 (1.44,1.76)	1.83 (1.60,2.06)	1.49 (1.33,1.65)[*]
Dairy	0.47 (0.41,0.53)	0.48 (0.41,0.55)	0.39 (0.33,0.45)	0.36 (0.28,0.44)	0.48 (0.36,0.60)	0.49 (0.38,0.60)

- Items in bold show a statistically significant difference between liking school a lot and other students.

4. Lead and classroom teacher survey tables

This section of the technical report presents the data from the school staff surveys. Most of this information comes from baseline and end of 2008 surveys of FiS lead teachers from Phase 1–3 schools, and classroom teachers from Phase 2–3 schools. The baseline classroom teacher survey was completed by Year 4 teachers (who taught the students we were tracking), and the end of 2008 survey, by Year 6 teachers (who now taught the students we were tracking). The data is reported as a percentage of the total number of teachers who completed the surveys. These figures are:

- FiS lead teachers: Baseline N=122; End 2008 N=104
- Classroom teachers: Baseline N=52; End 2008 N=46

In most case baseline and end of 2008 data is reported for FiS lead teachers and classroom teachers in separate sections of this chapter. If baseline data was not available, then end of 2008 FiS lead teacher and classroom teacher data is reported in the same table in the FiS lead teacher section below.

4.1 Survey of FiS lead teachers

Table 209 The health priority areas focused on at FiS schools

Area	Lead teachers (Phase 1–3)	
	End 2008	
	Focus in 2008	Plans for 2009
	%	%
Healthy eating	93	70
Physical activity	86	68
Sunsmart	65	60
Emotional and social wellbeing	66	64
Smokefree	38	38
Other areas	14	14
No areas	1	NA
Not sure/not decided	-	17

Table 210 **Lead teachers improvements or developments to school activities in 2008**

Area of improvement or development	Lead teachers (Phase 1–3) End 2008 %
Healthy eating	
Whole-school policies or guidelines relating to healthy eating	52
Whole-school practices or events relating to healthy eating	72
Improved or new curriculum resources and activities relating to healthy eating	35
Working with parents and whānau on areas relating to healthy eating	45
Working with health agencies on areas relating to healthy eating	53
No changes made	6
Other	3
Physical activity	
Whole-school policies or guidelines relating to physical activity	36
Whole-school physical activity events or practices	63
Improved or new curriculum resources and activities relating to physical activity	51
Working with parents and whānau on areas relating to physical activity	26
Working with health agencies on areas relating to physical activity	38
No changes made	21
Other	1
Sun protection	
Whole-school policies or guidelines relating to sun protection	43
Whole-school practices or events relating to sun protection	44
Improved or new curriculum resources and activities relating to sun protection	20
Working with parents and whānau on areas relating to sun protection	34
Working with health agencies on areas relating to sun protection	27
No changes made	26
Other	-
Smokefree	
Whole-school policies or guidelines relating to smokefree behaviours	39
Whole-school practices or events relating to smokefree behaviours	26
Improved or new curriculum resources and activities relating to smokefree behaviours	13
Working with parents and whānau on areas relating to smokefree behaviours	17
Working with health agencies on areas relating to smokefree behaviours	17
No changes made	44
Other	4

Table 211 **To which aspects of the HPS framework were improvements linked?**

Aspect of the HPS framework	Lead teachers (Phase 1–3)
	End 2008 %
School organisation and environment	78
Active student involvement in school organisation and environment	14
Curriculum, teaching, and learning	38
Active student involvement in curriculum, teaching, and learning	14
Community links and partnerships: Health and community agencies	44
Community links and partnerships: Parents and whānau	22
Active parent/whānau involvement in setting directions	16
No areas	1

Note: This table shows coded responses from an open-ended question.

Table 212 **Influences on decision to focus on health areas**

Focus decision influence	Lead teachers (Phase 1–3)
	End 2008 %
Continued developing areas previously focused on	80
Focused on areas not previously looked at	35
Long term plans/planning and reporting targets in areas	40
School data showed need	27
Staff were interested in these areas	35
FiS cluster decided to focus on these areas	19
Community consultations identified areas	26
NAGs in these areas	39
Programmes or resources available in these areas	39
Focused on healthy eating because of the free fruit	38

Table 213 **Other health and wellbeing initiatives influencing FiS**

Initiative	Lead teachers (Phase 1–3)
	End 2008 %
The new food and beverage classification system, tool kits for schools, and NAGs	51
The Fuelled 4 School campaign that is part of Mission-On	4
Other initiatives that are part of Mission-On or HEHA	24
Media campaigns (e.g., focus on healthy lifestyles or obesity)	12
Regional initiatives (such as Project Energize)	5
Other	5
No initiatives	30
No response	33

Table 214 **Did you make changes to meet the Healthy Eating NAGs?**

Made changes?	Lead teachers (Phase 1–3) End 2008
	%
Yes made new changes as a result of the NAGs	40
Yes improved on changes made since being part of FIS	30
No already made changes since being part of FIS	19
No already meet NAG requirements	5
No have not considered these changes to the NAGs yet	1
Other	1
No response	4

Table 215 **Does your school use the HPS approach?**

	Lead teachers (Phase 1–3)	
	Baseline	End 2008
	%	%
Use HPS***	33	92
Not using HPS (but have a relationship with HPS advisor)	27	NA
Not using HPS	38	2
Not sure/no response	2	6

- Items in bold show a statistically significant shift from 2006–8.

Table 216 **Does your school have a health team?**

Health team?	Lead teachers (Phase 1–3) End 2008
	%
Yes	75
No	20
Other	3
No response	2

Table 217 **Who is represented on your school health team?**

People represented	Lead teachers (Phase 1–3) End 2008 %
Students	53
FiS lead teacher	67
Teachers who have Health and PE curriculum responsibility	51
Principal	47
Senior staff	22
Teacher aides/non-teaching staff	21
Board of Trustee members	21
Parents and whānau	31
Local health professionals	27
Local community group members	9

Table 218 **Use of whole school approaches to teach or promote health and wellbeing**

Whole school approaches	Lead teachers (Phase 1–3) End 2008 %
Curriculum integration	89
Māori frameworks	27
Action competence models	30
Inquiry approaches	30
Strengths-based approaches	23
Positive behaviour change or self-worth approaches	62
Health behaviour theories	10
No – Individual teachers use different approaches	10
Not sure	3
No response	1

Table 219 **Rating of areas of school practice – school-wide environment**

Current situation	Lead teachers (Phase 1–3)	
	Baseline	End 2008
	%	%
The school-wide focus on health and wellbeing***		
Excellent	13	31
Good	49	53
Average	31	14
Area for development	7	2
No response	-	-
Whole-school policies and guidelines on health and wellbeing***		
Excellent	8	30
Good	50	50
Average	31	10
Area for development	10	10
No response	1	1
How the school physical environment promotes health and wellbeing		
Excellent	32	34
Good	39	43
Average	25	15
Area for development	3	7
No response	-	1

- Items in bold show a statistically significant shift from 2006–8.

Table 220 **Rating of areas of school practice – leadership and learning**

Current situation	Lead teachers (Phase 1–3)	
	Baseline	End 2008
	%	%
School managers' awareness of and involvement in school health and wellbeing activities**		
Excellent	25	43
Good	45	40
Average	25	13
Area for development	3	3
No response	1	-
Staff awareness of and involvement in school health and wellbeing activities		
Excellent	23	35
Good	56	49
Average	16	13
Area for development	4	4
No response	1	-
Integration of health and wellbeing related goals into the curriculum⁺		
Excellent	12	25
Good	55	53
Average	26	15
Area for development	6	7
No response	1	-
Staff access to professional development about health and wellbeing		
Excellent	13	17
Good	42	53
Average	34	19
Area for development	9	11
No response	2	-
Networking or sharing of health and wellbeing related resources between local schools***		
Excellent	2	6
Good	11	31
Average	37	32
Area for development	47	32
No response	3	-

- Items in bold show a statistically significant shift from 2006–8.

Table 221 **Rating of areas of school practice – community connections**

Current situation	Lead teachers (Phase 1–3)	
	Baseline %	End 2008 %
Making connections with parents and whānau about health and wellbeing***		
Excellent	7	15
Good	28	48
Average	47	27
Area for development	19	10
No response	-	-
Making connections with the local Māori community about health and wellbeing		
Excellent	7	13
Good	29	31
Average	34	30
Area for development	30	25
No response	-	1
Staff knowledge about the resources the wider health community could offer the school***		
Excellent	22	19
Good	32	59
Average	35	18
Area for development	11	4
No response	-	-
Involvement of the wider health community in school health and wellbeing activities⁺		
Excellent	13	16
Good	31	47
Average	40	25
Area for development	14	11
No response	2	1

- Items in bold show a statistically significant shift from 2006–8.

Table 222 **Rating of students' general behaviours, knowledge, attitudes, or health**

Current situation	Lead teachers (Phase 1–3)	
	Baseline	End 2008
	%	%
Students' involvement in school decision-making about health and wellbeing***		
Excellent	4	15
Good	21	38
Average	31	24
Area for development	43	23
No response	1	-
Students' ability to take ownership over personal health and wellbeing goals***		
Excellent	4	9
Good	27	53
Average	50	27
Area for development	19	11
No response	-	1
Students' behaviour/attention span in class***		
Excellent	2	12
Good	27	56
Average	56	30
Area for development	14	2
No response	1	1
Students' achievement/learning outcomes***		
Excellent	3	8
Good	34	57
Average	48	32
Area for development	12	2
No response	3	2
Students' emotional and social health and wellbeing		
Excellent	NA	13
Good	NA	55
Average	NA	24
Area for development	NA	6
No response	NA	2
Students' physical health and wellbeing		
Excellent	NA	14
Good	NA	57
Average	NA	24
Area for development	NA	3
No response	NA	2

- Items in bold show a statistically significant shift from 2006–8.

Table 223 **Rating of student practices – four health areas**

Current situation	Lead teachers (Phase 1–3)	
	Baseline	End 2008
	%	%
Healthy eating		
Students' healthy eating behaviours***		
Excellent	2	14
Good	19	54
Average	39	28
Area for development	39	3
No response	1	1
Students' knowledge of the health benefits of good nutrition***		
Excellent	7	22
Good	29	53
Average	45	22
Area for development	19	1
No response	1	2
Students' attitude towards healthy eating practices***		
Excellent	4	14
Good	22	56
Average	39	25
Area for development	33	4
No response	2	1
Physical activity		
Students' engagement in physical activity***		
Excellent	15	40
Good	46	43
Average	36	12
Area for development	3	4
No response	-	1
Students' knowledge of the health benefits of physical activity***		
Excellent	10	30
Good	44	55
Average	41	13
Area for development	5	1
No response	-	1
Students' attitude towards participating in physical activity***		
Excellent	16	38
Good	48	48
Average	33	12
Area for development	3	1
No response	-	1

- Items in bold show a statistically significant shift from 2006–8.

Table 224 **Rating of student practices – four health areas continued**

Current situation	Lead teachers (Phase 1–3)	
	Baseline	End 2008
	%	%
<i>Smokefree</i>		
Students' smokefree behaviours		
Excellent	28	33
Good	30	32
Average	25	16
Area for development	11	11
No response	7	9
Students' knowledge of the health benefits of smokefree behaviours*		
Excellent	13	27
Good	38	35
Average	36	21
Area for development	9	13
No response	4	4
Students' attitudes towards smokefree behaviours⁺		
Excellent	11	27
Good	39	36
Average	31	23
Area for development	13	12
No response	5	3
<i>Sun protection</i>		
Students' sun protection behaviours⁺		
Excellent	14	21
Good	34	42
Average	29	24
Area for development	24	12
No response	-	1
Students' knowledge of the health benefits of sun protection		
Excellent	17	31
Good	43	39
Average	29	18
Area for development	11	11
No response	-	1
Students' attitude towards sun protection behaviours		
Excellent	13	18
Good	35	42
Average	30	26
Area for development	21	13
No response	-	1

- Items in bold show a statistically significant shift from 2006–8.

Table 225 **Impacts of FiS on areas of school practice – school-wide environment**

Impacts of FiS	End 2008	
	Year 6 teachers (Phase 2&3) %	Lead teachers (Phase 1–3) %
The school-wide focus on health and wellbeing		
Major positive impact	48	55
Minor positive impact	36	38
No impact	5	4
Negative impact	-	-
Not sure	7	1
No response	5	2
Whole-school policies and guidelines on health and wellbeing		
Major positive impact	39	44
Minor positive impact	41	42
No impact	9	9
Negative impact	-	-
Not sure	7	2
No response	5	3
How the school physical environment promotes health and wellbeing		
Major positive impact	36	28
Minor positive impact	34	42
No impact	14	23
Negative impact	-	1
Not sure	11	3
No response	5	3

Table 226 **Impacts of FiS on areas of school practice – leadership and learning**

Impacts of FiS	End 2008	
	Year 6 teachers (Phase 2&3) %	Lead teachers (Phase 1–3) %
School managers' awareness of and involvement in school health and wellbeing activities		
Major positive impact	39	43
Minor positive impact	43	38
No impact	-	13
Negative impact	-	1
Not sure	14	1
No response	5	4
Staff awareness of and involvement in school health and wellbeing activities		
Major positive impact	32	37
Minor positive impact	50	43
No impact	2	15
Negative impact	2	-
Not sure	9	1
No response	5	4
Integration of health and wellbeing related goals into the curriculum		
Major positive impact	32	27
Minor positive impact	45	45
No impact	9	22
Negative impact	2	-
Not sure	7	1
No response	5	5
Staff access to professional development about health and wellbeing		
Major positive impact	20	35
Minor positive impact	39	41
No impact	18	18
Negative impact	2	-
Not sure	16	2
No response	5	4
Networking or sharing of health and wellbeing related resources between local schools		
Major positive impact	16	20
Minor positive impact	30	30
No impact	25	38
Negative impact	5	-
Not sure	20	8
No response	5	4

Table 227 Impacts of FiS on areas of school practice – community connections

Impacts of FiS	End 2008	
	Year 6 teachers (Phase 2&3) %	Lead teachers (Phase 1–3) %
Making connections with parents and whānau about health and wellbeing		
Major positive impact	18	26
Minor positive impact	43	41
No impact	23	25
Negative impact	-	1
Not sure	7	3
No response	9	4
Making connections with the local Māori community about health and wellbeing		
Major positive impact	16	18
Minor positive impact	30	35
No impact	30	36
Negative impact	-	1
Not sure	16	6
No response	9	5
Staff knowledge about the resources the wider health community could offer the school		
Major positive impact	16	29
Minor positive impact	43	43
No impact	23	24
Negative impact	-	-
Not sure	11	1
No response	7	3
Involvement of the wider health community in school health and wellbeing activities		
Major positive impact	11	21
Minor positive impact	45	44
No impact	27	29
Negative impact	-	1
Not sure	9	2
No response	7	3

Table 228 **Impacts of FiS on students' general behaviours, knowledge, attitudes or health**

Impacts of FiS	End 2008	
	Year 6 teachers (Phase 2&3) %	Lead teachers (Phase 1-3) %
Students' involvement in school decision-making about health and wellbeing		
Major positive impact	25	31
Minor positive impact	41	37
No impact	9	22
Negative impact	-	-
Not sure	18	4
No response	7	7
Students' ability to take ownership over personal health and wellbeing goals		
Major positive impact	25	19
Minor positive impact	41	52
No impact	9	19
Negative impact	-	-
Not sure	18	1
No response	7	9
Students' behaviour/attention span in class		
Major positive impact	30	27
Minor positive impact	43	50
No impact	7	13
Negative impact	-	1
Not sure	14	3
No response	7	6
Students' achievement/learning outcomes		
Major positive impact	16	16
Minor positive impact	48	52
No impact	11	20
Negative impact	-	-
Not sure	18	6
No response	7	6
Students' emotional and social health and wellbeing		
Major positive impact	14	22
Minor positive impact	50	46
No impact	11	22
Negative impact	-	-
Not sure	18	6
No response	7	6

Table 229 **Impacts of FiS on students' general behaviours and health (continued)**

Impacts of FiS	End 2008	
	Year 6 teachers (Phase 2&3) %	Lead teachers (Phase 1-3) %
Students' physical health and wellbeing		
Major positive impact	32	32
Minor positive impact	48	47
No impact	2	13
Negative impact	-	-
Not sure	11	6
No response	7	6

Table 230 **Impacts of FiS on student practices: Healthy eating**

Impacts of FiS	End 2008	
	Year 6 teachers (Phase 2&3) %	Lead teachers (Phase 1-3) %
Healthy eating		
Students' healthy eating behaviours		
Major positive impact	36	44
Minor positive impact	45	42
No impact	2	7
Negative impact	2	-
Not sure	9	1
No response	5	6
Students' knowledge of the health benefits of good nutrition		
Major positive impact	34	40
Minor positive impact	48	45
No impact	2	9
Negative impact	50	-
Not sure	57	-
No response	5	6
Students' attitude towards healthy eating practices		
Major positive impact	34	39
Minor positive impact	48	44
No impact	2	9
Negative impact	2	1
Not sure	9	1
No response	5	6

Table 231 **Impacts of FiS on student practices: Physical activity**

Impacts of FiS	End 2008	
	Year 6 teachers (Phase 2&3) %	Lead teachers (Phase 1-3) %
<i>Physical activity</i>		
Students' engagement in physical activity		
Major positive impact	20	23
Minor positive impact	48	49
No impact	14	21
Negative impact	-	-
Not sure	14	1
No response	5	6
Students' knowledge of the health benefits of physical activity		
Major positive impact	18	23
Minor positive impact	45	51
No impact	14	19
Negative impact	-	-
Not sure	18	1
No response	5	6
Students' attitude towards participating in physical activity		
Major positive impact	16	24
Minor positive impact	43	49
No impact	16	18
Negative impact	-	-
Not sure	20	3
No response	5	6

Table 232 **Impacts of FiS on student practices: Smokefree**

Impacts of FiS	End 2008	
	Year 6 teachers (Phase 2&3) %	Lead teachers (Phase 1-3) %
Smokefree		
Students' smokefree behaviours		
Major positive impact	5	12
Minor positive impact	20	32
No impact	39	36
Negative impact	2	1
Not sure	27	8
No response	7	12
Students' knowledge of the health benefits of smokefree behaviours		
Major positive impact	9	12
Minor positive impact	20	34
No impact	34	36
Negative impact	2	1
Not sure	30	7
No response	5	11
Students' attitudes towards smokefree behaviours		
Major positive impact	2	12
Minor positive impact	25	34
No impact	32	35
Negative impact	2	1
Not sure	32	9
No response	7	10

Table 233 **Impacts of FiS on student practices: Sunsmart**

Impacts of FiS	End 2008	
	Year 6 teachers Phase 2&3 %	Lead teachers Phase 1-3 %
<i>Sun protection</i>		
Students' sun protection behaviours		
Major positive impact	20	24
Minor positive impact	34	41
No impact	20	24
Negative impact	-	2
Not sure	20	3
No response	5	6
Students' knowledge of the health benefits of sun protection		
Major positive impact	20	25
Minor positive impact	36	39
No impact	18	24
Negative impact	-	2
Not sure	20	4
No response	5	6
Students' attitude towards sun protection behaviours		
Major positive impact	18	22
Minor positive impact	34	41
No impact	23	26
Negative impact	2	1
Not sure	18	4
No response	5	6

Table 234 **Support for FiS by school community in 2008**

Support by:	Lead teachers: (Phase 1-3): End 2008				
	Very high %	High %	Medium %	Low %	Very low/none %
School management	63	25	12	-	1
Students	58	36	7	-	-
Teachers	62	27	9	3	-
Parents and whānau	46	33	17	3	1

Table 235 **Changes to school healthy eating policies and guidelines**

Aspect of policy, guideline, or promotion	Lead teachers (Phase 1–3)	
	Baseline %	End 2008 %
A school-wide healthy eating or nutrition policy or guidelines***		
Practised policy/guidelines	44	66
Optional guidelines	26	18
No guidelines	27	9
No response	2	7
Healthy food guidelines for interval, lunch, or breakfast food**		
Practised policy/guidelines	53	70
Optional guidelines	25	17
No guidelines	20	9
No response	2	4
Healthy food guidelines for food on sale at school*		
Practised policy/guidelines	47	61
Optional guidelines	20	14
No guidelines	25	12
No response	7	13
Healthy food guidelines for school events***		
Practised policy/guidelines	7	38
Optional guidelines	29	37
No guidelines	61	20
No response	4	5
Healthy food guidelines for buying food or rewards for students***		
Practised policy/guidelines	17	39
Optional guidelines	25	33
No guidelines	54	24
No response	3	4
Healthy food guidelines for fundraising sales***		
Practised policy/guidelines	15	32
Optional guidelines	21	37
No guidelines	60	28
No response	4	4
Guidelines for the modelling of healthy eating by staff **		
Practised policy/guidelines	11	24
Optional guidelines	33	38
No guidelines	52	34
No response	3	5
Publicised healthy eating or nutrition guidelines (e.g., in newsletters)***		
A lot	30	44
Some	48	50
None	21	5
No response	2	1

- Items in bold show a statistically significant shift from 2006–8.

Table 236 **Changes to school physical activity policies and guidelines**

Aspect of policy, guideline, or promotion	Lead teachers (Phase 1–3)	
	Baseline %	End 2008 %
A whole-school policy or guidelines about physical activity		
Practised policy/guidelines	60	53
Optional guidelines	20	20
No guidelines	19	20
No response	2	7
Guidelines for the amount of physical activity students do each week⁺		
Practised policy/guidelines	35	32
Optional guidelines	43	32
No guidelines	19	32
No response	2	5
Guidelines for the modelling of physical activity by staff		
Practised policy/guidelines	19	12
Optional guidelines	32	32
No guidelines	48	51
No response	2	6
A focus on students staying active during class time		
A lot	NA	13
Some	NA	46
None	NA	39
No response	NA	2
Promotion of walking or cycling to school (e.g., Walking School Bus)		
A lot	13	16
Some	37	24
None	49	55
No response	1	5
Publicised school physical activity guidelines (e.g., in newsletters)		
A lot	16	17
Some	44	48
None	37	33
No response	3	2

- Items in bold show a statistically significant shift from 2006–8.

Table 237 **Amount of physical activity reported by teachers**

Amount of physical activity	Year 6 teachers (Phase 2&3)		Lead teachers (Phase 1–3)	
	Baseline mean	End 2008 mean	Baseline mean	End 2008 mean
Average number of sessions	4.58	4.77	4.18	4.66
Average amount of class time (hours)	2.75	2.90	2.41	2.64

Table 238 **Changes to school sunsmart policies or guidelines**

Aspect of policy, guideline, or promotion	Lead teachers (Phase 1–3)	
	Baseline %	End 2008 %
A sun protection policy or plan⁺		
Practised policy/guidelines	55	71
Optional guidelines	21	16
No guidelines	21	11
No response	2	2
A requirement that students wear sunhats when outside in summer⁺		
Practised policy/guidelines	54	71
Optional guidelines	28	18
No guidelines	17	10
No response	1	1
Requirement students wear sunscreen lunchtime/during school events in summer⁺		
Practised policy/guidelines	19	30
Optional guidelines	50	49
No guidelines	30	19
No response	1	2
Suggested times for outside activities and PE in summer⁺		
Practised policy/guidelines	19	28
Optional guidelines	40	46
No guidelines	40	24
No response	1	2
Guidelines for the modelling of sun protection behaviours by staff^{ff**}		
Practised policy/guidelines	34	53
Optional guidelines	35	35
No guidelines	28	12
No response	3	1
Shady areas provided in the school grounds		
A lot	62	61
Some	36	35
None	2	4
No response	-	1
Shady areas provided at sporting or other outdoor events		
A lot	31	31
Some	48	57
None	17	10
No response	3	3
Publicised school sunsmart guidelines (e.g. in newsletters)		
A lot	34	36
Some	43	49
None	22	13
No response	1	3

- Items in bold show a statistically significant shift from 2006–8.

Table 239 **Changes to school smokefree policies and guidelines**

Aspect of policy, guideline, or promotion	Lead teachers (Phase 1–3)	
	Baseline %	End 2008 %
A smokefree policy		
Practised policy/guidelines	93	92
Optional guidelines	1	2
No guidelines	3	1
No response	2	5
Guidelines for ensuring school events are smokefree		
Practised policy/guidelines	80	86
Optional guidelines	9	6
No guidelines	10	5
No response	2	4
Guidelines for the modelling of smokefree behaviours by staff		
Practised policy/guidelines	62	71
Optional guidelines	13	9
No guidelines	22	16
No response	2	4
Guidelines on avoiding tobacco-sponsored organisations and products		
Practised policy/guidelines	39	48
Optional guidelines	16	10
No guidelines	42	35
No response	3	8
Guidelines for addressing student smoking		
Practised policy/guidelines	48	48
Optional guidelines	20	12
No guidelines	25	32
No response	6	9
The school is publicised as smokefree (e.g. by signs, posters, or newsletters)		
A lot	80	80
Some	17	18
None	2	1
No response	1	1

Table 240 **Lead teacher involvement in healthy eating and physical activity initiatives**

Type of initiative	Lead teachers (Phase 1–3)	
	Baseline %	End 2008 %
Breakfast or lunch clubs		
Yes	38	38
No	60	60
No response	2	2
SportsMark		
Yes	48	70
No	48	24
No response	5	6
Push Play activities		
Yes	14	7
No	76	72
No response	10	20
Community health initiatives		
Yes	12	11
No	81	69
No response	7	20
Jump Rope for Heart[†]		
Yes	71	55
No	26	38
No response	2	8
Regional physical activity programmes run with local sports trusts		
Yes	18	23
No	74	62
No response	8	15
Use of HEHA funding to develop school physical activity equipment or resources		
Yes	NA	26
No	NA	61
No response	NA	13

- Items in bold show a statistically significant shift from 2006–8.

Table 241 **Opportunities for student leadership**

Type of leadership	End 2008	
	Year 6 teachers (Phase 2&3) %	Lead teachers (Phase 1–3) %
Total decision-making	41	52
School-wide and community decision-making (e.g., health team, school council)	36	52
Classroom or curriculum decision-making	11	6
Individual decision-making (e.g., setting personal goals or inquiry actions)	7	-
Total school leaders	61	51
Promote health messages (e.g., at assembly, through newsletters, at events)	11	20
Healthy eating (e.g., fruit or lunch monitors)	25	22
Physical activity (e.g., Physical Activity Leaders (PAL) or coaching juniors)	34	26
Sunsmart (e.g., hat or sunblock monitors)	7	3
Smokefree (e.g., smokefree monitors at events)	-	2
Environmental (e.g., running school gardens, composting, or recycling)	7	8
Peer mediators or leaders (e.g., house leaders)	9	11
No examples of student leadership mentioned	27	34

Note: This table shows coded responses from an open-ended question.

Table 242 **Student involvement in school-wide healthy eating practices**

Type of student involvement	Lead teachers (Phase 1–3)	
	Baseline %	End 2008 %
Decisions about school healthy eating activities***		
A lot	11	25
Some	50	63
None	37	11
No response	2	1
Participation in school-wide healthy eating activities**		
A lot	24	35
Some	54	58
None	20	7
No response	2	1

- Items in bold show a statistically significant shift from 2006–8.

Table 243 **Student involvement in school-wide physical activity practices**

Type of student involvement	Lead teachers (Phase 1–3)	
	Baseline %	End 2008 %
Decisions about school physical activity**		
A lot	11	21
Some	55	61
None	34	17
No response	-	1
Participation in organised lunchtime physical activity		
A lot	43	50
Some	43	44
None	13	6
No response	1	-
Participation in organised weekly out-of-school time physical activity		
A lot	30	35
Some	41	36
None	27	30
No response	2	-

- Items in bold show a statistically significant shift from 2006–8.

Table 244 **Student involvement in school-wide sunsmart practices**

Type of student involvement	Lead teachers (Phase 1–3)	
	Baseline %	End 2008 %
Decisions about school sun protection activities**		
A lot	11	14
Some	36	52
None	53	33
No response	-	1
Participation in school-wide sun protection activities***		
A lot	10	27
Some	20	38
None	70	34
No response	-	2

- Items in bold show a statistically significant shift from 2006–8.

Table 245 **Student involvement in school-wide smokefree practices**

Type of student involvement	Lead teachers (Phase 1–3)	
	Baseline %	End 2008 %
Decisions about smokefree activities		
A lot	10	9
Some	29	31
None	61	56
No response	1	5
Participation in school-wide smokefree activities		
A lot	10	11
Some	35	34
None	53	53
No response	2	3
Participation in local, national, or international smokefree activities		
A lot	11	18
Some	25	32
None	61	46
No response	2	4

- Items in bold show a statistically significant shift from 2006–8.

Table 246 **Parent and whānau involvement in school-wide healthy eating practices**

Type of parent and whānau involvement	Lead teachers (Phase 1–3)	
	Baseline %	End 2008 %
Decisions about school healthy eating activities		
A lot	11	13
Some	56	65
None	33	21
No response	1	1
Participation in school-wide healthy eating activities**		
A lot	8	19
Some	52	59
None	39	20
No response	1	2

- Items in bold show a statistically significant shift from 2006–8.

Table 247 **Parent and whānau involvement in school-wide physical activity practices**

Type of parent and whānau involvement	Lead teachers (Phase 1–3)	
	Baseline %	End 2008 %
Decisions about school physical activity		
A lot	9	12
Some	48	54
None	42	33
No response	1	2
Weekly involvement in physical activity events during school		
A lot	10	13
Some	51	49
None	39	37
No response	-	1
Weekly involvement in physical activity events out-of-school time		
A lot	20	20
Some	49	46
None	30	33
No response	1	1

Table 248 **Parent and whānau involvement in school-wide sunsmart practices**

Type of parent and whānau involvement	Lead teachers (Phase 1–3)	
	Baseline %	End 2008 %
Decisions about school sun protection activities		
A lot	9	12
Some	42	36
None	49	51
No response	-	2
Participation in school sun protection activities		
A lot	10	15
Some	32	33
None	57	50
No response	1	2

Table 249 **Parent and whānau involvement in school-wide smokefree practices**

Type of parent and whānau involvement	Lead teachers (Phase 1–3)	
	Baseline %	End 2008 %
Decisions about smokefree activities		
A lot	7	8
Some	22	26
None	68	63
No response	2	4
Participation in school smokefree activities		
A lot	15	10
Some	25	36
None	58	51
No response	2	4

Table 250 **Partners supporting lead teachers as part of FiS**

Partners	Lead teachers (Phase 1–3)
	End 2008 %
FiSC/HPS adviser	87
Public health nurses (PHNs)	68
Sports Trust or SPARC representative	49
National Heart Foundation representative	40
Cancer Society representative	29
Staff from other schools	19
Social Workers in Schools (SWIS)	36
Life Education Trust	57
Police educators (e.g. DARE facilitators)	50
Regional HEHA coordinators	31
Iwi health providers	15
Other health workers (e.g., DHB)	21
Local community groups	14
School Support Services/Ministry of Education staff	14
Local businesses	6
Local iwi representatives	10
Local social services	6
College of Education/University staff	10
Local council	9
Other	7

Table 251 **The health resources found useful by classroom and lead teachers**

Type of resource (and agency provider)	End 2008	
	Year 6 teachers (Phase 2&3) %	Lead teachers (Phase 1-3) %
Healthy eating resources		
5+ A Day resources (United Fresh)	84	86
Food and nutrition for healthy kids toolkit (MoE)	30	54
Food and beverage classification system (MoH)	41	52
Other resources that are part of Mission-On (MoH, MoE, SPARC)	32	39
School Food Programme (NHF)	25	39
Physical activity resources		
Jump Jam resource kit (Brett Fairweather's Kidz Aerobix)	66	68
Jump Rope for Heart (NHF)	50	60
Active Schools Tool Kit (SPARC)	39	58
Push Play Action packs (SPARC)	59	52
Other resources from SPARC	23	23
Resources from sports trusts	11	7
Sunsmart resources		
Sunsmart resources from the Cancer Society	55	59
Resources from the Sunsmart schools website (CS)	39	27
Smokefree resources		
DARE or other resources from the police	23	37
Smokefree schools resources (HSC)	23	31
Lungfish challenge or resources (HSC)	-	6
Health Sponsorship Council programmes	5	2
General resources		
Teacher developed resources	75	53
Health and PE exemplars from TKI website (MoE)	55	46
Health and PE curriculum resources from TKI website (MoE)	32	33
Other resources from the MoE	39	50
Resources from Learning Media	34	35
DHB toolkits (MoH)	2	9
Resources from the health education database (MoH)	9	5
Other resources	-	10

Table 252 **Lead teacher reports of enrolment in agency programmes**

Programme (and agency provider)	Lead teachers (Phase 1–3)	
	Baseline %	End 2008 %
Registered for School Food Programme (NHF)***	22	46
Gained a School Food Programme award (NHF)*	16	35
Involved in Active Schools (SPARC/RST)***	48	70
Working towards sunsmart accreditation (CS)	19	25
Gained sunsmart accreditation (CS)***	7	23
Working towards a smokefree award (HSC)	8	8
Gained a smokefree award (HSC)	5	6

- Items in bold show a statistically significant shift from 2006–8.

Table 253 **Lead and classroom teachers' access to formal PD since starting FiS**

Type of PD	End 2008	
	Classroom teachers (Phase 2&3) %	Lead teachers (Phase 1–3) %
FiS school cluster sessions	34	73
PD provided by FiS coordinators or HPS advisors	39	60
Workshops about the new Food and Nutrition guidelines	18	34
Active Schools PD from Active Schools facilitators	30	48
PD run by school staff	48	30
PD provided by local sports trusts	18	19
PD provided by Public Health Nurses (PHN)	16	25
PD provided by School Support Services	21	15
PD provided by the Heart Foundation	11	11
PD provided by the Cancer Society	9	14
PD provided by other staff from local health services	11	8
PD about social and emotional health	23	22
Other conferences or workshops (e.g., NZ Health Teachers)	5	2
Other PD	7	3
No PD	18	7

Table 254 **Did you/other school staff attend FiS cluster meetings this year?**

Attended cluster meetings?	Lead teachers (Phase 1–3)
	End 2008 %
Yes most FiS cluster meetings	68
Yes some FiS cluster meetings	19
No did not have FiS cluster meetings in our region	4
No did not attend FiS cluster meetings	5
Other	3
No response	1

Table 255 **Number of whole-school PD initiatives at your school (other than FiS)**

How many initiatives?	Lead teachers (Phase 1–3)
	End 2008 %
0 – 1	11
2	32
3	29
4	9
5	2
6 or more	13
No response	5

Table 256 **School has structures in place to continue to develop approaches to health and wellbeing in the longer-term?**

Structures are in place?	Lead teachers Phase 1–3
	End 2008 %
Yes for most activities	55
Yes for some activities	35
No	4
Not sure	7

Table 257 **Lead teachers' views on school success factors for FiS**

Success factor	Lead teachers (Phase 1–3) End 2008		
	Mostly %	In part %	No/Not sure %
Factors that are in place (50% or more considered this to be mostly in place)			
Commitment of the principal to health and wellbeing activities	79	16	2
Support by all staff for our school's focus on health and wellbeing	66	25	8
A school-wide focus (or vision) on health and wellbeing	64	29	5
Policies and systems that support our school's focus on health and wellbeing	55	36	8
Factors that are partially in place (70% or more considered this to be mostly or partially in place)			
Support and communications from FiSC and HPS advisors	49	38	10
Clear understanding of messages from the MoH and MoE about the changes expected of schools	46	38	13
Curriculum resources around the four health areas	34	51	11
Support from the staff at local health and education agencies	33	54	10
Skilled staff members who lead health and wellbeing activities	31	63	5
Inclusion of the four health areas in school curriculum plans	30	50	15
Access to PD for lead health teachers about health and wellbeing	29	53	16
A long term plan for addressing our school's health and wellbeing priorities	26	50	22
Realistic timelines for making changes	22	52	23
A shared understanding among staff about HPS and ways to support student leadership	21	53	23
Student involvement in decision-making about health and wellbeing	20	59	18
Factors that require more support (25% or more considered this not to be in place)			
Parent and whānau involvement in decision-making about health and wellbeing	12	55	30
Systems that support schools to share ideas (e.g. school clusters)	19	46	32
Access to PD for all staff about health and wellbeing	15	49	32
Funding or release time for lead health teachers	32	32	35
Access to an ongoing source of fruit, or funding for fruit	24	11	63

Table 258 **Plans for fruit sustainability**

Sustainability plan	Lead teachers Phase 1–3
	End 2008
	%
No plans developed yet/will explore if funding stops	65
Developing school orchards or gardens	28
Fundraising or seeking sponsorship or donations	8
Working towards families taking responsibility/funding	10
Working with cluster or school team on options	7
Applied for HEHA funding	11
Other (e.g., will sell at school)	6

Table 259 **Main ways FiS has supported lead teachers' school to improve approaches**

Main ways	Lead teachers Phase 1–3
	End 2008
	%
FiS supports improvement in student outcomes	30
Catalyst for change and raised awareness	45
Access to professional development and support	39
Using HPS processes (e.g. student and parent involvement)	23

Note: This table shows coded responses from an open-ended question.

Table 260 **One thing lead teachers would change about FiS**

Main ways	Lead teachers (Phase 1–3)
	End 2008
	%
FiS processes (e.g. funding and fruit)	25
Improve clustering and professional development	12
The FiS model (e.g. matching school needs, broaden)	9
More access to health community	5

Note: This table shows coded responses from an open-ended question.

4.2 Survey of Year 4 and 6 FiS classroom teachers

Table 261 The health priority areas focused on at FiS schools

Focus area in 2008	Classroom teachers (Phase 2&3)
	Year 6 teacher End 2008 %
Healthy eating	93
Physical activity	93
Sunsmart	73
Emotional and social wellbeing	64
Smokefree	32
Other areas	11
No areas	-
Not sure	-

Table 262 Did you develop or improve your approaches to classroom activities during 2008?

Focus area in 2008	Classroom teachers (Phase 2&3)
	Year 6 teacher End 2008 %
Healthy eating	
Yes	61
No	20
Not sure	18
Physical activity	
Yes	70
No	20
Not sure	9
Sun protection	
Yes	52
No	32
Not sure	16
Smokefree	
Yes	18
No	64
Not sure	18

Table 263 **Classroom teachers changes to school activities in 2008 – healthy eating and physical activity**

Area of change	Classroom teachers (Phase 2&3) Year 6 teacher End 2008 %
Healthy eating	
School policy/environment/planning	39
School policy/environment active student involvement	18
Curriculum	43
Curriculum active student involvement	11
Parent connections	2
Parent connections active parent consultation	-
Health promoter connections	7
Other community connections	5
Already doing this/not necessary	-
In 2 year plan/part of plan for next year	-
Physical activity	
School policy/environment/planning	46
School policy/environment active student involvement	7
Curriculum	59
Curriculum active student involvement	5
Parent connections	2
Parent connections active parent consultation	-
Health promoter connections	16
Other community connections	2
Already doing this/not necessary	2
In 2 year plan/part of plan for next year	-

Note: This table shows coded responses from an open-ended question.

Table 264 **Classroom teachers changes to school activities in 2008 – sun protection and smokefree**

Area of change	Classroom teachers (Phase 2&3) Year 6 teacher End 2008 %
Sun protection	
School policy/environment/planning	50
School policy/environment active student involvement	2
Curriculum	25
Curriculum active student involvement	-
Parent connections	-
Parent connections active parent consultation	-
Health promoter connections	5
Other community connections	2
Already doing this/not necessary	2
In 2 year plan/part of plan for next year	2
Smokefree	
School policy/environment/planning	7
School policy/environment active student involvement	-
Curriculum	21
Curriculum active student involvement	-
Parent connections	2
Parent connections active parent consultation	2
Health promoter connections	11
Other community connections	-
Already doing this/not necessary	7
In 2 year plan/part of plan for next year	-

Note: This table shows coded responses from an open-ended question.

Table 265 **How classroom teachers teach about the four FiS health areas**

	Classroom teachers (Phase 2&3)	
	Year 4 teacher Baseline	Year 6 teacher End 2008
Students learn about health and wellbeing by:	%	%
Working on units about health/the four health areas*	92	75
Taking action in regard to class or school health initiatives	46	46
Being involved in school-wide decision making about health***	10	48
Being involved in setting assessment tasks or success criteria	31	46
Setting individual health/wellbeing goals	67	52
Setting collective health/wellbeing goals	40	36
Setting health/wellbeing topics or content	21	36
Taking action in regard to personal health/wellbeing goals	21	36
Taking action in regard to local community health initiatives	8	14

- Items in bold show a statistically significant shift from 2006–8.

Table 266 **How do you teach about healthy eating?**

	Classroom teachers (Phase 2&3)	
	Year 4 teacher Baseline	Year 6 teacher End 2008
Type of approach	%	%
Within stand-alone units or topics	58	43
Within integrated units or inquiry topics	67	80
Informally as need arises	50	64
Other	-	9
Do not cover	2	-

Table 267 **How do you approach teaching physical activity?**

	Classroom teachers (Phase 2&3)	
	Year 4 teacher Baseline	Year 6 teacher End 2008
Type of approach	%	%
By doing physical activity	94	91
By teaching skills	90	96
Within stand-alone units or topics	33	41
Within integrated units or inquiry topics	42	57
Informally as need arises	23	30
Other	-	18
Do not cover	-	-

Table 268 **How do you teach about sun protection?**

Type of approach	Classroom teachers (Phase 2&3)	
	Year 4 teacher	Year 6 teacher
	Baseline	End 2008
	%	%
Within stand-alone units or topics	40	27
Within integrated units or inquiry topics	48	48
Informally as need arises	46	61
Other	-	18
Do not cover	12	2

Table 269 **How do you teach about smokefree behaviours?**

Type of approach	Classroom teachers (Phase 2&3)	
	Year 4 teacher	Year 6 teacher
	Baseline	End 2008
	%	%
Within stand-alone units or topics	14	11
Within integrated units or inquiry topics	21	21
Informally as need arises	52	36
Other	-	14
Do not cover	29	43
No response	2	2

Table 270 **Models or approaches used to teach or promote health and wellbeing**

Whole school approaches	Classroom teachers (Phase 2&3)
	Year 6 teacher End 2008
	%
Health Promoting Schools (HPS) approach	68
Curriculum integration	82
Māori frameworks	34
Action competence models	30
Inquiry approaches	14
Strengths-based approaches	16
Positive behaviour change or self-worth approaches	57
Health behaviour theories	2
Other	9
No models or approaches	-
Not sure	-

Table 271 **Rating of areas of school practice– school-wide environment**

Current situation	Classroom teachers (Phase 2&3)	
	Year 4 teacher Baseline %	Year 6 teacher End 2008 %
The school-wide focus on health and wellbeing		
Excellent	17	34
Good	38	39
Average	31	23
Area for development	10	2
No response	4	2
Whole-school policies and guidelines on health and wellbeing		
Excellent	25	30
Good	37	41
Average	25	25
Area for development	6	2
No response	8	2
How the school physical environment promotes health and wellbeing		
Excellent	35	36
Good	38	32
Average	12	25
Area for development	10	5
No response	6	2

Table 272 **Rating of areas of school practice – leadership and learning**

Current situation	Classroom teachers (Phase 2&3)	
	Year 4 teacher Baseline %	Year 6 teacher End 2008 %
School managers' awareness of and involvement in school health and wellbeing activities**		
Excellent	25	45
Good	38	45
Average	29	7
Area for development	2	-
No response	6	2
Staff awareness of and involvement in school health and wellbeing activities		
Excellent	31	48
Good	37	36
Average	27	11
Area for development	2	2
No response	4	2
Integration of health and wellbeing related goals into the curriculum		
Excellent	23	27
Good	38	45
Average	27	18
Area for development	7	7
No response	4	2
Staff access to professional development about health and wellbeing		
Excellent	19	18
Good	38	39
Average	35	34
Area for development	4	7
No response	4	2
Networking or sharing of health and wellbeing related resources between local schools		
Excellent	8	9
Good	19	16
Average	37	32
Area for development	31	39
No response	6	5

- Items in bold show a statistically significant shift from 2006–8.

Table 273 **Rating of areas of school practice – community connections**

Current situation	Classroom teachers (Phase 2&3)	
	Year 4 teacher Baseline %	Year 6 teacher End 2008 %
Making connections with parents and whānau about health and wellbeing		
Excellent	8	14
Good	31	39
Average	35	30
Area for development	23	16
No response	4	2
Making connections with the local Māori community about health and wellbeing		
Excellent	4	14
Good	33	25
Average	21	27
Area for development	37	27
No response	6	7
Staff knowledge about the resources the wider health community could offer the school		
Excellent	10	18
Good	46	36
Average	31	39
Area for development	8	5
No response	6	2
Involvement of the wider health community in school health and wellbeing activities		
Excellent	10	14
Good	38	34
Average	35	39
Area for development	12	11
No response	6	2

Table 274 **Rating of students' general behaviours, knowledge, attitudes or health**

Current situation	Classroom teachers (Phase 2&3)	
	Year 4 teacher Baseline %	Year 6 teacher End 2008 %
Students' involvement in school decision-making about health and wellbeing*		
Excellent	2	18
Good	23	32
Average	37	27
Area for development	35	18
No response	4	5
Students' ability to take ownership over personal health and wellbeing goals		
Excellent	6	14
Good	35	41
Average	35	32
Area for development	21	7
No response	4	7
Students' behaviour/attention span in class**		
Excellent	-	16
Good	27	39
Average	46	32
Area for development	23	5
No response	4	9
Students' achievement/learning outcomes		
Excellent	4	2
Good	38	43
Average	40	43
Area for development	13	2
No response	4	9
Students' emotional and social health and wellbeing		
Excellent	NA	14
Good	NA	39
Average	NA	36
Area for development	NA	2
No response	NA	9
Students' physical health and wellbeing		
Excellent	NA	23
Good	NA	48
Average	NA	20
Area for development	NA	2
No response	NA	7

Table 275 **Rating of student practices – four health areas**

Current situation	Classroom teachers (Phase 2&3)	
	Year 4 teacher Baseline %	Year 6 teacher End 2008 %
Healthy eating		
Students' healthy eating behaviours***		
Excellent	-	25
Good	13	32
Average	48	30
Area for development	35	5
No response	4	9
Students' knowledge of the health benefits of good nutrition**		
Excellent	6	30
Good	50	41
Average	29	18
Area for development	12	2
No response	4	9
Students' attitude towards healthy eating practices⁺		
Excellent	4	16
Good	33	39
Average	42	32
Area for development	17	5
No response	4	9
Physical activity		
Students' engagement in physical activity		
Excellent	27	43
Good	52	32
Average	15	11
Area for development	2	5
No response	4	9
Students' knowledge of the health benefits of physical activity		
Excellent	17	25
Good	48	45
Average	21	18
Area for development	10	2
No response	4	9
Students' attitude towards participating in physical activity		
Excellent	27	32
Good	52	41
Average	13	14
Area for development	-	5
No response	8	9

Table 276 **Rating of student practices – four health areas continued**

Current situation	Classroom teachers (Phase 2&3)	
	Year 4 teacher Baseline %	Year 6 teacher End 2008 %
Smokefree		
Students' smokefree behaviours		
Excellent	25	18
Good	21	25
Average	27	32
Area for development	12	14
No response	15	11
Students' knowledge of the health benefits of smokefree behaviours		
Excellent	15	14
Good	29	32
Average	31	32
Area for development	12	14
No response	13	9
Students' attitudes towards smokefree behaviours		
Excellent	13	16
Good	31	23
Average	33	36
Area for development	10	14
No response	13	11
Sun protection		
Students' sun protection behaviours		
Excellent	15	27
Good	27	27
Average	40	32
Area for development	13	7
No response	4	7
Students' knowledge of the health benefits of sun protection		
Excellent	15	27
Good	46	41
Average	31	25
Area for development	4	-
No response	4	7
Students' attitude towards sun protection behaviours		
Excellent	12	23
Good	31	32
Average	42	34
Area for development	12	5
No response	4	7

Table 277 **Support for FiS by school community in 2008**

Support by:	Classroom teachers (Phase 2&3): Year 6 teacher: End 2008				
	Very high %	High %	Medium %	Low %	Very low/none %
School management	34	55	9	2	-
Students	34	50	11	5	-
Teachers	41	50	9	-	-
Parents and whānau	27	23	34	7	7

Table 278 **The health priority areas to which parents and whānau contributed**

Health priority area contributed to	Classroom teachers (Phase 2&3)	
	Year 4 teacher Baseline %	Year 6 teacher End 2008 %
Healthy eating	48	50
Physical activity	35	43
Sunsmart	31	39
Emotional and social wellbeing	17	30
Smokefree	19	21
Other	12	9
Parents and whānau are not involved	25	36

Table 279 **Type of parent and whānau involvement in classroom health activities**

Type of involvement	Classroom teachers (Phase 2&3)	
	Year 4 teacher Baseline %	Year 6 teacher End 2008 %
Students work on projects that require parent and whānau input	46	41
Parents and whānau with specific skills contribute to units*	17	39
Parents and whānau work with students on class, school, or community health and wellbeing projects	23	36
Parents and whānau assist in the classroom as units are taught	21	14
Parents and whānau are involved in setting topics or content	14	7
Other	7	16

- Items in bold show a statistically significant shift from 2006–8.

Table 280 **Partners supporting classroom teacher programmes**

Partners	Classroom teachers (Phase 2&3)	
	Year 4 teacher	Year 6 teacher
	Baseline	End 2008
	%	%
The school lead health/HPS/FiS teacher*	48	73
Staff at this school	90	80
Public health nurses (PHNs)	69	75
Life Education Trust	69	64
FiSC/HPS advisor	29	48
Sports Trust or SPARC representative	46	48
National Heart Foundation representative	33	18
Cancer Society representative	25	16
Iwi health providers	14	21
Local community groups	19	16
Social Workers in Schools (SWIS)	39	30
Local social services	19	11
Other health workers (e.g., DHB)	NA	9
Staff at other schools	19	16
School Support Services/Ministry of Education staff	25	21
Local iwi representatives	10	16
Local council	6	2
Local businesses	6	7
College of Education/University staff	19	9
Regional HEHA coordinators	NA	11
Police educators (e.g. DARE facilitators)	NA	43
None	7	-
Other	8	7

- Items in bold show a statistically significant shift from 2006–8.

Table 281 **Contribution by others to classroom teacher programmes**

Health area contributed to	Classroom teachers (Phase 2&3)	
	Year 4 teacher	Year 6 teacher
	Baseline	End 2008
	%	%
Healthy eating***	69	96
Physical activity***	50	86
Sunsmart***	31	73
Smokefree*	21	46
Other	39	32
No response	15	-

- Items in bold show a statistically significant shift from 2006–8.

Table 282 **Type of contribution to classroom teacher programmes**

Type of contribution	Classroom teachers (Phase 2&3)	
	Year 4 teacher	Year 6 teacher
	Baseline	End 2008
	%	%
Provide information or resources***	65	93
Provide advice**	56	82
Provide PD**	31	59
Talk to student groups**	40	71
Work on joint class-school/community projects	33	39
Involved in setting topics or content	21	32
Other	4	2
No response	25	-

- Items in bold show a statistically significant shift from 2006–8.

Table 283 **Classroom teachers' views on school success factors for FiS**

Success factor	Classroom teachers (Phase 2&3) Year 6 teacher End 2008		
	Mostly	In part	No/Not sure
	%	%	%
Factors that are in place (50% or more considered this to be mostly in place)			
Commitment of the principal to health and wellbeing activities	66	23	5
Support by all staff for our school's focus on health and wellbeing	66	27	-
A school-wide focus (or vision) on health and wellbeing	66	25	-
Policies and systems that support our school's focus on health and wellbeing	50	36	5
Factors that are partially in place (70% or more considered this to be mostly or partially in place)			
Support and communications from FiSC and HPS advisors	41	34	16
Clear understanding of messages from the MoH and MoE about the changes expected of schools	43	39	11
Curriculum resources around the four health areas	39	48	7
Support from the staff at local health and education agencies	32	41	20
Skilled staff members who lead health and wellbeing activities	43	39	9
Inclusion of the four health areas in school curriculum plans	39	41	14
A long term plan for addressing our school's health and wellbeing priorities	36	39	18
A shared understanding among staff about HPS and ways to support student leadership	34	45	14
Student involvement in decision-making about health and wellbeing	30	34	27
Factors that require more support (25% or more considered this not to be in place)			
Parent and whānau involvement in decision-making about health and wellbeing	20	23	48
Systems that support schools to share ideas (e.g. school clusters)	27	30	36
Access to PD for lead health teachers about health and wellbeing	30	25	39
Realistic timelines for making changes	30	34	30
Access to PD for all staff about health and wellbeing	23	25	45
Funding or release time for lead health teachers	23	20	48
Access to an ongoing source of fruit, or funding for fruit	45	14	34

Table 284 **School has structures in place to continue to develop approaches to health and wellbeing in the longer-term?**

Structures in place?	Classroom teachers (Phase 2&3)
	Year 6 teacher End 2008 %
Yes for most activities	57
Yes for some activities	32
No	-
Not sure	7
No response	5

Table 285 **Main ways FiS has supported classroom teachers to improve approaches**

	Classroom teachers (Phase 2&3) Year 6 teacher End 2008
Main ways	%
Improved outcomes for students (health, wellbeing and learning)	50
Improved approaches to curriculum, teaching and learning	39
Improved access to professional development and support	30
Using HPS processes (e.g. student and parent input)	16

Note: This table shows coded responses from an open-ended question.

Table 286 **One thing classroom teachers would change about FiS**

	Classroom teachers (Phase 2&3) Year 6 teacher End 2008
Main ways	%
FiS processes (funding and fruit)	27
Curriculum and schools (e.g. more curriculum resources)	16
Improve clustering and professional development	5
The FiS philosophical model (e.g. broaden beyond four areas)	5
More access to health community	2
Nothing needs changing	7

Note: This table shows coded responses from an open-ended question.

5. FiSC and regional interagency survey data

This section of the technical report presents the data from an online survey of 72 FiSC and regional interagency partners completed in early 2009. This survey contained a number of filters in the questions (that is, “go to” questions). Therefore some questions have a high number in the non-response or “skipped question” column.

Table 287 **Areas of FiS support provided by respondents**

Areas in which respondents were providing support for FiS	%
Physical activity	49
Health Promoting Schools and health promotion processes	49
Healthy eating	46
Sunsmart	35
Smokefree	28
Integration of the four health areas into the curriculum	22
Other	7
None	1

Note: Total adds to more than 100% because some respondents were working across more than one area.

Table 288 **Respondents attending regional interagency group meetings**

	%
Yes	69
No	24
No response	7

Table 289 **FiS impact on aspects of interagency group practices**

Aspect of practices	Major positive impact %	Minor positive impact %	No impact %	Negative impact %	Not sure/ Skipped question %
Information sharing between agencies	32	43	4	-	21
Joint planning and coordination of activities	26	40	15	-	18
Professional development	25	39	17	-	19
Issue identification	19	44	10	3	24
Problem solving	13	42	18	1	26
Other aspects	6	6	3	-	86

Table 290 **Respondents attending school cluster meetings**

	%
Yes	58
No	32
No response	10

Table 291 **FiS impact on aspects of school practice**

Aspects of school practice	Major positive impact	Minor positive impact	No impact	Negative impact	Not sure/ Skipped question
	%	%	%	%	%
School-wide emphasis on health and wellbeing	53	22	1	-	24
School-wide approaches to promoting a healthy social and physical environment	36	38	-	-	26
Students' ability to engage in healthy behaviours and take ownership over personal health and wellbeing goals	35	29	7	-	29
School policies and guidelines on health and wellbeing	32	36	3	-	29
Staff access to professional development about health and wellbeing	31	33	7	-	29
Staff modelling of healthy behaviours (e.g. wearing sun hats)	26	33	10	-	31
Integration of health and wellbeing goals into the curriculum	25	29	7	-	39
Students' involvement in school decision-making about health and wellbeing	24	39	6	-	32
Staff awareness of health promotion and ownership over health goals	24	35	10	-	32
Involvement of the wider community at schools (e.g., health agencies, community groups, iwi providers)	15	53	3	-	29
Parent/whānau involvement in school activities	10	51	4	-	35

Table 292 **Survey respondents' feedback on aspects of FiS operations**

Aspects of FiS	Strongly agree	Agree	Neutral	Disagree	Strongly Disagree	Not sure/ Skipped question
	%	%	%	%	%	%
FiS is supporting schools to develop on-going processes for working on health and wellbeing goals	28	38	4	7	1	22
I understand how the new school curriculum is connected to the work I do	28	36	11	3	-	22
My organisation is supportive of my work in FiS	26	47	7	1	-	18
FiS and Health Promoting Schools (HPS) are well-aligned	24	35	14	7	1	19
My organisation's contribution to FiS is understood and valued by other agencies	22	36	17	4	1	19
FiS is working well overall	22	33	17	6	3	19
My organisation has enough resources to fulfil its role in FiS in this region	18	36	10	10	7	19
The regional leadership of FiS is working effectively	18	36	17	6	-	24
Clear messages are communicated to schools about how FiS, Mission-On and HEHA support each other	10	26	11	22	6	25
FiSC have enough resources to fulfil their role in FiS in this region	7	28	15	17	-	33
The national leadership of FiS is working effectively	7	18	24	13	3	36
FiS is effectively meeting the needs of Maori and Pacific communities	6	31	17	14	1	32
Fruit provision is sustainable by schools	1	10	15	31	14	29

Table 293 **Interagency support for schools**

In my region, there is adequate interagency support for schools in the areas of...	Strongly agree	Agree	Neutral	Disagree	Strongly Disagree	Not sure/ Skipped question
	%	%	%	%	%	%
Healthy eating	33	42	6	1	1	17
Physical activity	31	43	6	3	1	17
Use of HPS or health promotion processes	29	33	10	6	-	22
Sun protection	26	38	10	3	3	21
Smokefree	18	32	6	10	10	25
Integration of the four health areas into the curriculum	13	36	10	8	7	26

Table 294 **Sustainability of approaches to health and wellbeing in FiS schools**

Sustainable infrastructure is in place in schools	%
Yes – for some activities	44
Yes – for most activities	21
No	3
Not sure/Skipped question	32

Table 295 **School success factors for FiS and extent they are in place**

Success factors	Mostly	In part	No	Not sure/ Skipped question
	%	%	%	%
Support and communications from FiSC and HPS advisors	36	31	1	32
A school-wide focus (or vision) on health and wellbeing	31	38	3	29
Commitment of the Principal to health and wellbeing activities	31	35	6	29
Support from the staff at local health and education agencies	26	35	3	36
Access to PD for lead health teachers about health and wellbeing	26	33	3	38
Policies and systems that support schools' focus on health and wellbeing	25	42	4	29
Systems that support schools to share ideas (e.g. school clusters)	25	40	4	31
Support by all staff for schools' focus on health and wellbeing	21	36	15	28
Realistic time lines for making changes	19	26	13	42
Access to PD for all staff about health and wellbeing	19	18	19	43
Funding or release time for lead health teachers	18	28	17	38
A long-term plan for addressing schools' health and wellbeing priorities	15	31	15	39
Inclusion of the 4 health areas in curriculum plans	13	39	10	39
Skilled staff members who lead health and wellbeing activities	11	49	10	31
Curriculum resources around the 4 health areas	11	46	3	40
A shared understanding among staff about HPS and ways to support student leadership	11	40	11	38
Student involvement in decision-making about health and wellbeing	8	46	10	36
Clear understanding of messages from MOH & MOE about the changes expected of schools	8	33	22	36
Parent and whanau involvement in decision-making about health and wellbeing	6	38	17	40
Access to an ongoing source of fruit, or funding for the fruit	4	15	38	43

Table 296 **Agency success factors for FiS and extent they are in place**

Agency success factors	Mostly %	In part %	No %	Not sure/ Skipped question %
Ongoing commitment to developing the interagency approach to support schools	28	32	7	33
Adequate agency capacity	24	31	14	32
Ongoing national/regional hui and resource development for FiSC and interagency staff	11	35	7	47
Ongoing national coordination and leadership to address concerns (such as agency capacity issues)	8	32	18	42
Other school, regional or national success factors	4	19	1	75

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