

Study participants' eating habits are putting them at risk for future chronic disease:

While **carbohydrate, fat and protein intakes** are within acceptable distribution ranges:

- Almost 90% of students are not eating recommended amounts of **fruits and vegetables**.
- Students consume on average more than four **servings of “other” foods** per day. For example: candy, soft drinks, salty snacks, added fats and condiments.
- **Calcium, vitamin D and fibre intakes** are well below recommended amounts.
- **Sodium consumption** is more than double Acceptable Intake levels.
- **Saturated fat and sugar intakes** are too high.
- One in five students have **energy drinks at least once per week**.
- Half feel they don't get **enough sleep**, mainly due to screen activities.
- Over one third are **overweight or obese**.

Manitoba Youth Nutrition Pilot Survey

SUPPORTING *References:*

- Johnson, L., Mander, A. P., Jones, L. R., Emmett, P. M., & Jebb, S. A. (2008). A prospective analysis of dietary energy density at age 5 and 7 years and fatness at 9 years among UK children. *International Journal of Obesity*, 32(4), 586-593.
- Johnson, L., Mander, A. P., Jones, L. R., Emmett, P. M., & Jebb, S. A. (2008). Energy-dense, low-fiber, high-fat dietary pattern is associated with increased fatness in childhood. *The American Journal of Clinical Nutrition*, 87(4), 846-854.
- Magarey, A. M., Daniels, L. A., Boulton, T. J., & Cockington, R. A. (2003). Predicting obesity in early adulthood from childhood and parental obesity. *International Journal of Obesity*, 27(4), 505-513.
- Swinburn, B. A., Caterson, I., Seidell, J. C., & James, W. P. T. (2004). Diet, nutrition and the prevention of excess weight gain and obesity. *Public Health Nutrition*, 7(1a), 123-146.

- Swinburn, B., Sacks, G., & Ravussin, E. (2009). Increased food energy supply is more than sufficient to explain the US epidemic of obesity. *The American Journal of Clinical Nutrition*, 90(6), 1453-1456.

WHY *this study?*

- Canadian children and youth have concerning dietary habits and health status.
- Current Manitoba data on youth nutrition does not exist.

WHAT *it consisted of:*

- This pilot study implemented and evaluated an online dietary assessment questionnaire called Web Q to determine its suitability for measuring Manitoba youth dietary intakes and food related behaviours.
- Dietary data was collected using a 24-hour recall for the previous day.
- The questionnaire was completed by 132 grade nine students in four Winnipeg schools.



UNIVERSITY
OF MANITOBA

A PILOT STUDY BY:

Joyce Slater RD, MSc, PhD
Sarah Colatruoglio BSc, MSc

Department of Human
Nutritional Sciences

MORE *Information*

Contact Joyce Slater: joyce.slater@umanitoba.ca

This project is funded by Growing Forward 2,
a federal-provincial-territorial initiative.

Additional support from Dairy Farmers of Manitoba.

APRIL 2016



FOOD INTAKE:

Food Groups and Nutrients

Majority of students did not meet Canada's Food Guide (CFG) requirements for all four food groups.

Intakes of fruits and vegetables, milk and alternatives, meat and alternatives, and grain products were well below recommendations.

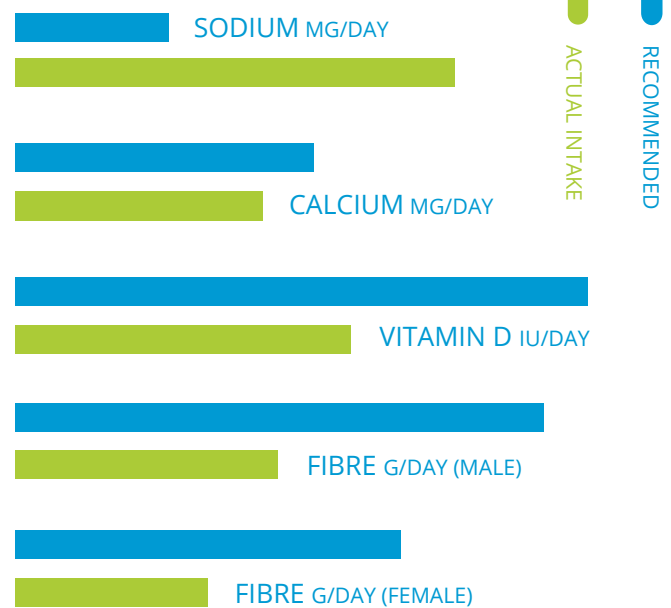
Students had on average more than four servings of "other" foods and beverages per day, typically high in fat, sugar and salt.

Students had low intakes of calcium and vitamin D, while sodium intakes were more than double Acceptable Intake levels (1500 mg) and well above the Upper Limit (2300 mg).

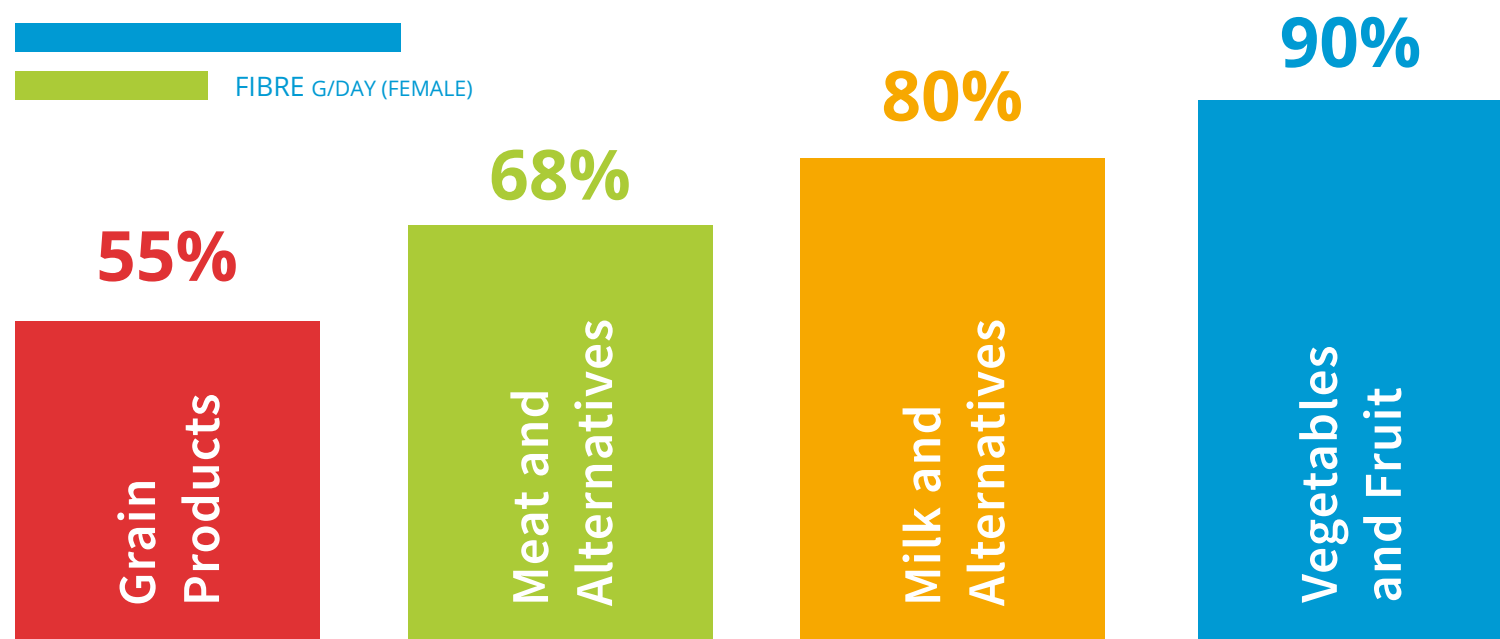
Fibre intakes were well below recommended levels.

While students were within an acceptable macronutrient distribution range (adequate proportions of fat, protein and carbohydrate), they had high intakes of saturated fat and sugar.

AVERAGE NUTRIENT INTAKE COMPARED TO RECOMMENDATIONS ↓



PROPORTION OF STUDENTS NOT MEETING MINIMUM CFG SERVING RECCOMENDATIONS ↓



BREAKFAST CONSUMPTION

Breakfast consumption frequency per week ↓

Fewer than half of students ate breakfast daily.

Almost 40% never ate breakfast or ate it less than half the week.

The majority of students who ate breakfast did so at home.



BODY WEIGHT & BODY IMAGE

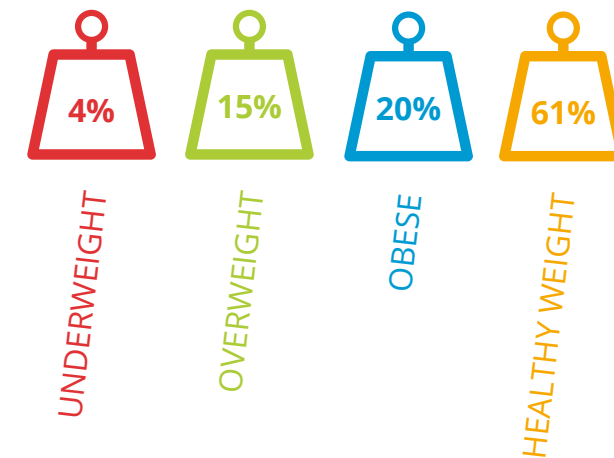
Weight status (Body Mass Index) of participants ↓

The majority of students were in a healthy weight range.

Over one third of students were overweight or obese, particularly boys (45.7%).

Almost one quarter were eating less to lose weight, yet were not making adequate dietary choices.

There is growing evidence that overweight and obesity tend to persist or get worse into adulthood, and diet is a more important contributor to excess body weight than inactivity.



SLEEP HABITS

Reasons cited for inadequate sleep ↓

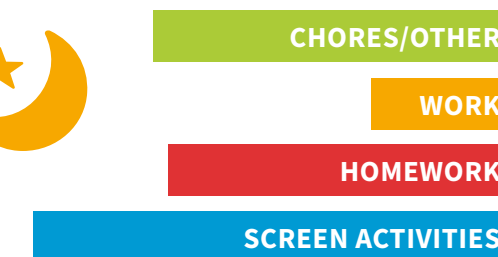
More than half of students felt they did not get enough sleep the previous night.

1 in 10 got less than 6 hours the previous night.

Screen activities were the main reason cited for lack of sleep.

In addition to poor diet, lack of sleep is a risk factor for obesity.

35% of youth feel they don't get enough sleep, mainly due to digital screens.



WHAT did we find out?:

This pilot study showed some positive results plus several areas of concern with youths' food intake and behaviours.

Web Q is a suitable tool for assessing dietary intakes and food behaviours of adolescents in Manitoba.

This pilot study was not representative. Therefore, a province wide survey is necessary to better understand the nutritional status and needs of Manitoba youth. This will provide essential baseline data to inform program and policy decisions.

It is critical that solutions focus on creating environments which help youth make better food choices without creating stigma about body size.