



# Team Opti-Health

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mini-MBA  
capstone project presentation  
April 27, 2018



# Most important issue facing Canada?

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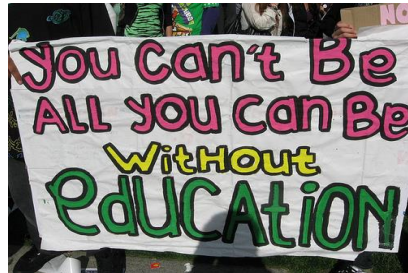
Climate change?



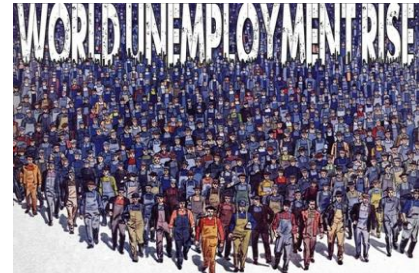
Housing?



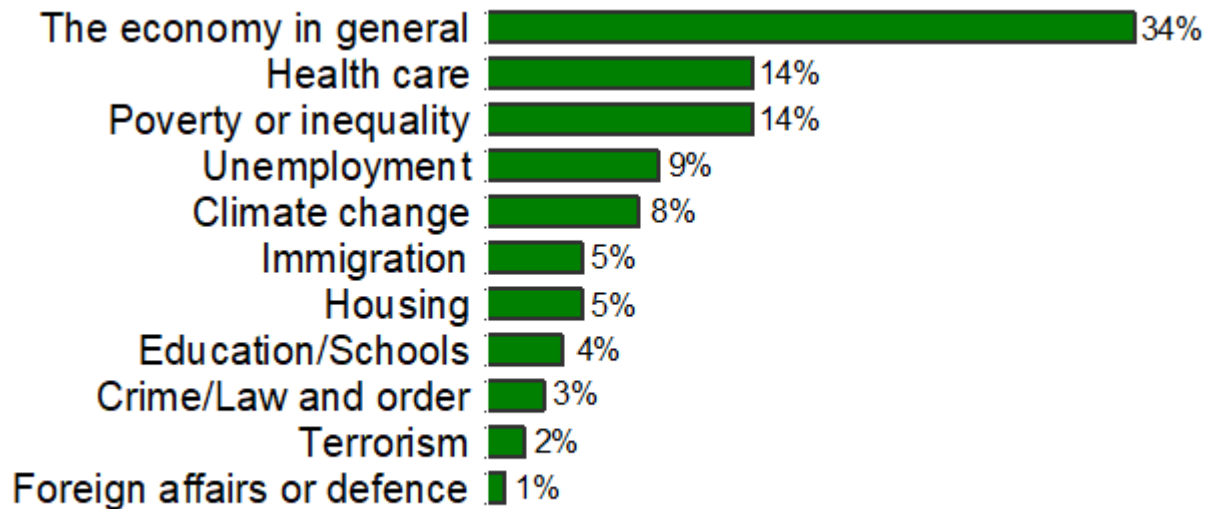
Education?



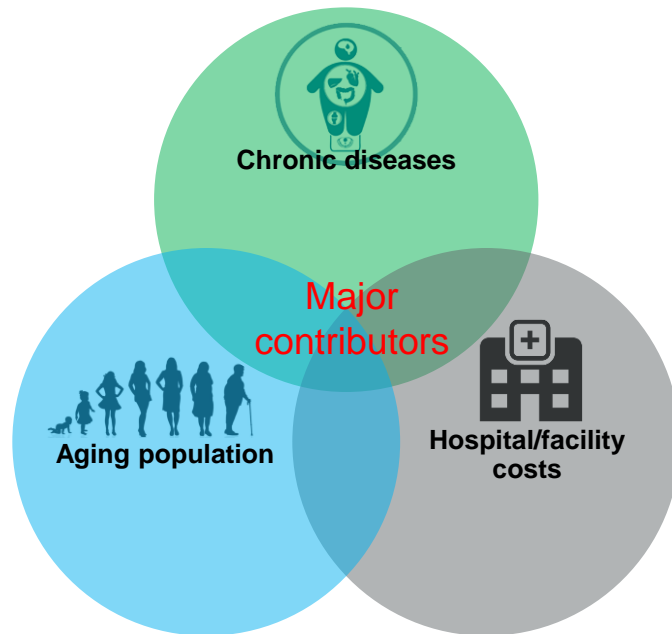
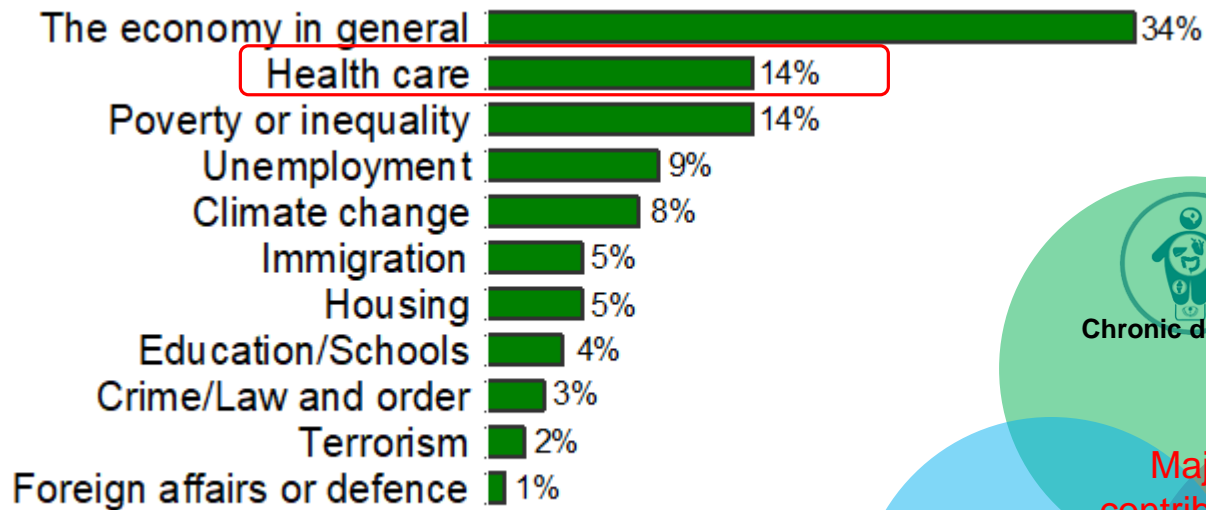
Unemployment?



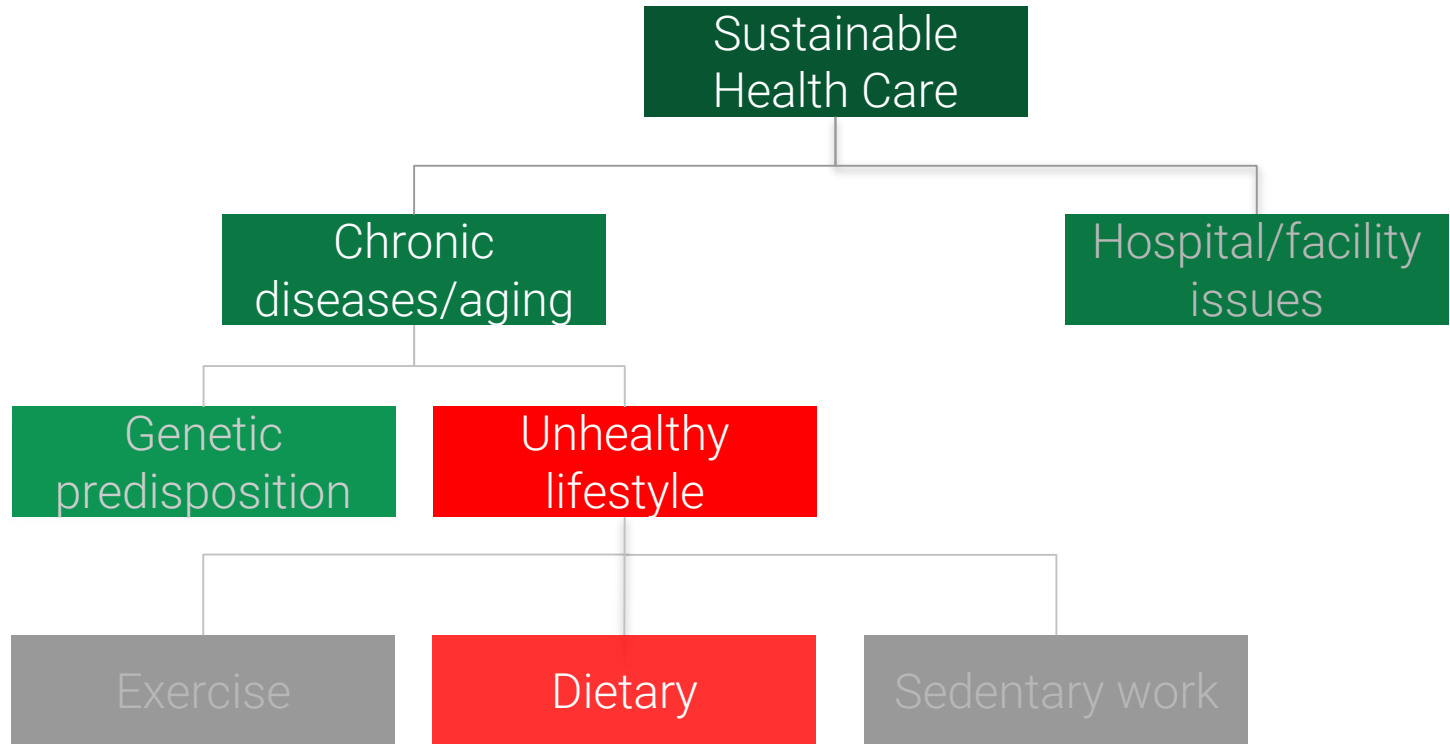
# Healthcare is the second most important issue facing Canada



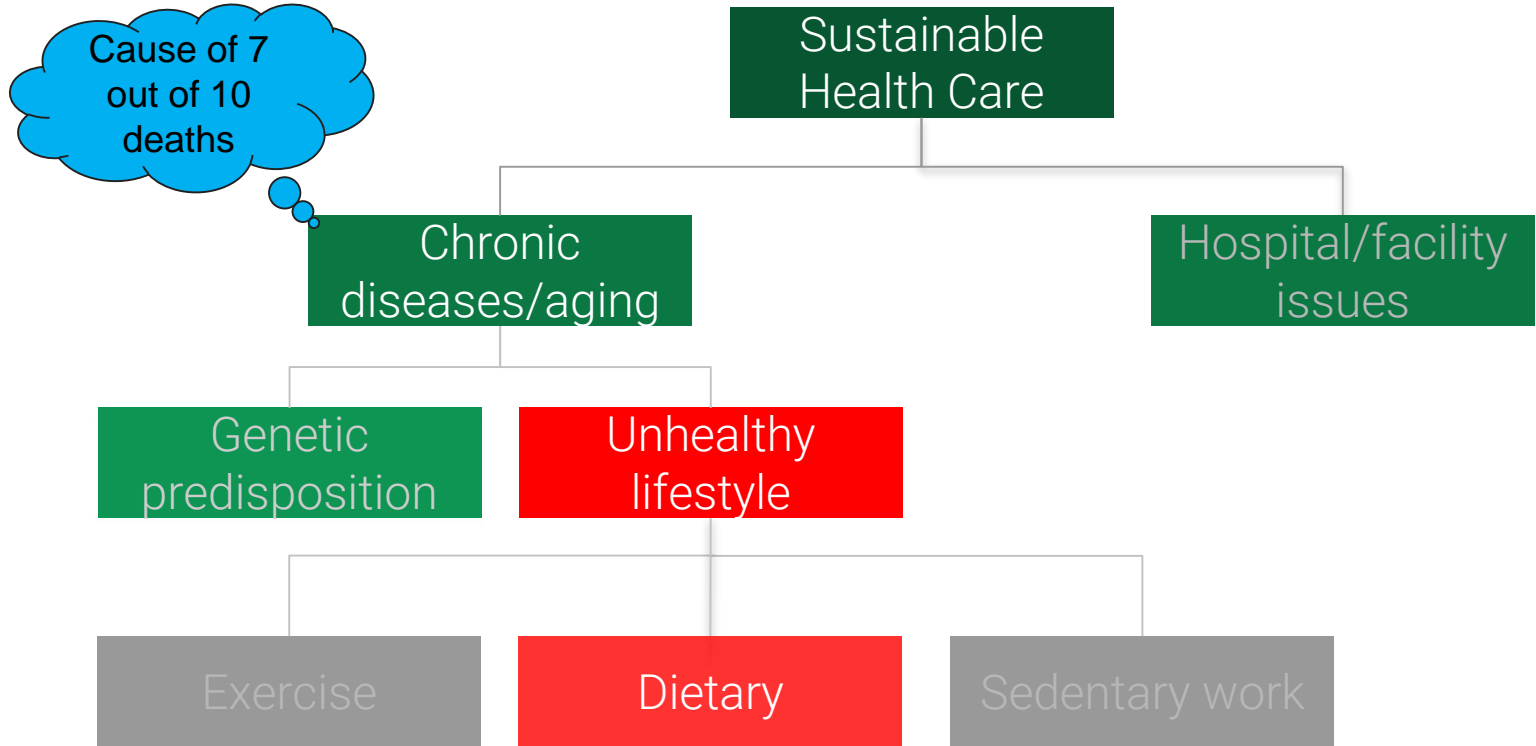
# Healthcare is the second most important issue facing Canada



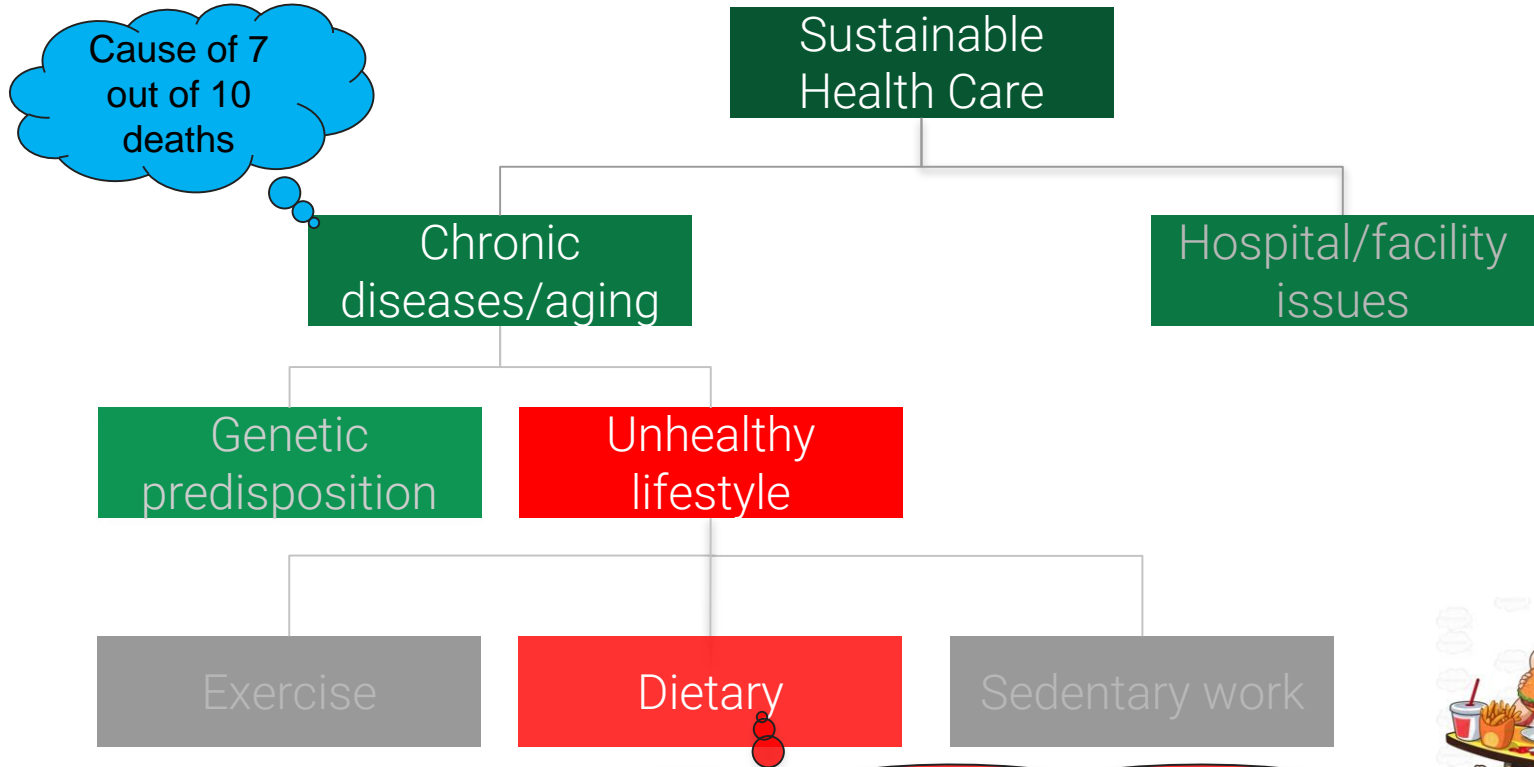
# Problem breakdown



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- ❑ 53% kids are eating ultra processed food & usually have busy parents to prepare healthy foods
- ❑ Obesity has doubled for adults, tripled in children and more than tripled in adolescents





# We have a solution!



# Health-In-A-Box Menu - Mix & Match

## Mains (Choose any 1)

- A. Quinoa macaroni & Cheese
- B. Chicken wrap
- C. Turkey meatball
- D. Black beans pita
- E. Pork + cabbage gyoza/dumpling
- F. Egg + cheese + mushroom omelet
- G. Whole wheat nut butter sandwich
- H. Curry rice

## Sides (Choose any 2)

- 1. Broccoli
- 2. Fresh corn kernel
- 3. Sliced banana
- 4. Dried raisins
- 5. Green beans
- 6. Grape tomato
- 7. Mashed sweet potato
- 8. Mixed nuts
- 9. Peas



# Affordable health at your doorstep!!

**0-4 Meal Boxes**

**\$4 / Box**

**5-15 Meal Boxes**

**\$3.5 / Box**

**>15 Meal Boxes**

**\$3 / Box**

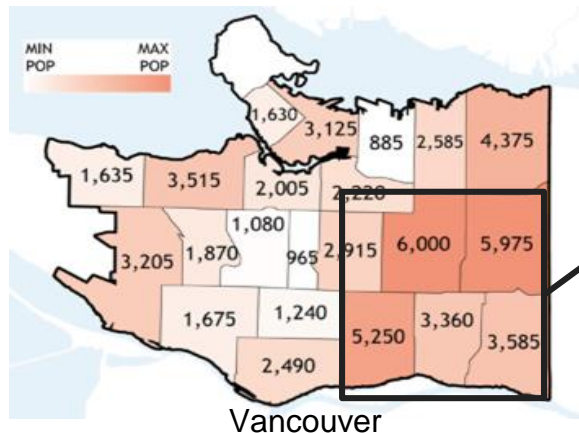
Encouraging customers to buy more meal boxes at a time

We **deliver** meal boxes every Sunday and Wednesday evening



# Market analysis

Target age group: 6-14



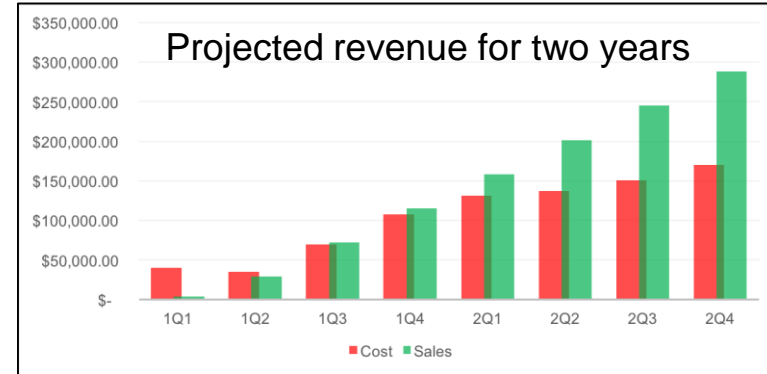
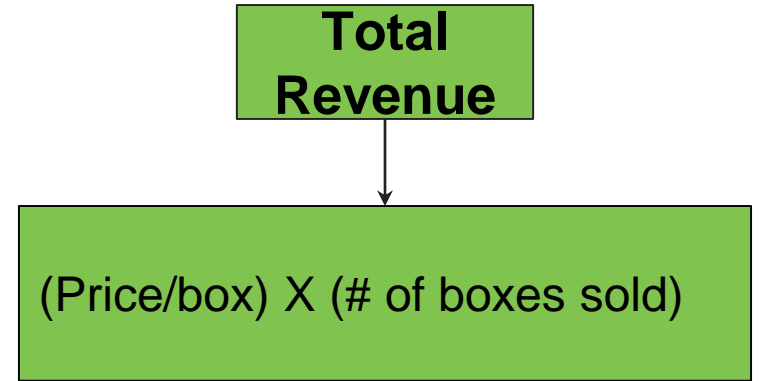
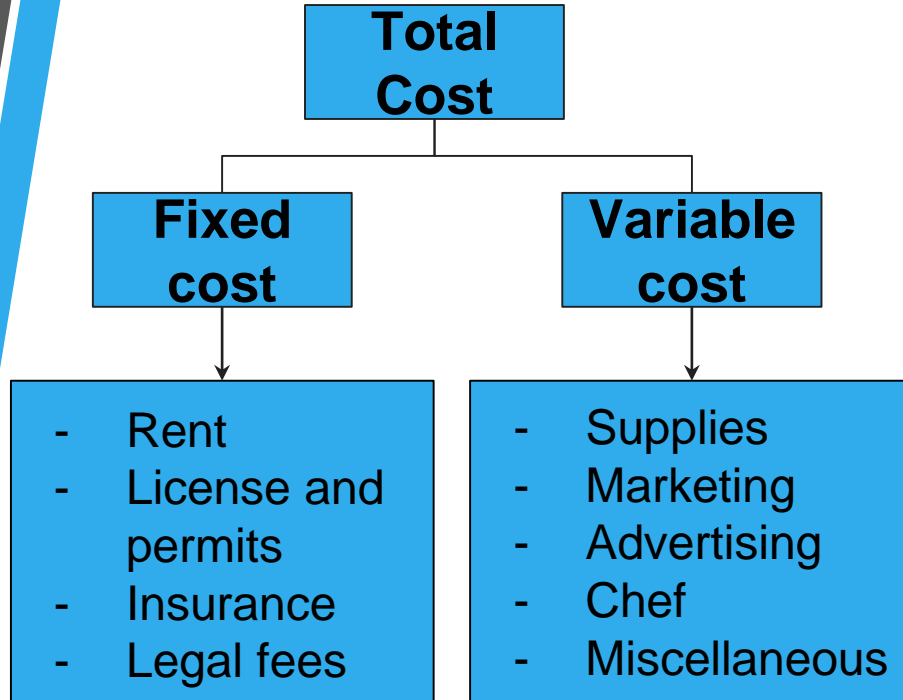
**Initial Target Area**

Highest # of children ~ **21,000**

With 1% market penetration ~ **200 boxes/day**

We expect to penetrate the market through our **outreach** and **advertising** schemes (e.g. social media, referrals, farmers markets, paid advertising)

# Cost and revenue analysis



\*Estimated for an increase of 300 boxes per quarter



Lookout for us, **Health-In-A-Box** is coming to your  
**HOMES** very soon...

Thank you for listening to



Questions and Discussions...



## Supplementary Slides







Competition Landscape Analysis	Health-in-a-box	Foodie kids	Nourish	Well-fed	Whole foods/ Safeway
Price	\$	\$	\$\$	\$\$	\$\$-\$\$\$
Home delivery	✓	X	✓	✓	✓
Fresh food	✓	✓	✓	X	✓
Food kids will love (food made for kids)	✓	✓	✓/X	✓/X	✓/X
Customizable	✓	X	X	X	X
Flexibility in subscription	✓	X	✓	X	X

# Target region, market and cost analysis

South Vancouver has the around 21,000 kids between ages 8-14

## **Fixed costs per month**

Legal fees (\$700)

Rent (\$1,000)

Permits and licenses (\$1000)

Insurance (\$700)

## **Variable costs**

Supplies (\$1.50 per box)

Marketing (\$1000)

Miscellaneous

~ \$13,500 per month

## **Revenue**

Market size (1%): 200 boxes / day

Average 3 boxes per week per kid

Number of boxes per month: 2400

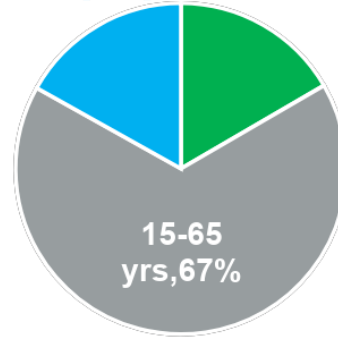
~ \$9,600 for the month (from Q2)

## Estimated financial needs in the first three months of business

Start-up costs (first 3 months)	
Rent (for 3 months)	<b>\$4,000</b>
Supplies (3 months)	<b>\$18,000</b>
Permits and licenses	<b>\$3,000</b>
Insurance	<b>\$2,000</b>
Advertising/promotional expenses	<b>\$3,000</b>
Legal fees	<b>\$2,000</b>
Miscellaneous (Ordering and payment technology, internet, phone services, gas, part-time chef)	<b>\$8,000</b>
Total	<b>\$40,000</b>

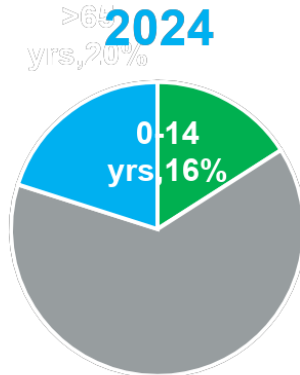
# Aging population

2016 population

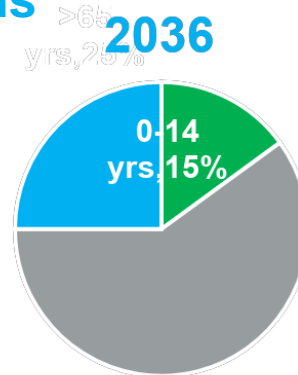


Expectations

2024



2036



The aging of Canada's population is anticipated to cause a major impact on the country's economy, social club and health care system over the next 25 to 30 years.

# Chronic diseases



CHRONIC DISEASES CAUSE 7 OUT OF EVERY 10 DEATHS.



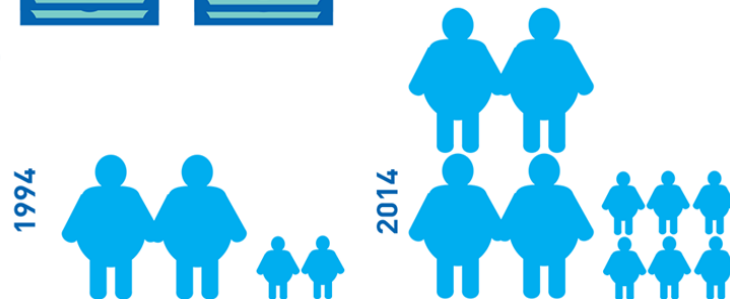
MEDICAL EXPENSES ARE THE #1 CAUSE OF BANKRUPTCIES



1 in 3 children born today will develop diabetes in their lifetime (1 in 2 Latino children).



Health care costs for a person with one or more chronic conditions **ARE FIVE TIMES HIGHER** COMPARED TO INDIVIDUALS WITHOUT A CHRONIC DISEASE.



OBESITY IN ADULTS HAS **DOUBLED** IN THE LAST 20 YEARS, **TRIPLED** IN CHILDREN AGES 2-11, AND **MORE THAN TRIPLED** IN CHILDREN AGES 12-19.

OVERWEIGHT AND OBESITY ARE THE BIGGEST PUBLIC HEALTH THREATS OF THIS CENTURY, CAUSING UNPRECEDENTED INCREASES IN THE RATES OF DIABETES, HEART DISEASE, OSTEOARTHRITIS, AMONG OTHERS.

# COSTS OF CHRONIC DISEASE

CHRONIC DISEASES ACCOUNT FOR  
**\$3 OF EVERY \$4**  
SPENT ON HEALTHCARE

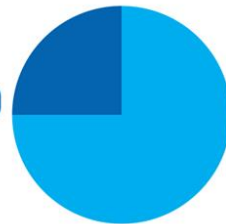
OR **\$7,900**

FOR EVERY AMERICAN  
WITH A CHRONIC DISEASE.



SINCE THEY ARE FREQUENTLY  
LONGSTANDING, PEOPLE WITH  
CHRONIC CONDITIONS ARE ALSO  
AT HIGH RISK FOR DEPRESSION,  
ANXIETY, MARITAL AND FAMILY  
DISCORD AND FINANCIAL  
BURDEN.

ABOUT **25%**  
OF PEOPLE WITH A  
CHRONIC DISEASE HAVE  
SOME TYPE OF ACTIVITY  
RESTRICTION, e.g.,  
MOBILITY, PERSONAL  
CARE, WORK OR  
SCHOOLING.



EVEN WITH HEALTH INSURANCE, CHRONIC  
CONDITIONS CAN POSE A SIGNIFICANT  
FINANCIAL BURDEN, PARTICULARLY WHEN  
WORK IS AFFECTED.

PEOPLE WITH CHRONIC DISEASES ARE AT  
HIGHEST RISK OF MEDICAL ERRORS AND  
DUPLICATED OR UNNEEDED SERVICES.

MOST DISABILITY AND PREMATURE  
DEATHS IN U.S. ARE CAUSED BY CHRONIC  
DISEASES SUCH AS DIABETES, CANCER,  
AND HEART DISEASE.

# Break down of healthcare costs associated with chronic diseases



# Risk Factors and Chronic Diseases

	Cancers	Hypertension	Diabetes (type 2)	Atherosclerosis	Obesity	Stroke
<b>Dietary Risk Factors</b>						
Diets high in added sugars					✓	
Diets high in salty or pickled foods	✓	✓				
Diets high in saturated and/or <i>trans</i> fat	✓	✓	✓	✓	✓	✓
Diets low in fruits, vegetables, and other foods rich in fiber and phytochemicals	✓		✓	✓	✓	✓
Diets low in vitamins and/or minerals	✓	✓		✓		
Excessive alcohol intake	✓	✓		✓	✓	✓
<b>Other Risk Factors</b>						
Age	✓	✓	✓	✓		✓
Environmental contaminants	✓					
Genetics	✓	✓	✓	✓	✓	✓
Sedentary lifestyle	✓	✓	✓	✓	✓	✓
Smoking and tobacco use	✓	✓		✓		✓
Stress		✓		✓		✓

Source: Nutrition Concepts and Controversies



# Why school kids?

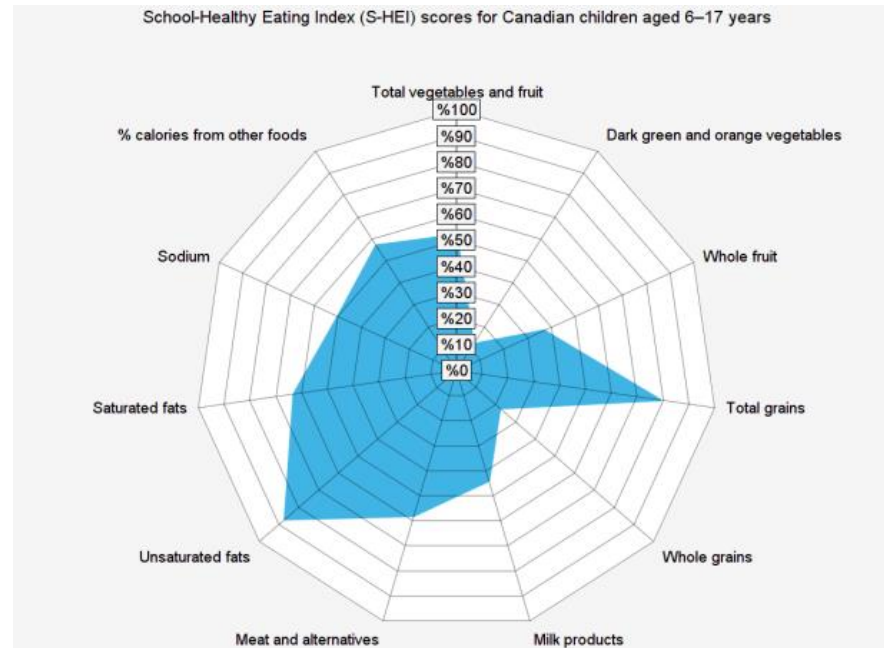
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ARTICLE

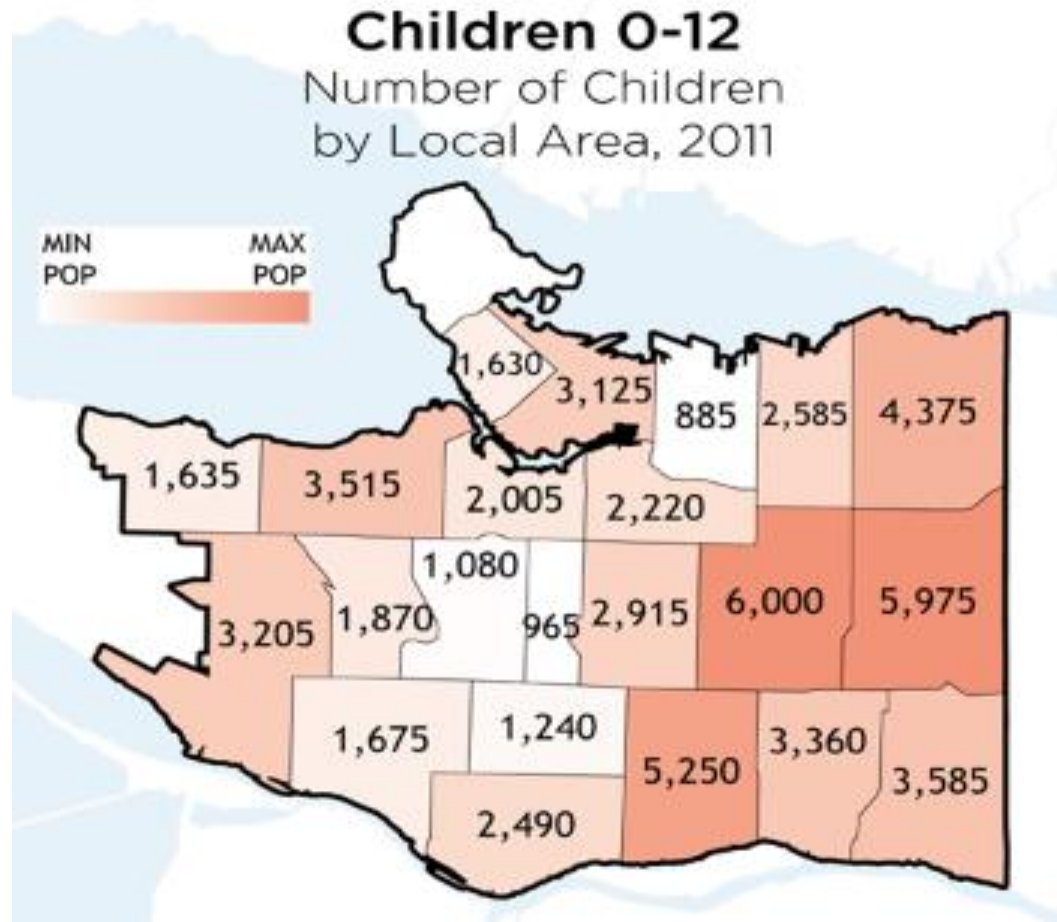
## Examining school-day dietary intakes among Canadian children

Claire N. Tugault-Lafleur, Jennifer L. Black, and Susan I. Barr

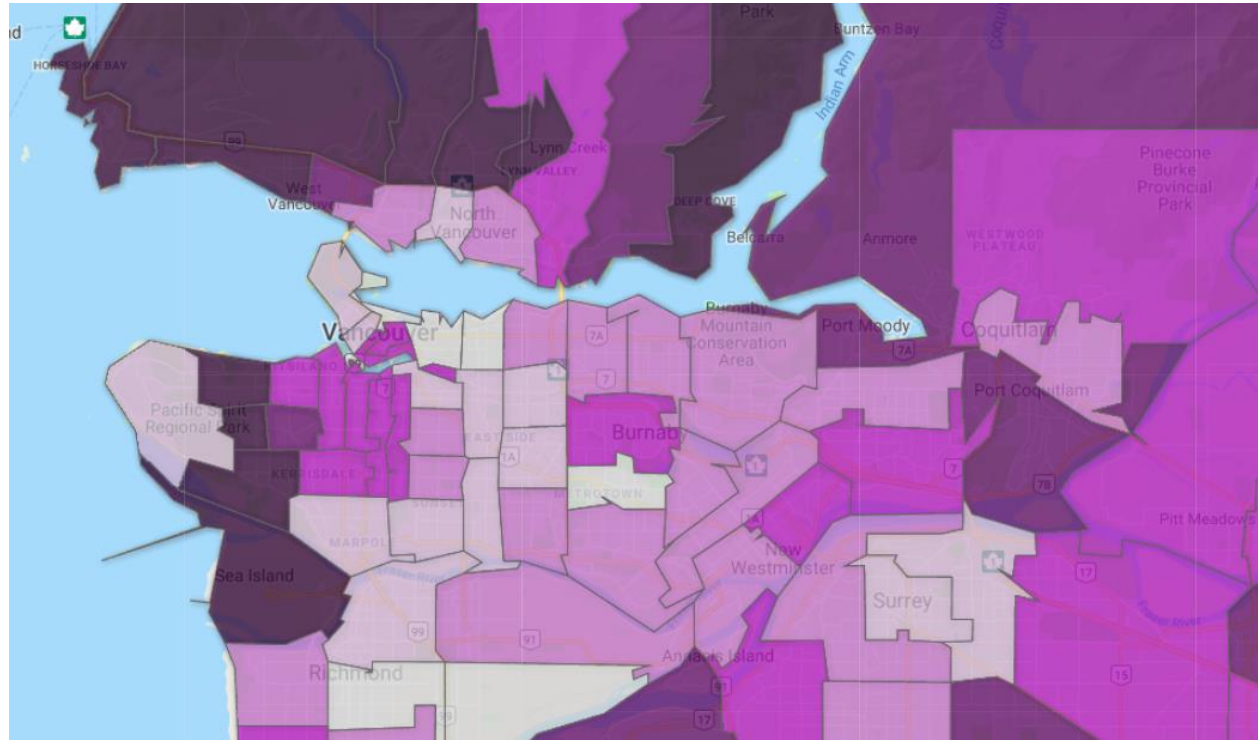


School-going kids in Canada between age 6-17 are eating unhealthy at school according to a study by scientists at UBC. The food quality eaten by school-going kids is given a score of 53.4 out of 100.

# Number of kids in different regions of Vancouver



# Map of Greater Vancouver based on income



Over \$90,000

\$80-90,000

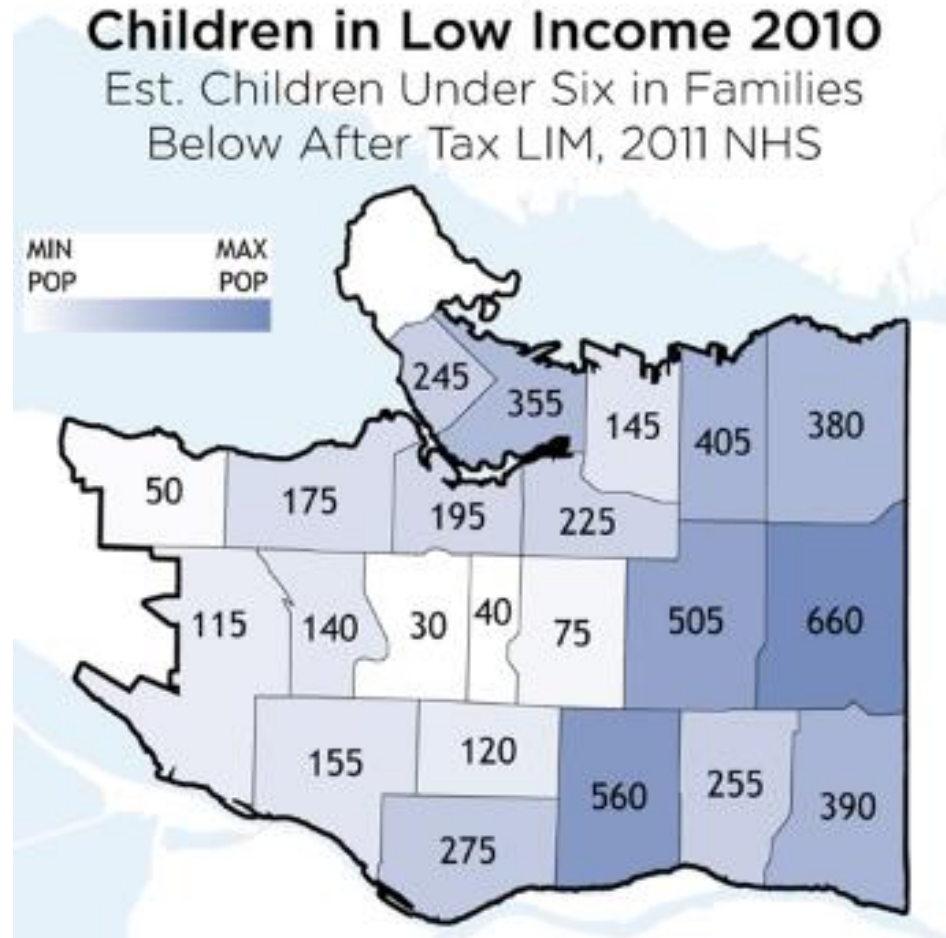
\$70-80,000

\$60-70,000

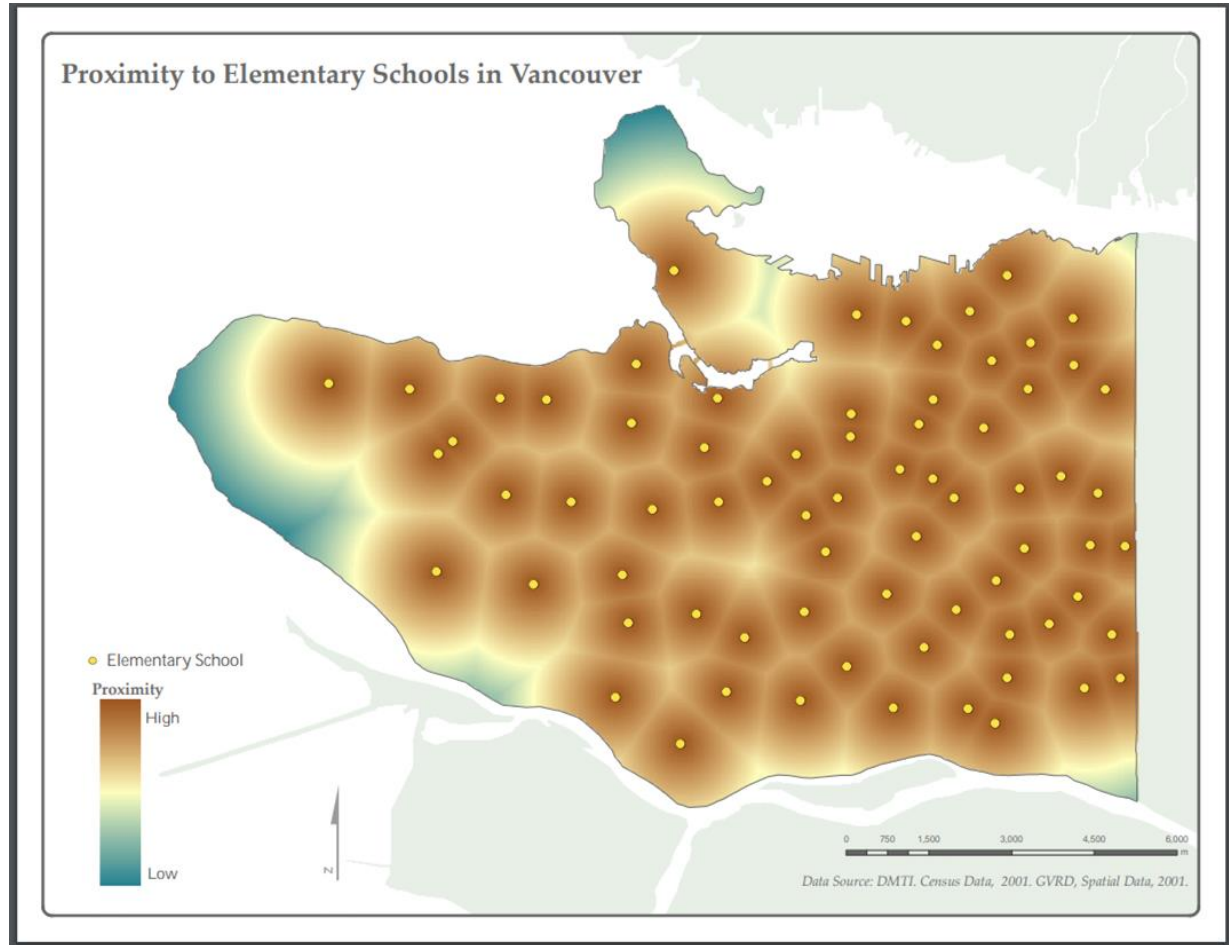
\$50-60,000

Under \$50,000

# Children from low-income families in different regions



# Map of Greater Vancouver based on proximity to schools



# Health-In-A-Box Menu

## **Box 1**

Chickpeas and broccoli  
Chicken  
Banana slices



## **Box 2**

Carrots and celeries  
Lamb  
Apple slices



## **Box 3**

Green beans and tomato  
Fish  
Strawberries



## **Box 4**

Brussel sprouts and peas  
Pork  
Blueberries



## **Box 5**

Lentils and basil  
Cranberries



## **Box 6**

Quinoa and Spinach  
Watermelons  
Sweet corn



## **Box 7**

Red beans and kale with macaroni  
Melons  
Cupcakes



## **Box 8**

Rice and lettuce with cheese  
Oranges



...Mix & Matc...

All the dishes are seasoned with lime, salt, pepper



# Health-in-a-box!

- Provide healthy lunch options for kids.
- Deliver lunch boxes to parents (home delivery) twice a week.
- Parents get to choose out of a variety of options on a weekly basis.



# Estimated cost is ≤ \$1.5 per meal

## Box A - Quinoa macaroni cheese

Main				Sides			
A. Quinoa mac & cheese	Price/kg or L(\$)		Costs (\$)	1. Broccoli	Price/kg or L(\$)		Costs (\$)
macaroni pasta	1.2	56 g	0.0672	broccoli	3.97	70 g (1/2 cup)	0.28
quinoa	16.6	10 g	0.166				
butter	10.9	2.8 g	0.03	2. Sweet corn			
milk	1.1	60 mL	0.066	sweet corn kernel	3.86	70 g (1/2 cup)	0.27
broth	1.9	30 mL	0.057				
shredded cheddar	12.4	35 g	0.434				
salt and pepper							
<b>Food cost per meal</b>	<b>\$1.3702</b>						
Container	\$0.05						
Cutlery	\$0.05						
<b>Total cost per meal</b>	<b>\$1.4702</b>						

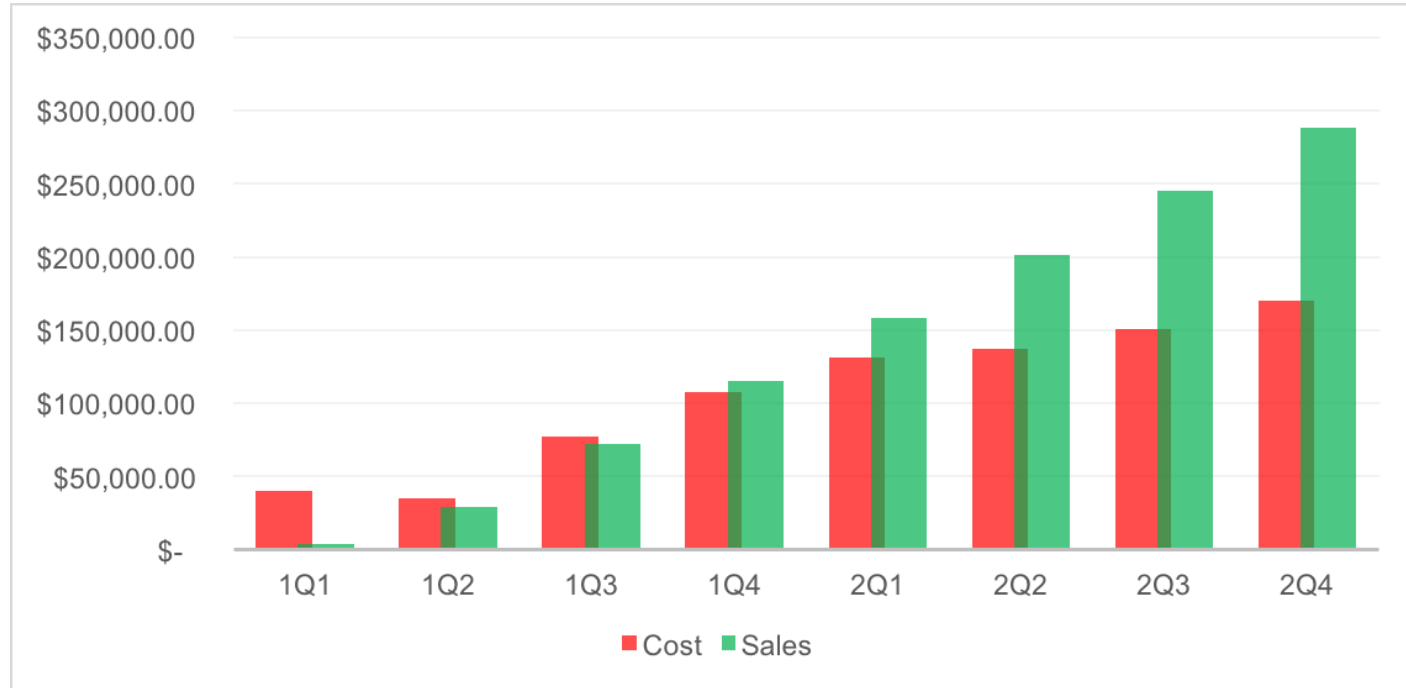


# Estimated cost is ≤ \$1.5 per meal

## Box B - Chicken wrap

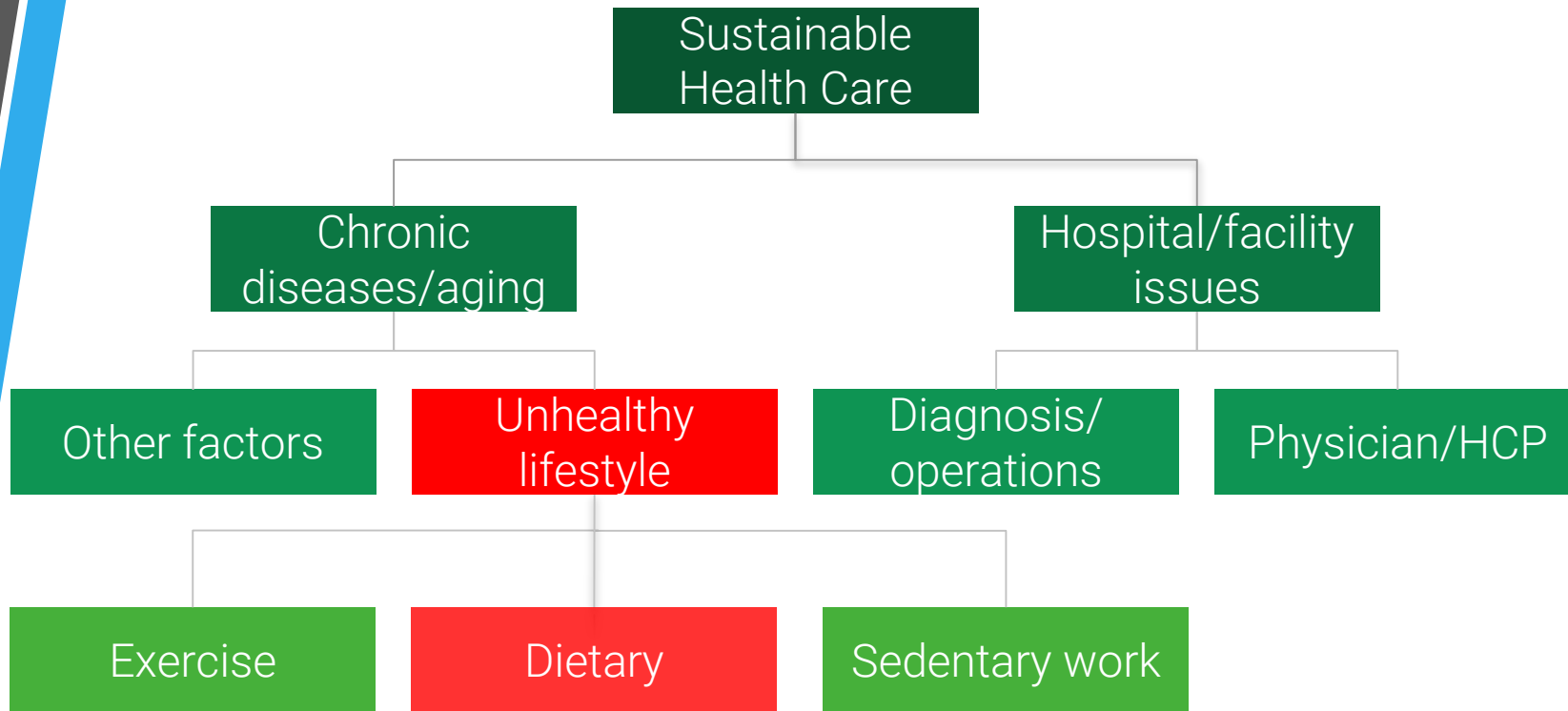
Main				Sides			
B. Chicken wrap	Price/kg or L(\$)		Costs (\$)	3. Sliced banana	Price/kg or L(\$)		Costs (\$)
chicken thigh	4.97	1 cup (70 g)	0.3479	banana	1.43	70 g (1/2 cup)	0.1
whole wheat tortilla	4.34	1 tortilla (40g)	0.1736	4. Dried raisin			
lettuce	6.4	10 g	0.064	dried raisins	6.61	30 g	0.198
broth	1.9	30 mL	0.057				
sliced cheddar	10	1 slice (22 g)	0.22				
salt and pepper							
Food cost per meal	\$1.1605						
Container	\$0.05						
Cutlery	\$0.05						
Total cost per meal	\$1.2605						

## Projected Finances (2 years)

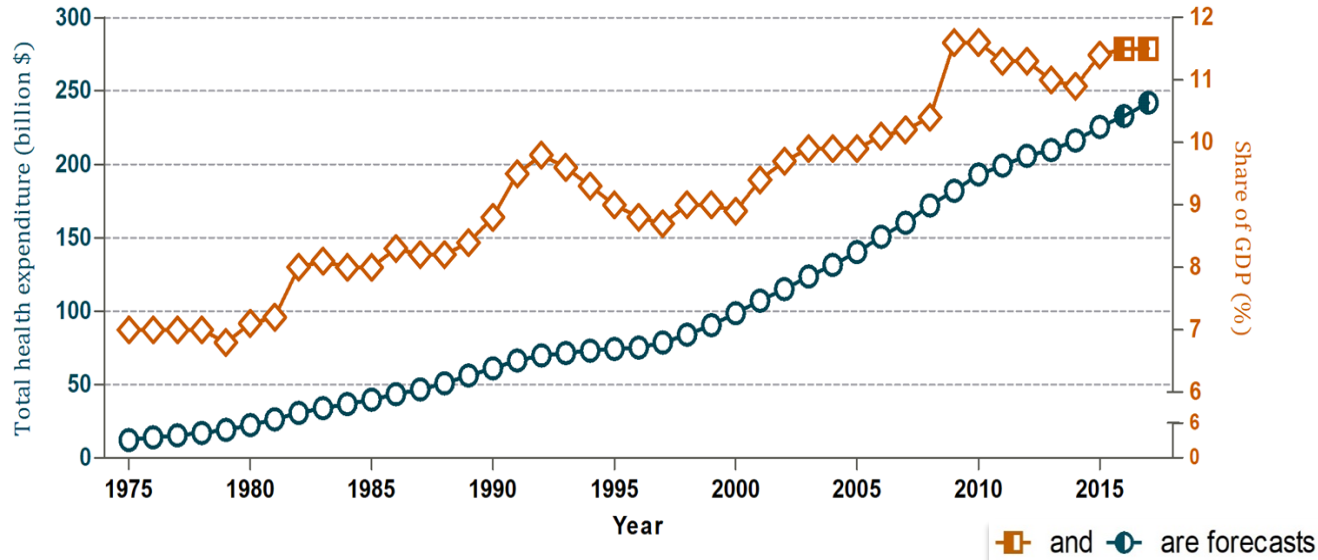


\*Estimated for an increase of 300 boxes per quarter

# Problem breakdown



# Total health care spending in Canada

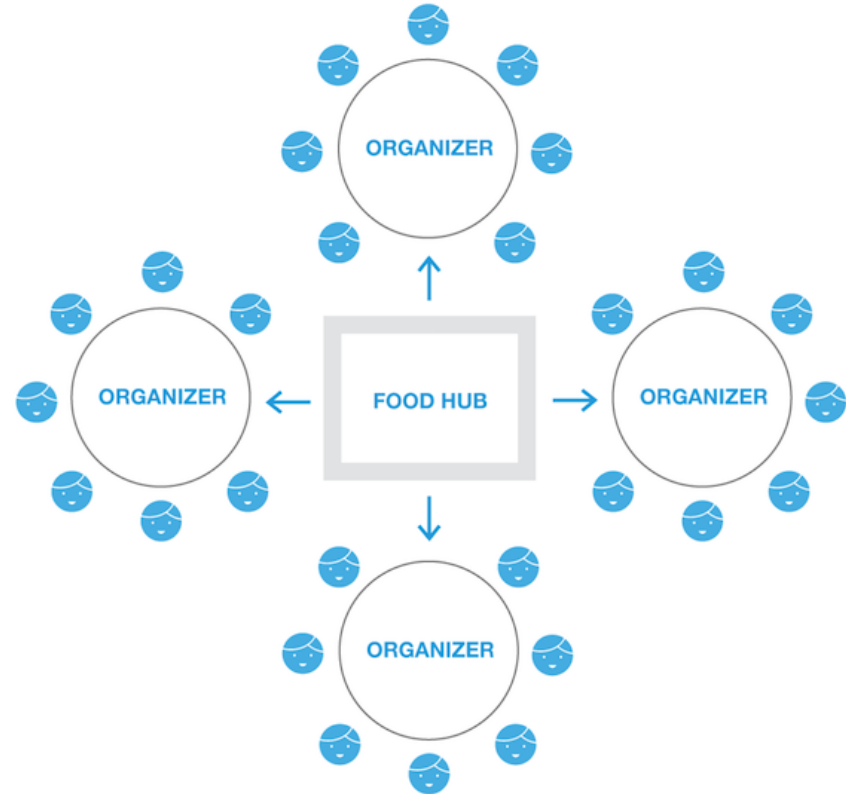


## Reachout strategies

1. Social Media Outreach  
Facebook ads, Instagram, Youtube, twitter, LinkedIn, Flickr
1. Media attention through interviews with local newspapers and community radio stations
2. Booth at Farmer's Markets
3. Community events and newsletters
4. Blogs
5. Teacher-Parent nights
6. Promotions on subscriptions, coupons, other incentives

Sign Up and get  
**\$15 OFF** on your  
first food order!

## Decentralized Delivery Network



# Marketing

**Website**



Dolphin bananas  
kids cannot resist

**Facebook**



**Twitter**



**Email**



**community events**



**+ referrals**

**Ad screens at schools**



**Flyers/coupons**



Search ads  
Display ads  
Video ads  
App Ads

# How to measure impact (percentage of kids that eat over processed foods)

This is the link: <https://globalnews.ca/news/3898015/canada-kids-processed-food/>

Some stats:

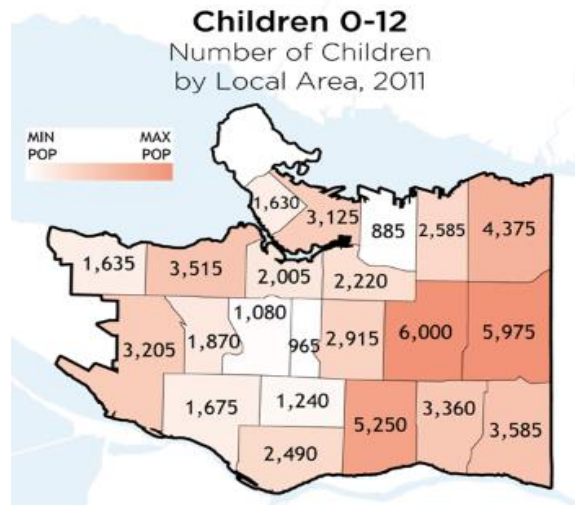
- children aged 9 to 13 (Gr.4 - 8) are the largest consumers of ultra-processed/nutritionally lacking products, which account for 57 % of their daily calories.

- In fact, Canadians are the second largest buyers of ultra-processed foods and drinks in the world (second only to the U.S.), and for the first time, we have children who have spent their entire lives eating diets high in these foods.

- nationwide health issues like obesity (12% of kids and teens, and 26.7% of adults are obese) and heart disease (25.1 % of adults are hypertensive and 8.5% have ischemic heart disease)

# Market analysis

## Map of Vancouver and the distribution of kids



### Vancouver British Columbia [Census metropolitan area]

Characteristic	Total	Male	Female
0 to 14 years	362,110	186,780	175,335
0 to 4 years	116,270	60,045	56,225
5 to 9 years	122,735	63,390	59,345
10 to 14 years	123,110	63,340	59,765

We expect to attract 1% of Vancouver's student population aged 0-14 through our **outreach** and **advertising** schemes  
Therefore, market size is 3600