

Healthy Eating for Healthy Development of Children

15th ASEAN and Japan Meeting on Caring Societies

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Health Promotion Board, Singapore

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S'pore risks hitting obesity rates of 15% in seven years

Average Singaporean today is heavier and more likely to overeat, HPB findings show

Linette Lai

In just seven years, Singapore could reach a tipping point and lose valuable ground in fighting obesity.

This warning came as the Health Promotion Board (HPB) released its most extensive data on Singaporeans and obesity to date.

If nothing is done, Singapore could hit obesity rates of 15 per cent in just seven years, said Dr Annie Ling, who is director of the policy, research and surveillance division at the HPB. That was the point at which obesity increased rapidly in the United States, where it is now considered an epidemic. People who are obese are at higher risk of developing health problems such as diabetes, heart disease and stroke.

Today, the average Singaporean is heavier and more likely to overeat. Even children here are putting on weight and, unsurprisingly, the biggest weight gain starts when people begin work.

These were some of the findings from the HPB's analysis of nearly 30 years of data to find out when Singaporeans begin putting on weight and how obesity trends have changed.

Dr Ling said: "To our knowledge, this is the first local study looking at the obesity transition all the way from childhood into adulthood, using the biggest data set ever."

Her team tracked more than 60,000 people from 1990, follow-

ing some up from childhood all the way to when they started work.

First, they found that Singaporeans are, on average, 3kg heavier today than they were 15 years ago. The median body mass index (BMI) score for adults last year was 23.15 - just outside the healthy range, and above the 2001 median of 22.23.

The HPB analysis also found that Singaporeans are exercising slightly more these days - but eating so much that it outweighs any benefit to their health.

In the first quarter of 2014, 54.3 per cent of people said that they got the recommended 150 minutes of physical activity a week. By the third quarter of last year, this had gone up to 59.6 per cent.

But bring this down to the individual, Dr Ling said, and it translates to only two or three extra minutes of activity every day.

In contrast, the average Singaporean is consuming more calories than ever before, and more likely to exceed the recommended daily intake. In 1998, people consumed 2,062 calories a day on average, with a third of them eating more than the recommended amount. By 2010, they were consuming 2,624 calories daily. Six in 10 were exceeding their recommended intake.

"Efforts to get Singaporeans active may not be enough to offset the caloric consumption," Dr Ling said.

They also found that the biggest increase in the proportion of overweight people came, unsurprisingly, during the transition to work.

Dr Ling said the findings show that there has been a population-wide shift towards obesity,

which could prove difficult to



According to the HPB findings, the biggest increase in the proportion of overweight people came during the transition to work. ST PHOTO: KUA CHEE SIONG

tackle if it gets out of hand.

Since 2004, Singapore's obesity rates have increased by 0.7 percentage point a year, and stood at 11 per cent, according to the last National Health Survey in 2010.

"If we don't slow down or halt this shift, eventually we will be tilting

over to the obese and overweight category, and it will be much harder to treat or reverse this condition when people get there," she said.

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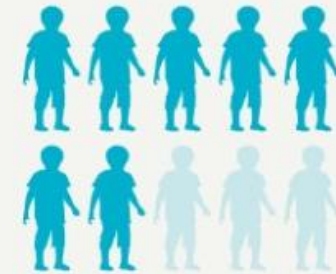
SEE HOME 81

Singapore is facing a childhood obesity challenge

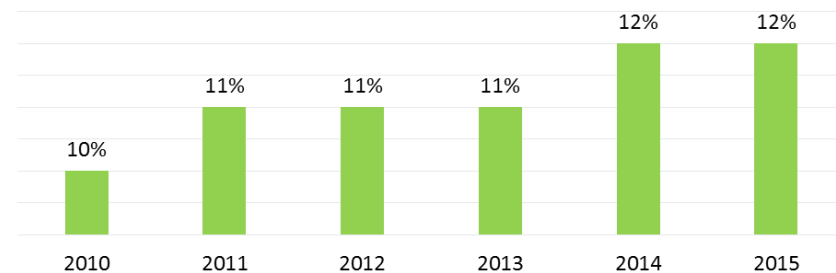
Overweight sets in during early childhood. 10% of five-year-olds are overweight.



70% of children who were overweight at age seven, stayed overweight as adults.



Prevalence of overweight and severely overweight among mainstream school students (age 7 to 18)



Overweight: BMI-for-age 90th to <97th percentile

Severely overweight: BMI-for-age \geq 97th percentile

Source: Ministry of Education (2015)

What do the insights and research data tell us?



Consumer Patterns and Preferences

Consumption of >1 sweetened drinks up to 74% (2%pp)

Consumption of fruits & veg declined from 40% to 34%

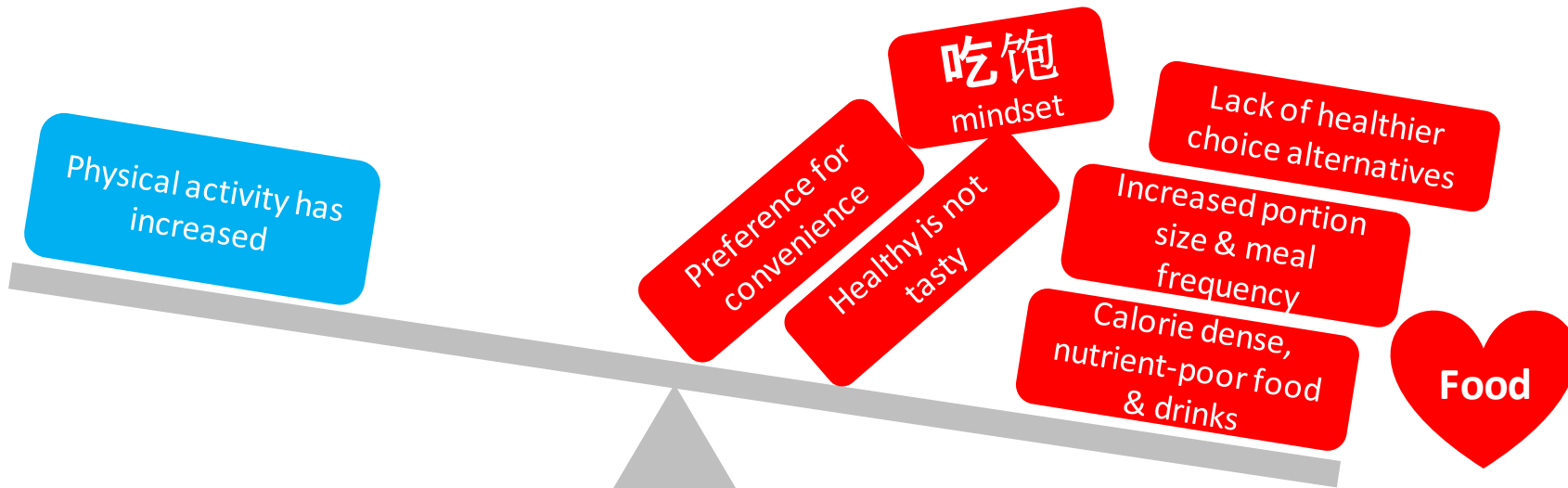
Obesity prevalence for children increased from 10% to 12%

Average Singaporean consumes 2624 calories daily (30% more than a decade ago) and with 60% of Singaporeans exceeding their daily recommended intake.

The majority of seniors eat home-cooked food but dietary *quality* is less than optimal.

Singaporeans consumed **9 times more refined carbohydrate vs unrefined carbohydrate** (associated with increased risk of obesity and diabetes especially in Asians).

Possible factors



Singapore invested in a national food strategy designed to shape citizens' eating habits by reducing diet quantity and improving in diet quality

Reduce Diet Quantity & Improve Diet Quality	
Principles	<p>Healthy Eating with an emphasis on:</p> <ul style="list-style-type: none">• Eating balanced healthy meals• Choosing water first or lower sugar drinks <p>To reinforce healthy eating habits with focus on :</p> <ul style="list-style-type: none">• Less calories , Less Saturated Fat , Less Sugar• More Wholegrain <p><i>For Seniors</i>, special focus on Higher Protein & Calcium intake</p>



Design food programmes that cater to different population segments and needs



Create a multi-stakeholder ecosystem that supports healthy eating anywhere and anytime.

Our approach was to design food programmes that cater to different population segments and needs,

Dining at home

Healthier Choice Symbol (HCS)

- Healthier packaged food options across 70 categories,
- More than 2,500 products available in all supermarkets and convenience stores



• Healthy Meal at Childcare Centre (HMCCP), Healthy Meals in Schools (HMSP):

- Meals that are higher in wholegrain, fruits & vegetables, lower in saturated fat, sugar and salt;
- Beverages with lower sugar option,

• Healthy Dining Program (HDP)

- Institutes of Higher Learning

Food Programmes to Reduce Diet Quantity & Improve Diet Quality



Dining out

Healthier Dining Programme (HDP) & Healthier Ingredient Scheme (HIS)*

- Meals that are lower in calories, higher in wholegrain in all types of food outlets around where you work, live and play,
- Food cooked with healthier oil (lower in saturated fat),
- Beverages with lower sugar option,

Healthier Catering, Water First Policies

- Public Service Agencies as early adopters



Healthy eating and food messages are integrated into WOD – **Let's Beat Diabetes campaign**



Food Programs are integrated under **Healthy Aging** with focus on senior nutrition that encourages :

- Higher Calcium & Protein intake

* HIS to be transited to Healthier Ingredient Development Scheme (HIDS) in Jul 17

And create an ecosystem that supports healthy eating anywhere and anytime.

Inform

Shift to

Influence



Eco-systemic Approach

- Make healthier choice default and accessible
- Change the environment and context to nudge consumers
- Generate demand for healthier options



Publicagencies



Grocery Shopping



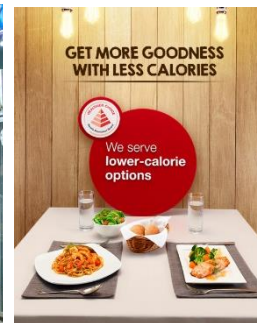
Live (Community)



Food and Beverage Industry



Dine Out



Point of Sales nudges



Work



School

The quality of food and beverages served had not changed much over the past few decades as school food guidelines were not rigorously implemented



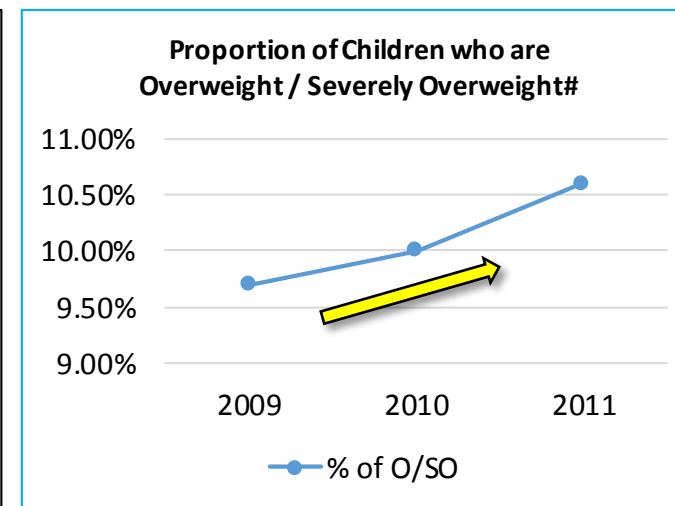
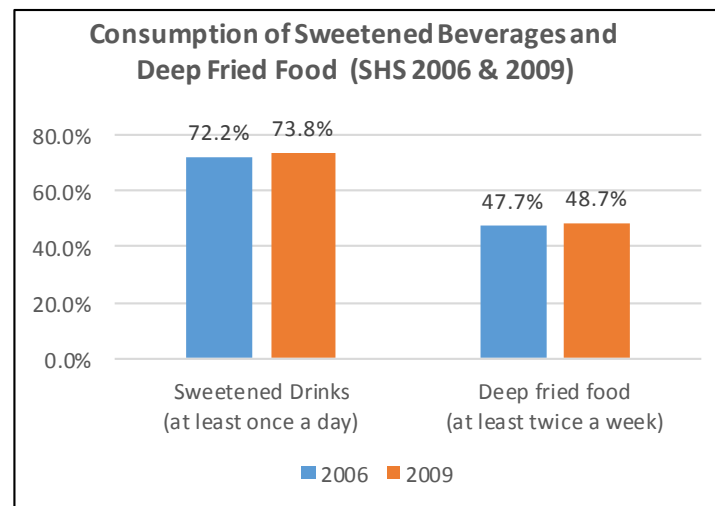
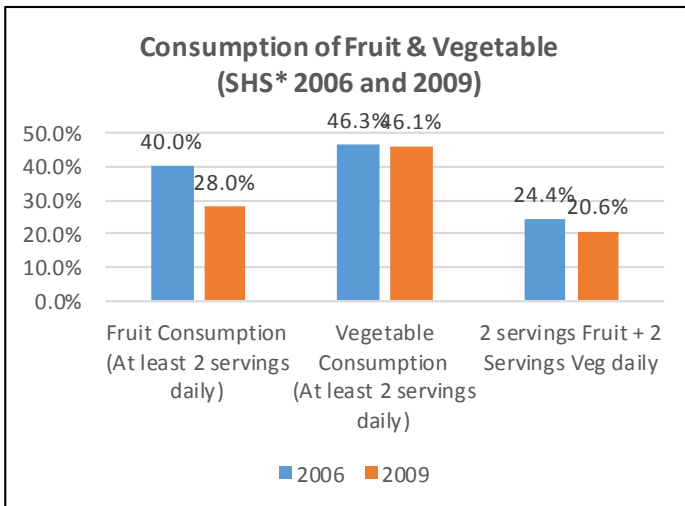
Provision of fruit and vegetables was insufficient and consumption was low.



Deep-fried & preserved food continued to be sold. Sugared drinks were easily accessible.



What was the impetus for change?



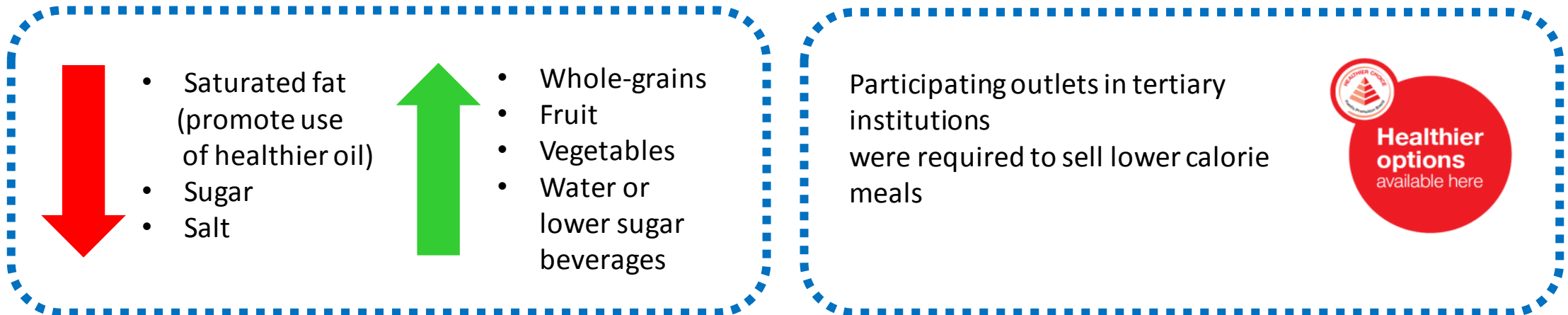
Childhood obesity was beginning to trend upwards.

Data source:
 *HPB Student Healthy Survey 2006, 2009
 #Ministry of Education obesity prevalence data

In 2012, Singapore implemented and enforced standards for quality of food served in childcare and educational institutions with the following key principles:

- 1 Improve the quality and taste of food served
- 2 Inculcate healthy eating habits from young
- 3 Make healthier eating the default in schools
- 4 Increase healthier options available in tertiary institutions

The programme required educational institutions* to:



* Educational institutions refer to Childcare Centres, Mainstream Schools and Institutes of Higher Learning.

As soon as implementation was underway, unforeseen challenges and pushbacks arose.



Untrained cooks/vendors lacked understanding of the guidelines.

Operationally tedious.

There were also storage issues.



Supply of healthier ingredients lagged behind demand.

Higher cost was a concern.

Canteen vendors were afraid of losing business and money.



Students did not like the taste of whole-grains and did not eat fruit/ vegetables.

High wastage of fruit and vegetables.

They were unhappy when Fried Food Day was abolished.

Parents complained about the increased price of meals.

Adoption rate for the programmes was low and progress severely hindered.

It was necessary to galvanise strong support from stakeholders to improve implementation, generate demand and make healthier options sustainable

Create a supportive and sustainable environment with pervasive healthier options...



- Inclusion of HMCCP guidelines in ECDA's **Revised Licensing Criteria** by 2018



- Inclusion of HMSP guidelines into **tenancy agreement** for canteen vendors
- Ministry of Education directive: **all vendors to be trained** by Oct 2016 and all schools to implement HMSP by 2017



- Inclusion of HDP guidelines into **tenancy agreement** for F&B outlets
- Expand from mass eating outlets eg canteen to cafes, restaurants etc



- Support HCS programme
- Increase range of products that met HCS guidelines

Active collaboration with key influencers to encourage and reinforce habit forming

Schools

- **Phase-in approach** towards implementation
- **Sharing** of best practices
- Facilitation of **Learning Journeys**
- Implementation **toolkit** for schools

Cooks/Canteen Vendors

- **Hands-on training** to prepare tasty and healthy meals
- **Monetary incentives Handholding** and consultation
- **Audit** by independent parties
- List of healthier ingredient **suppliers**

Students

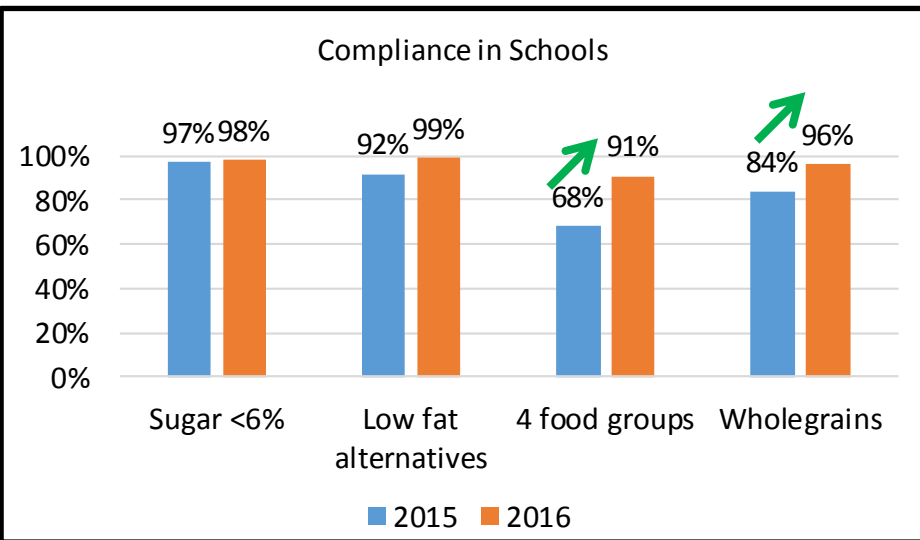
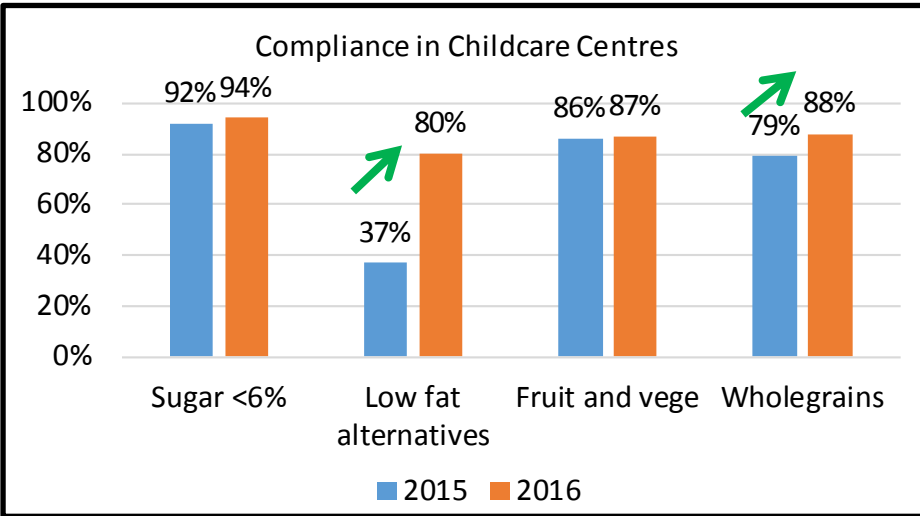
- Nutrition education in **curriculum**
- Campaigns and **visual cues** at points-of-sale to increase mindshare
- **Resources** for schools to increase awareness and consumption of healthy meals

Parents

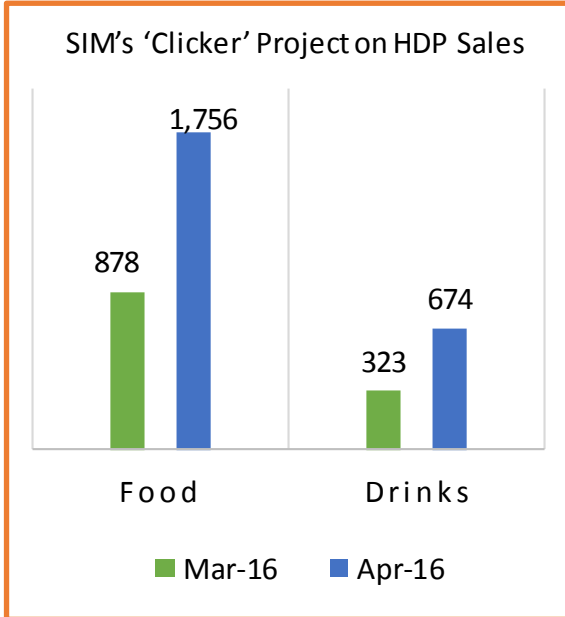
- **Communication** to parents about the programme
- Resources to **increase awareness** of healthy eating
- Parents as **catalyst** for change

With time, programme adoption rate and compliance to guidelines improved, consumption patterns started to shift

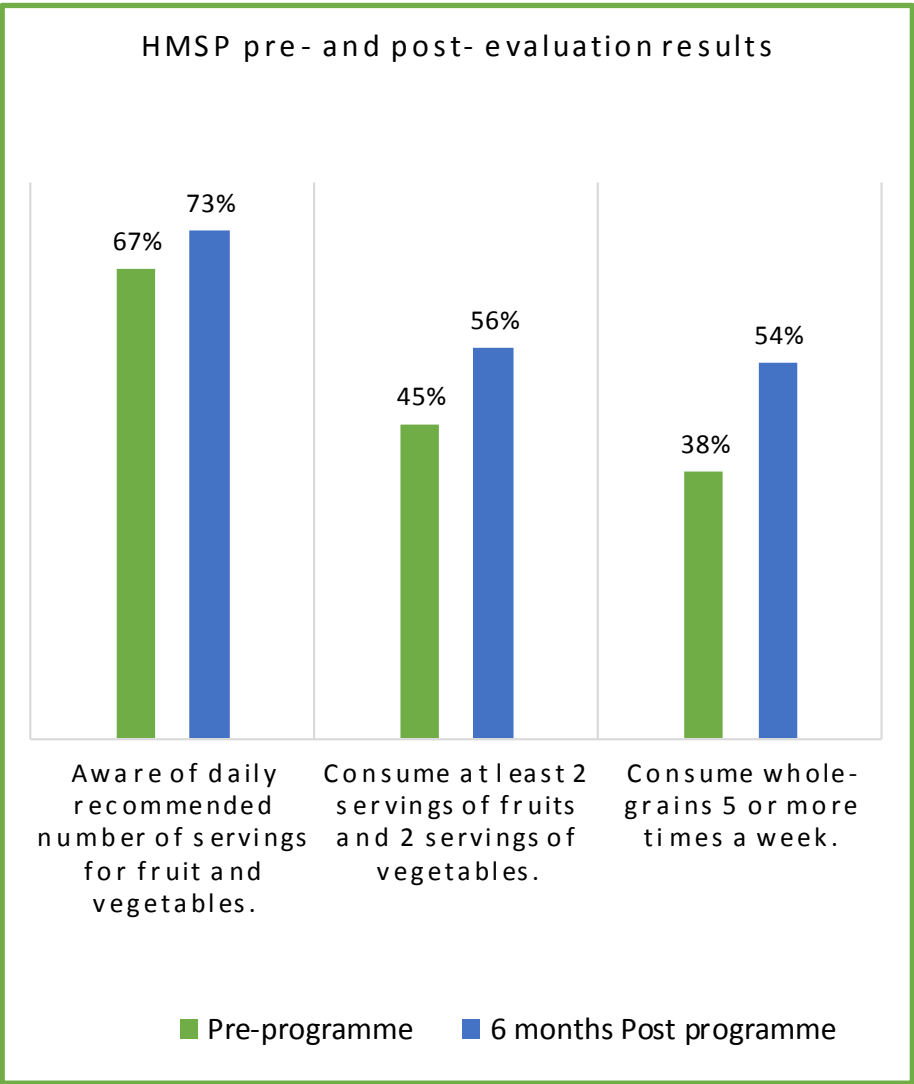
Compliance with Healthy Meals Programme guidelines



Sale of healthier food and drinks in tertiary institutions



Consumption habits among school children



Today, over half a million students have access to healthier meals.

Increase from 130,000 to 500,000 students having access to at least 1 healthy meal daily!

2014

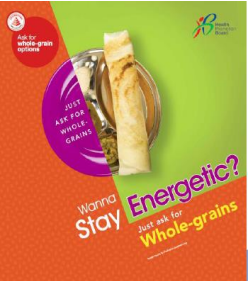
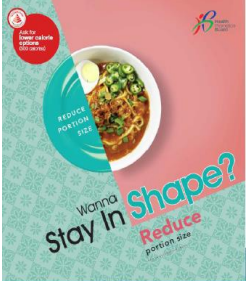
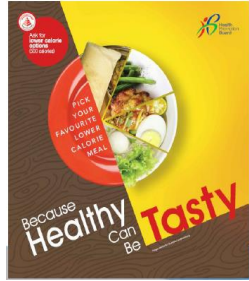
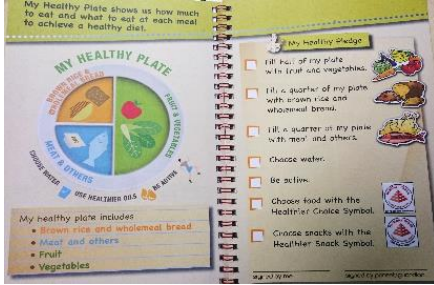
- 100 childcare centres
- 92 Schools
- 6 F&B outlets in IHLs

Mar 2017

- 848 childcare centres
- 359 schools
- 52 F&B outlets in IHLs

Universe:
1200 childcare centres
359 schools
188 outlets in IHLs

With default healthy meals & the use of repeated cues, behavioural change seems to have taken root.



Serving of Healthier Meals as a Default

Nutrition Education in Curriculum

Visual and Environmental Cues



Greater acceptance of fruit by students

Greater acceptance of healthier food - wholegrains and vegetables.

Preschoolers become agents of change, encouraging their parents to buy healthier food.

Youth in IHLs are selecting healthier options.



Implementing Healthy Meals Programme in Singapore Schools: Lessons learnt




- Engage key decision makers and stakeholders for support and proactively keep them updated on progress and compliance



- Ensure market availability of healthier products to meet the programme requirements



- Implement a phased approach as schools have different needs and are at different stages of readiness



- Put in place a compliance audit process to ensure that schools continue to abide with the requirements



- Provide value-added products and services to ensure ease of implementation for stakeholders

Discussion points

Invest in a national food strategy to reduce diet quantity & improve diet quality so as to shape healthy eating habits especially children and youth

Implement and enforce standards on quality of food served in childcare and educational institutions

Galvanise support from stakeholders to improve implementation, generate demand and make healthier options sustainable

Thank you