

3 October 2011

***HPB DECLARES WAR ON SALT: SINGAPORE RESIDENTS EXCEED
DAILY RECOMMENDED SALT CONSUMPTION BY 60%***

***HPB's Centre of Excellence for Nutrition introduces "FINEST FOOD" Programme,
in collaboration with SPRING Singapore and Singapore Food Manufacturers' Association,
to encourage food companies to develop healthier salt and
other functional food products***

Singapore appears to be a nation that loves its food salty, with eight in 10 Singapore residents exceeding the daily salt intake recommendation of less than 5g/day (equivalent to one teaspoon). The Health Promotion Board (HPB)'s Salt Intake Study, which was conducted as part of its 2010 National Nutrition Survey, has found that the individual's daily salt intake stands at 8.3g i.e. more than 60% above the recommended level. The Salt Intake Study comprised over 800 subjects aged 18-79 years.

2 The findings further revealed that adults aged 30-49 years consumed the most salt (about 9g/day); males also consumed more salt (nearly 10g/day) compared to their female counterparts (about 7g/day).

3 Most of the salt (60%) in the local diet comes from table salt and sauces. Of this, almost two-thirds are consumed outside of the home. Processed food, especially fish balls, fish cakes, breads and noodles are estimated to contribute another 37% of the population's salt intake¹. The remainder is the salt found naturally in fresh food.

¹ These food contain salt as a major ingredient, and are also consumed in substantial amounts.

4 Excessive intake of salt is a key risk factor for the development of high blood pressure (i.e. hypertension). The prevalence of hypertension in Singapore currently stands at 23%. Hypertension, which does not carry any visible symptoms to the individual, is a silent killer as it attacks the body system and can cause deadly consequences such as stroke, heart attack and kidney failure.

5 HPB Chief Executive Officer Mr Ang Hak Seng said, “Salt is a double-edged sword, when not handled with care. While a little salt may enhance the flavor of food, over consumption can raise blood pressure, which in turn is a significant risk factor for cardiovascular diseases. Even small dietary salt reductions can lower blood pressure and the incidence of stroke and heart disease. Studies have estimated that a reduction in daily salt intake of about 1g can lower blood pressure by an average of 2 mmHg, which can reduce the incidence of stroke by about 10% and that of heart disease by 5%”

6 “Local food companies play a vital role in producing local healthier food alternatives for our domestic market. Hence, HPB’s Centre of Excellence for Nutrition (CoEN) is collaborating with the private sector partner - Singapore Food Manufacturers Association (SFMA) – to make healthier food pervasive.

7 “Together with SFMA and SPRING, CoEN’s new FINEST (Functional, Innovative, Nutritious, Effective, Science-based & Tasty) Food Programme will take the lead in equipping SMEs with knowledge and skills to develop functional healthier products² to address the nutritional and health needs of the population. This includes hypertension, diabetes and heart disease, especially with our rapidly aging population. We are already working with industry partners to develop a ‘healthier salt’ and other food with lower sodium content. This HCS salt has 25% less sodium³ compared to regular salt. We aim to reduce the proportion of people exceeding the daily salt recommendation by 30% (from 8 in 10 to 6 in 10) by 2015”.

8 To ensure that technical resources are in place, the FINEST FOOD Programme will also harness food science expertise from knowledge institutions such as the Food Innovation and Resource Center at Singapore Polytechnic, Republic Polytechnic and Temasek Polytechnic, to supervise and test-bed the healthier product formulation to ensure its suitability for market consumption. Local food companies can tap the existing Technology Innovation Programme to adopt technology innovation or Innovation Voucher Scheme to develop innovative food products, including functional food. Both programmes are administered by SPRING Singapore.

² Food ingredients or composition that may provide a health benefit beyond basic nutritional value.

³ Sodium found in salt and other food is the compound which raises blood pressure when consumed in excess

9 For some forward thinking companies, several reformulation projects are already underway. CoEN is presently in collaboration with Siem Trading (the producer of Pagoda Salt) to manufacture a “healthier salt” that meets the nutritional guidelines for the Healthier Choice Symbol (HCS). Food companies Prima Taste, Woh Hup, Tai Hua and Sin Hwa Dee are also looking into reformulating their sauces and pastes to contain less salt. Additionally, local food manufacturer Ha Li Fa, has recently developed their popular BoBo fish balls and fish cakes to have a lower salt content. Some of these products (e.g. the “healthier salt”) will be promoted for use in hawker centres and other food service establishments.

ANNEX 1 – Key Findings from the Salt Intake Study

ANNEX 2 – Sources of Salt in the Singapore Diet

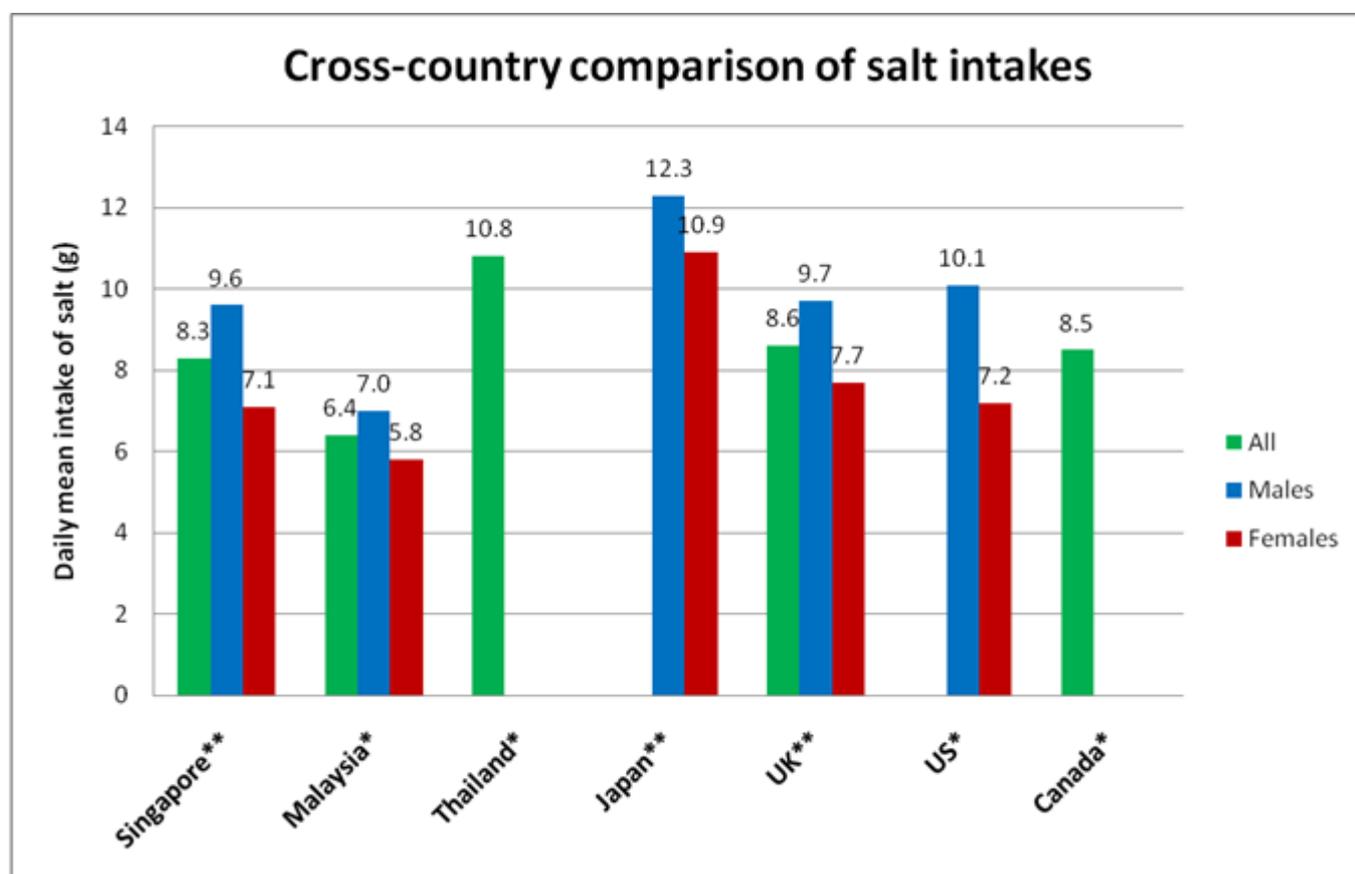
ANNEX 3 – Fact Sheet on FINEST FOOD Programme

ANNEX 4 – Fact Sheet on Innovation Scheme Voucher (IVS) and Technology Innovation Programme (TIP)

ANNEX 5 – Frequency Asked Questions

Issued by Health Promotion Board

Key Findings from the 2010 Salt Intake Study



** Data obtained via 24-hr urine analyses, which is considered the “gold standard” method to estimate salt intake in the population

* Data obtained through dietary surveys (generally tend to underestimate sodium intakes)

Source

Singapore: *Salt Intake Study, 2010*

Malaysia: *Malaysian Adult Nutrition Survey, 2008*

Thailand: *Nutrition Division, Ministry of Public Health, 2008*

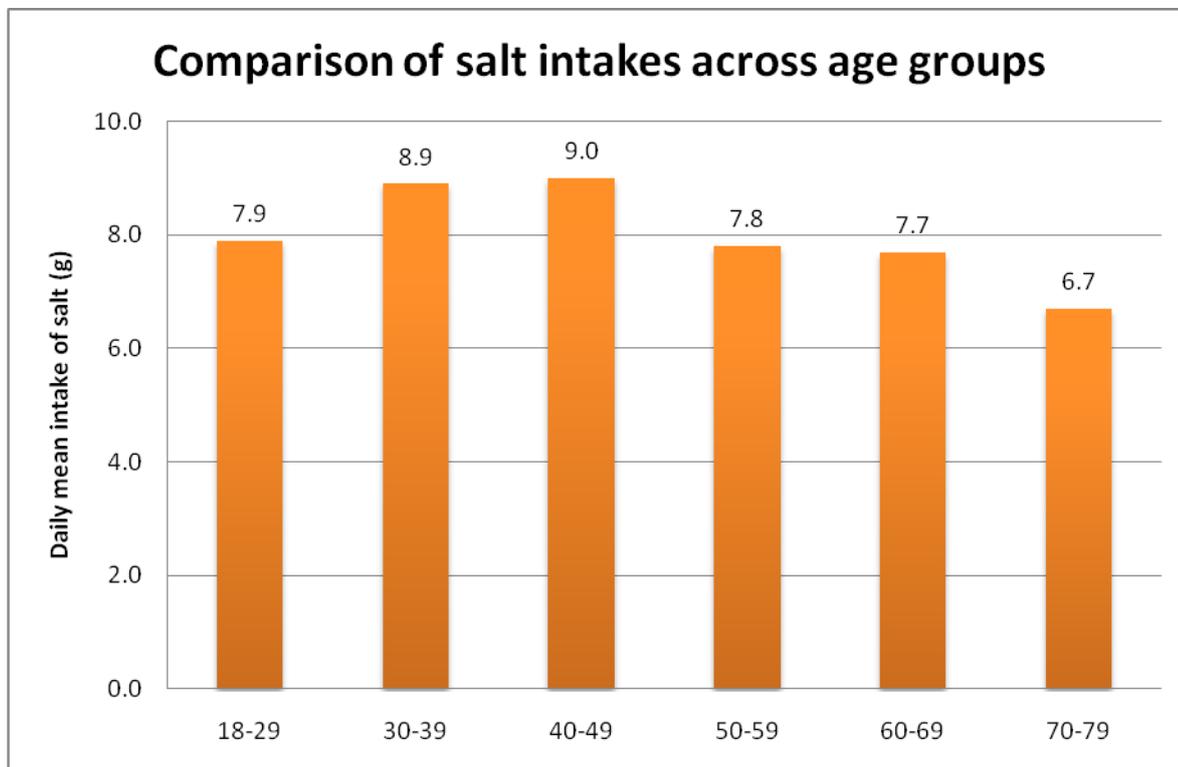
Japan: *INTERMAP Study, 1996-98*

UK: *National Centre for Social Research, 2008*

US: *What we eat in America, NHANES 2007-08*

Canada: *Canadian Community Health Survey 2.2 (Nutrition), 2004*

Key Findings from the 2010 Salt Intake Study



Sources of Salt in the Singapore Diet

Food	Contribution
<p style="text-align: center;">Salt and sauces</p> <ul style="list-style-type: none"> • Used in cooking at home and outside • Includes soy sauce, oyster sauce, stock powder, sambal and pastes 	60%
<p style="text-align: center;">Processed food</p> <ul style="list-style-type: none"> • Includes breads, noodles and <i>surimi</i> products (e.g. fish balls, fish cakes and crab sticks) 	37%
<p style="text-align: center;">Fresh food</p> <ul style="list-style-type: none"> • Naturally-occurring salt in raw food such as meats and vegetables 	3%

Source

National Nutrition Survey, 2010 (preliminary data)

“FINEST Food” Programme for SMEs

Functional, Innovative, Nutritious, Effective, Science-based and Tasty Food

FINEST Food Programme in partnership with Singapore Food Manufacturers’ Association (SFMA) and SPRING Singapore

Overview

The FINEST Food programme aims to build capability among food manufacturing industry with knowledge and skills to develop healthier, functional food products, to address nutritional and health needs of the Singapore population, like an aging population, obesity and chronic diseases like diabetes, high blood pressure and heart health.

It is a tri-partite initiative helmed by HPB’s Centre of Excellence (Nutrition), in collaboration with enterprise development agency, SPRING Singapore, and Singapore Food Manufacturers’ Association (SFMA), to drive the co-innovation of healthier functional food solutions with the food industry in Singapore.

Harnessing on the food science and engineering expertise of the Institutes of Higher Learning (IHLs) like, the Food Innovation and Resource Centre (FIRC@SP), Temasek Polytechnic and Republic Polytechnic, the programme, as its name suggest catalyses the development of Functional, Innovative, Nutritious, Effective, Science-based and Tasty Food.

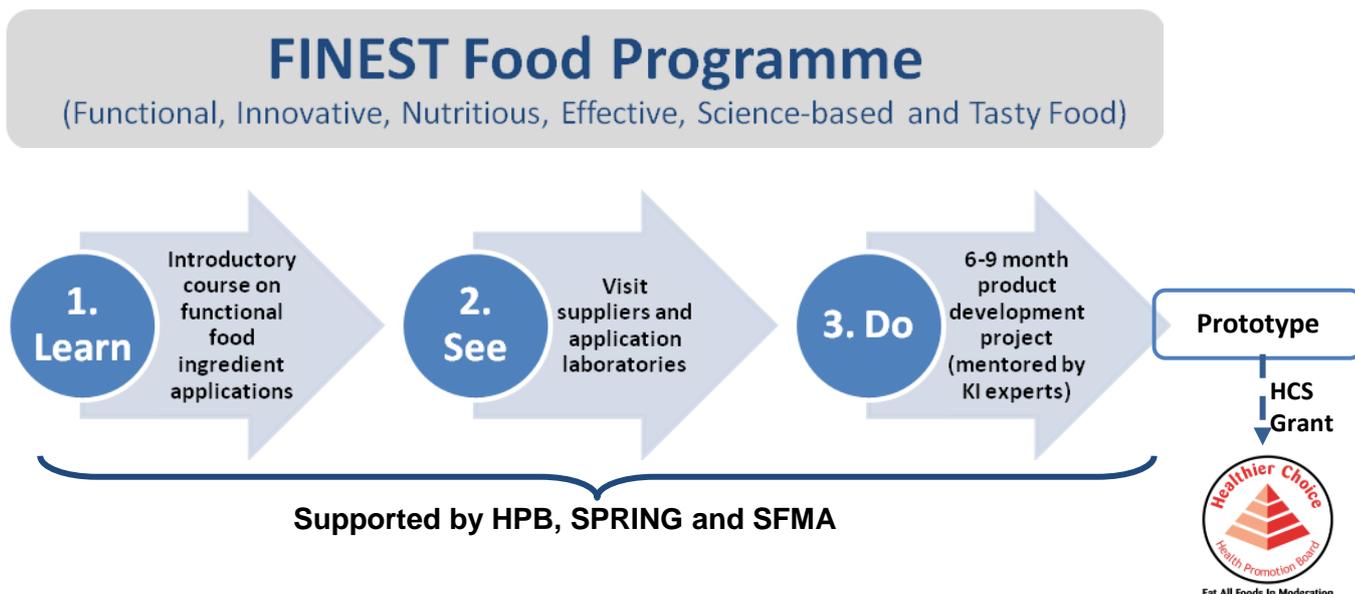
Roles of each party : HPB, SPRING, SFMA

HPB’s Centre of Excellence for Nutrition (CoEN) seeks to be a leading regional industry-oriented Food & Nutrition Centre to drive the co-innovation of functional healthier food solutions with the food industry in Singapore. It will identify key and emerging areas of nutritional concern in Singapore to provide guidance to the food industry in the development of healthier functional food. The new Healthier Choice Symbol grant would be given to companies to encourage the development of healthier functional products.

SPRING Singapore is the enterprise development agency responsible for helping Singapore enterprises grow. As the lead agency for the food sector, SPRING Singapore work with partners to help enterprises in financing, capability and management development, technology and innovation, and accessing new markets. Companies interested to create and develop innovative food products can apply for support through the Technology Innovation Programme and Innovative Voucher Scheme.

SFMA is an active trade association formed by members of local food manufacturers with the purpose of developing and promoting the local food manufacturing industry. Its mission is to act as a bridge between relevant government authorities and food manufacturers to respond effectively to the government’s policies and initiatives to promote the development of the food industry. SFMA will continue to be a conduit reaching out to, providing platforms, and driving initiatives among the food industry community to develop healthier, functional food products.

The programme comprises of three phases:



Timeline

The first run of the FINEST programme will commence February 2012.

To Participate in the FINEST Food Programme

More details on registration, programme outline, can be obtained from the [Healthier Choice Symbol Programme website](#).

Available Assistance Schemes for companies

Companies interested in participating can tap on the following funding sources

1. **SPRING Technology Innovation Programme and Innovation Voucher Scheme (Annex 4)**
2. **HPB Healthier Choice Symbol (HCS) Grant** to support or pay for the cost of reformulation projects of existing products and prototypes to meet the healthier choice symbol nutritional criteria, leading to the certification of healthier choice products. These projects should be conducted at participating appointed Knowledge Institutes (KIs). Interested SMEs can apply for up to \$5,000 per project.

More details can be obtained from the [Healthier Choice Symbol Programme](#)



ABOUT INNOVATION VOUCHER SCHEME

The Innovation Voucher Scheme (IVS) connects public knowledge institutions (KIs)⁴ with SMEs to encourage the latter to use technology to develop their innovative ideas. The innovation vouchers can be used to support projects or services that use technology to enhance or develop new products, processes, applications, practices or operations, or result in the development of new technology capabilities.

SMEs with an innovative idea can apply for an innovation voucher worth \$5000 from SPRING Singapore. The voucher can help to pay for the cost of technology-related projects and services at participating KIs. These activities should facilitate the transfer of know-how from the KIs to the SMEs.

For more information, visit www.spring.gov.sg/ivs

ABOUT TECHNOLOGY INNOVATION PROGRAMME

SPRING Singapore launched the Technology Innovation Programme (TIP) in 2006. A total of \$220 million was committed over five years to help SMEs adopt technology innovation as a competitive strategy. Under the TIP, support is extended to SMEs in four ways:

- Catalysing technology projects with funding support
- Seeding technology startups with early stage funding
- Building technology expertise through the secondment of experts
- Developing the technology infrastructure by setting up Centres of Innovation (COIs)

Another \$320 million has been committed in Aug 2011 to drive the technology innovation initiative over next five-year phase, from 2011 to 2015.

For more information, visit www.spring.gov.sg/tip

⁴ Knowledge Institutions (KIs) with expertise in food products include Food Innovation & Resource Centre (FIRC), Nanyang Polytechnic, Republic Polytechnic, Temasek Polytechnic and ITE College East.

FREQUENCY ASKED QUESTIONS

Questions on Salt Intake Study

1. What is the methodology for the Salt Intake Study?

- The Salt Intake study is part of the 2010 National Health Survey and National Nutrition Survey.
- Urine samples from 800 participants were collected and the concentration of salt (sodium) in the urine was then measured in a laboratory.
- This is the first time that salt intake of Singaporeans were assessed through 24-hr urine analysis, which is considered the “gold standard” method to estimate salt intake in the population.

2. What is sodium and what food contain sodium?

- Salt contains 40% sodium, a mineral which affects blood pressure.
- Salt is one of the sources of sodium in the diet; others include sauces, MSG and preservatives
- These are often used in cooking and the manufacturing of processed food (e.g. canned food).

3. Why is eating too much salt harmful?

- Studies have shown that a high salt intake raises blood pressure and significantly increases the risk of stroke and heart disease.
- Currently, about 1 in 4 adults in Singapore have hypertension and 1 in 3 deaths are attributed to heart disease or stroke.
- Without strategic intervention efforts to reduce salt intakes, we will likely see an increase in the prevalence of hypertension, and potentially more fatalities resulting from cardiovascular diseases.

4. Where is salt coming from in Singaporeans' diet?

- 60% of salt comes from table salt and sauces.
- Processed food (including breads, noodles, fish balls and fish cakes) are estimated to contribute another 37% of the population's salt intake.
- The remainder (3%) of salt intake comes from fresh food such as fruits, vegetables, meat.

5. What are salt contents of some common hawker food?

Food	Serving size	Salt content per serving
Fish ball noodles, soup	1 bowl	7.3g
Mee soto	1 bowl	6.7g
Mee siam	1 bowl	6.6g
Prawn noodles, soup	1 bowl	6.1g
Prawn noodles, dry	1 bowl	4.8g
Wanton noodles, soup	1 bowl	4.5g
Fish ball noodles, dry	1 bowl	4.1g
Wanton noodles, dry	1 bowl	3.8g
Char kway teow	1 plate	3.6g
Roasted chicken rice	1 plate	2.8g

In general, soupy dishes tend to contain more salt than non-soupy ones. One tip to reduce the amount of salt from these soupy dishes is to avoid drinking the soup. For instance, by not drinking the soup from fish ball noodles, one can save about 2g of salt (or about 20%).

6. How is HPB helping people reduce/monitor their salt intake, especially in view of their reliance on outside and processed food?

- CoEN adopts a holistic eco-system approach working with food manufacturers.
- Working with SFMA to encourage their members to drive the co-innovation of healthier food products.
- Working with Restaurant Association of Singapore and the hawkers to encourage them to use these healthier products in their dishes.
- Process is modeled after Healthier Hawker Programme
 - working with manufacturers to develop wholegrain ingredients
 - working with hawkers to cook with wholegrain ingredients
 - working with supermarkets and grocery stores to sell wholegrain products

7. How can one try to keep his/her salt consumption within the daily recommendation limit?

When eating at home:

- Eat more fresh food such as fruit and vegetables, meat, poultry and fish and less processed food such as canned food
- Eat less salt-preserved, cured and smoked food such as Szechuan vegetables, salted eggs, ham, sausages and smoked salmon.
- Try natural seasonings' such as fresh or dried herbs (parsley, corianders, onion, garlic, chives and spring onions) and spices (cinnamon, cardamom, cumin, pepper, curry powder and chilli) and adding fresh lemon, lime or orange juice to food to naturally increase flavour.

When eating out:

- Ask for less sauce and gravy
- Don't add extra salt / sauces at the table
- Don't finish all the liquid in soup-based dishes
- Include some fresh fruit and vegetables (such as salad) with your meal

When shopping for food:

- Read and compare food labels to choose food that are labelled 'reduced salt', 'low in salt or sodium', 'salt or sodium free', and 'no added salt' and those carrying the Healthier Choice Symbol (HCS).

8. **How does Singapore rank against other neighbouring countries in terms of salt intake?**
- The level of salt intake in Singapore is somewhat close to other countries in the region, including Malaysia, India, and southern part of China, as well as to the UK and Canada.
 - The level is lower than that observed in Japan and China overall. (refer to graph in Annex 1)

Questions on FINEST Food Programme

9. **What is the objective of developing this initiative?**

The aim of the FINEST FOOD Programme is to build capability among food manufacturing industry with knowledge and skills to develop functional and healthier products, to address priority nutritional needs of the Singapore population.

10. **What are the targets for the programme? Eg. what kind of innovative food products will be developed and by when?**

- We are aiming for about 30 products by 2015.
- These products will cover a whole spectrum, not just more products that are lower in salt, but those that are lower in Glycaemic Index, and can help in diabetes management, and those that are for healthy aging (food fortified with omega-3, calcium vitamin B6 and 12, Vitamin D).

11. **What are the resources and how much is available to assist companies in the development of healthier functional food?**

Companies interested in developing healthier functional food can tap on the various funding schemes:

- **Technology Innovation Programme** to adopt technology innovation or **Innovation Voucher Scheme** to develop innovative food products, including functional food. Both programmes are administered by SPRING Singapore.
- **HPB Healthier Choice Symbol (HCS) Grant** to support or pay for the cost of reformulation projects of existing products and prototypes to meet the healthier choice symbol nutritional criteria, leading to the certification of healthier choice products. These projects should be conducted at participating appointed Knowledge Institutes (KIs). Interested SMEs can apply for up to \$5,000 per project.

More details can be obtained from the [Healthier Choice Symbol Programme](#)

- What is the difference between both?
 - SPRING'S IVS supports the adoption of technology in the development of an innovative idea into a prototype.
 - HPB'S HCS grant supports work after the prototype or product has been developed that leads to the certification of healthier choice

12. **Are there any companies who have already begun reformulation works to develop healthier functional food? Who are they and what healthier products are they developing?**

We are already working with companies like Siem Trading, Prima Taste, Woh Hup, Tai Hua, Sin Hwa Dee and Ha Li Fa to produce lower-salt products. We will definitely be recruiting more companies for the FINEST Food Programme

13. How will these healthier functional food be differentiated in the market?

- These products may choose to carry the healthier choice symbol (HCS) should the products meet the nutritional criteria set out in the programme.
- The new HCS logos are tagged with various nutrient claims e.g. Lower in saturated fat, higher in calcium. Products may also carry pre-approved nutrient claims and health claims listed under AVA's Food Advertisement and Labelling section should it meet the requirements to carry the specified claim.