A collage of various oil sources including olives, corn, soybeans, coconuts, and sunflowers. The background is black, and the items are arranged around the central text. 

# BATTLE OF THE OILS

*Does oil really matter?*

A PROJECT BETWEEN BUNGE AND SINGAPORE CHEFS ASSOCIATION



# BATTLE OF THE OILS

8 types of cooking oil put to the test in  
20 popular recipes from 10 countries

## Oil selection is subjective....

Cooking oils shape the culinary experience. Each has distinct functional, flavour and sensory characteristics that affect how food is prepared, served and enjoyed.

However, choice of cooking oils made by both consumers and professional chefs is done on a subjective basis rather than an informative decision based on the cooking performance of the oils.

Cooks from professional kitchens tend to choose the oils that they are familiar with growing up. European chefs use mainly olive and sunflower oils, North American chefs, canola and soybean, South East Asian chefs, palm and coconut oils, Australian chefs, canola etc...

Bunge and the Singapore Chefs' Association (SCA) for the first time ever are providing answers based on empirical evidence.

## Which oil is best for your dish?

Does the choice of oil really make a difference to the taste, smell, texture and appearance of a dish? Does oil really matter?

To answer this question, Singapore's top chefs used eight of the world's top cooking oils to prepare the most popular dishes in Asia. A panel consisting of professional chefs, home cooks and consumers judged the oils based on cooking performance, taste and sensory appeal.

The results published here provide guidance on which oils work best for each particular dish based on the experience of consumers and chefs.

*Are you ready?*

# The Test

## The Contenders

These eight oils were tested across 20 dishes, which will come up tops in this test?



# The Test

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# The Dishes



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## China

Fried Rice  
Fried Spring Rolls

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## Indonesia

Ayam Panggang  
Beef Rendang

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## Korea

Korean Fried Chicken  
Pajeon Pancake

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## Malaysia

Ayam Rendang  
Udang Masak Nanas

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## Philippines

Baboy Binagoongan  
Chicken Adobo

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## Thailand

Thai Prawn Toast  
Pandan Leaf Chicken

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## Vietnam

Lemongrass Pork Chop  
Seafood Patties

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## Japan

Tempura  
Agedashi Tofu

---

## Singapore

Cereal Prawn  
Fluffy Wok Fried Egg

---

## Western

French Fries  
Fried Chicken

# The Test

## The Chefs



# The Test

## The Judges

A panel comprised professional chefs, home cooks and consumers judged the best oil for each dish based on the following parameters:

### Sensorial Testing Parameters (Consumers/Homecooks)

*Legend – 3 for the highest grading and 1 for the lowest grading*

For each question, please grade by circling the number that represents your answer. Please also write your comment for the grading given.

Testers are required to rate the Colour and Appearance of all 8 dishes before the taste tests.

- |  |   |   |   |
|--|---|---|---|
| 1) Colour & Appearance of the Dish                   | 1 | 2 | 3 |
| Remark: _____  |   |   |   |
| 2) Taste of the Dish                                 | 1 | 2 | 3 |
| Remark: _____  |   |   |   |
| 3) Texture of the Dish                               | 1 | 2 | 3 |
| Remark: _____  |   |   |   |
| 4) Smell of the Dish                                 | 1 | 2 | 3 |
| Remark: _____  |   |   |   |
| <i>(Please re-look at the dish after 10 minutes)</i> |   |   |   |
| 5) Colour & Appearance of the Dish                   | 1 | 2 | 3 |
| Remark: _____  |   |   |   |

Please indicate **your top 3 oils used for the dish** after tasting all 8 versions of the dish. Eg. #1: Corn Oil, #2: Peanut Oil, #3: Olive Oil.

### Cooking Testing Parameters (Professional Chefs)

- Stability of the Oil during Cooking  
(smoking point, how the oil holds over time whether it needs to be changed before it smokes or turn dark/burnt, any oil splattering etc...)
- Fat Absorption
- Smell of the Oil during Cooking
- Colour of the Oil during Cooking
- Preparation & Cooking Time Difference
- Taste of the Dish  
(Ready to Serve / After Shelf Life)
- Effect on Reheating Process  
(Taste, Texture, Colour & Smell)



*And the results are...*

# Fried Rice



Corn

## Test Results

BEST  
OVERALL OIL  
FOR THIS  
DISH

**BEST**



## RUNNERS-UP



## What do consumers say?

- Corn oil ranks highest thanks to a glossy and moist appearance, not too oily, a snappy texture and fragrant taste and smell

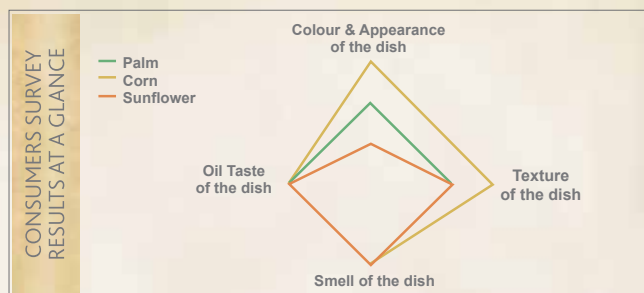
### Runners-up:

- Sunflower oil exhibited a smooth nutty taste despite a matte and dry appearance
- Palm oil has a nice shiny appearance and taste which compensates for lack of aroma and oily aftertaste



## What do chefs say?

- Corn, palm and sunflower oils received the highest marks due to their stability, colour and aroma while cooking





# Fried Spring Rolls

DEEPLY FRY



## Test Results

BEST  
OVERALL OIL  
FOR THIS  
DISH

Corn

**BEST**



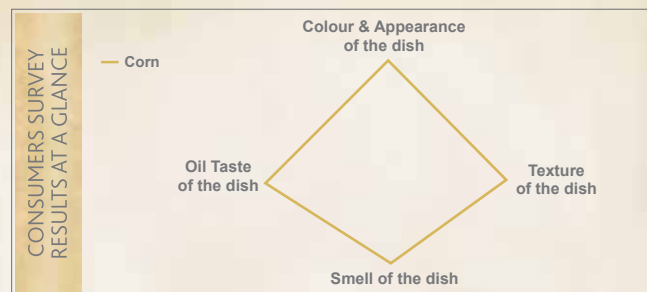
## What do consumers say?

- Corn oil ranks highest as it produces a crispy texture, vibrant golden brown colour, fragrant aroma and good taste
- Corn oil beats the other oils by a wide margin; there are no viable runners-up



## What do chefs say?

- Palm and corn oils perform the best producing golden brown spring rolls faster than the others



# Ayam Panggang



## Test Results

BEST  
OVERALL OIL  
FOR THIS  
DISH

**BEST**

Sunflower



## RUNNERS-UP

Coconut



Peanut



## What do consumers say?

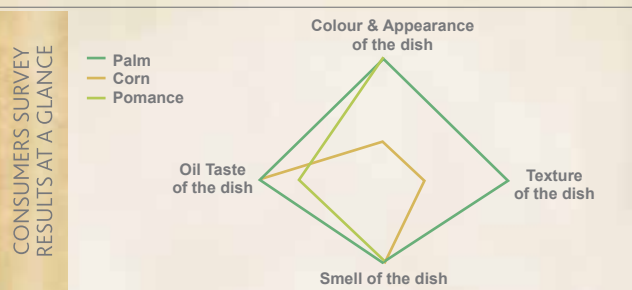
- Sunflower oil ranks highest thanks to a juicy, melt-in-your-mouth chicken texture, good balance, aroma and subtle taste

### Runners-up:

- Coconut oil's sweetness blends well with the dish's spiciness despite having a dark and dry appearance
- Peanut oil, with its bright and glossy colour, enhances the marriage of sauce and chicken flavours

## What do chefs say?

- Corn and peanut oils perform best, delivering an appealing colour and the fragrance of shallots and garlic



# Beef Rendang



**BRAISE**



## Test Results

BEST  
OVERALL OIL  
FOR THIS  
DISH

**BEST**

*Peanut*



## RUNNERS-UP

*Palm*



*Soybean*



## What do consumers say?

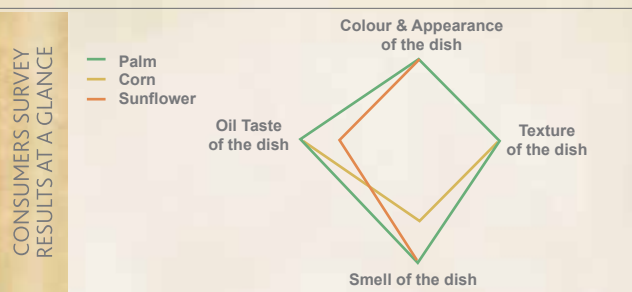
- Peanut oil ranks highest with its moist texture, fragrant smell and subtle taste, binds well with the meat and sauce

### Runners-up:

- Palm oil, despite an oily appearance, produces a tender texture and complements the spiciness of the dish
- Soy oil is well balanced with an appetising appearance and fragrant smell

## What do chefs say?

- Most oils are suitable for this dish



# Tempura

DEEPFRY



Coconut

## Test Results

BEST  
OVERALL OIL  
FOR THIS  
DISH

**BEST**



## RUNNER-UP

Sunflower



## What do consumers say?

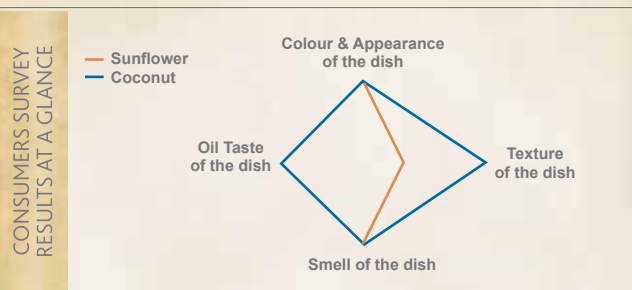
- Coconut oil for being an excellent complement to the sweetness and aroma of the potato tempura and the rich, golden-brown appearance of the food

### Runner-up:

- Sunflower oil for the nuttiness of the oil detected in the tempura, despite the slight lack of crispiness

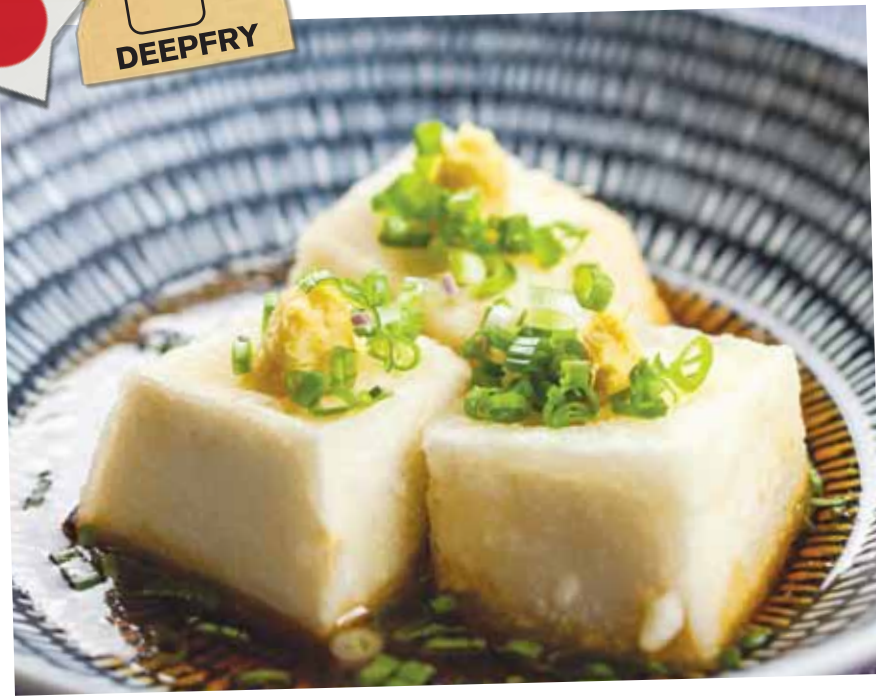
## What do chefs say?

- Soybean, corn and sunflower oils for colour, smell stability and faster reaction time



# Agedashi Tofu

DEEPPFRY



## Test Results

BEST  
OVERALL OIL  
FOR THIS  
DISH

**BEST**

Olive



## RUNNERS-UP



## What do consumers say?

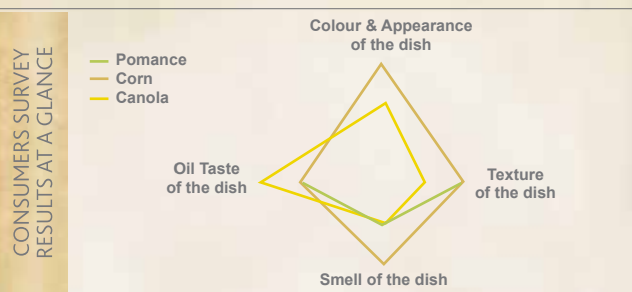
- Pomace oil ranks highest thanks to its golden colour, crunchiness and fragrance which is unparalleled by the other oils

### Runners-up:

- Corn oil delivers good crispiness and fragrance despite a slight lack of taste
- Canola oil has nice flavour and crunchiness despite a pale and oily appearance

## What do chefs say?

- Soybean, corn and sunflower oils are tops based on aroma, stability and faster oil reaction while cooking



# Korean Fried Chicken



## Test Results

BEST  
OVERALL OIL  
FOR THIS  
DISH

**BEST**



## RUNNERS-UP



## What do consumers say?

- Canola oil ranks highest thanks to a superior crispy texture, consistent golden brown colour, overall balance and fragrant smell

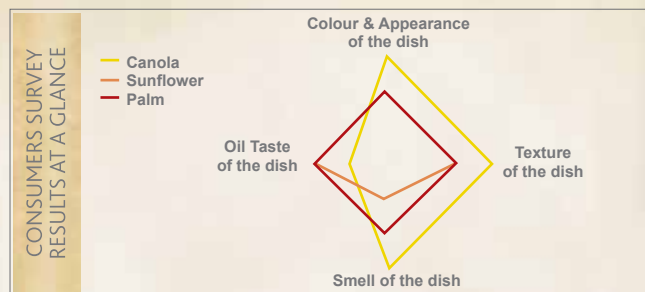
### Runners-up:

- Sunflower oil delivers good crispiness and a fragrant smell, despite perceived oiliness
- Palm oil provides crispiness, golden brown colour, and overall balance, despite a bland smell and taste



## What do chefs say?

- Palm, corn and soybean oils test highest for colour and frying stability



# Pajeon Pancake



Corn



## Test Results

BEST  
OVERALL OIL  
FOR THIS  
DISH

**BEST**

## RUNNERS-UP



## What do consumers say?

- Corn oil ranks highest thanks to its well-blended pancake texture, subtle taste and smell and glistening golden appearance

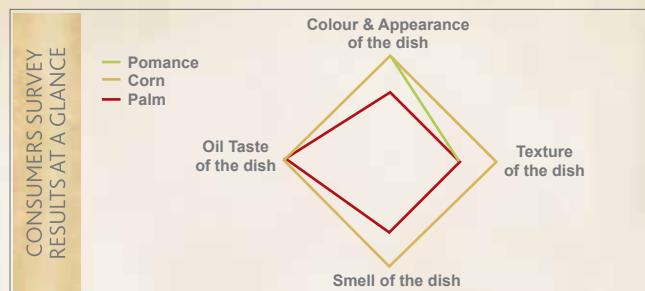
### Runners-up:

- Palm oil delivers good balance and a fruity fragrance and taste despite having a pale unappetizing appearance
- Pomace oil brings a nice brown appearance, fragrant smell and subtle taste, despite a dry texture



## What do chefs say?

- Palm, corn and soybean oils deliver consistent browning and superior frying stability



# Ayam Rendang



**BRAISE**



Coconut

## Test Results

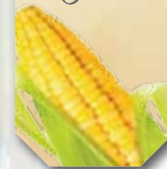
BEST  
OVERALL OIL  
FOR THIS  
DISH

**BEST**



## RUNNERS-UP

Corn



Peanut



## What do consumers say?

- Coconut oil ranks highest despite a dark colour and dry texture for a sweet, aromatic smell and a highly complementary taste

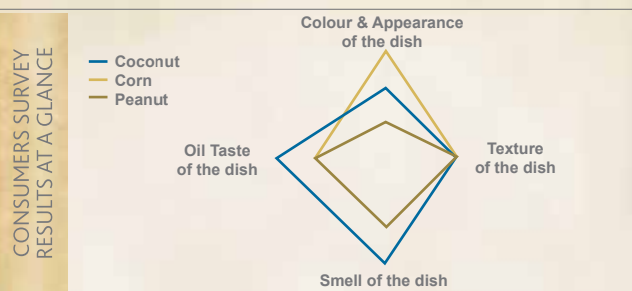
### Runners-up:

- With corn oil, the chicken is juicy and balanced with a fragrant smell and taste
- Peanut oil renders a tender, yet oilier texture, and brings out the chicken taste in the dish



## What do chefs say?

- Peanut, sunflower and corn oils get the high marks for stability, colour and smell during cooking





# Udang Masak Nanas



**BRAISE**



## Test Results

**BEST  
OVERALL OIL  
FOR THIS  
DISH**

**BEST**

Sunflower



## RUNNERS-UP

Coconut



Peanut



## What do consumers say?

- Sunflower oil ranks highest as it renders the gravy a nice thick and creamy appearance and complements the dish's spiciness and sweetness

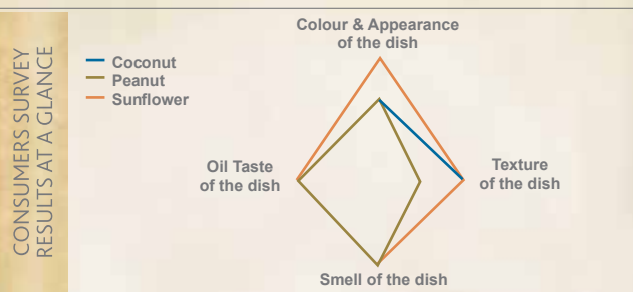
### Runners-up:

- Coconut oil has good balance and very fragrant sweet smell
- Peanut oil brings an appetising creamy appearance and complements the sweetness and spiciness of the dish



## What do chefs say?

- Palm, soybean, and corn oils deliver consistent stability, a rich colour and fragrant smell during cooking



# Baboy Binagoongan



## Test Results

BEST  
OVERALL OIL  
FOR THIS  
DISH

**BEST**



## RUNNERS-UP



## What do consumers say?

- Pomace oil ranks highest as the dish is balanced overall, emulsifies nicely in the sauce, and has a fragrant aroma despite some dryness

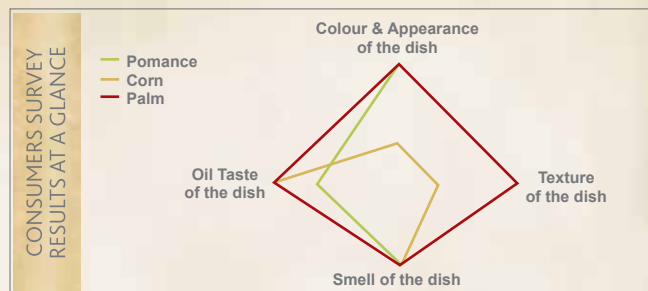
### Runners-up:

- Palm oil has a bright appetising appearance, fragrant smell, and good overall balance
- Corn oil has a good taste and visual appeal despite its excessively oily appearance



## What do chefs say?

- Most oils are suitable for this dish



# Chicken Adobo



## Test Results

BEST  
OVERALL OIL  
FOR THIS  
DISH

**BEST**

Sunflower



## RUNNERS-UP



## What do consumers say?

- Sunflower oil ranks highest thanks to its good balance and savory, inviting flavour

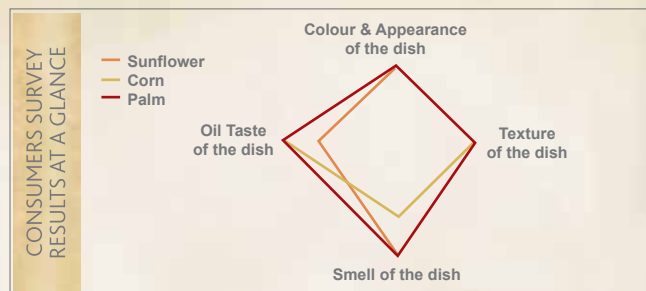
### Runners-up:

- Palm oil delivers a good taste and fragrant smell, despite perceived oiliness
- Corn oil renders an appetising appearance and the oil integrated well with the sauce and chicken



## What do chefs say?

- Sunflower and palm oils deliver superior colour, aroma and stability



# Cereal Prawns

DEEPLY FRY



## Test Results

BEST  
OVERALL OIL  
FOR THIS  
DISH

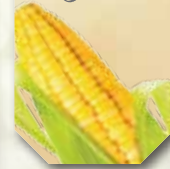
**BEST**

Olive



## RUNNERS-UP

Corn



Canola



## What do consumers say?

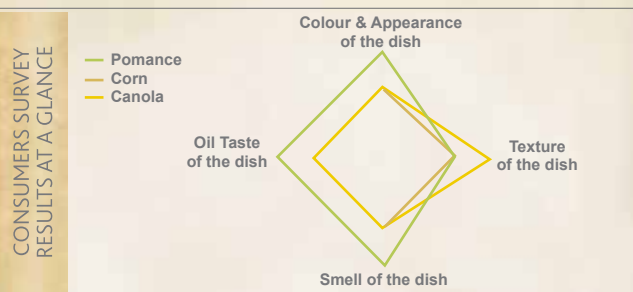
- Pomace oil ranks highest as it imparts a golden brown appearance, good crispiness, a fragrant aroma and a savory taste that balances nicely with the sweetness of the dish

### Runners-up:

- Corn oil brings crispiness and a nice flavour that is well infused in the dish, helping overcome its lack of aroma
- Canola oil delivers a good crispiness and a balanced oil profile despite a somewhat fishy taste

## What do chefs say?

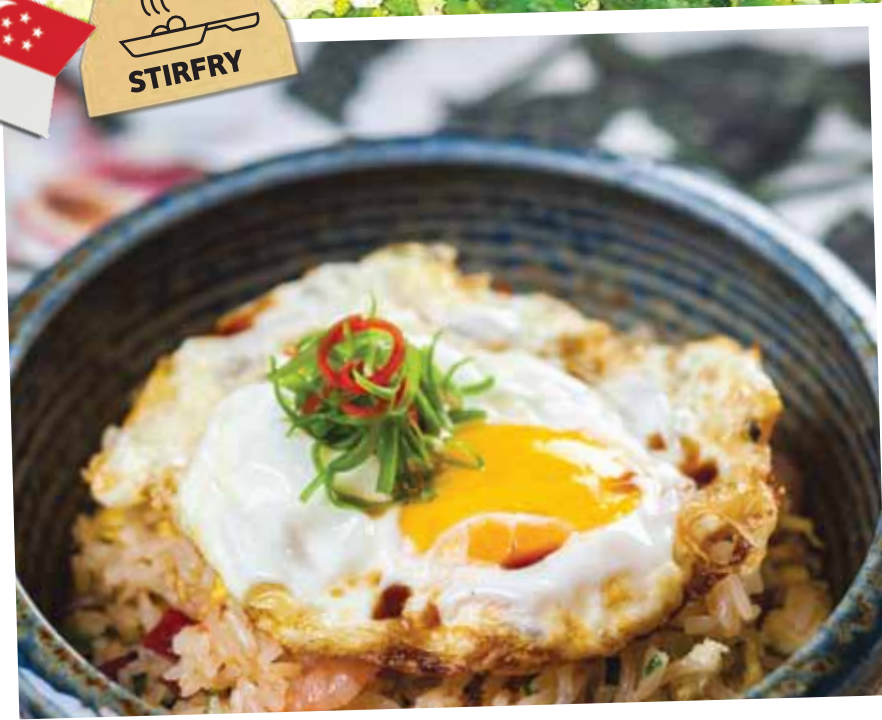
- Soybean, corn and sunflower oils have stable aromas and faster oil reaction when cooking



# Fluffy Wok Fried Egg



STIRFRY



## Test Results

BEST  
OVERALL OIL  
FOR THIS  
DISH

**BEST**

Peanut



## RUNNER-UP

Corn



## What do consumers say?

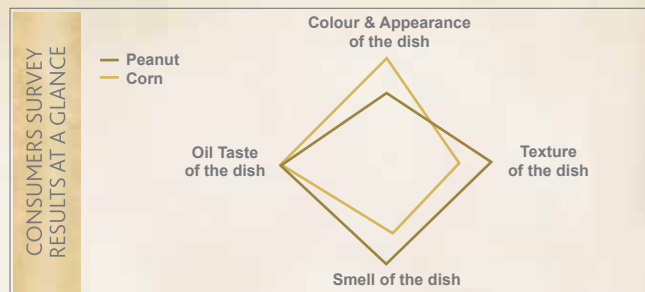
- Peanut oil ranks highest as it produces an appetising golden brown colour, buttery taste and balanced oil profile despite the dish being overly crispy

### Runner-up:

- Corn oil brings a light golden brown colour, subtle aroma and balanced oil profile despite slightly lacking crispiness

## What do chefs say?

- Corn and soybean oils deliver superior stability and crispiness



# Thai Prawn Toast



## Test Results

BEST  
OVERALL OIL  
FOR THIS  
DISH

**BEST**



## RUNNERS-UP



## What do consumers say?

- Palm oil ranks highest thanks to its superior crispiness and subtle complementary flavour, which compensates for its darker colour

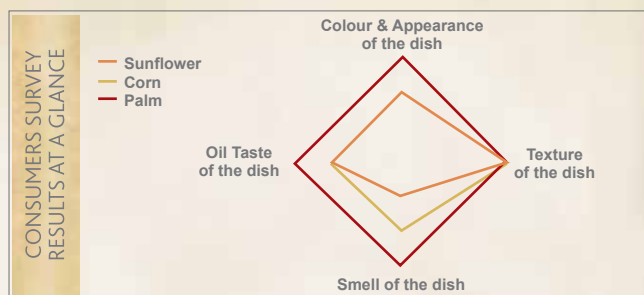
### Runners-up:

- Sunflower oil delivers a golden brown colour, excellent crispiness and sweet, aromatic fragrance
- Corn oil with its crispiness despite a darker colour

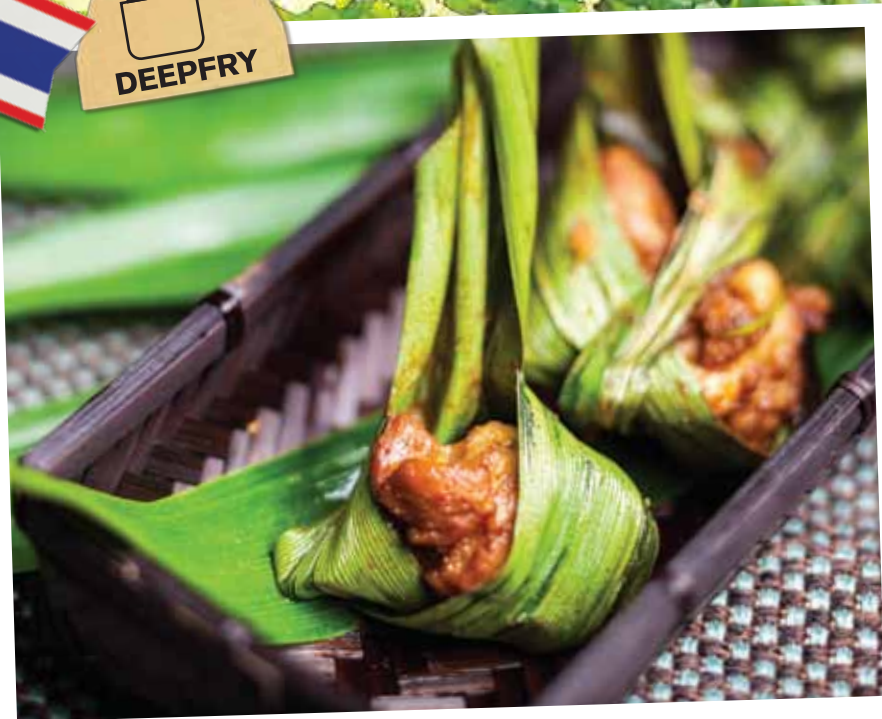


## What do chefs say?

- Palm and soybean oils due to the faster reaction of these oils and their superior frying stability



# Pandan Leaf Chicken



## Test Results

BEST  
OVERALL OIL  
FOR THIS  
DISH

**BEST**



## RUNNERS-UP



## What do consumers say?

- Peanut oil ranks highest thanks to superior crispiness and subtle flavours, which compensate for its darker colour

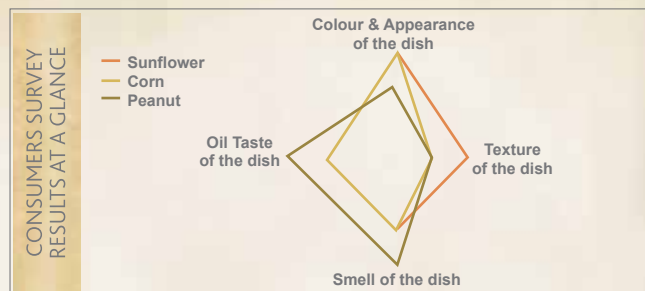
### Runners-up:

- Sunflower oil with its golden brown colour, excellent crispiness and sweet, aromatic fragrance
- Corn oil due to its enhanced crispiness which offsets its darker appearance



## What do chefs say?

- Peanut and corn oils due to faster oil reaction and fragrant smell while cooking



# Lemongrass Pork Chop

PAN FRY



Corn

## Test Results

BEST  
OVERALL OIL  
FOR THIS  
DISH

**BEST**



## RUNNERS-UP

Canola



Peanut



## What do consumers say?

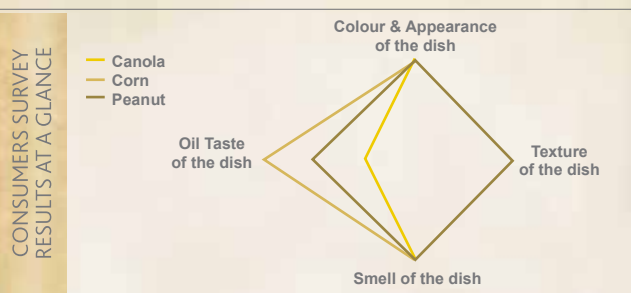
- Corn oil ranks highest thanks to a nice charred appearance, good balance and accentuation of the lemongrass flavour

### Runners-up:

- Canola oil delivers a very appetising golden brown charred appearance and brings out the flavour and aroma of lemongrass
- Peanut oil produces an appetising colour and fragrance and complements the pork flavour despite dryness

## What do chefs say?

- Corn and soybean oils have a faster oil reaction and a consistent colour and smell throughout cooking





# Seafood Patties



DEEPFRY

Corn

## Test Results

BEST  
OVERALL OIL  
FOR THIS  
DISH

**BEST**



## RUNNERS-UP

Palm



Olive



## What do consumers say?

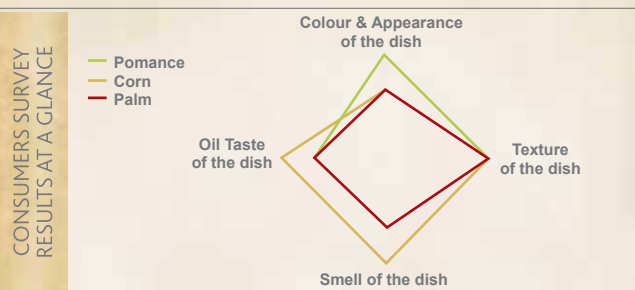
- Corn oil ranks highest thanks to its golden brown appearance, superior crispiness, balance and enhancement of the dish's flavour

### Runners-up:

- Palm oil delivers an appetising golden brown colour, excellent crispiness and good taste
- Pomace oil produces a golden brown appearance and superior crispiness, despite neutral taste and smell

## What do chefs say?

- Sunflower and corn oils deliver consistent colours and aromas and faster oil reaction throughout cooking



# French Fries



DEEPLY FRY

## Test Results

BEST  
OVERALL OIL  
FOR THIS  
DISH

**BEST**

Olive



## RUNNERS-UP

Corn



Sunflower



## What do consumers say?

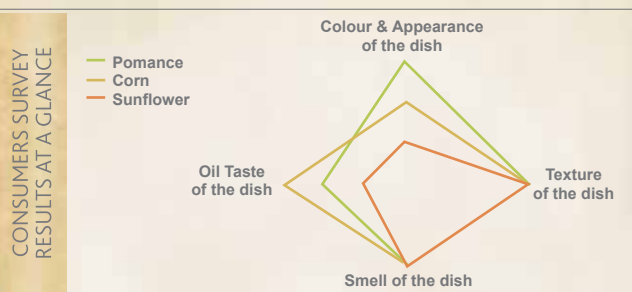
- Pomace oil ranks highest as it brings a nice golden colour and crispiness

### Runners-up:

- Corn oil produces a golden yellow appearance and fragrant aroma despite a slight lack of crispiness
- Sunflower oil produces a golden yellow appearance and crispiness

## What do chefs say?

- Soybean, corn and sunflower oils have stable aromas and faster oil reaction



# Fried Chicken



Peanut



## Test Results

BEST  
OVERALL OIL  
FOR THIS  
DISH

**BEST**

## RUNNERS-UP



## What do consumers say?

- Peanut oil produces a juicy appearance, golden brown colour, nice crunchiness, fragrant aroma and nutty flavour complementing the chicken

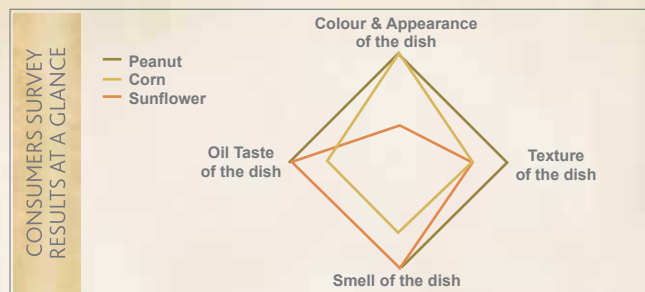
### Runners-up:

- Sunflower oil imparts a golden brown colour, crispiness and crunchiness, fragrant aroma and enhances the chicken flavour
- Corn oil delivers a savory taste and fragrant aroma despite some oiliness



## What do chefs say?

- Sunflower and soybean delivers cooking stability; oil colour remains bright and shiny after frying



# Top Choice in Aggregate

We hope that you have enjoyed this culinary journey as much as we did. Through this, we hope to have increased your awareness of how different oils can impact your dishes and help you to become a better cook, whether it be in a restaurant or at home.

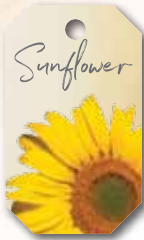
If your restaurant covers a wide variety of Asian dishes, it would be too challenging to have to store eight different types of oil in your kitchen, as that would be too complex to handle. We have therefore taken a realistic approach and summarised the survey results of this culinary journey below.

We have the following top rankings:



We also very much welcome your comments and would like to hear from you on your experiences and findings. Please email us with your comments at [CS-Oils@bunge.com](mailto:CS-Oils@bunge.com).

# Do you know your oils?



## Sunflower oil

Sunflower oil originates mostly from Ukraine and Russia. It is low in saturated fats and rich in Omega 9 and 6 and antioxidants (Vitamin E, sterols and squalene).



## Peanut oil

Peanut oil originates mostly from China and India. It is relatively low in saturated fats and rich in Omega 6 and 9.



## Coconut oil

Coconut oil originates mostly from Indonesia, Philippines, and India. It is high in saturated fats but rich in medium chain triglycerides.



## Canola oil

Canola oil originates mostly from Canada and China. It is low in saturated fats and rich in Omega 9, 6 and 3 and antioxidants (Vitamin E).



## Corn oil

Corn oil originates mostly from the USA. It is relatively low in saturated fats and rich in Omega 6 and 9.



## Palm oil

Palm olein oil originates mostly from Indonesia and Malaysia. It is high in saturated fats but rich in beta-caroten.



## Olive oil

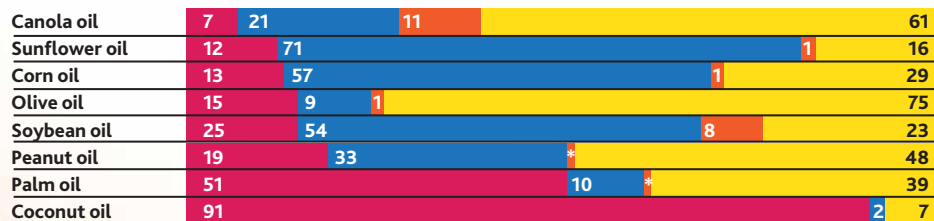
Olive oil originates mostly from Spain. Pomace oil is extracted from olive pulp after the first press. It is relatively low in saturated fats.



## Soybean oil

Soybean oil originates mostly from North and South America. It is relatively low in saturated fats and rich in Omega 6 and 9.

## COMPARISON OF DIETARY FATS



SATURATED FAT

POLYUNSATURATED FAT

MONOUNSATURATED FAT



Linoleic acid  
(an omega-6 fatty acid)



Alpha-linolenic acid  
(an omega-3 fatty acid)



Oleic acid  
(an omega-9 fatty acid)

\* Trace amount



### **What we do**

We bring food from where it is grown to where it is needed. For the last 200 years, Bunge has served the world, connecting harvests to homes, restaurants, hotels, bakeries and food manufacturers.

### **Our living heritage**

We see our work as a huge opportunity and an important responsibility. We maximise the value of the agrifood chain for communities, shareholders and ourselves by producing safe and high-quality products, and acting as a trusted partner to farmers, customers and consumers.

### **From farm to table**

We ensure quality and food safety from the farms to your table. As world populations grow, we rely increasingly on farmers in the Americas and Europe. As a partner of choice, we help them deliver better harvests and select the best seeds to deliver you with the highest quality food all year round.



### **Who we are**

With a history of more than 25 years, the Singapore Chefs Association is the official government recognised non profit oriented national chefs association representing professional cooks in the local food and beverage industry. With a membership strength of more than 700 individual members and more than 60 corporate members, the SCA umbrella includes two strategic sub alliances, the Singapore Pastry Alliance and Singapore Junior Chefs Club. SCA also represents Singapore as a national member in the World Association of Chefs Societies (WACS), the global world chefs association encompassing more than 90 over member countries.

### **What we do**

The main objective of SCA is to be the official voice representing chefs working in Singapore in various engagements with the local community, government and fellow food and beverage associations. SCA also establishes and mentors the National Culinary Team for international competitions locally and overseas.



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## Our winning Blends for Food Services

Our Palm Olein Oil Blends combine high quality Palm Olein Oil with our best sources of soft oils to produce a high performing oil that is better for health.



### Our Blends are made for your professional kitchens

**HORECA**

**QSR**

**CATERING**



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For enquiries: [CS-oils@bunge.com](mailto:CS-oils@bunge.com)

[www.farmoriginoil.com](http://www.farmoriginoil.com)