MARKETING MALAYSIAN PALM FAT IN ROMANIA

Presented By:
Mohamad Raid Majzoub
Business Development Manager
Soon Soon Oilmills Sdn Bhd
POTS Romania 18 September 2012
List of Contents:

1. Introduction Ulei de Palmier
2. Palm Oil Advantages
3. Palm Oil Applications
4. Malaysian Palm Oil
1. Introduction Ulei de Palmier

2. Palm Oil Advantages

3. Palm Oil Applications

4. Malaysian Palm Oil
Palm Tree
Palm Fruit

Fresh Fruit Bunch
Flesh of the Palm Fruit where Palm Oil is obtained

Palm Kernel where Palm Kernel Oil is obtained
Palm Oil

The oil which is extracted from the Fruit is called: Crude Palm Oil (CPO)

The color of the (CPO) is reddish to orange in color. This is due to the presence of beta carotene (source of vitamin A) and other carotenoids.

After the oil undergoes refining, it become light yellow to yellow in appearance and called: Refined Bleached Deodorized Palm Oil (RBD PO)
CPO and RBD Palm Oil
The Palm Oil can undergo a process called **FRACTIONATION** to separate the liquid portion (**OLEIN**) from the solid portion (**STEARIN**) through a chilling process followed by a process of filtration.

**OLEIN** Used mainly in Frying and manufacture of Specialty Fats.

**STEARIN** Can be blended with RBD Palm Oil or RBD Palm Olein to produce various types of Fats for different food or non food applications.
RBD Palm Oil Fractionated Products

- RBD PALM OIL
  - COOLING
  - FILTRATION

<table>
<thead>
<tr>
<th>SOLID FRACTION</th>
<th>LIQUID FRACTION</th>
</tr>
</thead>
<tbody>
<tr>
<td>PALM STEARIN</td>
<td>PALM OLEIN</td>
</tr>
</tbody>
</table>
Although originating from the same fruit, the characteristics of Palm Kernel Oil is different from Palm Oil.

<table>
<thead>
<tr>
<th>Palm Oil</th>
<th>Palm Kernel Oil</th>
</tr>
</thead>
<tbody>
<tr>
<td>Contains mainly Palmitic acid (~44%) and 40% Oleic acid</td>
<td>Mainly contains Lauric acid (48%) and Myristic acid (16%).</td>
</tr>
<tr>
<td>Provides a more plastic solid fat profile</td>
<td>Shows a sharper solid fat profile.</td>
</tr>
</tbody>
</table>
Similarly Palm Kernel Oil can undergo the same process of **FRACTIONATION** to separate the solid portion (**STEARIN**) from the liquid portion (**OLEIN**).

**KERNEL STEARIN** Mainly use in manufacture of Cocoa Butter Substitute.

**KERNEL OLEIN** Mainly use in confectionery fats, ice cream fats and non dairy fat replacers.
RBD Palm Kernel Oil fractionated products

PALM KERNEL OIL

COOLING

FILTRATION

SOLID FRACTION
PALM KERNEL STEARIN

LIQUID FRACTION
PALM KERNEL OLEIN
RBD Palm Kernel Oil fractionated products

Palm Kernel Olein

Palm Kernel Stearin
1. Introduction
2. Palm Oil Advantages
3. Palm Oil Applications
4. Malaysian Palm Oil
Why Palm Oil?

- Versatility and Functionality
- Cholesterol Free
- Trans Fat Free
- Good Saturated Fat
- Nutritious
- Oxidative Stability
- Bland
- Availability
- Price Consideration
Versatility and Functionality

Naturally occurring in semi solid form. Palm Oil, Palm Olein and Palm Stearin can be further blended in various percentages to produce Palm Oil blends of different melting points.

Similarly the Palm Kernel Stearin and Palm Kernel Olein for various applications from confectioneries to non dairy fat applications.
Palm Oil Advantages

- **Cholesterol Free**

Like any other vegetable based oil, Palm Oil is cholesterol free.
Trans Fat Free

Naturally occurring in semi solid form. There is no need to hydrogenate palm oil to produce hard fats of different quality. This way we can produce fat formulations which are trans fat free.

“Partial hydrogenation which produces trans fat is known to be detrimental to cardiovascular health because it increases the bad cholesterol LDL cholesterol and reduces the good cholesterol HDL cholesterol”
Palm Oil Advantages

- Trans Fat

  Increase Bad Cholesterol

  Reduce Good Cholesterol

Zock et. al., 1995
Good Saturated Fat

Even though the palm oil contains about 50% saturated fats, most of the saturated fats, especially for Palm Olein, are located at the sn-1 & sn-3 positions.

The fatty acids in these sn-1 and sn-3 positions are absorbed as fatty acids and metabolized separately.

However the fatty acids in the sn-2 position will be absorbed in good way and used for forming fats in our body.

In Palm Olein, the fatty acids in sn-2 position, consist mainly of monounsaturated fats “oleic acid” similar to olive oil.
Palm Oil Advantages

- Good Saturated Fat

Almost 70% of the Sn–2 position in Palm Olein is monounsaturated fats which is similar to Olive Oil.
Palm Olein behave like Olive Oil in terms of effect on the cholesterol level.

Human subjects fed diets predominating as either olive oil or palm olein showed identical plasma cholesterol response. 


Nutritious

Palm Oil is rich in vitamins E (tocotrienol and tocopherol) and provitamin A.

“Tocotrienol has the ability to reduce the risk of stroke, arteriosclerosis and other heart diseases problems”

“Vitamin A is an effective antioxidant that helps strengthens the body's immune system and reduces the risk of cancer and heart disease. Lack of Vitamin A can lead to blindness and a variety of serious medical conditions”
Palm Oil Advantages

- **Bland**

Palm Oil is bland – perfect for cooking and frying and do not affect the finished product aroma
Palm Oil Advantages

- **Oxidative Stability**

Palm Fats has good oxidative stability and is suitable for frying and also long shelf life products

<table>
<thead>
<tr>
<th>Oil</th>
<th>Induction Period (hrs) at 100 C</th>
</tr>
</thead>
<tbody>
<tr>
<td>Palm Olein</td>
<td>44.0</td>
</tr>
<tr>
<td>Cottonseed Oil</td>
<td>11.1</td>
</tr>
<tr>
<td>Corn Oil</td>
<td>9.0</td>
</tr>
<tr>
<td>Olive Oil</td>
<td>11.8</td>
</tr>
<tr>
<td>Rapeseed Oil</td>
<td>11.5</td>
</tr>
<tr>
<td>Soybean Oil</td>
<td>16.0</td>
</tr>
<tr>
<td>Sunflower Oil</td>
<td>6.0</td>
</tr>
</tbody>
</table>

Source: Kurt Berger (2005). The Use of Palm Oil in Frying. MPOC
Palm Oil Advantages

- Availability

The oil palm is the most efficient oil-bearing crop in the world, requiring only 0.26 hectares of land to produce one tonne of oil while soybean, sunflower and rapeseed require 2.22, 2 and 1.52 hectares, respectively, to produce the same.

Palm Oil also Environmentally Friendly
Palm Oil Advantages

- Price

Vegetable-oil prices, $ per tonne

- Rapeseed
- Sunflower
- Soya
- Palm

Source: Thomson Reuters
1. Introduction

2. Palm Oil Advantages

3. Palm Oil Applications

4. Malaysian Palm Oil
Historical evidence from Egypt shows that Palm Oil has been used widely in food for at least 5000 years ago.

Now consumed in more than 100 countries in the world, Palm Fats has found its applications in both food and non-food applications.
Bakery Fats

Palm Oil is very suitable for manufacture of Shortening, Margarine, Butter Oil Substitutes and Vegetable Ghee due to its semi-solid consistency and its tendency to form smooth fats crystals.
Palm Oil Applications

- Bakery Fats

Palm based Shortening and Margarine can be applied in many areas such as bread, buns and biscuits.
Palm Oil Applications

- **Fillings and Coatings**

  Palm based fats also provide options to the users to select their choice of fillings:

  - **Soft and Plastic**
    - Shortening, Margarine
  - **Firm and Dry**
    - Hydrogenated Palm Kernel Fats
  - **Soft and Spreadable**
    - Blends of Palm Based and Hydrogenated Palm fats

**COCOFAT**  **KUVER**  **COCOSPREAD**
Palm Oil Applications

- Chocolate

Palm and Palm Kernel Fats have been used widely in the manufacture of fats such as CBS, CBR and CBE.
Ice Cream and Cream Coating

Palm Kernel Fats are widely used in both ice cream as well as ice cream coatings.

The suitability of the fats in ice cream is mainly due to its fast crystallization properties and good meltdown.
Palm Oil Applications

- Cakes
- Margarine
**Deep Frying**

Palm Fats has been used extensively in frying due to its stability.

Available in its natural form or hydrogenated, Palm Oil is applied in many deep frying applications such as in food service, doughnuts, instant noodles etc.
Palm Oil Applications

- Non Dairy creamer

Hydrogenated Palm Kernel Fats and Hydrogenated Palm Fats

- Candy and Toffee

Palm Kernel Fats Palm and Palm Kernel Fats, both in their natural and hardened form can be used in candy and toffee manufacturing.
Seasoning Cube

Hardened Palm Fats are suitable as a binding agent for the bouillons.
Palm Oil Applications / Non Food

- To be used directly:
  - soap
  - plastics
  - palm based diesel substitute

- Via the Oleo chemical route
  - Candles
  - Lotion
  - Body Oils
  - Shampoo
  - Skin Care Products
  - Rubber
Why Blended Oil???

Not a single oil can be good for everything ...
Canola oil and Soybean oil are rich in polyunsaturated (Omega 3 & 6) thus are prone to oxidation.

Sunflower oil and Corn oil are the more stable soft oils, but they are relatively low in Omega 3 and expensive.

Palm Olein, like Olive Oil, is more stable compared to soft oils; however with high saturated fats, Palm Olein maybe a risk to form solids at low temperature.
Blending Soft Oils with Palm will help to enhance the attributes of the blended oils in many areas of application besides producing a more balanced fatty acids composition as well as making the price more competitive.

Soon Soon has also working on producing a healthier oils and fats by promoting blended oils with a balance fatty acid profile of 1:1:1 of Polyunsaturated to Monounsaturated to Saturated Fats.
Malaysia is one the largest producers and exporters of palm oil in the world, accounting for 11% of the world’s oils & fats production and 27% of export trade of oils & fats.

Malaysian Government has taken several distinct steps to support and develop the palm oil agriculture and Palm Oil industry.

A significant budget has allocated for this purpose and spend on:

- Human Resources Technology
- Training institutes, universities On the job training
- Training focused on downstream products
Training of R&D personnel

Overseas training

Localization of machinery & equipment production

Reduce downtime and costs from freight and exchange rate fluctuations

Government incentives

Double deduction tax benefit on export sales

Market coordinated incentives
Call for development of different segments of the industry in the value chain

Rationalization of palm oil refining and fractionation

To increase efficiency and competitiveness in world markets

Expansion of bulking, onshore pumping, storage and handling facilities

Establishing numerous organizations (MPOB, MPOC & PORAM)
Malaysia Palm Oil Council
Objectives:

- To enhance trade opportunities in the market place by identifying and meeting the latest opportunities in the market.

- To encourage product diversification by using Malaysian palm oil as the key ingredient, thus gaining a prominent role in new and reformulated products.

- To improve understanding of palm oil, enhancing its application and elucidating its numerous strengths and benefits.

- To uphold the good name of Malaysian palm oil by closing the gap between the issues of perception, allegations and the realities of palm oil.

- To safeguard Malaysian palm oil as the most dominant vegetable oil in terms of market coverage, nutritional benefits, environmental sustainability and commercial success.
A research and development institution was formed in 2000 to enhance the well-being of the Malaysian oil palm industry through research, development and excellent services.

**Objectives:**

- To conduct research on the economics of production, downstream processing, marketing of the palm oil industry and other producing countries
- To ensure compliance of conditions imposed on the license regarding registration of contract and submission of monthly statement.
- To disseminate comprehensive, accurate and timely industry and market information
- To provide inputs for the establishment of national palm oil development policy
Palm Oil Refinery Association Of Malaysia
Formed in 1975

Objectives:

- To provide an organization for palm oil refiners to collectively support and enhance the status and interest of the palm oil refining industry.

- To promote the processing, refining and fractionation of palm oil and the manufacture of all products and by-products there from

- To project an international image of sophistication and reliability

- To establish an identity with the public at large as an organization with an important role to play in Malaysia's economic development and as an organization responsibly acting in the interest of the community.

- To be both responsive to the Malaysian Government's overall socio-economic policies and responsible in this role.
Malaysian Palm Oil Association
Objectives:

- Act as the single united voice of the Malaysian oil palm and other plantation tree crop industry.
- Represent oil palm and other plantation crop interests to government, various statutory bodies, stakeholders and external parties.
- Promote the future growth and profitability of the industry.
- Support members by providing specific support services.
- Provide representation for the industry at both the domestic and international levels.
SOON SOON OIL MILLS SDN BHD

VISION:
To be a GLOBALLY competitive LEADER In FOOD & FEED ingredients
OUR FACILITIES

Penang

West Port
<table>
<thead>
<tr>
<th>Product</th>
<th>Application</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Supercocofat</strong></td>
<td>CBS - Compound chocolate, enrobing etc.</td>
</tr>
<tr>
<td><strong>COCOFAT</strong></td>
<td>HPKO - Confectionery and bakery coatings, compound chocolate, fillings for</td>
</tr>
<tr>
<td></td>
<td>biscuits, caramels, nougat, dairy fat substitutes in cheese analogues etc.</td>
</tr>
<tr>
<td><strong>KUVER</strong></td>
<td>CBR - Chocolate covertures, Confectionery and bakery coatings, fillings and</td>
</tr>
<tr>
<td></td>
<td>centers for biscuits, caramels, nougat, chocolate rice, toffees, non-dairy</td>
</tr>
<tr>
<td></td>
<td>creamer etc.</td>
</tr>
<tr>
<td><strong>COCOSPREAD</strong></td>
<td>Chocolate spread, ice cream dipping and toppings, soft fillings</td>
</tr>
<tr>
<td><strong>Golden Bridge</strong></td>
<td>Vegetable Ghee - Sweets production and Cooking Frying Oil – Cooking and</td>
</tr>
<tr>
<td></td>
<td>Food Industries</td>
</tr>
<tr>
<td><strong>Majors Margarine</strong></td>
<td>Margarine - Cake, bread, cookies, biscuits, fillings etc.</td>
</tr>
<tr>
<td><strong>Soon Soon Shortening</strong></td>
<td>Bread, biscuit, yeast raised products, centers for biscuit and wafers, frying etc.</td>
</tr>
</tbody>
</table>
Mušumesc.
Thank you.

Contact us:
E-mail: info@soonsoongroup.com
www.soonsoonoil.com.my