About Palm Oil

1. What is palm oil?

■ Palm oil is produced from the fruit pulp of the oil palm tree (*Elaeis guineensis*). This tree is native to the area of West Africa near the Gulf of Guinea, which is where its scientific name comes from. Palm trees can grow up to 30 meters tall and produce fruits which are grouped in big, compact and spherical bunches that can contain up to 2,000 fruits each. These tropical fruits are about the size of a large olive, rich in oil (45-65%), and are naturally reddish in colour because of the fruit pulps' high carotenoid content.

The fruit has a single seed or kernel, which is used to produce a different oil, called palm kernel oil, which has a completely different structure from palm oil (fruit palm oil).

Palm oil is extracted by heating and pressing the pulp of the fruit. The refining process is applied to purify the crude palm oil, providing a highly versatile oil, with important functional properties. Subsequently palm oil can be separated into different fractions, liquid (oil) and solid (fats), which can then be processed and mixed according to specific purposes in order to provide exclusive taste and texture in food products.

2. Where is palm oil produced?

■ Oil Palm (Elaeis guineensis) is supposed to originate from the tropical rain forest region of West Africa. Processing palm oil fruits for edible oil has been practiced in Africa for thousands of years, and the oil produced, highly colored and flavored, is an essential ingredient in much of the traditional West African cuisine.

Because of its economic importance as a high-yielding source of edible and technical oils, the palm oil is now grown as a plantation crop in most countries with high rainfall in tropical climates within 10° of the equator.

Indonesia and Malaysia produce around 85 % of all palm oil, with other tropical countries in Asia, Africa and Latin America producing the rest.

3. In which products is palm oil used?

■ A high percentage of the products on sale in the supermarkets use palm oil in their formulation. These products include food products such as margarine, confectionery, ready to eat meals, food snacks, chocolate, ice cream and bakery products, as well as non-food products such as soap, candles, and cosmetics.

4. Why is palm oil the most widely-used vegetable oil in the world?

■ Palm oil has been used for domestic cooking for centuries in Southeast Asia and tropical Africa.

The Food industry has adopted palm oil in its refined form in recent decades because of its functional benefits, versatility and widespread availability.

Its main advantages are:

- **High stability over time:** Palm oil helps to maintain the products taste along its whole shelf life, because of its higher stability to oxidation compared to other vegetable oils.
- Neutral taste and smell: deodorized palm oil can be used in many different foods without affecting
 their taste; due to its neutral taste it doesn't mask the flavor of the other ingredients such as milk,
 cocoa, hazelnuts.
- Palm oil is a very versatile vegetable fat due to the possibility to be fractionated in different parts: liquid and solid. The possible mixes of these fractions make it suitable for different requirements of texture and flavor in the final product.
- **Smooth and creamy texture:** food products with palm oil have an excellent mouth feel with specific characteristics for each product. For example, palm oil contributes to the smooth and creamy texture and spreadability in chocolate spreads.

• **Alternative to trans-fat:** palm oil is a good replacement for partially-hydrogenated fat containing trans-fatty acids (http://www.palmoilandfood.eu/en/natural-and-versatile-ingredient).

5. What are palm oil key facts?

- Palm oil and palm kernel oil represent 33 % of the global vegetable oil production (Oil World 2015)
- 60 million tons of palm oil is produced annually (Oil World 2015).
- One hectare of oil palm trees can produce on average 3.6 tons of oil each year (Oil World 2015).
- Hectares required to produce one tons of oil (MPOC.org):

- Palm: 0.26 hectares

- Rapeseed: 1.52 hectares

Sunflower: 2 hectaresSoybean: 2.22 hectares

- Oil palm is cultivated on 16.5 million hectares, which accounts for 6 % of all the cultivated land for vegetable oils globally, but has the highest output, producing 33 % of all oils and fats (Oil World 2016).
- Indonesia and Malaysia supply around 83% of the palm oil produced globally (of which Indonesia 51%, Malaysia 34 %)(Oil World 2016).
- In Indonesia approximately 52% of palm oil production derives from smallholders, in Malaysia they represent 33% of production (Oil World 2016).
- A palm tree is productive for around 25 years (www.palmoilandfood.eu/en/what-is-palm-oil).
- One palm tree produces 40 kilograms of palm oil every year (www.palmoilandfood.eu/en/what-is-palm-oil).
- In Indonesia and Malaysia together, approximately 4.5 million people earn a living from palm oil (www.palmoilandfood.eu/en/what-is-palm-oil).
- The use of palm oil in human nutrition dates back 5,000 years

6. What is the role of palm oil in producing countries?

■ Palm oil is an important asset for the producing countries. It favors rural employment and is a crop that smallholder farmers can grow easily, often lifting people out of poverty in rural regions.

Oil palm represents 3.2% of the Malaysian GDP and 6% to 7% of the Indonesian GDP. In Malaysia, the palm oil sector employs 590,000 direct workers and 35% of production derives from smallholders. In Indonesia, 3.7 million people are engaged in the palm oil industry and downstream industries, with 45% of production from smallholders.

The booming request of palm oil in recent years has created new jobs, helping to lift millions out of poverty in Indonesia and Malaysia. It significantly contributed to the growth of the Indonesian middle class (more than doubling it) in the decade leading up to 2009. (WWF, 2012 "Profitability and Sustainability in Palm Oil Production").

7. Does palm oil contain a high level of saturated fats?

■ Palm oil fat composition is equally distributed: approximately 50% of saturated fats and 50% of unsaturated fats. It should be taken into consideration that even if other vegetable oils (sunflower, rapeseed, soy, etc.) have a lower saturated fat content, they would need to undergo a chemical process

called hydrogenation to obtain the same creaminess and consistency typical of palm oil in the final product. Hydrogenation results in the by-production of trans-fatty acids, which are widely considered harmful, therefore to avoid this process, the palm oil alternatives would need to be submitted to further chemical treatment.

8. Does palm oil have adverse health effects?

■ Contrary to some misleading communications, it is unfair to affirm that palm oil is harmful to health. In food products, palm oil is used because of its intrinsic properties and qualities without resorting to the hydrogenation process. Hydrogenation, in fact, leads to the creation of fatty acids called "trans", which are recognized by the authorities and by the scientific world as being harmful to health.

The attack on palm oil is not new. Already in the 1980s in the United States, palm oil was the subject of a prolonged campaign about the alleged harmful effect on health, principally driven by other local producers of alternative vegetable oils. But in the end, the campaign was proven wrong by the scientific world which, on the contrary, recognized how useful palm oil is as a primary substitute for harmful hydrogenated fats. Consequently, the consumption of palm oil in the USA and throughout the world still continues to constantly and significantly grow.

Palm oil has been used for thousands of years in human nutrition. There are many scientific studies demonstrating the neutrality of the effect of palm oil on the metabolism as part of a balanced diet.

9. What is certified palm oil?

■ Certified palm oil is produced according to a set of environmental and social criteria defined by the Roundtable on Sustainable Palm Oil (RSPO), a multi-stakeholders initiative established in 2004. Eight principles and 39 practical criteria define the sustainable production of palm oil. In particular they ensure that fundamental rights of individuals and communities affected (previous land owners, local communities, plantation workers, small farmers and their families) are respected and fully taken into account. Furthermore they ensure that no new primary forests or high conservation value areas have been cleared for palm oil production since November 2005¹, and that mills and plantation owners mitigate their environmental footprint². When correctly applied, these criteria help to minimise the negative consequences associated with conventional palm oil cultivation.



10. What is sustainable palm oil?

■ Sustainable palm oil aims to reduce the impacts on forests, workers and communities. It establishes a balance between the conservation of the environment, community needs and economic benefit and viability. Today the demand for palm oil for edible use is expected to continue to rise due to population growth, increased per capita consumption, and movement of the developed world away from saturated animal fats. Furthermore palm oil production has often been criticized for being a major contributor to deforestation and emissions of greenhouse gasses as well as for complications regarding land rights and

¹ Principle 7, criteria 7.3

² Principle 5, criteria 5.1

conflicts with indigenous peoples, local communities and workers. Therefore the challenge is to ensure that the expansion of palm oil takes place sustainably, with respect for people and nature.

While the RSPO has offered a standard since 2004 that has made some progress on palm oil sustainability, it is not completely addressing deforestation and peat deterioration and exploitation of workers. Consequently, the POIG (Palm Oil Innovation Group) Charter was launched in November 2013 by a group of NGOs and growers in order to set standards aimed at breaking the link between palm oil and deforestation, and human, land and labour right violations. Specifically the POIG aims to support the RSPO through building on RSPO standards and commitments by promoting the implementation of additional critical issues. Among the NGOs are Greenpeace, Rainforest Action Network, WWF, Forest Peoples Programme and Orangutan Land Trust.

This initiative underpins that the NGOs aren't against palm oil, but rather that they are calling on consumers, producers and traders to work together to put an end to deforestation linked to commodities such as palm oil and support forest protection initiatives.

Since November 2015 Ferrero has been a <u>POIG member</u> whose Charter is aligned with our vision and values.

11. What is the Palm Oil Innovation Group (POIG)?

■ The Palm Oil Innovation Group (POIG) is a multi-stakeholder initiative with a mission to transform the palm oil industry, and break the link between palm oil, the destruction of forests and peatlands, and the violation of human and labour rights. Founded in 2013, the initiative was developed in partnership with leading NGOs as well as with progressive palm oil producers.

POIG aims to support the RSPO by demonstrating that innovation and leadership in responsible palm oil production is possible. POIG's palm oil grower members demonstrate that the adoption of innovative best practices is economically viable. The group is developing new models for best practice in the sector and advocates for these improved practices to be become mainstream. By engaging with buyers of palm oil from retail and manufacturing sectors, POIG aims to influence market demand for responsibly produced palm oil from POIG verified companies.

For more information on the POIG, visit www.poig.org
For more information on the POIG Charter and indicators, visit: http://poig.org/wp-content/uploads/2016/03/100316 POIG FAQ.pdf

12. How does POIG build on the RSPO standards and commitments?

■ POIG supports the Roundtable on Sustainable Palm Oil standards and commitments through the implementation of the POIG Charter and the POIG verification indicators by its members. The POIG Charter builds on the RSPO by creating a framework for companies to be audited against additional requirements that go above and beyond those required by the RSPO. The objective of the Charter is to create market recognition for palm oil that is free from forest destruction, expansion on peatlands of any depth and human and labour rights violations. Grower companies that sign up to become a POIG member must be at least 50% RSPO certified, with a commitment to becoming 100% RSPO certified within two years of their membership start date.

The POIG Charter and indicators provide additional guidance and requirements that explicitly address issues in palm oil production that have not yet been fully addressed by the RSPO Principles & Criteria. The POIG Charter also provides clearer and more binding language on how members will respect the rights of indigenous peoples, local communities, small farmers and plantation workers.

For more information on the POIG, visit www.poig.org. For more information on the POIG Charter and indicators, visit: http://poig.org/wp-content/uploads/2016/03/100316 POIG FAQ.pdf.

For further information regarding palm oil use in food products across the European Union countries, please refer to the following link: http://www.palmoilandfood.eu/en (also available in Italian, Swedish and Norwegian)