



AUSTRALIAN OLIVE  
ASSOCIATION<sub>LD</sub>



# **AUSTRALIAN CONSUMER DETRIMENT – OLIVE OIL COSTS AND CONSEQUENCES OF MISLABELLING AND THE SUBSTITUTION OF LOWER GRADES OF OLIVE OIL FOR HIGH QUALITY EXTRA VIRGIN OLIVE OIL IN AUSTRALIA**

October 2012



## **Summary**

Olive oil is 22% more expensive in Australia due to non-compliance with the Australian Standard for Olive Oil and Olive-Pomace Oil (AS5264-2011). Non-compliance is estimated to cost Australian olive oil consumers \$54.8m per year. This overcharge equates to \$1.22 per litre of olive oil sold or \$4.88 per 4 litre tin sold: This over-charge is caused by two key factors;

1. Misleading terms used to describe lower grade refined olive oil such as 'Extra light' and 'Pure' make up the labelling of approximately 40% of Australia's olive oil consumption. Based on available retail data in 2012, consumers are paying 39% too much for refined olive oil labelled as 'Extra Light' and 'Pure'. The approximate overcharge per 4 litre tin is \$6.16, or \$27.7M annually.

2. Based on a Government and industry funded supermarket survey from 2008-2011, 74% of imported olive oil labelled as Extra Virgin and 21% of the domestic olive oil labelled as Extra Virgin was not actually Extra Virgin grade (highest grade).

Charging consumers an “extra virgin” price for low quality “refined olive oil” results in an overcharge that costs Australian consumers \$26.7M per year or an overcharge of \$3.96 per 4 litre tin. Consumers are paying 18% more for olive oil that is low grade masquerading as high grade.

## Supporting Evidence / Rationale

### Consumer overpayment for ‘Extra Light’ and ‘Pure’ Olive Oils

Based on online pricing (Woolworths and Coles – September 2012) of the major imported olive oil brands (La Española, Moro and Carbonell) sold in 4 litre tins (packaging used for this comparative exercise), the average price for the different grades is as follows:

- Extra Virgin Olive Oil (EVOO) (x 4 litre tin): AU\$ 22.12 or AU\$ 0.55/100ml
- Extra Light Olive Oil (XLOO)(x 4 litre tin): AU\$ 22.12 or AU\$ 0.55/100ml
- Pure Olive Oil (POO)(x 4 litre tin): AU\$ 22.12 or AU\$ 0.55/100ml

These data demonstrate that there is no price difference between grades despite the fact that EVOO is a higher grade (natural, healthier, more sought after product) that costs significantly more to purchase from producers. The other two grades ‘extra light’ and ‘pure’ are blends of refined olive oil with a small percentage of lower quality virgin oil added. The industry standard percentage of virgin oil in these refined blends is 5-8%.

There is research data to support the fact that equal retail pricing of all the grades in the Australian market is achieved through misleading labelling practices that deceive consumers into paying more for ‘extra light’ olive oil and ‘pure’ olive oil than a ‘refined’ olive oil blend.

If we compared this situation with Europe, where the terms to describe olive oil as ‘Extra light’ and ‘Pure’ are not used, the pricing is completely different. Based on a comparative retail pricing study published by Mercacei in Spain (see attached), major olive oil brands average pricing comparison for the different grades are as follows:

- Extra Virgin Olive Oil (EVOO) (x 5 litre tin): AU\$ 26.60 or AU\$ 0.53/100ml
- Olive Oil – Composed of refined oils (OO)(x 5 litre tin): AU\$ 19.11 or AU\$ 0.38/100ml

EVOO sells at a premium price, which is an average of 39% more expensive than the price of the refined olive oil blend.

As ‘extra-light’ and ‘pure’ olive oils represent approximately 40% of all olive oil sales (see attached supermarket scan data) in Australia (45M litres according to the International Olive Council), there are some 18M litres of ‘extra-light’ and ‘pure’ olive oils sold in Australia every year for approximately AU\$99.54M.

It is therefore possible to calculate that Australian consumers are overpaying for these lower grade products by approximately AU\$ 28.17M every year.

## Overpayment for adulterated or poor quality oils labelled as Extra Virgin Olive Oil

The results of a comprehensive Australian supermarket survey carried out as a research project funded by RIRDC and the Australian olive industry from 2008 until 2010, showed that an average of 74% of the imported EVOO and 21% of the Australian EVOO was not true to label. The tests were limited and it was not always possible to determine if the quality problem was due to adulteration or the use of poor quality olive oil.

The following table summarises the most likely distribution of the types of olive oil that were labelled as extra virgin but were of a lower grade and so failed the testing. The failures are classified as refined oil present (ROO), virgin olive oil (VOO) or lampante olive oil (LOO).

	Total Samples	ROO	VOO	LOO
<b>Australian</b>	127	5%	9%	8%
<b>Imported</b>	138	25%	33%	16%
<b>TOTAL</b>	265	15%	22%	12%

Based on the comparative retail pricing study recently published by Mercacei in Spain, in this the world's largest olive oil market both ROO and VOO sale for approximately 28% less than EVOO. LOO does not have a retail price as it is considered unfit for human consumption. Nonetheless, if we use the extrapolation of farm gate prices of oil to be refined vs. EVOO presented in the same publication, these data demonstrate that LOO has about 44% less commercial value than EVOO.

As EVOO represents approximately 59% of all olive oil sales in Australia (45M litres according to IOC), there are some 27M litres of EVOO sold in the country every year (8M litres of Australian EVOO and 19M litres of imported EVOO). Based on these consumption figures and the prices and adulteration/mislabelling issues above explained, the conclusion is that Australian customers are overpaying approximately AU\$ 26.7M every year.

It is important to highlight that these estimates assume that all EVOO sold in Australia follows the quality pattern of the retail sector. Anecdotal evidence and some samples indicate that the situation in the Food Service sector is worse than the retail sector with a greater portion of food service "EVOO" containing seed oils and/or olive-pomace oils.

## Health aspects of consumer detriment

It is difficult to place a value on the consumer detriment with regard to health outcomes that could result from the degree of adulteration and mislabelling presented previously.

Evidence from epidemiological studies suggests that a higher proportion of monounsaturated fats in the diet are linked to a consequent reduction in the risk of coronary heart disease. This is significant because olive oil is rich in monounsaturated fats, most notably oleic acid that was named after olive oil.

There is a large body of clinical data to show that consumption of olive oil can provide heart health benefits such as favourable effects on cholesterol regulation and LDL cholesterol oxidation, and that it exerts anti-inflammatory, antithrombotic, antihypertensive as well as vasodilatory effects both in animals and in humans.

Some clinical evidence suggests that it is **olive oil's phenolic content**, rather than its fatty acid profile, that is responsible for at least some of its cardio protective benefits.

For example, a clinical trial published in 2005 compared the effects of different types of olive oil on arterial elasticity.

- Test subjects were given a serving of 60 g of white bread and 40 ml of olive oil each morning for two consecutive days.
- The study was conducted in two stages. During the first stage, the subjects received polyphenol-rich oil (extra virgin oil contains the highest amount of polyphenol antioxidants). During the second phase, they received oil with only one fifth the phenolic content (refined olive oil).
- The elasticity of the arterial walls of each subject was measured using a pressure sleeve and a Doppler laser.
- It was discovered that after the subjects had consumed olive oil high in polyphenol antioxidants, they exhibited increased arterial elasticity, while after the consumption of olive oil containing fewer polyphenols; they displayed no significant change in arterial elasticity. It is theorized that, in the long term, increased elasticity of arterial walls reduces vascular stress and consequentially the risk of two common causes of death—heart attacks and stroke.
- This could, at least in part, explain the lower incidence of both diseases in regions where olive oil with a natural amount of polyphenols – extra virgin olive oil - and olives are consumed on a daily basis.

Another health benefit of olive oil seems to be its property to displace omega-6 fats, while not having any impact on omega-3 fats. This way, olive oil helps to build a more healthy balance between omega-6 fats and omega-3 fats.

Based on all this and the large body of other medical evidence, the consumption of oils other than extra virgin olive oil will most likely not produce the health benefits associated to this product. In other words, there are health consequences for consumers who purchase olive oil labelled as extra virgin when it is in fact of a lower grade.