

How to tell if your olive oil is the real thing

Adulterated and even fake olive oil is widespread, according to studies. Just how big is the problem, and how can you avoid being caught out?

Last month, the Olive Oil Times reported that two Spanish businessmen had been sentenced to two years in prison in Cordoba for selling hundreds of thousands of litres of supposedly extra virgin olive oil that was, in fact, a mixture of 70-80% sunflower oil and 20-30% olive.

In 2008, Italian police arrested over 60 people and closed more than 90 farms and processing plants across the south after uncovering substandard, non-Italian olive oil being passed off as Italian extra virgin, and chlorophyll and beta-carotene being added to sunflower and soybean oil with the same aim.

Most alarmingly, a study last year by researchers at the University of California, Davis and the Australian Oils Research Laboratory concluded that as much as 69% of imported European olive oil (and a far smaller proportion of native Californian) sold as extra virgin in the delicatessens and grocery stores on the US west coast wasn't what it claimed to be.

In Britain, of course, it wasn't so very long ago that the most likely place to find olive oil was the chemist. Today, thanks partly to the health claims made on its behalf and partly to the fact it tastes good, the oil Homer called "liquid gold" is in half of all UK homes and we get through 30m litres of olive oil every year – more than double than we did decade ago. We're now, in fact, the world's 10th biggest olive oil-consuming nation. So with a litre of supermarket extra virgin costing up to £4, and connoisseurs willing to pay 10 times that sum for a far smaller bottle of seasonal, first cold stone pressed, single estate, artisan-milled oil from Italy or Greece, can we be sure of getting what we're paying for?

The answer, according to Tom Mueller in a book out this month, is very often not. In *Extra Virginity: the Sublime and Scandalous World of Olive Oil*, Mueller, an American who lives in Italy, lays bare the workings of an industry prey, he argues, to hi-tech, industrial-scale fraud. The problem, he says, is that good olive oil is difficult, time-consuming and expensive to make, but easy, quick and cheap to doctor.

Most commonly, it seems, extra virgin oil is mixed with a lower grade olive oil, often not from the same country. Sometimes, another vegetable oil such as colza or canola is used. The resulting blend is then chemically coloured, flavoured and deodorised, and sold as extra-virgin to a producer. Almost any brand can, in theory, be susceptible: major names such as Bertolli (then owned by Unilever) have found themselves in court having to argue, successfully in this instance, that they had themselves been defrauded by their supplier.

Meanwhile, the chemical tests that should by law be performed by exporters of extra virgin oil before it can be labelled and sold as such can often fail to detect adulterated oil, particularly when it has been mixed with products such as deodorised, lower-grade olive oil in a sophisticated modern refinery. Nor do national food authorities appear particularly bothered as long as the oil isn't actively harmful, which is rare. In Britain, says Judy Ridgeway, one of the UK's leading olive oil experts, the Food Standards Agency has not done any checks on olive oil in five or six years. "And it only does chemical tests, not taste tests," she adds.

The EU now also requires extra virgin oil to pass assorted taste and aroma tests, assessed by panels of experts: the oil has to be suitably fruity, bitter and peppery, and cannot display any of 16 different defects, including "grubbiness", "mustiness" and "fustiness". But bad stuff still gets through.

Ridgeway says it is "hard to say what percentage of faulty oil gets through" to Britain. "It will vary seasonally – there will be more at this time of year than in March or April, but it's appreciable. They buy in good faith, but there are faulty oils on our supermarket shelves, without any argument."

The olive, in more than 700 varieties or cultivars, has been grown for its oil in the Mediterranean since 3000 BC. Unlike most vegetable oils, which are extracted from seeds or nuts, good olive oil is made using a basic hydraulic press, or more modern centrifuge, so it is more a fruit juice than an industrial fat. It comes in several qualities, including *lampante*, or "lamp oil", which is made from damaged or ground-gathered fruit and cannot be sold as food; virgin; and extra virgin, the highest grade. This has to be made by a physical (rather than chemical) process, and meet strict chemical requirements, including levels of oxidation and "free acidity" (a measure of decomposition).

Like any fresh product, olive oil deteriorates over time. "The trouble," says Ridgeway, "is that it's quite easy to clean up, say, an oil that doesn't quite pass the acidity test, and to do it without leaving any chemical markers. It could even taste pretty good, for about three months. Then it will go horribly wrong."

Michael North, an expert who runs a fresh seasonal olive oil club, says the problem is "huge. The public are just not aware of what's going on. There's plenty of oil out there that's rubbish: last year's oil or older. Or not even olive oil." So how can consumers best ensure they're not being ripped off? Ridgeway recommends paying a sensible price. Unfortunately, a 50cl bottle costing £15 is, on balance, "less likely to have problems" than one costing £2. North urges people never to buy olive oil in a clear bottle ("It oxidises and goes rancid far faster"), and to buy from somewhere you can taste it first.

Both he and Ridgeway, though, stress the prime importance of buying young. "Look for a harvest date," North says. "They're starting to appear now, albeit on only a few bottles, and they'll tell you how old the oil is. It's not an absolute guarantee of quality, but half the battle."

How to buy olive oil

- Find a seller who stores it in clean, temperature-controlled stainless steel containers topped with an inert gas such as nitrogen to keep oxygen at bay, and bottles it as they sell it. Ask to taste it before buying.
- Favour bottles or containers that protect against light, and buy a quantity that you'll use up quickly.
- Don't worry about colour. Good oils come in all shades, from green to gold to pale straw – but avoid flavours such as mouldy, cooked, greasy, meaty, metallic, and cardboard.
- Ensure that your oil is labelled "extra virgin," since other categories—"pure" or "light" oil, "olive oil" and "olive pomace oil" – have undergone chemical refinement.
- Try to buy oils only from this year's harvest – look for bottles with a date of harvest. Failing that, look at the "best by" date which should be two years after an oil was bottled.

- Though not always a guarantee of quality, PDO (protected designation of origin) and PGI (protected geographical indication) status should inspire some confidence.
- Some terms commonly used on olive oil labels are anachronistic, such as "first pressed" and "cold pressed". Since most extra virgin oil nowadays is made with centrifuges, it isn't "pressed" at all, and true extra virgin oil comes exclusively from the first processing of the olive paste.

*For further information, see extravirginity.com. Extracted from *Extra Virginity: The Sublime and Scandalous World of Olive Oil* by Tom Mueller.*

- This article was amended on 5 January 2012. The original referred to Bertolli as owned by Unilever. This has been corrected.