

n the south bank of the Tiber, just across the river from Rome's seven more famous hills, is an untidy knoll 150 feet tall and over half a mile around at the base, covered with a thin pelt of grass and a few trees, one of those odd bucolic relicts that give much of Rome a countryside feel even in the heart of town. During the Middle Ages this hill, called Monte Testaccio, was the scene of riotous banquets, and a carnival ritual in which a cartload of pigs was driven off the mountaintop and crashed to the ground below, where hungry, knife-wielding locals fell upon the unfortunate beasts. Nowadays it is lively only at night, thanks to the trendy restaurants, sushi bars, gay nightspots, and bleeding-edge dance clubs dug into its base around the perimeter. While I was in Rome to interview the Italian agriculture minister about olive oil imports, I visited Monte Testaccio, which is a testament to olive oil importations on a vast scale. As I climbed the steep upper slope, something crunched now and then underfoot, like thick seashells at the beach.

“Testaccio” derives from the Latin word *testa*, meaning potsherd, and the hill crunches when you climb it because it is composed of 25 million amphorae, dumped here by the Romans between the first and third centuries AD: Monte Testaccio is the classical world's biggest midden. Each amphora held about seventy liters of olive oil, imported from southern Spain or North Africa—in all, Monte Testaccio represents something like 1.75 billion liters of olive oil, which was distributed free to Roman citizens as part of a food subsidy known as the *annona*. Monte Testaccio is the largest known olive oil dump, but every other city, town, and army camp in the empire had a smaller version of its own. Standing at the summit of this mountain of olive oil bottles and looking out over Rome's rooftops, you understand that olive oil was every bit as vital to the ancient economy as petroleum is today. “Petroleum” is from *petra* and *oleum*, Latin for “olive oil from a stone.”

If the Greeks celebrated the aesthetic and spiritual aspects of olive oil, the Romans, as Monte Testaccio suggests, concentrated on its commercial possibilities. In parts of the empire, per capita consumption was

as high as fifty liters a year, and the Romans turned olive oil into an international cash crop. Agronomists like Cato and Columella codified the practice of olive cultivation. They identified twenty different olive cultivars, and distinguished several quality grades of oil; the best, they agreed, was *oleum viride* ("green oil") made from half-ripe olives, while *oleum maturum* (from mature fruit) was less desirable, and *oleum cibarium* ("fodder oil," the Roman version of *lampante*) from spoiled olives was suitable only for slaves. The Romans planted large groves in North Africa, southern Italy, and Andalucía, the source of most of Monte Testaccio's amphorae, and built huge, high-throughput mills with batteries of a dozen or more enormous lever presses. (The tall masonry housings of these presses, which still dot certain areas of the Maghreb like megaliths, are so stately and tall that early British explorers in the region mistook them for religious monuments.) The Romans set up commodity markets in oil prices in major ports, and formed specialized guilds in the oil trade, ranging from *olearii*, small retailers in olive oil, to progressively larger-scale *diffusores* and *mercatores*, to *negotiatores* who sold oil in bulk throughout the empire. Roman cargo ships crisscrossed the Mediterranean loaded with oil.

A commodity of this importance became a vital bargaining chip in the politics of empire, and was sometimes preferred to cash. Julius Caesar, wanting to punish Leptis Magna for taking part in the resistance to his invasion of Africa, fined the town fathers three million Roman pounds, or 1,067,800 liters, of olive oil. Olive oil could smooth the path to power in the empire. Emperors Marcus Aurelius and Hadrian were scions of olive oil clans in Baetica (today Andalucía), and Septimius Severus was born in Leptis Magna, capital of the famous oil-producing region of Tripolitana (modern-day Libya), where his family had grown rich making oil and the amphorae to ship it. "I've always thought of [Septimius Severus] as somewhat parallel to an oil sheikh," says David Mattingly, a professor of Roman archaeology at the University of Leicester and an authority on Roman olive cultivation. "Olive oil was the source of fabulous wealth and power."

Having obtained his authority through oil, Septimius Severus used oil to keep it. Shortly after his accession, he asked the citizens of Leptis for a “voluntary” donation of one million pounds of olive oil per year—the mafia-style offer they couldn’t refuse—and distributed it free to the Roman populace. (The amphorae it arrived in, naturally, were dumped on Monte Testaccio.) His strategy, which might be called the “bread, circuses, and olive oil” approach to boosting his approval rating, worked: Severus ruled successfully for nearly two decades, and transferred his power to his two degenerate sons, Caracalla and Geta, murmuring to them on his deathbed, “Get along with each other, give piles of money to the soldiers, and forget about everybody else.” (His sons, lacking his oil man’s savvy, paid no attention, and ended badly.)

Since the Roman legions frequently planted olive trees where they were stationed, for food and fuel, the gnarled trunks and gray-green leaves of the olive became symbols of conquest and cultural ascendancy. As Aldous Huxley observed, “The crown of olive was originally worn by Roman conquerors at ovation; the peace it proclaimed was the peace of victory, the peace which is too often only the tranquillity of exhaustion or complete annihilation.” A jug of olive oil on the dinner table likewise marked the triumph of Roman cuisine over barbarian beer and lard. “The inhabitants lead the most miserable existence of all mankind,” wrote a homesick Roman senator of the second century AD posted to a settlement on the Danube, deep in the beer and pork fat forests of the barbarian north. “For they cultivate no olives, and they drink no wine.” Culinary historian Massimo Montanari claims that the Romans considered oil, like wine and bread, to be “symbols of their own identity” that demonstrated the Roman ability to shape nature itself, since none of these foods exists in nature. “They become material and mental markers, in the sociological sense, of *romanitas*,” Montanari says.

A substance of such prestige and volume, the ancient world’s answer to sweet light crude, naturally attracted criminals. In fact, oil fraud is far older than the Romans. The five-millennia-old cuneiform tablets from Ebla describe investigators charged with combating oil fraud, naming

the “olive oil surveillance team at Nuzar,” near modern-day Aleppo in Syria, and a certain Ingar, head of the royal anti-fraud brigades. Oil fraud appears to have been widespread in Ptolemaic Egypt. The Romans, too, experienced a measure of it. The physician Galen mentions oil traders who cut high-quality olive oil with cheaper substances like liquefied lard. Among the many oil-drenched recipes of Apicius, the wealthy merchant and bon vivant whose cookbook was a bestseller in antiquity, is a procedure for doctoring cheap, smelly Spanish oil—the kind whose amphorae built Monte Testaccio—with minced herbs and roots, to make it taste and smell like prized oil from Istria.

Yet in preventing oil fraud, as in so many other areas of life, the Romans had a system. Many amphora fragments bear *tituli picti*, stamped inscriptions or handwritten notes in black or red ink that record information such as the locality where the oil was produced, the name of the producer, the weight and quality of the oil when the amphora was sealed, and the name of the merchant who imported it. Other annotations record the name of the imperial functionary who confirmed this information when the amphora was reopened at its destination in Rome. The purpose of this vast bureaucratic apparatus and of the detailed, explicit labeling of each amphora was to ensure that none of the middlemen in the long supply chain linking the olive groves in Spain and Africa to the imperial oil warehouses in Rome siphoned off oil, or substituted an inferior product. Monte Testaccio is a monument to the fight against international food fraud.

That fight continues in Italy today, though the methods and results are less impressive. The enormous popularity of the “Made in Italy” label worldwide makes it an appetizing target for food fraudsters, who earn an estimated €60 billion a year selling counterfeit or adulterated faux-Italian foods. In some of these crimes, mafia syndicates and other criminal networks sell substandard or unsafe products at huge profits. In the so-called Italburo scandal, for example, several dairies near Naples controlled by the Camorra blended up fake butter from vegetable oils, lard, petrochemicals, and animal carcasses (some possibly infected

with BSE, or mad cow disease), and sold 22,000 tons of their product throughout the EU. Other cases involve “legal frauds,” which, though seemingly unethical, are nevertheless permitted under Italian and EU law and are not mentioned on labels. Four “Italian” products in ten are actually foreign imports relabeled as Italian, often with false certificates of authenticity: over a third of pasta manufactured in Italy is made from imported wheat, half of mozzarella is produced with German milk and curds, and two-thirds of prosciutto comes from foreign hogs.

Many more cases fall somewhere in between, linking large, outwardly reputable companies with criminals, either directly or through a series of trading companies and intermediaries. Since price competition in the food industry is fierce, companies are often willing to buy their raw materials from dubious sources, even at prices so low they suggest that the foods may be fake. The Camorra-made butter in the Italburro scandal was bought up by major food companies in Belgium, France, and Germany, some of which were household names, and resold to consumers as butter and in ice cream and sweets. Regarding these high-profile companies, Paulo Casaca, former EU parliamentarian and head of the European Commission’s Budget Committee, who followed the case on behalf of the EU, observes: “I’m not sure which is worse—that these companies knowingly bought tainted butter and resold it to consumers, or that, as they claim, they didn’t know what they were buying, meaning that they weren’t competent to distinguish between real and fake butter.” (Italburro’s clients also collected generous EU subsidies for the production and sale of their “butter.”)

In another case dating from 2005, prosecutors allege that Francesco Casillo, head of Europe’s leading producer of semolina for pasta, brought a transport ship into Bari harbor loaded with Canadian wheat infected with a carcinogenic mold, whisked it through customs using false analytical results prepared by a complicit food chemist, then sold it to a number of major pasta manufacturers, who used it to make *fusilli* and *rigatoni* subsequently bought by consumers throughout Italy. (The case is being tried in a court in Puglia, and Casillo maintains his innocence.)

More recently, in November 2010, a biodiesel company delivered three batches of fatty acids intended for industrial uses, such as paper production, to a German manufacturer of vegetable feed fat. These fatty acids were contaminated with dioxin, an industrial by-product and potent carcinogen; nevertheless, they were blended into the feed fat, yielding as much as 2,256 tons of tainted feed fat, which was sold to twenty-five compound feed manufacturers. They, in turn, used it in their animal feeds, which they supplied to thousands of poultry, pig, dairy cattle, beef, rabbit, and goose farms in Germany, France, and Denmark. European health officials continue to analyze potentially affected foods, but have ordered extensive farm blockages and product recalls.

More disturbing than these individual cases of food contamination, however, is the likelihood that, for each case which comes to light, many more occur without ever being detected by authorities. Speaking of the tainted semolina incident, Antonio Barile, president of the Puglia chapter of *Confederazione Italiana Agricoltori* (CIA), a major farmers' union, says that the case "opens a terrifying window on what for years we have defined as 'the economy of deceit' in Italian food. The events in the Casillo case date from 2005, but we suspect that the arrival of contaminated shipments is a regular feature of the grain imports into our country." In Italy, a range of enforcement agencies works to protect the food industry, including military police forces like the *Carabinieri* and the *Guardia di Finanza*, the agriculture ministry's *Fraud Repression Unit*, customs and public health offices, even the forestry service. Despite their collective efforts—2009 saw some 600,000 inspections, over 66,000 irregularities detected, and seized goods valued at about €160 million—food fraud is rising steeply. The trend is the same worldwide. OLAF, the anti-fraud agency of the European Union, reports the rapid spread of food adulteration and counterfeiting. In 2009, a new *Food Fraud Advisory Unit* was formed in the United Kingdom to meet the rising pressure of food crime. In the US, where retail sales of foods and beverages were worth \$560 billion in 2010, several major academic institutes including Michigan State University have recently established

food fraud centers, and President Barack Obama has created a presidential task force that is discussing steps to radically improve testing and enforcement by official agencies (at present the FDA only tests 0.3 percent of the total American food supply).

Admittedly, the size and far-flung internationalization of the food and agriculture sector, which has been estimated to be worth something like \$5 trillion per year worldwide, makes policing it very difficult. But the reasons food fraud is on the rise go well beyond size and globalism. Some frauds are committed by companies whose chemical knowledge and expertise far outstrip those of the investigators. The enormous profits associated with food allow unscrupulous businessmen to bribe often low-paid customs agents and law enforcers. This is all the more true when the companies cooperating in the fraud are multinational concerns, who thanks to their deep pockets can influence legislators, pay for powerful advertising campaigns, and employ legal action to silence individuals and media who question their practices. Ultimately, however, the central reason fraud is on the rise is that most governments lack the political will to confront it. In an age of *laissez-faire* economics and blind faith in the free market, companies are often given a free hand, even at the expense of consumers.

The Romans, who created and ran one of the largest and longest-lived international empires in history, largely thanks to their immense pragmatism, even cynicism, knew this attitude, and had a phrase for it: *caveat emptor*, "let the buyer beware." But Monte Testaccio proves that the Romans sometimes took better care of the buyer than they let on. When you purchased an amphora of oil in the Roman world, you knew from the label exactly what you were getting.

DOMENICO RIBATTI, former olive oil tycoon, greets me at the door of his apartment in the center of Andria, a town forty kilometers northwest of Bari that is one of centers of olive oil production in Puglia. He is a small, slender man of seventy, with large amber eyes and thick, arched,