

CHAPTER 1

Espresso

Espresso (/ɛˈsprɛsoʊ/, Italian: [esˈprɛsso]) is coffee brewed by expressing or forcing a small amount of nearly boiling water under pressure through finely ground coffee beans. Espresso is generally thicker than coffee brewed by other methods, has a higher concentration of suspended and dissolved solids, and has crema on top (a foam with a creamy consistency).^[1] As a result of the pressurized brewing process, the flavors and chemicals in a typical cup of espresso are very concentrated. Espresso is also the base for other drinks such as a caffè latte, cappuccino, caffè macchiato, caffè mocha, flat white, or caffè Americano.

Espresso has more caffeine per unit volume than most coffee beverages, but because the usual serving size is much smaller, the total caffeine content is less than a mug of standard brewed coffee, contrary to a common belief.^[2] Although the actual caffeine content of any coffee drink varies by size, bean origin, roast method and other factors, the caffeine content of typical servings of espresso vs. drip brew are 120 to 170 mg^[3] vs. 150 to 200 mg.^{[4][5]}

Brewing

Espresso is made by forcing very hot water under high pressure through finely ground compacted coffee. Tamping down the coffee promotes the water's even penetration through the grounds.^[6] This process produces an almost syrupy beverage by extracting both solid and dissolved components. The crema^{[7][8]} is produced by emulsifying the oils in the ground coffee into a colloid, which does not occur in other brewing methods. There is no universal standard defining the process of extracting espresso,^[9] but there are several published definitions which attempt to place constraints on the amount and type of ground coffee used, the temperature and pressure of the water, and the rate of extraction.^{[10][11]} Generally, one uses an espresso machine to make espresso. The act of producing a shot of espresso is often termed "pulling" a shot, originating from lever espresso machines, which require pulling down a handle attached to a spring-loaded piston, forcing hot water through the coffee at high pressure. Today, however, it is more common for the pressure to be generated by an electric pump.

The technical parameters outlined by the Italian Espresso National Institute for making a "certified Italian espresso" are:^[12]

Espresso roast

Espresso is both a coffee beverage and a brewing method. It is not a specific bean, bean blend, or roast level. Any bean or roasting level can be used to produce authentic espresso. For example, in southern Italy, a darker roast is generally preferred. Farther north, the trend moves toward slightly lighter roasts, while outside Italy a wide range is popular.^[13]

History

Angelo Moriondo patented a steam-driven "instantaneous" coffee beverage making device in 1884 (No. 33/256). The device is "almost certainly the first Italian bar machine that controlled the supply of steam and water separately through the coffee" and Moriondo is "certainly one of the earliest discoverers of the espresso [sic] machine, if not the earliest".^[14] Unlike true espresso machines, it brewed in bulk, not as individual servings. Seventeen years later, in 1901, Luigi

Bezzera, from Milan, came up with a number of improvements to the espresso machine. He patented a number of these, the first of which was applied for on 19 December 1901. It was titled "Innovations in the machinery to prepare and immediately serve coffee beverage" (Patent No. 153/94, 61707, granted on 5 June 1902). In 1905, the patent was bought by Desiderio Pavoni, who founded the La Pavoni company and began to produce the machine industrially (one a day) in a small workshop in Via Parini in Milan.

The popularity of espresso developed in various ways; a detailed discussion of the spread of espresso is given in (Morris 2007), which is a source of various statements below. In Italy, the rise of espresso consumption was associated with urbanization, espresso bars providing a place for socializing. Further, coffee prices were controlled by local authorities, provided the coffee was consumed standing up, encouraging the "stand at a bar" culture.

In the English-speaking world, espresso became popular, particularly in the form of cappuccino, owing to the tradition of drinking coffee with milk and the exotic appeal of the foam; in the United States, this was more often in the form of lattes, with or without flavored syrups added. The latte is claimed to have been invented in the 1950s by Italian American Lino Meiorin of Caffè Mediterraneo in Berkeley, California, as a long cappuccino, and was then popularized in Seattle,^[15] and then nationally and internationally by Seattle-based Starbucks in the late 1980s and 1990s.

In the United Kingdom, espresso grew in popularity among youth in the 1950s, who felt more welcome in the coffee shops than in public houses (pubs). Espresso was initially popular, particularly within the Italian diaspora, growing in popularity with tourism to Italy exposing others to espresso, as developed by Eiscafès established by Italians in Germany. Initially, expatriate Italian espresso bars were downmarket venues, serving the working-class Italian diaspora and thus providing appeal to the alternative subculture; this can still be seen in the United States in Italian American neighborhoods, such as Boston's North End, New York's Little Italy, and San Francisco's North Beach. As specialty coffee developed in the 1980s (following earlier developments in the 1970s and even 1960s), an indigenous artisanal coffee culture developed, with espresso instead positioned as an upmarket drink.

In the 2010s, coffee culture commentators distinguish large-chain mid-market coffee as "Second Wave Coffee", and upmarket artisanal coffee as "Third Wave Coffee". In the Middle East and Asia, espresso is growing in popularity, with the opening of Western coffee-shop chains.^[16]