The Art of Tamping Espresso

There are many factors that contribute to brewing the perfect shot of espresso:

- Quality of the water
- Quality of the espresso bean
- Correct grind of the espresso beans (fineness)
- Correct tamping of ground espresso
- Correct water temperature
- Correct water pressure

Tamping the ground espresso is one of the most important factors to brewing the perfect shot. The ground espresso needs to be densely compacted into the portafilter in order for the hot water to be uniformly forced through the grounds with the same pressure throughout the entire portafilter. If the espresso grounds are not evenly distributed into the filter the water will find the weak spots resulting in part of the coffee being over extracted and bitter while the rest of the coffee is under extracted and weak. With firm and even tamping, the water has no other option but to flow through the coffee evenly creating the perfect espresso shot topped with rich, golden crema.

To extract the best taste from your espresso beans start every time with fresh, cold filtered water. Choose a high quality espresso bean and store the whole beans away from the light in a dark, airtight container. Never store coffee beans in the refrigerator or freezer. Grind the espresso beans right before brewing on a fine grind setting.

Ensure you have the correct filter basket inside the portafilter for either a single or double shot of espresso. Always ensure the filter is clean. You may need to use a pin to clean out any residue. Fill the portafilter basket loosely with ground coffee and level off the basket using the side of your pinky finger to discard any excess coffee grounds.

- For a single shot of espresso use 6 to 7 grams (1 ½ teaspoons) of ground espresso.
- For a double shot of espresso use 12 to 14 grams (1 tablespoon) of ground espresso.

To create a solid puck, leveling the ground coffee is important. Prior to tamping, make sure you evenly distribute the coffee without packing the grounds or leaving any spaces. Uniformly distribute the ground coffee in both depth and density around the basket. Make sure no gaps or breaks occur inside or around the perimeter of the basket.

Once the ground espresso is evenly distributed around the portafilter, grip the portafilter handle in one hand and with your other hand press the tamper straight down and apply approximately 30 lbs of pressure* followed by a light twist to settle any stray grinds. If any ground coffee remains on the perimeter of the filter basket, use your finger to lightly brush them away without disturbing the tamped shot.

After the shot has been brewed and portafilter removed, the espresso puck should be solid, relatively dry and evenly extracted. If the coffee grounds in the filter are watery and loose, try applying more pressure to the tamp and ensure even distribution of grounds. Also, check your grind size to ensure the water can pass through at the appropriate rate. If the shot is too slow (over 25-30 seconds) adjust to a coarser grind. If the shot is too fast (less than 15-20 seconds) adjust to a finer grind. Practice your grinding and tamping techniques to perfect the art of brewing espresso.

*30 lbs of pressure can be compared to the amount of pressure you would use to twist off a very tight jar lid.