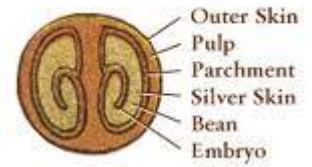# Processing

The coffee shrub bears fruit that are called cherries. These cherries have several layers surrounding the seeds in the middle (which are the beans). The outside layer is the skin, which immediately covers the pulp, known as the mucilage layer. Inside the mucilage is the parchment layer which is a thick skin or hull. Inside the parchment and covering the beans is the silverskin, which becomes the chaff when roasted. In the center there are usually two seeds (coffee beans). When only one seed is present it is known as a peaberry.

When these cherries are harvested they are processed one of two basic ways or a hybrid between the two. The two basic methods of processing are the Wet Method (sometimes called Washed) and the Dry Method (or Natural). Wet processing will usually result in cleaner cups of coffee that are consistent in flavor. Dry processing can influence the flavor of the beans dramatically; natural fermentation can impart a sweetness, floral or fruity notes, earthiness, a great range of interesting flavors, or, if done improperly, it can leave a musty or moldy taste.

Wet Method.

The first stage after harvesting the cherries is to dump them into a tank of water. (There is usually an initial sorting to remove unripe and overripe fruit.) The twigs, leaves, and bad cherries will float to the surface, where they are skimmed off.

The remaining cherries are then run through a depulper, in which the skin and some of the mucilage is stripped off. The next stage is to soak the resulting pits in water and allow them to ferment for 24 to 36 hours so bacteria can remove the remaining mucilage. Some processing facilities put them through mechanical washers in place of the fermentation step.

After the pits have been stripped of all mucilage, what remains are the beans covered with their parchment layers (hulls). These are spread to dry in the sun on patios or raised tables where they are raked, windrowed, and turned to permit even drying and to avoid mildewing. In some cases they are mechanically dried, or a combination of the two methods. Once the moisture content is low enough (10 to 12 percent), the beans are run through a hulling machine where the each bean's hull (parchment layer) is removed along with some of the silverskin. The remaining silverskin comes off during roasting as chaff.

Dry Method

The Dry Method, also known as Natural, is the oldest and simplest method. The cherries are spread, after harvest, to dry naturally. They are spread on patios or the ground and turned by hand to dry. When the cherries are dry husks, they are put through a hulling machine and hulled of the remaining dried skin and parchment. This method only works in dry climates with little rain, such as Ethiopia, Yemen, and Brazil. Some processors start with an initial wash and segregation of cherries.

Hybrids

There are several hybrid methods that employ parts of each method. I will touch on a few of the basic ones:

Pulped Natural

This process starts out like the Wet Method and runs the cherries through a pulping machine. The resulting cherry pits are still covered with mucilage. They are then dried and processed as they are in the Dry Method. This method is also known as Semi-Washed or Semi-Dry Method.

Honey Process

This process is similar to the Pulped Natural. The cherries are stripped of the skin but some of the mucilage is left on by less washing. As the mucilage begins to ferment naturally, the parchment will take on a slight orange color and the mucilage begins to resemble honey. They are often, then, washed to remove the remaining mucilage and dried. If done properly the sugars in the mucilage will impart a sweetness to the beans.

Wet Hulled

This is a process where the beans are pulped, washed and dried over a short period of time. The moisture content of the beans is about 40 percent when they are hulled. The beans are then spread to dry to bring them down to the 10- to 12-percent moisture range. This method is used exclusively in Indonesia and results in cups with less brightness and more body.