



Though barley's popularity as a food product is definitely on the rise, the grain has been a staple in the brewing industry for centuries. Barley's unique ability to be easily malted makes it the perfect base for both ales and lagers. The process of brewing a barley-based beer varies from brewery to brewery but the essential steps are similar.



#### 1. Malting & Germination

First, the barley is malted. The barley is soaked for several days until it germinates, or sprouts, then drained and then heated for a period of time. The timing and heat intensity affects the flavour of the grain and resulting beer. Once this is complete, the barley is considered malt.

## 2. Mashing

The malt is then ready to be crushed in the mashing process. This step breaks up the kernel to allow for the sugars to be released more readily in the fermentation process. Once the malt is crushed to the brewer's specifications, the malted and crushed barley is sprayed and soaked through several rounds to remove all of the sugars. The water is drained off and placed into a kettle. This resulting liquid is called the wort.



## 3. Boiling

The wort is boiled for approximately 90 minutes. Hops are added at different stages throughout the boil in accordance to the different type of beer the brewer is brewing. After 90 minutes, the solids are separated from the liquids once more. The liquids are then cooled in order to allow proper fermentation when the yeast is added.



## 4. Fermentation

When yeast is added to the cooled wort, it reacts with the sugar to create alcohol. The length of this fermentation process is what creates the key difference between lager and ale.

Ale is fermented for 2 weeks, while lager takes much longer with the fermentation process - up to 6 weeks.

# 5. Bottling

After fermentation, the beer will move to bottling and kegging to then be sent out for commercial use.

Barley's fundamental role in the brewing process has made it a staple to the brewing industry. Its unique composition is responsible for the majority of beer's main attributes such as the colour, aroma and flavour. Though many brewers have started using different grains in their brewing process such as wheat and rye, these grains are used to enhance the barley, not replace it.

