

Why mash?

You are now asking yourself, why should I spend an hour mashing, then more time sparging? there are various reasons:

1. More fresh grain flavor in the beer. Extracts are boiled for a long time to turn them into syrups or powders, losing a lot of the fresh grain-malt flavors in the process. Consider three glasses of milk, fresh from the cow, reconstituted from powdered and condensed milk. The milk straight from the cow is far superior in taste (and nutrition) than the two reconstituted milks!

Just adding more crystal malt for more grain flavor will make the beer unbearable caramelly. Only base malts can be added in big amounts.

2. Control over the final beer. If we mash at a high temperature, 68-70°C, we get more unfermentable dextrins and slowly fermentable higher sugars. Result, a “thicker” beer, more mouth and stomach filling and relatively low in alcohol. If we mash cool, 64-66°C we get more of the simple malt sugar, maltose. Beer yeasts just love to “eat” maltose and we end up with a thinner, drier beer with relatively high alcohol content.
3. Use of adjuncts. Commercial breweries use a lot, a helluva lot, of adjuncts, cane sugar in Australia, rice and corn in the US, to save money, malt being more expensive than unmalted adjuncts. We, however, can use modest amounts of adjuncts to add grainy/bready flavors, or to adjust mouthfeel, like the flaked barley in Guinness. If you want to make a true wit (like Hoegaarden) you need to be able to mash 40% raw wheat. Stouts are great but oatmeal stouts are to die for!

A bitter or pale ale with some rolled oats and flaked rye is simply stunning! Judges at a beer show where I had entered such a rye and oat flavored bitter were just gobsmacked at the beautiful flavor! (Then marked it down for lack of fizz!!!!)

4. Use of elaborate mashing schedules. While pretty much all grain these days is “well modified” and can be used by simply adding hot water to reach the mash temp, some more elaborate techniques, like decoction (boiling some of the grains) can boost the maltiness of the final beer