

Brew the best of
YOUR OWN

OATMEAL STOUT



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Oatmeal Stout

by Jamil Zainasheff

From time to time, a person will ask me, “What is the difference between stout and porter?” Of course, there are several types of each, so my first thought is what kind of porter and what kind of stout? Most people do not want such precision when asking about beer and soon they lose interest in my rambling answer. I’m guessing you feel differently or you would not be reading this column.

Oatmeal Stout by the numbers

OG:1.048–1.065 (11.9–15.9 °P)
FG:1.010–1.018 (2.6–4.6 °P)
SRM:22–40
IBU:25–40
ABV:4.2–5.9%



In the stout family, the question of what differentiates the three lower gravity styles (dry, sweet and oatmeal) is a good question. In brief terms, think of dry stout as having a very dry character, not big and full. Think of sweet stout as similar, but with a sweeter, fuller character. Think of oatmeal stout as between the two, with a little bit of silkiness from the oatmeal. Of course, you can find examples of oatmeal stout that are sweeter than sweet stout and some drier than dry stout, but conceptually that is one of the key differences.

Oatmeal stout just might be my favorite of the stout family. Oatmeal stout is traditionally an English style, although there are more and more “Americanized” versions available. Oatmeal stout uses oats to build body and add a touch of silkiness to the mouthfeel. It is dark and rich, full of roasted flavors and aromas. It is full-bodied and has substantial coffee and chocolate notes. The appearance is dark brown to black in color. Think of oatmeal stout as similar to dry stout in roastiness, but much fuller and sweeter. Commercial examples vary considerably, with some sweeter, some drier, and many showing a wide range in oatmeal character. They range from more British (obvious fruity esters, rich malt character) to more American (lower ester levels, a little less malt character, and sometimes a touch of late hop character). I prefer the traditional British character in this

style, but there are some nice Americanized examples. If you want to impress the judges, you will tend to have more success with a slightly sweet rendition of the style with enough specialty malt character that makes them think of oatmeal cookies.

To brew a great example of this style, start with high quality British pale ale malt as the base. It provides that background rich malt character that is a key component in fine British beers. British pale ale malt is kilned a bit darker (2.5 to 3.5 °L) than the average North American two-row or pale malt (1.5 to 2.5 °L) and this higher level of kilning brings out the malt’s biscuit-toasty flavors. Some brewers use North American pale ale malt or North American two-row with the addition of some specialty malts, but this will not produce the same beer as using British pale ale malt. Spend the money, make the effort and use the proper base malt if you want to make an excellent example of the style.

Similarly, extract brewers should make the effort to source an extract made from British pale ale malt. If you end up using North American two-row malt extract, you can try to compensate by partial mashing some additional specialty malts such as Munich, biscuit or Victory®.

All-grain brewers should use a single infusion mash. A temperature in the range of 150 to 156 °F (66 to 69 °C) works well. Use a lower temperature when using lower attenuating yeasts or higher starting gravities. Use a higher mash temperature when using the higher attenuating yeasts or lower starting gravity beers. If you are unsure, a great starting point is 152 °F (67 °C).

While using the proper base malt is important, oatmeal stout also requires a fair amount of specialty malt. To develop some sweetness and a caramel flavor component, you will want some crystal malt. A dry stout uses no crystal malt, but sweet stout

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**McQuaker's
Oatmeal stout
(5 gallons/19 L,
all-grain)**

OG = 1.055 (13.5 °P)

FG = 1.016 (4.1 °P)

IBU = 28 SRM = 35 ABV = 5.1%

Ingredients

8.5 lb. (3.85 kg) Thomas Fawcett & Sons Maris Otter pale ale malt (or similar English pale ale malt)
14.1 oz. (400 g) Great Western flaked oats 1 °L
10.6 oz. (300 g) Briess Victory® malt 28 °L
10.6 oz. (300 g) Thomas Fawcett & Sons chocolate malt 350 °L
7.1 oz. (200 g) Thomas Fawcett & Sons roasted barley 500 °L
7.1 oz. (200 g) Thomas Fawcett & Sons crystal malt 85 °L
7.5 AAU Kent Goldings pellet hops (60 min.) (1.5 oz./42 g at 5% alpha acids)
White Labs WLP002 (English Ale) or Wyeast 1968 (London ESB) yeast

Step by Step

Spread the flaked oats out on a cookie sheet and toast them in the oven around 300 °F (149 °C) until they begin to slightly color up and give off a nutty oatmeal cookie character. Mill all of the grains together and dough-in targeting a mash of around 1.5 quarts of water to 1 pound of grain (a liquor-to-grist ratio of about 3:1 by weight) and a temperature of 154 °F (68 °C). Hold the mash at 154 °F (68 °C) until enzymatic conversion is complete. Infuse the mash with near-boiling water while stirring or with a recirculating mash system raise the temperature to mash out at 168 °F (76 °C). Sparge slowly with 170 °F (77 °C) water, collecting wort until the pre-boil kettle volume is around 5.9 gallons (22.3 L) and a gravity of 1.046 (11.5 °P).

The total wort boil time is

60 minutes. Add the hops once the wort reaches a full boil and then start your timer. Add Irish moss or other kettle finings with 15 minutes left in the boil.

Chill the wort to 68 °F (20 °C) and aerate thoroughly. The proper pitch rate is two packages of liquid yeast or 1 package of liquid yeast in a 2-liter starter. Ferment at 68 °F (20 °C). When fermentation is finished, carbonate the beer to approximately 2 to 2.5 volumes.

**McQuaker's
Oatmeal stout
(5 gallons/19 L,
extract with grains)**

OG = 1.055 (13.5 °P)

FG = 1.016 (4.1 °P)

IBU = 28 SRM = 35 ABV = 5.1%

Ingredients

5.7 lb. (2.6 kg) English pale ale liquid malt extract
14.1 oz. (400 g) Great Western flaked oats 1 °L
10.6 oz. (300 g) Briess Victory® malt 28 °L
10.6 oz. (300 g) Thomas Fawcett & Sons chocolate malt 350 °L
7.1 oz. (200 g) Thomas Fawcett & Sons roasted barley 500 °L
7.1 oz. (200 g) Thomas Fawcett & Sons crystal malt 85 °L
7.5 AAU Kent Goldings pellet hops (60 min.) (1.5 oz./42 g at 5% alpha acids)
White Labs WLP002 (English Ale) or Wyeast 1968 (London ESB) yeast

Step by Step

Ask your local homebrew shop for an English-style liquid malt extract or an extract made from 100% Maris Otter malt. If you cannot get fresh liquid malt extract, it is better to use an appropriate amount of dried malt extract (DME) instead.

Spread the flaked oats out on a cookie sheet and toast them in the

oven around 300 °F (149 °C) until they begin to slightly color up and give off a nutty oatmeal cookie character. Mill or coarsely crack the oats with the rest of the specialty malt and place loosely in a grain bag. Avoid packing the grains too tightly in the bag, using more bags if needed. Steep the bag in about 1 gallon (~4 liters) of water at roughly 170 °F (77 °C) for about 30 minutes. Lift the grain bag out of the steeping liquid and rinse with warm water. Allow the bags to drip into the kettle. Do not squeeze the bags. Add the malt extract and enough water to make a pre-boil volume of 5.9 gallons (22.3 L) and a gravity of 1.046 (11.5 °P). Stir thoroughly to help dissolve the extract and bring to a boil.

The total wort boil time is 60 minutes. Add the hops once the wort reaches a full boil and then start your timer. Add Irish moss or other kettle finings with 15 minutes left in the boil.

Chill the wort to 68 °F (20 °C) and aerate thoroughly. The proper pitch rate is 2 packages of liquid yeast or 1 package of liquid yeast in a 2 liter starter. Ferment at 68 °F (20 °C). When fermentation is finished, carbonate the beer to approximately 2 to 2.5 volumes.

might use up to 10%. An oatmeal stout is in the middle, around 5% of a 40 to 120 °L crystal malt. I prefer to use crystal malt in the 80 °L range for darker British style beers. It provides a slightly raisiny caramel flavor that complements the fruity esters common to the style. To create the dark color and an espresso-like richness, British black malt, chocolate malt, and even roasted barley are good choices. The proper amounts are going to vary based on color and flavor. Generally, 10% of the grist is highly kilned malt in a stout. Be aware that malts of the same name from different suppliers can vary substantially in color and flavor. You might find both chocolate malt and black malt ranging from 300 °L to 500 °L, so the name the maltsters give a product is not always a reliable indicator. Always let flavor be your guide.

Many people expect to taste oatmeal in an oatmeal stout. In reality, oatmeal does not taste like much, which is why people add so much flavoring to a bowlful at breakfast. While oatmeal does add some to mouthfeel, it needs some help as far as flavor goes to produce that nutty/biscuity flavor and aroma people expect. One specialty grain that I like a lot for this is Victory® (~28 °L). It adds a toasty, nutty, bready character, which reinforces the impression of “oatmeal” in the beer. Another way to enhance the character of the oatmeal is by roasting the oats in the oven around 300 °F (149 °C). This toasting increases the oatmeal character and helps it stand out a bit more in the beer.

If you are looking for more complexity or increased head retention, you can add other malts as well. Wheat malt, Munich, biscuit and others are common additions in many recipes, but keep in mind that using too many specialty malts often ends up as a muddled malt character, not a more complex one. Emphasize one or two particular malt characters in your recipe by using two or three grains and selecting only high quality British specialty malts such as Simpsons or Thomas Fawcett. These malts have a

rich malt character, which is complex on its own. Some brewers like to experiment with other adjuncts, such as brown sugar, but keep in mind that simple sugars ferment out completely and result in a thinner body, which is the opposite of what you want in oatmeal stout.

All English-style beer is best brewed with English hops, such as East Kent Goldings, Fuggles, Target, Northdown or Challenger. A new hop variety that I think might do well for an Americanized version of the style is Delta, which is a cross between Fuggle and Cascade. Hop flavor and aroma should be absent or at the most minimal. The bittering level for oatmeal stout has a wide range of 25 to 40 IBU, but you should be shooting for a balance that is even or slightly sweet. The bitterness to starting gravity ratio (IBU divided by OG) ranges from 0.4 and 0.8. What ratio you target depends on the amount and type of specialty malts and yeast attenuation. If you use more highly kilned malts or chose a more attenuative yeast, then you will want to target a lower bittering ratio. If you use more unfermentable crystal malts or a less attenuative yeast, then you go with a higher bittering ratio. It is all a matter of balance, avoiding an overly sweet or bitter beer. Generally, skip any late hop additions. If you are trying to make a more “American” version of oatmeal stout, you could use a small touch of late hopping, perhaps ¼ to ½ ounce (7 to 14 g) during the last few minutes. In a classic British version, no hop flavor or aroma is fine. At most, any hop character detected would be from the bittering hop addition.

Fermentation creates most of the flavor and aroma in many British beers. “English” yeast strains provide a variety of interesting esters and leave some residual sweetness to balance the hop bittering. Many English yeasts attenuate on the lower side (< 70%), but there are some that attenuate quite well (up to 80%). For many British-style beers you have to think about the final balance of the beer. If the beer has a high starting

gravity, or you are using many specialty grains that add residual sweetness (such as crystal malts), you need to select a more attenuative strain. If you are brewing a beer with a lower starting gravity and/or limited specialty grains, then you want to go with a less attenuative yeast. This is one of the most important things to know about crafting your own British-style recipes. My favorite yeast strains for brewing oatmeal stout are White Labs WLP002 (English Ale) or Wyeast 1968 (London ESB). They both provide a wonderful ester profile without being excessively fruity, and they both attenuate to a moderate level, leaving just the right amount of malt sweetness and fuller mouthfeel.

At lower temperatures (<65 °F /18 °C), these yeasts produce a relatively low level of esters and at high temperatures (>70 °F/21 °C) they produce abundant fruity esters and fusel alcohol notes. I start fermentation in the middle of this range (68 °F/20 °C), letting the temperature rise a few degrees over a couple days. This creates the expected level of esters, helps the yeast attenuate fully and keeps the amount of diacetyl in the finished beer to a minimum. **BYO**

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