## **Beers Around Transcription**

So, for this experiment we're going to need a little bit of water, at a reasonably warm temperature, some plain old white sugars, food for the yeast, and the yeast itself. And what we're going to do is, we're going to create a simple closed system here. So, you can see that the yeast is going to consume the sugar and produce those by-products of carbon dioxide [CO2]. What you can't see is the alcohol that's also being produced in the process- that's in solution.

If we look at this [shows yeast with bubbly foam top) we can see our bubbling of the lid and some nice capture of the CO2 and the foam at the top here. But how do we go from this [shows foamy yeast cup] to this [beer glass overflowing with foam]? Well, here it is! You see, most beer these days is carbonated by a process called force carbonation, where CO2 is left in a closed system until it is absorbed in solution by the liquid. So, the stuff that we're actually looking at here is not a product of yeast at all. This carbonation comes out of the CO2 canister, a gas tank, sort of looks something like this. These gas tanks are plumbed into your beer fridge through a bunch of braided line that comes in through a hole that's drilled in the back. This braided line hooks up into a regulator, a sort of gas distribution manifold, that goes into the sealed kegs. The beer is then left at a constant pressure until the solution has absorbed as much of the CO2 as the brewer would like it to have.

Hello everyone, and here we go with "Things That You're Doing Wrong with Your Life Still ", pouring a beer... When you go into a restaurant, and the server [beer opening] brings you your glass, one of the things they do often, is they try and make sure that none of that delicious CO2 escapes solution, so they pour it slowly and gently over the side of the glass... just like so.

That's not a beer! Here's why... when we're pouring, we're doing a couple of different things. The first is we're releasing the CO2 that's in... there there's over two and a half bottles of carbon dioxide in this beer and when you pour it, you want to pour it nice and tall, and as we pour nice and tall, we see we get that nice foam collar on there and it does a couple of things. The first is that it releases the foam, the co2, so you don't get the bloat and all the nice smells from the hops and the bitterness comes through, as well as the sweetness of the malt all on the palette, and it becomes much more aromatic.

And for those reasons you want a nice collar of foam on there in order to enhance your imbibing pleasure. Cheers.

[takes drink]