

PENNY SAVER NEWS

July 17, 2014

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Why Beer in the Batter?

Go to a fish fry and crunch into a great piece of battered fish. Go to a different place, bite into the fish and wonder if you want to even try the second piece. At the first place the fish was juicy and tender. The batter was crisp and light. But at the second the batter was tough and doughy, the fish inside was dry. What on earth happened? The first cook's secret is probably beer, and not beer that he (or she) was drinking!

Despite some cooks' reluctance to use alcohol, even for cooking, in this case beer really will make a much better batter, one that will be very hard to copy with other ingredients. Beer actually has three things that make it special for light, crisp batter. Alcohol is one of them, true, but the others are plenty of carbon dioxide and some proteins. All three work together to make a light, crisp batter.

Let's start with the alcohol. Probably the most important thing it does in the frying kettle is evaporate out and disappear. Alcohol will wet the flour or other ingredients enough to stick them together and make batter. But because it has less water than water or milk, it doesn't let the gluten proteins stick together. So they can't get sticky and stretchy. When the flour is fried it stays crunchy, not bendable like a slice of bread.

Then, as soon as the batter hits the hot oil the alcohol evaporates and dries the batter. Batter made with milk or water has to be cooked until the water evaporates, and that takes awhile. But a beer batter - with fish or vegetables inside - doesn't need as long to cook. There's less time to dry out the fish or turn the veggies mushy.

Then there is the carbon dioxide. That's all the bubbles in beer. Cold beer holds lots of tiny bubbles. We can mix the batter with cold beer and keep lots of bubbles in the batter. But as soon as the batter hits the hot oil all the little bubbles start expanding and becoming big bubbles. The oil stiffens the flour around big bubbles, and we have a light, open, lacey, crispy coating around our fish or vegetables. Bubbles are important.

The other thing that lots of bubbles do is help protect the food inside from too high a heat. A bubbly batter is like foam insulation. It keeps most of the heat away from the fish. By controlling the

heat of the oil and watching carefully you - the cook - can get the insides cooked just right, tender and still juicy, inside the crispy batter.

So why not just use seltzer water for bubbles? Now we get to the third beer ingredient - protein. Beer naturally has some proteins and manufacturers add more. They call them 'foaming agents', and they're there to protect the foam. A glass of beer should have a nice tall head of foam. Those proteins protect the bubbles by putting a thin skin of protein around each bubble, sort of like mini-balloons filled with carbon dioxide. Because of the proteins the bubble foam lasts a lot longer than the bubbles from seltzer. So that takes us back to insulating the fish from overcooking, and making an open, lacey crisp crust around the fish or vegetables.

All three ingredients - alcohol, carbon dioxide and proteins - have their own special job in making a good, light and crispy crust of batter around a juicy, tender piece of fish. So don't let anyone drink all the beer on the day you intend to fry battered fish! Be sure to save a can for cooking. Here's a super simple recipe for beer batter. Happy cooking!

Basic Beer Batter for Fish or Vegetables

6-8 cups vegetable oil	1 cup all purpose flour
½ tsp baking powder	1 cup beer (pale lager or other)
1 tsp salt	Black or red pepper, garlic powder optional

This batter is enough for 1 ½ lbs firm white fish, OR 2 zucchinis, OR 1 lb mushrooms.

Cut fish into 1 by 3 inch pieces and lay out on cookie sheet covered with paper towels. OR Wash and slice zucchini into french-fry size strips. Roll zucchini lightly in a little flour to dry. OR Wash mushrooms and pat dry.

Heat oil in large pot to 375° F over medium-high heat, checking with a deep-fat thermometer. In medium bowl combine flour, salt and baking powder. Slowly add beer and whisk until smooth.

Season fish or vegetables with pepper or garlic powder if desired. Dip pieces into batter and gently shake off excess. Fry fish about 7 minutes, turning once. Zucchini will only need about 4 minutes per batch, mushrooms 6 to 8 minutes depending on size. Transfer fried pieces to paper towel-lined plate and keep warm while frying the rest. Serves 6-8.

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