32 grams, so this means we're adding 1.6 moles of sodium hydroxide to the 4 liters of water, making the concentration 0.42 moles per liter. This corresponds to a pH of 13.6! This is such a high pH that you have to wear gloves to avoid getting burned. The many steps of soaking and rinsing removes the lye, but even so it's recommended you discard the liquid after cooking. Using alkaline solutions to prepare food is common in many cultures. Native American cuisine, for example, along with both Mexican and Central American cooking, use lye and slaked lime to prepare dried corn, which is then used in a number of preparations.

CEVICHE

Both century eggs and lutefisk are cooked in alkaline pH, be it in the form of lye, clay, or ash. There are, however, dishes that do the same thing using acids. One of the best known and loved is ceviche. Ceviche is raw fish that has been immersed in lime or lemon juice for varying amounts of time. The low pH of the citrus juice cooks the fish, and the effect is readily observable with the naked eye. A piece of white fish such as tilapia will go from translucent white to opaque. A piece of red tuna will go from brilliant red to dull pink. The fish also acquires a texture that is slightly tougher, not unlike the texture of fish that has been cooked with heat. The sidebar shows a classical ceviche recipe and a Philippine version, kinilaw, which uses vinegar instead of lime juice.

SIDEBAR 3: CEVICHE

Ceviche

Ingredients

200 g sashimi-grade fish, cut into 0.5 cm pieces 250 mL lime juice tomato, diced
or 2 garlic cloves, finely minced
red onion, finely diced
tablespoons chopped fresh cilantro
serrano pepper, seeded and finely chopped (optional)
teaspoon salt
teaspoon ground black pepper
avocado, pitted, peeled, and sliced, for serving
Tortilla chips, for serving

Directions

- 1. Pour the lime juice into a medium bowl. Add the fish and marinate at room temperature or in the refrigerator for 15 to 20 minutes.
- 2. While the fish is marinating, toss together the tomato, garlic, onion, cilantro, serrano (if using), salt, and pepper in a small bowl.
- 3. Drain the lime juice from the bowl and mix the fish with the vegetables. You can cut the pieces in half and examine how the color and texture changed due to the lime juice.
- 4. Serve portions on individual plates and garnish with slices of avocado. Enjoy with tortilla chips. 🕸

SIDEBAR 4: MARGARITA FORÉS'S KINILAW

Kinilaw

Ingredients

Brine/Sauce

3/4 cup white vinegar

- 1/4 cup chopped calamansi
- 1 medium red onion, chopped
- 1 (1-inch) knob ginger, peeled and chopped