

recipe redux

Walnut Romesco

By Rachel Zemser, CCS

When it comes to sauces, especially in the U.S. retail market, nuts are largely an untapped resource. Nuts, finely ground into a meal or “flour,” provide rich texture and creamy mouthfeel when added to a vegetable-based sauce.

Romesco is a classic Spanish dipping sauce with nuts, olive oil, bread, vinegar, garlic and *nyora* peppers, which give the sauce its red color and a hint of heat. In Tarragona, Spain, *romesco* is served with *calçots*, a spring green onion caramelized over an open coal fire, but *romesco* pairs well with grilled fish, chicken, pasta and potatoes and other vegetables.

The classic version of this dish typically includes toasted hazelnuts or almonds, but walnuts are also a top choice. They not only contribute a meaty texture and rich flavor, but also provide 2.5 grams of alpha-linolenic acid, 2 grams of fiber and 4 grams of protein per 1-oz. serving. Almost all walnut processors offer the nut in a double-dice form, also known as walnut meal.

There are as many versions of Spanish *romesco* as there are Italian marinara. My gold-standard version of this recipe was, in part, inspired by Chef Greg Higgins, a James Beard award-winning chef who owns Higgins in Portland, OR. I included some of the unique flavors in Higgins’ sauce, like orange juice and sherry vinegar (red-wine vinegar would be the usual choice), but also followed more-traditional versions and included tomatoes and *nyora* red peppers. *Romesco* can be prepared raw or cooked, and it can be served room temperature or warmed; serving it warm brings out the most layers of flavor.

Most of the ingredients used in the gold standard are available industrially, with a few exceptions. *Nyora* red peppers cannot be purchased in large quantities, so roasted, individually quick-frozen (IQF) red peppers were used instead. Also, fresh-squeezed orange juice was replaced with a Brix-controlled concentrate. Many of the ingredients could be procured pre-roasted or pre-sautéed, already minced, and ready to go into a batch tank.

Romesco sauce can be manufactured as a commercially sterile shelf-stable sauce, or as a non-sterile refrigerated item with a shorter shelf life. In order for a product to be commercially sterile, it must be heated to 185° to 200°F and have a final equilibrium pH below 4.6, which inhibits the outgrowth of *Clostridium botulinum*. The refrigerated version allows the manufacturer to use little heat during processing and have better control over the final flavor profile. No acidification is required, since refrigeration is the microbiological inhibitor. However, this product’s shorter shelf life compared to the shelf-stable version will likely dictate a higher selling price.

This *romesco* sauce has more than 10% non-acid ingredients, like red pepper, walnuts and garlic, which can result in a finished-product pH greater than 4.6. This means that, if this product is to be made shelf stable, the thermal process must be established with a processing authority, acidified with an FDA-approved acidulant like citric acid or lemon-juice concentrate to bring it below pH 4.6 (possibly making the sauce slightly more tangy than the gold standard), and the product must be filed with FDA as an acidified food.

Regardless of the route for processing and ultimate shelf positioning, there is a need for more *romesco* sauce in the retail and foodservice market. *Romesco* has the advantage of being a unique sauce that blends together simple ingredients that are readily available to any manufacturer. ●



Photo: California Walnut Board

Recipe:

Ingredients

6 medium tomatoes
4 *nyora* red peppers, seeded
½ head garlic
1⅓ cup walnuts
1 large onion, minced
6 tablespoons extra-virgin olive oil
2 medium oranges, juice and zest
4 tablespoons sherry vinegar
1 tablespoon crushed red pepper
Salt to taste

Procedure: Roast the tomatoes, *nyora* peppers and garlic in the oven until evenly roasted on all sides. Blend in a food processor until chunky in texture; set aside to cool. Grind the walnuts in a food processor until finely ground. Sauté the onions in the olive oil for about 5 to 7 minutes, then add the orange juice and zest, sherry vinegar, crushed red pepper and ground nuts. Stir until well incorporated and simmer for 3 to 4 minutes. Remove from heat and allow to cool. Purée in a food processor to desired finished consistency. Final sauce can range anywhere from chunky with noted particulates to thin without any particulates. Season the final sauce with salt to taste.

Formula:

Ingredients	% by Weight
Sherry vinegar, 70-grain	2.87
Orange-juice concentrate, 60°Brix	2.60
Olive oil, extra-virgin	2.47
Walnut meal, finely ground	7.32
Red pepper flakes	0.18
Tomatoes in juice, fire-roasted, ½-in. dice	45.98
Red pepper, fire-roasted, minced, IQF	24.62
Onion, sautéed, minced, IQF	10.98
Garlic, oven-roasted, diced, IQF	1.83
Salt	1.15
Total	100.00

Citric acid, anhydrousAs needed for the shelf-stable sauce

Procedure: In a mixing tank, combine the sherry, orange-juice concentrate, olive oil, walnut meal and red pepper flakes. Mix until well blended. Then add the tomatoes with juice, red peppers, onions, garlic and salt, mixing again until well incorporated.

Shelf stable: Take a representative sample of the mixture and measure the pH. Calculate how much citric acid is needed to bring the pH to the level predetermined by an FDA-mandated processing authority. Add the appropriate percentage of citric acid to the mixing tank, blend well and recheck the final product pH. When the appropriate pH reading has been reached, the product can be processed between 185° and 212°F and then packaged into a can, glass jar, laminated pouch or plastic container. The specific time-and-temperature procedure, which includes both the fill and hot hold, must be predetermined by an FDA-mandated processing authority. All shelf-stable products manufactured under pH control should be put on hold for 48 hours so the pH equilibrates, then checked by a third-party laboratory.

Refrigerated: Bring the blended product up to a minimum temperature of 185°F and hold for 3 to 5 minutes to inactivate spoilage organisms. If desired, a longer, slower cook time can be used to meet desired sensory attributes (like particulate size and cooked flavor profiles). Run the final product through a cooling tunnel to rapidly bring the temperature below 40°F. Case and ship the sauce below 40°F.