

## LESSON PLAN: Fresh Craft Sausages with Ground American Lamb –

### Not Your Usual Grind

By Chef Mark DeNittis

*Many globally inspired dishes include lamb sausages. Starting with ground lamb is an affordable and approachable way to introduce lamb and sausages to your students. No grinder, stuffer or casings needed. \Maximum flavor. Profitable results. American Lamb – Not Your Usual Grind.*



### TOOLS/INGREDIENTS NEEDED

Sausage making typically involves the use of grinders, stuffers and casings. In this lesson plan, we will focus on making fresh approachable lamb sausages which do not require this equipment.

- Ground American Lamb (80/20)
- Salt (regular or sea salt, kosher)
- Liquids imparting moisture and/or flavor (water, wine, vinegar)
- Herbs and Spices
- Large Mixing Bowl
- Gloves for handling
- Portion scoops or spoons
- Sheet pan (half or full depending on volume)
- Optional: skewers (wooden or metal)
- Parchment paper

### FRESH SAUSAGE DEFINITION

Fresh sausages are a coarse or finely "comminuted" (reduced to minute particles) meat food product prepared from one or more kinds of meat, or meat and meat "byproducts" (heart, kidney, or liver, for example).

Fresh sausage may contain water not exceeding 3 percent of the total ingredients in the product. They are usually seasoned, frequently cured/cooked, and may contain binders and extenders (for example, wheat flour, and non-fat dry milk). They must be kept refrigerated and thoroughly cooked before eating.

See Sausage Classifications (page 156-157 of [USDA Food Standards and Labeling Policy Book](#)) for additional information.

### SAFE HANDLING

- Maintain clean and sanitary work area
- Work in manageable batch sizes keeping in mind time/temperature
- Store refrigerated for 1 to 2 days unopened/opened
- Store frozen for 1 to 2 months
- Cook to internal temperature of 160°F

## ABOUT AMERICAN LAMB INDUSTRY

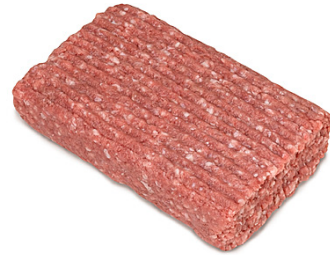
There are more than six million sheep in the United States and more than 80,000 sheep farms and ranches, the vast majority of which are family owned and operated. Flocks in the East and Midwest are smaller, usually between 50 to 300 animals, while operations in the West range from those same small flock sizes up to 10,000 sheep. Sheep are raised in every state. Leading sheep production states are Texas, California, Colorado, Wyoming and South Dakota.

Today's U.S. sheep producers focus on producing flavorful and tender meat, with wool as the byproduct. The most common breeds of sheep in the United States are Dorset, Hampshire, Rambouillet and Suffolk. These breeds are known for their larger size.

Sheep are generally processed at 7 to 10 months of age. The average weight of a lamb heading for processing is around 135 pounds. Meat from a sheep less than one year of age is called lamb. Meat from an older animal is referred to as mutton. All American Lamb is either USDA inspected for wholesomeness or inspected by state systems equal to the federal government.

## ABOUT GROUND AMERICAN LAMB

As noted in the North American Meat Institute's Meat Buyer's Guide, ground lamb shall be prepared from any portion of a lamb carcass. Unless otherwise specified, the fat content shall not exceed 20 percent. Purchasers, however, may specify a different fat content provided it does not exceed 30 percent.



*Note: The North American Meat Institute's Meat Buyers Guide and Institutional Meat Purchasers Specifications are globally recognized product identification systems for meat standards.*

## HERBS AND SPICES COMMONLY USED IN SAUSAGES

American Lamb blends well with a variety of herbs and spices. Common herbs, spices and other ingredients used in sausage making include:

- Allspice berries
- Black peppercorns
- Celery seed
- Coriander seed
- Dill seed
- Dried ground chile peppers (varieties from sweet bell to jalapeno to chipotle to ghost chili and everything in between)
- Dried oregano
- Dried Rosemary
- Fennel seeds

- Yellow mustard seed
- Paprika (regular or smoked)
- Wine or vinegar (liquids other than water that add flavor and moisture)
- salts (experiment with varieties such as smoked and flavored salts)

*Chef Notes:*

- *Mix ground American Lamb incorporating non-meat ingredients thoroughly to evenly disperse ingredients, flavors will “bloom” slightly before cooking*
- *Cook and taste a small “patty” to make any final adjustments as necessary for salt or seasoning; remember recipes are intended as guidelines -- make it your own or serve as is.*
- *Using whole ground spices and fresh herbs will impart a brighter flavor in smaller batch fresh sausages.*
- *Dry herbs are commonly used in commercial production of fresh sausages. When using dry in place of fresh herbs, decrease the amount by 2 to 3 times as dry herbs tend to be much more concentrated in flavor than fresh herbs.*
- *Sausages are by nature gluten-free; however, when sausages call for a binders such as wheat or breadcrumbs, try substituting with oats, quinoa, barley or similar grains to accommodate.*
- *Consider low-salt alternatives for salt-sensitive populations such as health care, seniors or individuals with high blood pressure substituting with the following:*
  - *Potassium Chloride*
  - *Acids: Citrus Juice, Vinegar, Wine*
  - *Citrus Zest*

**FORMS FOR UNCASSED AMERICAN LAMB SAUSAGES**

**Patties:**

- Hand Formed – Country - Home – Cloud Style
- Portion Scoop – Meatballs and/or Pressed Portion Patties (Parchment Paper & Sheet Pans)
- Patty Machine

**Other Forms/Shapes:**

- Quenelle - Oval Three-Sided
- Oblong – Shish Kebab hand formed or rolled
- Round/Ball
- Loaf - Muffin – Pie Tin

**Portion Size Averages:**

- .25 to 1-ounce (single bite, tapas style)
- 1 to 3-ounce (appetizer)
- 3 to 8-ounce (full entrée portion serving)

## LAMB SAUSAGE RECIPES

### American Lamb Breakfast Sausage

Executive Chef Christopher DeJohn, CEC, AAC  
Centerplate  
Sports Authority Field at Mile High  
Denver, Colorado

Yield: 12 servings

INGREDIENTS	WEIGHTS/MEASURES
Dried sage	2 teaspoons
Salt	2 teaspoons
Ground black pepper	1 teaspoon
Dried parsley	1 teaspoon
Coriander	1 teaspoon
Thyme	1 teaspoon
Dried marjoram	1/4 teaspoon
Crushed red pepper flakes	1/8 teaspoon
Ground cloves	1 pinch
Brown sugar	1 tablespoon
Ground <b>American Lamb</b>	1 pound
Ground pork	1 pound

#### METHOD:

In a small bowl, combine sage, salt, pepper, parsley, coriander, thyme, marjoram, pepper flakes, cloves and brown sugar; mix well. In a large bowl combine ground lamb and pork; add mixed spices and mix well with hands. Form meat mixture into patties.

In a large skillet over medium-high heat, sauté the patties for 5 minutes per side, or until internal temperature reaches 160°F (73°C).

## Greek Lamb Meatballs

Sam Woodfill  
Executive Sous Chef  
Catering by Design  
Denver, Colorado

Yield: 50 meatballs



<u>INGREDIENTS</u>	<u>WEIGHTS/MEASURES</u>
Ground <b>American Lamb</b>	7 pounds
Eggs	5
Toasted bread crumbs	3 cups
Feta cheese crumbles	2 cups
Lemon juice	1/4 cup
Finely chopped fresh parsley	1 ounce
Lemon zest	2 tablespoons
Finely chopped fresh thyme	1 tablespoon
Finely chopped fresh oregano	1 tablespoon
Finely minced garlic	1 tablespoon
Salt <i>and</i> pepper	to taste
Olive oil	as needed

### METHOD:

In a chilled metal bowl, add lamb, eggs, bread crumbs, cheese, lemon juice, parsley, lemon zest, thyme, oregano, garlic, salt and pepper; lightly mix until all ingredients are incorporated. Form into 2-ounce meatballs. On a well-oiled sheet tray, place meatballs close together. Bake at 375°F for 15 to 20 minutes, or until internal temperature reaches 165°F.

### Chef Tips:

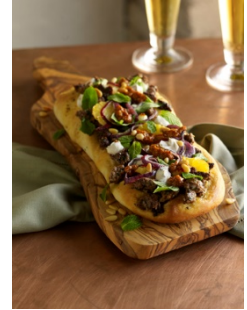
When rolling meatballs, coat hands with oil. This will ensure the ground meat doesn't stick to your hands and will help the meatballs to brown.

Serve meatballs garnished with grilled lemon wheels, grilled pita wedges and Tzatziki sauce.

## Merguez Flatbread with Tahini Yogurt and Harissa

Chef Alicia Jenish-McCarron  
Executive Chef  
Artisan Restaurant Collection  
San Francisco, California

Yield: 8 appetizer servings



<u>INGREDIENTS</u>	<u>WEIGHTS/MEASURES</u>
Flatbread dough	9 ounces
Merguez (recipe follows)	2 cups
Feta, crumbled	1/4 cup
Lemon, pared, thinly sliced, seeded	1
Red onion, thinly sliced	1
Tahini Yogurt (recipe follows)	1/2 cup
Harissa (recipe follows)	2 tablespoons
Mint leaves, torn	1/3 cup
Pine nuts, toasted	2 tablespoons
 <u>Merguez:</u>	
Ground <b>American Lamb</b>	1/2 pound
Cumin, toasted and ground	1/2 teaspoon
Coriander, toasted and ground	1/2 teaspoon
Paprika	1 teaspoon
Lemon zest	1/2 teaspoon
Lemon juice	1 tablespoon
Red wine	1 tablespoon
Extra virgin olive oil, divided	2 teaspoons
Kosher salt	1-1/2 teaspoons
Mint, packed then chopped	2 tablespoons
Parsley, packed then chopped	2 tablespoons
 <u>Tahini Yogurt</u> (makes 1 cup):	
Greek yogurt	1/3 cup
Tahini	1 tablespoon
Toasted black sesame seeds	1-1/2 teaspoons
Lemon juice	3/4 teaspoon
Extra virgin olive oil	3/4 tablespoon
Water	1-1/2 tablespoons
Kosher salt	1/2 teaspoon

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Harissa (makes about 2 tablespoons – or use a mild premade harissa):

Coriander seed, toasted and ground	1/2 teaspoon
Fennel seed, toasted and ground	1/2 teaspoon
Cumin seed, toasted and ground	1/2 teaspoon
Caraway seed, toasted and ground	1/2 teaspoon
Chile paste (or pureed roasted pepper)	1 tablespoon
Minced garlic	1/2 teaspoon
Minced preserved lemon	1/2 teaspoon
Extra virgin olive oil	1/2 tablespoon

**METHOD:**

Lightly spray baking sheet with oil. Roll flatbread dough into two 6-inch x 12-inch rectangles. Crumble and cover each with about 1 cup Merguez. Sprinkle each with 2 tablespoons feta, 6 slices lemon and slivers of red onion. Bake at 450°F until the dough is toasted and brown, about 12 minutes.

Remove from oven and drizzle each with 1 tablespoon of Harissa and 1/4 cup of Tahini Yogurt. Sprinkle with fresh mint and pine nuts. Slice and serve.

For the Merguez: In a bowl, combine lamb, cumin, coriander, paprika, lemon zest and juice, wine, half the oil and salt. Refrigerate for at least one hour. In large skillet, heat remaining oil; cook lamb until browned, about 4 minutes over high heat. Pour off excess fat. Stir in mint and parsley.

For the Tahini: In a mixing bowl, combine yogurt, Tahini, sesame seeds, lemon juice, oil, water and salt. Mix thorough; reserve for finishing.

For the Harissa: In a blender, combine coriander, fennel, cumin, caraway, chile paste, garlic, lemon and oil; puree until smooth.

Additional Merguez recipes:

- [Merguez Scotch Egg](#)
- [Merguez Bucatini](#)
- [Merguez Pizza Confit Tomato - Fennel](#)

## Skewered Spiced Lamb Kafta

Chef Mark DeNittis  
Business development Specialist  
DeNCO Enterprises  
Denver, Colorado

Yield: 12 servings, 2 skewers each



INGREDIENTS	WEIGHTS/MEASURES
Ground <b>American Lamb</b>	4 pounds
Small red onion, peeled, finely diced	1 medium
Lime juice	3 ounces
Flat leaf parsley, leaves only, finely chopped	3 bunches
Ground coriander	3/4 teaspoon
Ground cinnamon	3/4 teaspoon
Cayenne	3/4 teaspoon
Allspice	3/4 teaspoon
Cardamom	3/4 teaspoon
Sea or kosher salt <i>and</i> black pepper	to taste
Pita bread rounds	12
Extra virgin olive oil	as needed
Sumac, ground	1 teaspoon
Minted Citrus-Fennel-Couscous Salad	1-1/2 quarts

### METHOD:

Mix together lamb, onion, lime juice and parsley. Season with coriander, cinnamon, cayenne, allspice, cardamom, salt and pepper. Refrigerate lamb mixture to chill. Once chilled, shape into 24 approximately 3-ounce flattened patties. Wrap around skewers. Grill or cook in skillet with a little oil until done, or until internal temperature reaches 165°F.

Brush pitas with olive oil and sprinkle with sumac. Toast or grill until crisp. Break into chips.

Serve with a chilled salad of couscous seasoned with thinly shaved fennel bulb, orange peel and juice, olive oil and torn fresh mint. If desired, garnish with orange and grapefruit slices.

Additional Kafta recipes:

- [American Lamb Kofta Meatballs with Green Chutney](#)
- [Grilled Lamb Kofte with Saffron Spiced Yogurt](#)
- [Lamb Kofta in Tomato Curry](#)





**COMMERCIAL RECIPE FORMULATION**

In commercial volume production of sausages, measurements such as tablespoons, teaspoons and cups are not common practice. Thus, for larger batch sausage making, you should convert recipes from these measurements to weight measurements. Setting up a template in a program such as Excel can help you scale formulations.

Example:

<b>Ingredient</b>	<b>LAMB SAUSAGE RECIPE/FORMULA INGREDIENT DECK</b>					<b>Ing. %</b>
Ground American Lamb	5LB	10LB	50LB	100LB	200LB	93 – 97%
H2O Water Liquid Aromatics Vinegar/Wine						Up to 3%
Salt						1 – 2 %
Spices/Herbs						.05 – 1 %
Binders/Other						.05 - 1%
BATCH TOTALS						100 %

**MERGUEZ IN COMMERCIAL BATCH**

Merguez is a spicy sausage in North African cuisine which is traditionally made with lamb. It can be used in diverse dishes – from Scotch eggs to pizzas to pasta dishes. Following is a sample formulation for merguez.

<b>PRODUCT: MERGUEZ</b>	<i>HACCP CATEGORY: RAW GROUND</i>			
Ingredient	INGREDIENT UNIT LBS			%
Ground American Lamb	25	50	100	94.02%
Water	.75	1.5	3	2.82%
Paprika	.31	.625	1.25	1.18%
Salt	.2	.4	.8	.75%
Granulated garlic	.092	.185	.37	.35%
Dry flake onion	.083	.166	.332	.31%
Ground black pepper	.035	.07	.14	.13%
Cayenne pepper	.031	.062	.125	.12%
Dry cilantro	.025	.05	.10	.09%
Ground cumin	.025	.05	.10	.09%
Ground coriander	.021	.043	.086	.08%
Dry oregano	.015	.03	.06	.06%
<b>BATCH TOTAL WT</b>	26.58	53.18	106.36	100.00%



## RESOURCES:

American Lamb Recipes: <https://www.americanlamb.com/recipes-for-industry>

American Lamb Curriculum: <https://www.americanlamb.com/curriculamb>

Cook Temperatures for Sausages: <https://www.foodsafety.gov/food-safety-charts/safe-minimum-cooking-temperature>

USDA Food Standards and Labeling Policy Book:

<https://www.fsis.usda.gov/sites/default/files/import/Labeling-Policy-Book.pdf>

Great Sausage Book By Rytex Kutas. A personal favorite and highly recommended read featuring more than 550 Pages including a variety of exciting fresh, cooked and dry/fermented sausage recipes incorporating lamb and other meats. References to commercial production, processing, safety and sanitation for state and federal regulatory practice are included within.

Len Poli: <http://lpoli.50webs.com/Sausage%20recipes.htm>

## CHEF DENITTIS BACKGROUND

Chef and Business Consultant Mark DeNittis is a pioneer in the world of modern butchery, charcuterie and salumi. DeNittis served as Culinary Educator and Chairperson of the Meat Cutting Curriculum at Johnson & Wales University from 2000 to 2010. In 2011, he founded The Rocky Mountain Institute of Meat. DeNittis has owned and operated Il Mondo Vecchio Salumi USDA Manufacturing. He has also worked as Center of the Plate Protein Specialist for Sysco Denver as well as Corporate Chef and Sales Manager for various meat companies.