



# QUESO DIEGO

## THE SAN DIEGO CHEESE CLUB

February, 2019

From the desk of Queso Grande, Larry Stein

I hope everyone had a great time at our Anniversary Party last month. If you didn't then you weren't there. Many thanks to everyone who helped make it a wonderful event. We've added the menu as part of this newsletter so you can go out and try these on your own. What a great way to impress your friends.

Now it's time to get down to the business of the club. Our first meeting of the year will be on Tuesday, Feb 19<sup>th</sup>. Food share and social time starts at 6:30 and the meeting starts at 7:00. To kick off the year we thought it would be good to look at the history of cheese. See how this great food got started and why we love it today. Marci Richards will be presenting this month. I'm sure it will be informative and tasty, with samples to get us through.

Speaking of presentations, the board has a few slots open for new ideas. We'd love for one of our members to offer to present on a topic they are interested in. It could be a cheese style you like, an overview of cheese from a country or region, a process, or something else. Please come up and see me at any meeting or send me an email as we'd love to have a new presenter. We have lots of experience and can help anyone with templates and ideas. It's fun to do and you get to pick the cheeses for the night.

The Fermentation Festival is coming February 17<sup>th</sup>. There's more specific information in this newsletter. The key thing is that Queso Diego has been part of the festival for the last 4 years and we're happy to have a booth again this year. We just do an information booth with some of the tools used in Cheesemaking and information about the club. I'll be doing a presentation on "Introduction to Cheesemaking". If you're new to the club or just getting started with Cheesemaking you may want to come see that. For the booth we need 4 more volunteers. The event runs 11-a.m.-5 p.m. You'll work in pairs for about 2-2 ½ hours, and then enjoy the rest of the festival. If you don't get to or want to volunteer, I really suggest you consider coming. It's a great event with all things fermented, and you take home a jar of your very own sauerkraut. Check out the website for more information and to purchase tickets. This event is put on by our very own member, Austin Durant.

One more announcement: Hold the dates, June 1-2. We'll be doing a Baja tour starting at the Cave de Marcelo cheese cave and creamery outside of Ensenada. Then Saturday night and Sunday we'll tour and enjoy some the wineries, breweries, food and cheese shops from Ensenada through the Valle Guadalupe and back up to San Diego. More information will follow, but hold the date! (Don't forget to check your passports while there's still time.)

That's it for now. See you at the Festival and then the meeting.

Stay cheesy my friends.

-Larry

### It's Membership Renewal Time for 2019!

Queso Diego dues are \$20 per year for individuals or \$30 per household. These dues help us pay for meeting supplies and commercial examples, as well as supplies for pairings and other club expenses. If you haven't already renewed for this year, you can pay your dues at our next meeting, or online from our [membership page](#) of the QuesoDiego website.

## FEBRUARY EVENTS

**February 17**

**Fermentation Festival**

**11 am—5 pm**

**February 19, 6:30 pm**

General Meeting @ Ale Smith

**History of Cheese**

**Presenter: Marci Richards**

## MARCH EVENTS

**March 19, 6:30 p.m.**

General Meeting @ Ale Smith

### Fermentation Festival, February 17th 11 am—5 pm

Queso Diego has participated in this event for the last four years. We have an informative booth where we introduce people to the hobby of Cheesemaking and provide some of the session talks.

From their [website](#):

A one-day, family-friendly outdoor festival celebrating fermented foods and beverages, local food and wellness featuring:

- Workshops and demos from experts on how to make and enjoy fermented foods and beverages
- DIY Sauerkraut stations
- Ambrosia Garden (21+) with tasters of local beer, wine, mead, cider and more (and keeper souvenir glass!)
- Keynote Panel by Dr. Rob Knight, UC San Diego about latest research on human microbiome (healthy gut!)
- Makers Marketplace with over 35 local and regional makers
- Wellness Pavilion with yoga classes, sound healing, acupuncture, and massage
- Live Music on 2 stages

**800 Ecke Ranch Road, Encinitas, CA 92024**



## Save the Dates: June 1-2, 2019 for Baja Tour

Tour starting at the Cave de Marcelo cheese cave and creamery outside of Ensenada. Then Saturday night and Sunday we'll tour and enjoy some of the wineries, breweries, food and cheese shops from Ensenada through the Valle Guadalupe and back up to San Diego. Don't forget to check your passports while there's still time.

Check upcoming newsletters for more information.



## The Human Hand in Cheesemaking: Curd Formation

### Curt Wittenberg

Coagulation or curd formation is the step in cheesemaking in which milk becomes cheese. There are several ways to get there and even more ways to go from there to the final product, but once curd is formed the milk, a liquid, becomes cheese, a solid. This month's column will explore the process of forming curd and its role in setting the process on the path toward the desired end product. I will attempt to demystify the choice of methods to set curd. While most of those variations arose via trial and error, there is an explanation for their role in achieving the properties characteristic of the cheese style for which they are used.

The fermentation of milk, discussed in the January newsletter, is generally thought of as the first step in the cheesemaking process. In fact, its primary function is to prepare milk for coagulation or curd formation. Sometimes the acidification of milk that arises from fermentation is sufficient for formation of curd. One of the simplest examples of an acid-coagulated curd is yogurt, which, although very soft and easily disrupted, when drained it can become a simple tart, yet pleasing, cheese.

But one doesn't have to ferment the milk to get acidity. Under appropriate conditions, addition of lactic acid or even vinegar to milk will promote curd formation. This approach is used in the production of many simple cheeses. A related method of curd formation, coagulation with heat and acid, is common in the production of quick cheeses like paneer, mascarpone, ricotta and halloumi.

However, a simple acid coagulation is unlikely to lead to the beautiful and versatile curd needed to make high quality pressed cheeses or even short-aged cheeses like Brie, Camembert and others with a supple creamy paste and high fat retention. For those cheeses, we rely on the rennet to facilitate coagulation. The active ingredient in rennet is the enzyme chymosin, an enzyme that trims. Curd formed with rennet is generally formed more quickly and has the sometimes desirable side effect of promoting coagulation without the need for high acidity. This provides the cheesemaker with the option of producing a curd that is more elastic and less tart. For more tartness, add less rennet and let the acid do more of the work (consider chevrè); for less tart cheese add more rennet and coagulate quickly (consider gouda or brie).

So, what is going on during coagulation of the milk? The casein proteins in milk form clusters that have a high concentration of negatively-charged amino acids exposed on their surface. Those common charges make casein clusters repel each other like the common poles of magnets when they come into close proximity. Since cheese curd forms when these clusters begin to stick together, we must "neutralize" or mask the charge via one of the methods already discussed. First, we can increase the acidity to pH 4.6, thereby increasing the concentration of positively charged hydrogen ions which can neutralize the negative charge on casein. Next, when casein is heated, the strands of amino acids that make up the protein begin to unravel through a process known as "denaturation". This brings more uncharged "hydrophobic" amino acids to the surface. Hydrophobic amino acids like to stick to each other, making the proteins more "sticky". Finally, addition of rennet leads to the trimming of the negatively amino acids from the surface of casein, which also makes the proteins more sticky, facilitating coagulation. Calcium, which is reduced during pasteurization, plays an important role in that process, explaining the requirement for addition of calcium chloride prior to coagulation when using pasteurized milk. In general, curd formation involves two or more of these treatments and the degree to which each is used in a specific recipe plays a big part in determining the nature of the curd that formed. Those properties of the curd determine its behavior during the subsequent steps of cheesemaking and much about the nature of the cheese that results.



## Aging Cheese in Vacuum Bags

### Chris Banker

One of the most time-consuming parts of making hard cheeses is all of the attention they require over months or even years of aging. If you go on vacation for too long, you can come back to moldy cheese. You almost need to consider hiring a babysitter for your cheeses.

Certain cheese styles are waxed and that does a good job at sealing the cheese to prevent it from growing mold or drying out. However, waxing does take some effort and small holes, air bubbles, or trapped whey create problems that can't easily be seen during aging.

Another option is to vacuum seal your cheeses for extended aging. This involves simply taking a whole or partial wheel of cheese and sealing it in a food-grade vacuum bag with a vacuum sealer.

A few of the benefits:

- Vacuum sealing is much easier than waxing
- Very low maintenance
- Extremely low opportunity for mold growth
- Humidity control is no longer important
- You can easily see if any whey is collecting or if anything is growing
- You can cut off part of the wheel to sample and re-seal the bag for continued aging
- Vacuum sealing tends to be more compatible with natural rind cheeses after the rind has developed, compared to waxing
- Vacuum bags are really easy to write on with a marker to identify the cheese

There are, however, some drawbacks. Having a vacuum sealer is a prerequisite, although it's a very useful tool to have anyway. Vacuum sealing only works for semi-firm to firm cheeses, and there may be a small subset of cheeses that could be waxed but would not hold up to vacuum sealing. If a cheese is not dry enough, the vacuum sealing can draw out excess whey beyond what might come out in a waxed cheese, and possibly degrade the rind. Natural rind cheeses will not experience any further rind development after vacuum sealing, which can be desirable or undesirable. A mature natural rind or oil-rubbed rind is likely to work well with vacuum bagging, whereas wax would be unlikely to stick to it and could degrade the rind.

Steps to vacuum seal cheese:

- Perform initial air drying and aging steps, and age in cheese cave for at least a couple weeks
- If the cheese has a natural or oil-rubbed rind, make sure the rind has time to fully develop to your liking
- Ensure that the cheese is dry enough. It should be firm and dry to the touch. It can help to place the wheel uncovered in the regular refrigerator for a day or two to help dry it out a bit more.
- Place the cheese in an adequately sized vacuum bag. Leaving some extra material will allow you to open and re-seal the bag several times. Write on the bag to identify the cheese.
- Seal with your vacuum sealer. If you have "Moist" and "Gentle" options, choose both. The "Gentle" option will use less pressure and affect the cheese less. The "Moist" option will seal a bit longer to ensure a good seal. It is also helpful to guide the folding of the bag so you don't end up with wrinkles on your cheese surface.
- Age at normal cave temperature in your cheese cave, but don't worry about humidity for vacuum bagged cheeses. Flip occasionally.
- Keep an eye out for accumulating moisture inside the bag. If you see any liquid, open the bag, dry the bag and wheel, dry the cheese in the fridge for a day or two, and then re-bag.
- If you want to consume part of the wheel, open the bag, cut off a piece leaving a convex wheel (don't cut a wedge out of it), then re-seal. If you want a wedge of less than half of the wheel, cut the wheel in half and seal that, then re-seal the parts of the other half separately.

Vacuum sealing cheeses is a great way to build up a collection of aged cheeses to age and enjoy over months, years, or even decades.

## Anniversary Chocolate Truffles (approximately 20 truffles) Sabine Friedrich-Walter

### Basic Recipe Ingredients:

6 ounces bittersweet chocolate, chopped  
6 ounces fresh (mild) goat cheese at room temperature  
3 Tablespoon honey  
1 Tablespoon almond butter  
1/4 cup cocoa powder

### Directions:

- Melt the chocolate in a double boiler, by simmering heat. Stir until smooth. Set aside.
- In a separate bowl mix goat cheese, honey and almond butter together until well combined. Whisk in melted chocolate
- After adding your favorite ingredients (see below)\*, chill the chocolate goat cheese blend covered in your refrigerator for 1 hour or until firm.
- To form the truffles take a heaping teaspoon of the mixture and lightly roll into balls with your hands. Set them aside on a baking sheet lined with wax paper.
- Roll finished truffle in sifted cocoa powder and chill for approximately 30 minutes
- Store in an airtight container. The truffles will keep fresh up to 3 days.

### \* Other variations:

#### Anniversary Truffles

Add 1/2 Teaspoon Cinnamon and 1/2 Teaspoon Cardamom powder

#### Classic

Substitute Honey and Almond butter with  
1/4 cup confectioners' sugar  
1/2 teaspoon vanilla extract

#### Spicy

2 Tablespoon confectioners' sugar  
1 Teaspoon cinnamon  
3/4 Teaspoon powdered ginger  
Dash chili powder  
1/8 cup fine chopped dry cranberry (optional)

Gutes Gelingen  
Happy making  
Sabine





1<sup>st</sup> Pairing

- Cheese:** 5 Year Cheddar, Face Rock Creamery, Oregon, Cow milk, Cheddar  
1st place ribbon at the 2015 ACS (American Cheese Society) Awards in the "BEST Aged Cheddar" category. Long aged rindless Cheddar. Tangy and full of Tyrosine crystals
- Bubbly:** Berliner Weise, North Coast Brewery, Ft. Bragg, CA  
Cranberry-Quince Berliner Weisse is made with the juice of Oregon cranberries and the pear-like quince. Tart and refreshing.

2<sup>nd</sup> Pairing

- Cheese:** Trillium, Tulip Tree Creamery, Indiana, Cow milk, Triple Crème  
Soft ripened, full fat and buttery, with a little lactic tang when young; earthy, mushroomy as it ages.
- Bubbly:** Farmers Blend Cider, Raging Cider & Mead, San Marcos, CA  
Lightly effervescent hazy dry cider with hints of tart wine, apples and honey. This is a wild-fermented cider derived from the juice of blended Winesap, Idared, Liberty and Wickson apples, all from our local mountains. The pressed apples are aged on lees in red wine barrels for 1 year and then raked and bottled to produce beautiful dry cider with a wild edge.

3<sup>rd</sup> Pairing

- Cheese:** Ewenique, Gouda, Central Coast Creamery, CA, Sheep milk  
2016 - World Cheese Championship - Best in Class  
This extremely complex cheese boasts incredible sweetness and flavors redolent of salted caramel and fresh vanilla beans with a slight hint of citrus to contrast the savory qualities of the sheep milk.
- Bubbly:** Saison Dupont, Brasserie Dupont, Belgium  
Considered as "the classic" among the Belgian season beers! Coppery blond, the finest aromas and a strong bitterness transform this beer into a thirst-quencher with no equal.

4<sup>th</sup> Pairing

- Cheese:** Beaufort Alpine, Chateau d'Alpage, France, Cow  
Beaufort is an alpine cheese of the Gruyère-style, produced in the Beaufortain, Tarentaise and Maurienne valleys in the Savoie region of France. Beaufort cheese is pale yellow, with a smooth and creamy texture. Its distinct aroma, sometime described as strong or mildly pungent and reminiscent of the pastures on which the Tarentaise and Abondance cows graze comes, in part, from the rind which is smear-ripened with a mixture called morge. The cheese is aged for 6–12 months in cool mountain cellars.
- Meat:** Elk & Berkshire Pork Cured Meat, Angel's Truffle & Salumi, Carlsbad, CA  
Made with Red Port Wine, Red Dutch Cacao Powder, and Pink Peppercorn
- Bubbly:** GREAT 2018, Barley wine, Alpine Brewery, Alpine CA  
Aged in whiskey barrels and left to rest for twelve months. GREAT pours a chestnut amber hue with an off white foam. Hints of caramel, oak, whiskey, sweet bread aromas are balanced by a sweet malty character dominated by caramel, oak and vanilla with trace amounts of whiskey.

5<sup>th</sup> Pairing

- Cheese:** Brebicot (Fromager d'Affinois Brebicot), Guilloteau creamery France, Sheep  
Bloomy rind sheep milk cheese with a rich lightly sweet flavor punctuated by pungent overtones. Made in the Rhone-Alps region of France. Delicate and supple paste that is creamy and soft.
- Bubbly:** IPA, AleSmith Brewing Company, San Diego, CA  
Aromas of grapefruit and tangerine lead into an abundance of fresh pine and tropical fruit notes followed by a crisp, resinous bitterness. The complex hop profile is supported by a firm malt presence to create an incredibly flavorful and well-balanced IPA.

Dessert Pairing

- Cheese:** Truffles by Sabine Friedrich-Walter  
Homemade dark chocolate ganache truffles made with honey, almond butter, and goat cheese "chevre" with cinnamon and cardamom. Covered in dark cocoa powder
- Bubbly:** Schloss Bieberich Sekt, German Sparkling Wine  
Bright and floral, this wine is almost as translucent and colorless as water. Modest apple aroma with a hint of pears and a flowery finish.

## Library of Cheesemaking—A unique benefit of this club!

The Club's Library is a great benefit, especially for those of us just starting out. It gives members an opportunity to get going without having to invest a lot of cash up front. You can borrow equipment (draining baskets, forms, presses, spoons, thermometers, etc.) and books on Cheese making. Or order cheese cultures (Flora Danica, feta culture, rennet, etc.) for just \$1.00 a sample good for 2 – 4 gallons of milk. And the books listed below also give you a chance to see what you like.

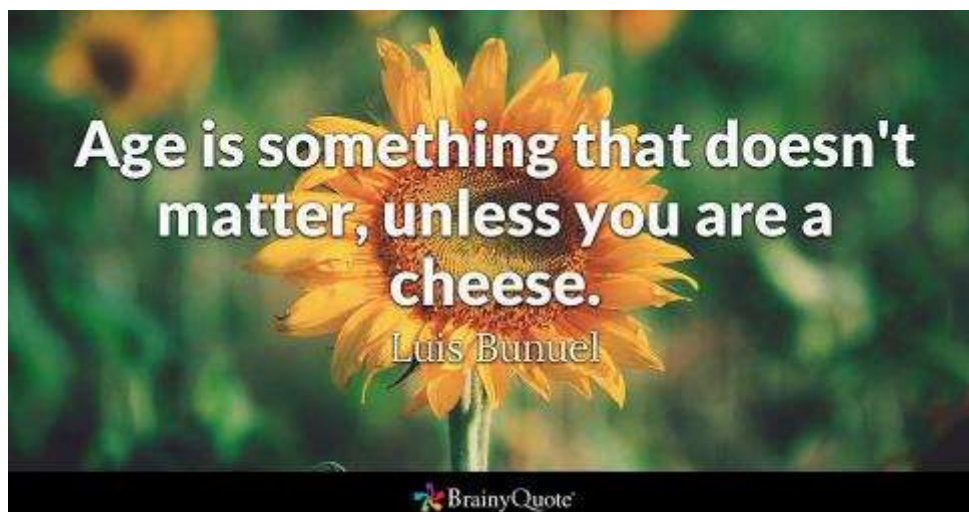
So if you've joined to start making your own cheese the library can really be a way to kick off a project!

Mastering Basic Cheesemaking	Gianacis Caldwell
Mastering Artisan Cheesemaking	Gianacis Caldwell
Artisan Cheesemaking at Home	Mary Karlin
Home Cheesemaking	Ricki Carroll
The Cheesemaker's Manual	Margaret Peters-Morris
The Science of Cheese	Michael H. Tunick
Cheesemonger: A life on the wedge	Gordon Edgar
The Complete Encyclopedia of Cheese	Christian Callec

Here is a link to the Library spreadsheet. The tabs at the bottom get you to what you need.

[https://docs.google.com/spreadsheets/d/19fLvqk26dKyUlf1Ay5E\\_IFhULYZ1rt8nk0SXir2R720/edit#gid=1491603828](https://docs.google.com/spreadsheets/d/19fLvqk26dKyUlf1Ay5E_IFhULYZ1rt8nk0SXir2R720/edit#gid=1491603828) .

Requests are generally filled at the monthly meetings. Simply request the items you'd like by sending an e-mail a week before the meeting to: [qd-library-request@quesodiego.org](mailto:qd-library-request@quesodiego.org).



Below are organizations who support Queso Diego. We hope you will support them as well! Click on the logos to get to their websites.

