

BEYOND MAC & CHEESE



Presented By

**Paula Bambrick
Patricia Moynihan Morris
Martin Raymond**

June 26, 2011

The History of Macaroni and Cheese

The exact origin of macaroni and cheese is unknown though it most likely hails from Northern Europe. Macaroni, a curved tubular pasta made from flour, has its origins in China and was brought to Italy by Marco Polo. Macaroni is mentioned in various medieval Italian sources. It is not clear whether it refers to a pasta shape or a prepared dish. However, pasta and cheese casseroles are recorded in cookbooks of the time, such as the *Liber de Coquina*, which demonstrates that they were known as a kind of dish.

A cheese and pasta casserole known as *Makerouns* was recorded in an English cookbook in the 14th century. It was made with fresh hand-cut pasta sandwiched between a mixture of melted butter and cheese.

Macaroni and Cheese was considered an upper class dish, even in Italy, until around the 18th century. At this time it became popular throughout Europe and colonists from England brought their recipes for this cheesy treat to North America.

Thomas Jefferson, known for his great interest in food, visited Paris and returned to the United States with noodle recipes and a pasta machine. In 1802, a macaroni pie was served at the White House during a state dinner. The recipe for this pie appeared in “*The Virginia Housewife*” a cookbook published by Mary Randolph, Jefferson’s cousin, in 1824.

Macaroni and Cheese is also known as “Mac and Cheese”, Macaroni Cheese” in British English, “Kraft Dinner” in Canadian English or “Macaroni Pie” in Caribbean English.

A similar traditional dish in Switzerland is called *Alpleermagronen* (Alpine Herder’s Macaroni). This version is made with macaroni, cream, cheese, roasted onions and potatoes.

The Challenge

Homemade Macaroni and Cheese is not complicated--usually a layering of cooked macaroni, shredded cheese or a cheese based sauce, topped with more cheese and/or buttered breadcrumbs. Easy to make with affordable, readily available ingredients, it is a good source of calcium and protein as well as carbohydrates. It is not surprising that many people consider this delicious dish the ultimate “comfort food”.

Fully aware that some would consider deconstructing and reconstructing an icon blasphemy, we made it our goal to attempt to enhance the original rather than give it a complete makeover. Some of the questions we pondered: Would substituting mascarpone cheese for some of the Cheddar create a kinder, gentler Macaroni and Cheese, perfect in the supporting role to a sturdier main dish? Would the addition of some funky blue cheese produce an in-your-face Macaroni and Cheese—the star attraction at any meal? Can we make these changes while still honouring the original?

Rising to the Challenge

Always up for a challenge, we set out to push the boundaries beyond Macaroni and Cheese by trying 6 different cheese pairings.

We began with a basic recipe for Macaroni and Cheese. For the purpose of our research, all the ingredients in the recipe remained constant except the cheese.

Our recipe calls for 8 oz. of Cheddar cheese. We decided to use 4 oz. of 4-year-old Perron Cheddar in all the pairings in combination with 4 oz. of another type of cheese. The alternate cheeses we chose were mascarpone, chèvre, Beemster Classic, Lancashire Cheddar, Applewood Smoked Cheddar and Gorgonzola.

We created tasting notes for each of the cheeses as we thought it would be interesting to compare these cheeses both uncooked and cooked. Could the cheese in its original condition be a predictor of its successful pairing in the quest for a “new” Mac and Cheese?

Our criteria for success were mainly sensory compatibility—did these pairings enhance/detract from the original recipe as well as intellectual—were we able to maintain the integrity of the original and did it even make sense to remake the “ultimate comfort food”?

We taste-tested the original 6 batches and came up with our “Top 3 Pairings”. All our pairings were rated on a 5-point scale. The following chart demonstrates our findings.

Our “Top 3 Pairings” were Cheddar and Beemster, Cheddar and Lancashire, and Cheddar and Smoked Cheddar.

Coming to Conclusions

Recipe testing/development is integral to our jobs. This project gave us the tools to approach this task in a very systematic way and this will definitely be a boon in our future work.

It is also interesting to note that the alternate cheeses in the “Top 3 Pairings” share a lot of the same flavour characteristics as Cheddar cheese, the most common choice for Macaroni and Cheese. This leads us to conclude that, perhaps when dealing with a classic, it is best not to stray too far from the original!

Macaroni & Cheese Pairing Comparison

Control Cheese Paired Cheese	Mascarpone	PC Chèvre	Beemster Classic 18 mo.	Lancashire English Cheddar	Apple Smoked Bacon
Perron 4 yr. Old Cheddar - Sharp	-Very creamy w/ little browning -Cheddar fully overwhelms Mascarpone	-Appearance is creamy w/ little browning -Lactic taste from Chèvre -Cheddar is primary flavour	-Good colour and browning -Full bodied texture -Beemster is top note in Nose -Umami from Beemster adds complexity -Nutty notes	-Classic colour and texture; perfect browning -Difficult to tell which cheese gives top note in Nose -Full bodied lactic, salty, sweet and umami flavour	-Great texture brown -Smoked Bacon -Smoked Bacon richness sharp
	Mascarpone could substitute for milk or cream in the recipe	Not a worthwhile pairing. Body of Chèvre too light to stand up to Cheddar	Good pairing Non-standard, but noteworthy flavours	This is the classic Mac & Cheese that anyone would expect from Mom's kitchen	A wonderful elevating touch.
	-1	-1	+1	+2	+2

Macaroni and Cheese

Serves 6

1 lb.	elbow macaroni
4 tbsp.	butter
4 tbsp.	all-purpose flour
½ tsp.	dry mustard
4 c.	milk
8 oz.	sharp Cheddar cheese, grated
	freshly grated nutmeg
	salt and pepper
1 tbsp.	melted butter
½ c.	dry breadcrumbs

Preheat the oven to 375°F. Grease a 2-qt. casserole.

Bring a large pot of lightly salted water to a rolling boil. Add the macaroni, stir and bring back to the boil. Cook until al dente, about 10 – 15 minutes. Drain.

Meanwhile, in a medium saucepan, melt the butter over medium heat. Add the all-purpose flour and whisk until smooth. Cook for about 1 minute.

Add the dry mustard and cook for another 30 seconds or so.

Slowly whisk in the milk and cook, whisking constantly, until mixture thickens and comes to a boil. Stir in the cheese and cook until it has melted. Remove from the heat and add nutmeg, salt and pepper to taste.

If your pot is large enough, stir the cooked pasta into the sauce. If it won't fit, transfer the pasta to a large bowl and pour the sauce over top. Stir gently to combine well. Transfer to the prepared casserole.

In a small dish, combine the melted butter with the breadcrumbs. Toss to mix well. Sprinkle evenly over top of the casserole.

Bake for 25 to 30 minutes, until golden brown and bubbling.

CHEESE TASTING JOURNAL

CHEESE NAME	COUNTRY OF ORIGIN	CHEESE STYLE	MILK TYPE
Mascarpone	Italy	Soft unripened	Pasteurized Cow

APPEARANCE (RIND AND PASTE)

Rindless
Paste is light ivory and creamy smooth

NOSE (INTENSITY, CHARACTERISTICS, FAULTS)

Medium intensity
Vanilla, milk, slightly lactic

PALATE (PRIMARY TASTES)	PALATE (FLAVOUR)	PALATE (TEXTURE, BODY)
Sweet – Low Salt – Neutral Bitter – neutral Sour – low	Milk Hints of butter Mildly lactic finish	Light body Dissolves readily Lasting finish of sweet butter

OTHER COMMENTS (QUALITY ASSESSMENT, PERSONAL IMPRESSIONS)

SUCCESSFUL PAIRINGS

Best use would be in desserts as a filling or paired with fresh fruit

CHEESE TASTING JOURNAL

CHEESE NAME	COUNTRY OF ORIGIN	CHEESE STYLE	MILK TYPE
PC Chèvre	Canada	Chèvre	Goat

APPEARANCE (RIND AND PASTE)

Rindless
Paste is white, chalky and moist

NOSE (INTENSITY, CHARACTERISTICS, FAULTS)

Very low intensity
Characteristics - Slightly lactic

PALATE (PRIMARY TASTES)	PALATE (FLAVOUR)	PALATE (TEXTURE, BODY)
Salt – Light Sweet – Light Sour – Medium Umami - Neutral	Intensity – light Goat, Crème fraiche	Creamy Light body

OTHER COMMENTS (QUALITY ASSESSMENT, PERSONAL IMPRESSIONS)

SUCCESSFUL PAIRINGS

Dried fruit, Sauvignon Blanc, Cured olives – not overly brined

CHEESE TASTING JOURNAL

CHEESE NAME	COUNTRY OF ORIGIN	CHEESE STYLE	MILK TYPE
Beemster	Netherlands	Semi hard to hard	Pasteurized cow's

APPEARANCE (RIND AND PASTE)

Waxed rind (Classic) aged 18 months
Caramel colour paste (butterscotch colour) , scattering of irregular shaped eyes

NOSE (INTENSITY, CHARACTERISTICS, FAULTS)

Fruity , nutty, scotch whiskey kind of fragrance, sweet and sharp at the same time

PALATE (PRIMARY TASTES)	PALATE (FLAVOUR)	PALATE (TEXTURE, BODY)
Salt –High Sweet - Medium Sour – Light Lots of umami	Rich, intense, butterscotch and toffee flavours, high on umami, tryrosine crystals	Hard, flaky and brittle Texture smooth

OTHER COMMENTS (QUALITY ASSESSMENT, PERSONAL IMPRESSIONS)

One of Pat's favourite cheese

SUCCESSFUL PAIRINGS

Fruity well rounded Merlot, California Zinfandel

CHEESE TASTING JOURNAL

CHEESE NAME	COUNTRY OF ORIGIN	CHEESE STYLE	MILK TYPE
Perron 4 year old Cheddar Cheese	Canada - Quebec	Firm	Thermalized cow's milk

APPEARANCE (RIND AND PASTE)		
Natural rind, pale ivory paste		
NOSE (INTENSITY, CHARACTERISTICS, FAULTS)		
Milky		
PALATE (PRIMARY TASTES)	PALATE (FLAVOUR)	PALATE (TEXTURE, BODY)
Salty –High Sweet - Medium Sour – Light Umami - Medium	Well developed sharpness	Dense, closed body, smooth texture

OTHER COMMENTS (QUALITY ASSESSMENT, PERSONAL IMPRESSIONS)
Melts well, lots of flavour, great choice for the mac & cheese Fromagerie Perron- traditional cheddaring process and natural aging – oldest cheese making company with over 115 years of experience Only private company to export cheese to Britain
SUCCESSFUL PAIRINGS
Dried fruit – apricots, dates Drizzle with honey and toasted walnuts with Perron cheddar cheese (delicious!)

CHEESE TASTING JOURNAL

CHEESE NAME	COUNTRY OF ORIGIN	CHEESE STYLE	MILK TYPE
Lancashire Cheddar	England	Semi-hard to hard; Pressed cooked	Pasteurized cow's

APPEARANCE (RIND AND PASTE)		
Natural rind Young Lancashire moist and crumbly (like a scrambled egg), with age more flavor Paste pale ivory		
NOSE (INTENSITY, CHARACTERISTICS, FAULTS)		
Medium intensity Slight lemony notes		
PALATE (PRIMARY TASTES)	PALATE (FLAVOUR)	PALATE (TEXTURE, BODY)
Salty – medium Sour – light Some umami notes with aged Lancashire	Young – mild, buttery, tangy With age more richer and piquant flavours detected in the cheese (more three dimensional flavours sharp and peppery)	Loose and crumbly when young, soft and creamy with aging

OTHER COMMENTS (QUALITY ASSESSMENT, PERSONAL IMPRESSIONS)
During the Industrial Revolution this cheese was the staple food of the mill workers. Kirkham's Lancashire (organic, uses a 3 day curd) unique slightly mottled texture (farmstead production) – Mrs. Kirkham third generation cheese maker (raw cow's milk) Aged 4-8 months Melts beautifully – cheese is favourite for Welsh Rabbit
SUCCESSFUL PAIRINGS
Traditional British ale German Riesling

CHEESE TASTING JOURNAL

CHEESE NAME	COUNTRY OF ORIGIN	CHEESE SYLE	MILK TYPE
Applewood Smoked Cheddar	England	Firm	Pasteurized Cow

APPEARANCE (RIND AND PASTE)

Coated in red wax, rind is smooth
 Paste in a rich gold, slightly darker at the edge. Sticky, crumbly

NOSE (INTENSITY, CHARACTERISTICS, FAULTS)

Medium Intensity
 Smoke almost overwhelms notes other characteristics. Detect some sour cream notes.

PALATE (PRIMARY TASTES)	PALATE (FLAVOUR)	PALATE (TEXTURE, BODY)
Bitter—Low Salt--Low Sweet--Sweet Umame--Medium	Smoke is immediate. Hints of sour cream, faint bitter edge	Melts in your mouth

OTHER COMMENTS (QUALITY ASSESSMENT, PERSONAL IMPRESSIONS)

SUCCESSFUL PAIRINGS

Shiraz

CHEESE TASTING JOURNAL

CHEESE NAME	COUNTRY OF ORIGIN	CHEESE SYLE	MILK TYPE
Gorgonzola	Italy	Blue	Raw Cow's

APPEARANCE (RIND AND PASTE)

Rindless
 Paste is loose, creamy white with numerous blue-green veins

NOSE (INTENSITY, CHARACTERISTICS, FAULTS)

Medium Intensity
 Characteristics—Barny, crème fraiche

PALATE (PRIMARY TASTES)	PALATE (FLAVOUR)	PALATE (TEXTURE, BODY)
Sweet--Light Salty—Light Sour—Light Umami—Pronounced	Intensity—Medium Garlic, onions Metallic Slightly fruity—grape	Creamy Full body

OTHER COMMENTS (QUALITY ASSESSMENT, PERSONAL IMPRESSIONS)

One of Paula's personal faves.

SUCCESSFUL PAIRINGS

Dried fruit, not overly sweet fruit jams (fig), toasted nuts, Muscat-based wines