



***What Would  
Saint Arnold  
Brew?***

***“Don’t drink water,  
drink beer”***



# Outline

- Who was Saint Arnold?
- 7<sup>th</sup> Century Metz
- The First Pandemic Plague
- Drinking in the 7<sup>th</sup> Century (How Beer Saved the World)
- 7<sup>th</sup> Century Beer (what we think we know)
  - Sources
  - ABV
  - Ingredients
  - Process



# Saint Arnulf (Arnold) of Metz

- Born 580, Died 640
- Parents were Frankish and lived in Austrasia.
- From a prominent family
- Married into nobility (Married up)
- Was consecrated the Bishop and Episcopal See of Metz
- Was famously quoted as preaching “Don’t drink the water, Drink the Beer”
- Also is quoted as saying “From man’s sweat and God’s love, beer came into the world,”



# 7<sup>th</sup> Century Metz

- Was the capital of the Merovingian kingdom of Austrasia, was a significant center for the Merovingian dynasty and saw the establishment of early monastic establishments like those of St. Glossinde and St. Peter
- Is currently in Northeast France on the Moselle River.







# Justinianic Plague (1st Plague Pandemic)

- The Justinian plague struck in the sixth century and is estimated to have killed between 30 and 50 million people—about half the world's population at that time—as it spread across Asia, North Africa, Arabia, and Europe. That represented approximately 25 to 50% of the population impacted
- St A. noticed that those who drank the beer and not the water did not suffer from the Plague. This led to his famous proclamation which encouraged everyone to drink the beer. This was largely successful.



# Beer in 7<sup>th</sup> Century Metz

- For most of the time, intoxication was not the main purpose and could only be achieved to a limited extent, if at all, given that beer had a low alcohol content for most of human history. Instead, beer, owing to its specific ingredients and characteristics—alcohol, carbon dioxide and a low pH value—was often the only safe liquid to drink when clean water was rare.
- Beer and other fermented foods are an important source of essential vitamins, such as vitamin B or riboflavin, trace elements and other health-promoting ingredients. Especially for poorer people who mainly lived on bread or porridge, supplementing their diet with beer was beneficial to their health.
- Beer was also an important staple for certain professions, such as seafarers, who had to live of vitamin-poor foodstuffs for longer times. Not surprisingly, many seafaring nations contributed to the spread and improvement of beer brewing



# More Beer Talk

- **Sources**

- **Home brewing (Domestic Brewing) Primary Source**
- **Monastic Breweries Starting to ramp up.**
- **Beer was a cultural and economic staple, with farmers, herders, and fishermen engaging in traditional brewing practices.**

- **Beer Types**

- **Small Beer: 1% or less ABV**  
This was a common, lower-alcohol beer, often unfiltered and porridge-like, sometimes produced for children and servants. It was favored in Medieval Europe and colonial North America as a more affordable and readily available option compared to stronger beers.
- **Stronger Ales: Up to 3% ABV**  
While "small beer" was common, stronger ales with higher alcohol content were also brewed, particularly for special occasions or for export.

- **Viking Ale: Not from Northern France**

- **Some sources suggest Viking ale could have been stronger, potentially around 13% ABV with a dry mash or 2.6% with a wet mash.**



# Ingredients

- **Grains:**
  - The primary ingredients were malted grains, with barley, rye, oats, spelt, and wheat being common choices.
  - Smokey? - Likely. Open fires were the primary source of heat in the malting process
- **Water:**

Water was a crucial ingredient, used to extract sugars from the malted grains. Plague enriched.
- **Yeast:**

Yeast was used to ferment the sugary wort into an alcoholic beverage.

  - Was not domesticated until the 16th Century
  - The yeast used for brewing ale was likely the same yeast used for making bread, a common practice in many households.
  - brewers used a technique called “backslopping” in which part of an old batch of beer—yeast and all—was used to inoculate a new batch
  - Yeast was likely not "intentionally" added.
  - "Wild" *Saccharomyces cerevisiae*. Third shed ale, Old barn ale etc.
  - Bottom fermenting yeast was not mentioned until the 14th to 16th century



# Other Ingredients (Gruit)

- **Not called Gruit until the 10th century**
  - **Some brewers added "gruit," a mixture of various herbs, spices, fruits, and honey, to alter the flavor of the ale.**
  - **Common gruit ingredients include sweet gale (also known as bog myrtle), yarrow, and wild rosemary, but other botanicals like heather, juniper, ginger, caraway, and cinnamon could also be used.**
  - **Gruit beers were popular in medieval Europe, and the herb mixtures were often closely guarded trade secrets, leading to a history of taxation on the gruit itself.**
  - **St. A came from a wealthy family and was on a major trade route, so non regional spices would have been available.**
  - **Fruits, Fruits, Fruits...**



# HOPS

Hops *MAY* have begun to surface in the 7th Century

- Hops were not a common ingredient in early European beer, as they were a later addition, first mentioned in Europe around 822 by a Carolingian Abbot and again in 1067 by abbess Hildegard of Bingen.
- The first documented use of hops in beer brewing is in the 8th century, with Benedictine monks in Bavaria and Bohemia experimenting with them.
- Hops DID exist. Since most brewing was Domestic and not documented...So maybe....
  - § Archeologists believe there is evidence of Hops in beer 1400 years earlier. <https://www.garshol.priv.no/blog/434.html>



# Other Notes

- Barrel aged? You bet, or at least barrel exposed.
  - Fermentation. Inoculation?
  - Storage
  - Serving vessels