

The Mystery of the *Karake*: From Grapes to your *Arak* Glasses



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Foreword

- Almost all Mediterranean countries share similar anise drinks and *mezzes*
- Even though *arak* can be considered as the national drink, its consumption in Lebanon started declining a while ago due to:
 - Mistrust regarding its making
 - The claim that some have intolerance to it
 - Fast way of life incompatible with slow savoring of mezze dishes
 - Influence of western values and drinks: it's "not cool" to drink *arak*

Mediterranean Anise Drinks

- Greece.....
- Turkey.....
- Spain.....
- France.....
- Italy.....
- *Ouzo* (mezethes)
- *Raki* (mezze)
- *Anisado* (tapas)
- *Pastis* (mixed)
- *Sambucca* (antipasti)

Contents

- Step 1: wine making
- Step 2: First distillation: Ethanol making
- Step 3: Second distillation: Ethanol purifying
- Step 4: Third distillation: *arak* making
- Step 5: Placing in clay jars: Angel's Share

Step 1: Wine Making

- Crush the grapes, preferably discarding the stalks (manual, machine)
- Place in non-reactant barrels (plastic is ok) and cover
- Stir regularly (twice a day) from down upwards, covering the barrels after each time
- Fermentation will take 2 to 3 weeks depending on the grapes and the weather

Step 1: Final Product is Wine

- Fermentation is complete when:
 - No bubbles, no heating
 - Alcoholic degree is around 12% (measured with an alcoholmeter)
 - Almost no sugar is left in the mash (measured with a saccharometer)

What you do next is press the mash, manually or using a press, to obtain a liquid: wine

Step 2: First Distillation

Distillation is the general process described by the following:

- A homogeneous liquid is heated
- At its boiling point, it evaporates. Evaporation takes place at constant temperature
- The vapor is then cooled down and transformed into a liquid again
- What happens if it is a mixture? One substance is distilled after the other according to boiling point: methanol, ethanol, higher alcohols

Step 2: First Distillation – cont'd

- The apparatus commonly used to make *arak* is the alembic or still (usually made of copper)
- Two types of alembics are used in Lebanon
 - Type where the cooling is an integral part of the alembic
 - Type where the cooling is carried out through an external unit



Karke Set-up



Step 2: First Distillation – cont'd

- The wine is placed in the lower part of the alembic – *dest*
- Water is added (30% of wine volume)
- The alembic cover is placed and sealed to prevent any leakage (dough or heavy duty masking tape)
- The alembic is heated (gas or wood)
- Running water is activated as soon as the first drops of liquid are collected
- Fire is adjusted to collect a fine, cold thread of liquid

Step 2: First Distillation – cont'd

- The first liter (for each 80 liters of wine) is discarded, 2 liters if fermentation was done with stalks
- Distillation is continued, making sure at all times the liquid collected is a fine, cold thread, and adjusting the fire accordingly
- Distillation is stopped when the collected liquid is at 45% (18 Degree Cartier)
- The collected liquid is mainly ethanol

Step 2: First Distillation - Summary

- Wine from first step is distilled using an alembic
- We discard the first batch (methanol, 64^o C), i.e. the head
- We collect and keep the core (Ethanol, 78^o C)
- We stop the distillation before the higher alcohols (Propyl, Butyl, Amyl, etc..., 100^o C and above) start to be collected. We cut the tail.

Step 3: Second Distillation: Ethanol Purifying

- Ethanol from previous distillation is distilled again to make sure:
 - It does not contain methanol: cutting the head, discard the first 250ml for each 80 liters
 - It does not contain higher alcohols: cutting the tail, when alcoholic degree reaches 50%

Step 4: Third Distillation: *Arak* Making

The night before:

- Ethanol from previous step is collected in one batch and degree is adjusted to 45% by adding water
- Anise is added: 3kg for each 20 liters of Ethanol at 45%, or to taste
- Water is added (15% of volume of mixture)
- Alembic is heated till mixture reaches a temperature of about 80° C

Step 4 – cont'd

The next morning:

- Distillation is carried out just like in step 2
- Discard the first 250ml for each 80 liters of mixture
- Stop distillation when:
 - Alcoholic degree reaches 50 %
 - Or
 - White cloud appears in the collected liquid

Step 5: Angel's Share

- The newly born *arak* is then placed in clay jars for around six months. This is intended to let the higher alcohols evaporate through the porous walls.
- The alcoholic degree of the newly born *arak* is then adjusted to 53% by adding drinkable water.

Clay Jars



Making *Arak* in a Nutshell

- 1) You ferment grapes to make wine
- 2) You distill wine to make ethanol: cut heads and tails
- 3) You distill ethanol to purify it
- 4) You distill mixture of ethanol and anise to make *arak*
- 5) You put in clay jars for about six months to rid it of higher alcohols

Conditions for good and safe *arak*

- Clean the *karke* thoroughly after each distillation.
- The anise used should be green and of good quality.
- Play it safe when cutting the heads and tails. Round up in case of doubt.
- Always make sure the liquid collected is a fine, cold thread. Adjust the heating accordingly.

Gay Lussac v/s Cartier

Gay Lussac ABV (%)

- 0%.....
- 10%.....
- 20%.....
- 30%.....
- 40%.....
- 45%.....
- 50%.....
- 100%.....

Cartier

- 10
- 11 ½
- 13 ½
- 14 ½
- 16 ½
- 18
- 19
- 44

FAQ

- Why does the *arak* turn white when water is added? Arak turns cloudy because the anise oil (anethole) produced in the distillation is not soluble. This happens when the solution contains low alcohol levels.
- What is the harmful substance present in *arak* if it is not made properly? Methanol (it might cause blindness if present in high ratios.)
- What is the substance present in *arak* that causes hangover and dry mouth: higher alcohols

Arak is ready for your glasses and *mezze*
Enjoy the experience!!!

