WHAT IS ALADIN?

The tradition tells that in the old Greek and Roman cultures smoking foods was a daily practice.

Smoking is one of the oldest preserving techniques. It was discovered by man while becoming sedentary and dominating the fire and was observed that food exposed to the smoke from the hearth not only lasted longer without decomposing but improved its taste.

Man discovered later and after learning how to extract the salt from the sea or saline lakes that salted food lasted longer and improved in flavor. A third important discovery was the preserving effect of spices such as clove, pepper, cumin, cinnamon and others. Nobody knows who or where these three discoveries combined, but this technique has been practiced in different parts of the world for a long time.

Nowadays smoked foods place an important space in the market and on our table. Meats, cured meats, fish, cheese, rinds...find in the smoke its best ally.

Thanks to the advance in science, man has satisfied their curiosity by thinking about not only the preserving methods but improving them technologically, and achieving the development of a whole industry that for countries like Spain, Italy or Germany is an important revenue source.

However, a new usage of smoke and the discovery of new techniques allows progress in favor of gastronomy. The SEMIPROFESSIONAL smoking requires certain knowledge and abilities that we would like to share with you in order to take maximum advantage of this technique.

We invite you to participate and share your knowledge with us to continue to advance. Please direct your e-mails to info@100x100chef.com. Thank you for your collaboration.

SMOKING TECHNIQUES

1. BASIC DESCRIPTION OF THE TECHNIQUE

The Five steps needed to follow to smoke correctly are: Salting/Brining, Rinsing, Seasoning, Classic Smoking and Ripening.

Salting

Salting is used when the pieces to smoke are big, like pig legs or loins and brining is used when small pieces are smoked, like fish.

Salting consists in the application of a thick layer of dry salt, sea salt or refined salt over the surface of the whole piece of meat making sure that no part is left uncovered. Next, place the flesh into a non metallic container with a cover as the PH decreases notably it can affect the metals and alter the results. Finally, apply more salt to cover and guarantee its dehydrating function. Turning the product at the appropriate time is necessary but depends on the size of the piece and the type of meat. For example, an approximate 600 gram trout should be salting for 8-10 hours, but a pig loin approximately 2.5 to 3 kilos, should be kept salted for three days.

Mixture recommended for salting

1 Kg. of salt

2 Kg. of sugar

1/2 Kg. of garlic salt or aromatized salts

1/2 Kg. salt to cure, nitrate salt o nitrate of sodium (NaOH4)

Aromatic herbs (Laurel thyme and marjoram)

Sugar reduces the harsh affects of salt and gives a light sweet flavor. Garlic salt adds flavor to the meat. Finally, the aromatic herbs transfer their aroma to the meats. (A guide for this mixture: 250 grams for each kilogram of meat).

Brining

This step consists on taking the meat out of the salt and submerging it in fresh water for 1 to 5 hours depending on the size of the pieces. The water extracts the excess salt and slightly rehydrates the flesh.

Rinsing

Este paso consiste en sacar la carne de la sal y sumergirla en simple agua durante 1 a 5 horas según el tamaño de las piezas. El agua extrae el exceso de sal y la rehidrata ligeramente. Después de este tiempo se saca del agua y se deja escurrir unos minutos.

Seasoning

In order to give a spicy flavor to the meat, protect it from flies that can lay eggs over it (and can spoil it with their larvas), prevent the establishment of bacteria and fungus, use spices with an antibiotic affect from their essential oils. Recommended spices that one should cover the whole meat surface with is a thick layer of black pepper powder, course pepper and paprika. It is an easy dry cure due to the humidity of the meat that allows the powder to adhere well to the surface.

Classic smoking

The quality of the selected product and the selection of the appropriate technique will determine the quality of the final result. This method consists of exposing food to the smoke that some woods produce. Woods that contain little "tar" (thick liquid, mixture of different products from the dry distillation of the wood) or "resins" like the ones from the pine tree. Recommended woods are sweet, rich in "esters" (solid and liquid subs-

tances that result from the parafinic series when combining an acid with an alcohol) that have a nice smell and antibiotic effect, that is why these essences are used in perfumes. These ones are liberated when we burn the woods and adhere themselves and penetrate into the foods, providing them with a good flavor and aroma as well as preserving them from decomposing. The usage of inappropriate woods can result in the product a flavor that sticks in your palate.

By submitting the foods to the action of the smoke:

- We facilitate its preservation through dehydration, eliminating the responsible germs that result in putrefaction through a chemical reaction.
- We endow foods with a characteristic and special flavor and color when we comunicate certain substances that get detached from the wood.

The smoking process considers three factors:

- Smoking Temperature
- Smoke Humidity
- Smoke Origin

Ripening or Maturity

This is the last step and the easiest one since it consists in taking the meats out of the smoker and hanging them to air so they loose the high concentrations of elements acquired in the smoker and stay balanced from the first time that they are consumed.

This process although is easy but it should be done carefully! It should be done in cool places without light and well ventilated as well as in periods when the relative humidity of the air is low. Otherwise, the meat will gain humidity instead of loosing it and with time develop fungus or bacteria that besides offering a bad aspect, could damage its quality.

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2. THE WOODS AND THEIR AROMATIZATION

The woods used for the smoking should be, in any case, of low resin content and very dry to facilitate its preservation with the goal to incorporate necessary humidity at the smoking time.

The best woods should come from leafy spicies cut in small pieces especially (Fagus sp., Quercus sp.) Never should it contain coniferous wood.

Around 95% of dry wood extract is made of cellulose (approx. 45%), lignin (20-30% approx.) and half cellulose. The wood selection has as much to do with the kind of aroma and flavor that one wants to provide to the food.

This wood selection will be vital when the smoking process is long, since these particularities coming from the combustion will be determinating the flavor of the food. Apple tree, cherry tree, oak, beech, cedar wood are the best posible selections.

It is a mistake that the woods used at the smoking time are too dry. This common mistake makes that, when lighting the fire, the combustion is fast and it reaches a temperature higher than 600 Celsius degrees. In this case, the aromatization will be too aggresive, spicy, little aromatic with toxins and will even offend the customer's palate.

This, in part, is due that when burning the wood too fast, the essences contained in the wood are not transported with the smoke and and the high temperature obtained in the combustion destroys the subtle aromas that have escaped with the smoke then leaving the product impregnated with toxic wood tar.

Many times the aromatization with spices and dry herbs provide the smoke with a characteristic aroma. Whenever possible one should always use green and fresh products rich in essentials oils that are more resistant to the combustion.

Another commonly used technique is the aromatization of **sawdust or shavings with essences.** Whenever possible it is always better to use natural essences without neutral added oils (usually glycerin oil) since the oils are a vehicle to transport aromas and assist to the aroma integration in doughs, ice creams, sauces or creams. In smoking with a high content of oil it hides the main aromas in the combustion so it is not always the best choice.

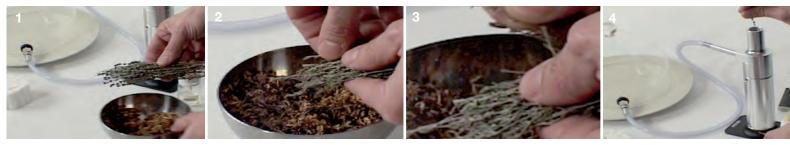
The smoke in its volatization leaves in the food essentials oils or resins which confer to the exposed food its characteristic flavor and aroma.

These essentials oils integrate better and are easier if the foods contain a high percentage of fat and even better if the fat is located on the exterior of the food. Products with little thickness and more surface are, because of their area of exposure to the smoke, likely to acquire this peculiar flavor than other products with greater volume. For these we should apply a few smoking sessions.

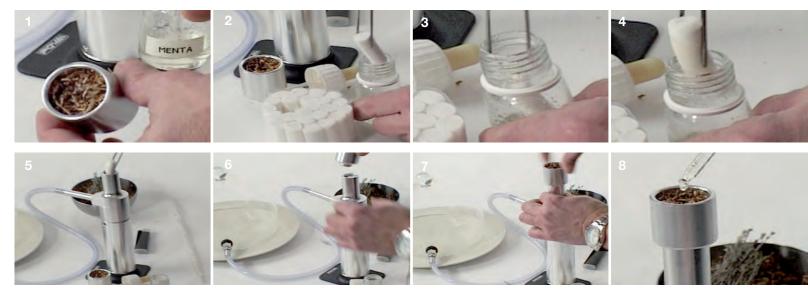
Remember that an inconsistent aromatization session can heat the piece too much and may contribute to helping bacteria grow.

It should be mentioned that smoking provides to the food a bacterial factor, although we recommend that the smoke exit is as far as possible from the combustion chamber so the smoke that is in contact with the food will be as cold as possible.

On the contrary, we should reinforce that a product too cold does not faciliate the integration of the aromatic elements since the fat closes the possible entry point through its pores.



Aromatizing the sawdust with fresh herbs: Before wetting it and some full herbs inside the aromatizing chamber. Cover it and let the sawdust impregnate with the



Aromatizing the sawdust with esential oils: Option 1- Impregnate the dump sawdust with the selected esential oil (image 1). Option 2- In addition, we can

⁽see our CTLGO 2010 Aladín Aromatic®).





3. SMOKING TECHNIQUE IN A BOX

If our smoking pipe has a special connection for the transmission of the smoke it can easily facilitate this work. **Super-Aladin®** has a special exit to connect any tube and a screw connection to be custom fitted to smoking boxes, gastronorm tanks or tray cabinets.

1

Connect the smoker exit escape to the box making sure that it is tight so there is no leaking. The tube or pipe can be longer and submerged into a water and ice bath. Using this method, we will obtain a more aromatic and cold smoke although this will reduce the impregnation action.

[If we do not have an specific box for the smoking you can use a gastronorm tank with or without a lid and make a hole of 10 cm. in diameter on the tank wall or the lid].

2

Place the food in the box or cabinet resting on a small grill to facilitate the passage of the smoke throughout the whole surface and to increase the maximum area of contact.

3

Close with a watertight lid or cover with film (plastic wrap) any openings. Inject a smoke charge. Next, verify that the combustion is not fast at any moment. In order to do this turn the motor on and off a few times wetting the sawdust with a few water drops so the combustion temperature does not reach $500\,^{\circ}\text{C}$ and a flame formation is avoided.

4

After a minimum action period of 30 minutes, repeat the necessary charges until obtaining the desired flavor. It should be taken into consideration that the smoking process requires a food resting time so the aromatic oils penetrate well, the smoke toxins volatilize, and the food matures to its toasty, characteristic flavor.

If the food is not too greasy we can brush it with a thin layer of neutral oil (less acid) to facilitate the wood essence retention. This oil will be absorbed little by little by the food and will assist the flavor in spreading to its interior.

4. SMOKING TECHNIQUE BY IMPREGNATION

The smoking by impregnation is a relative new technique. It consists of placing food in a box or container and create a vacuum environment. This vacuum will extract any air inside and around the food. Once the vacuum is achieved, we will recuperate the atmospheric pressure slowly by opening a point of entrance for air connected to another box where we will have previously injected a large quantity of smoke.

The air mixed with the smoke will enter rapidly taking the previous clean air space, obtaining a fast and strong smoking very easily. You will even be able to reach interior layers in no time.

Special Attention

The smoke has a high power of polluting aroma which leaves a permanent trace wherever it goes, especially in porous or absorbent products (plastics, rubbers, silicones, valves, filters, etc.). If these substances are used we recommend using them exclusively for smoking preparations. Metallic containers like stainless steel are highly recommended since even after repeated uses they can be used for other needs.

5. SMOKING A LA CARTE

This technique has been diffused very quickly amongst the professionals, as much as its ease of execution and its spectacular show at service time..

The smoking a la carte or instant aromatization is a technique that allows one to give to a specific dish a smoking touch at an instant before service. It even allows to bring to the customer the smoke covered with a bell, bowl, "papillote" or simply smoke at the table in front of the customer. To execute this it is necessary to have a communal smoking machine commonly called a Smoking Pipe.

This technique started being known from the application that the Brothers Roca made in their restaurant el Celler de Can Roca. A glass bell (with or without valve) or a bowl wrapped with plastic film can give us a perfect solution for its transportation to the table.

Certainly it must be understood that the smoking a la carte is not designed to achieve a proper smoking of the food. It consists on a procedure that pursues to seduce the customer's sense of smell and incite, in the best of the cases, a surprise reaction.

In order to do this we should be careful when preparing the smoke by trying to make an extremely slow combustion to extract the wood essences without damaging them with aggressive heat. In addition to achieve the proper aroma, we will obtain a cold smoke that is very white in color. To do this properly we need to wet the sawdust at the last minute. We can also add a few essence drops to reinforce the smoke aroma. If the smoking is done by a cold technique, we can obtain a floating smoke over the dish.

6. SMOKING TIMES

This is perhaps the most common question! It is difficult to calculate the time in which a product should be exposed to the smoking action. There are a great quantity of factors that influence this process. Ultimately, experience is what marks the path to success at any given moment.

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SUPER-ALADÍN® SMOKER & AROMATIZER





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SUPER-ALADÍN® | Smoker & Aromatizer

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Smoker & Aromatizer Super-Aladín®

Super-Aladín ® is the only manual smoker totally metallic, resistent to the daily usage or semi-industrial.

Its metallic propeller guarantees a total resistents to heat. It is different from other smokers because it has a big combustion deposit that will allow to burn other components than sawdust, for example, small shavings of noble woods.

Its detachable weighted base provides stability to the tool avoiding turn over or sawdust and ash spills on the working surface. The monobloc switch is located in the base, far from the heat and protected from damage if it falls. A big deposit assists in keeping the resins and tar resulting from the wood combustion to enter the motor joint.

Its patented system of double chamber has been improved and amplified to increase the capacity of aromatic products in its interior chamber, giving this way an extra aroma to the smoking and without having a combustion of these particular ones. It also incorporates aromas more pure and natural increasing the way of possible creative applications to the smoking technique. Since it is totally metallic its cleaning is easy and effective.

Our smoking pipe has the usual connection to connect the smoking pipe in chamber or fast connection to the bells **Aladín Cover**®.

Soon you will be able to connect your smoking pipe to the new **Cold-Kit**® cobtaining smoke totally cold and stable in time.



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