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Culinary Concept Bollito misto non-bollito

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Abstract

An improvement in nutritional and tenderness values, among others, was achieved in a traditional northern Italian recipe, the so-called *bollito misto* (a mixture of boiled meat) by integrating low temperature cooking. This technique can be used within the traditional recipe and therefore considerably enhance the sensory and the nutritional properties of the dish. This process would get a much tastier meat, preserving meat quality and keeping sauce flavors. This recipe update clearly gives a step forward from a traditional formula to an improved version. These “new traditions” should give new hints to the normal food that people usually consume.

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Keywords: Sous vide; Low temperature cooking; Boiled; Bollito

Introduction to the culinary concept

Tradition and innovation walk hand in hand. They need one another. When technical knowledge is needed to move forward, the access to the scientific knowledge is required. A way to develop new products from Osteria Francescana is always based on tradition. From this point on, a very traditional dish can be taken from the past and brought to the present to incorporate an innovation. This should be done keeping a strict connection to territory and tradition (Sultano and Bottura, 2006). Therefore, understanding and interiorizing tradition may open the possibility of modifying it, as it has always been modified in the history of men.

A very popular and traditional dish in the North of Italy is the so-called *bollito misto* (boiled) which is based on the use of

boiled low quality meat (more difficult to soft by cooking) (Fig. 1). Lower class at the area of Modena used to boil pieces from the hardest parts of the veal – *vitello* – cheek, tongue, tail, belly and head, which contains high contents of fat and collagen (Boni, 1971). It also used the *cotechino* – pork – a kind of salumi (big sausage) made by wrapped pieces of cured meat and it is formed mainly by skin, head and cheek (Molinari Pradelli, 1999). Once meat is boiled, the broth is used for other applications, like the preparation of pasta. The boiled meat is the core of this recipe, although it showed very poor quality as it is overcooked, exhausted without any juice inside and completely dry and tasteless. For other areas, different parts are used (Camacina and Veronelli, 1960). For instance, in Piemonte, *the gran bollito* is made by seven pieces of beef and veal (neck, belly, rump with thigh muscle, shin, shoulder, *fiocco di punta*, *cappello del prete*). In other areas, this dish contains other pieces of meat (tongue, head, cotechino, chicken, queue, trotter and hand roll). Traditional way to serve is accompanied with several kind of vegetables according to the season (usually potatoes, spinach, carrots, onions, cauliflower, green beans and roots) and seven kind of sauces: mustard (fruit, sugar and salt) in Cremona and Mantova; green sauce (made by garlic, anchovies, vinegar, cappers, oil, parsley and bread soaked in vinegar) in

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Emilia Romagna and Piemonte (Artusi, 1891), red sauce, honey sauce, horseradish sauce and mash in other areas. All of them hide any taste of meat.

The enhancement of the quality in these poor parts of the veal and pork brings us to profoundly know this material by collaborating with the best meat producers and breeders. Thus, different animals from different producers are cautiously chosen in this regard. *Testina* for example, which is usually rolled and wrapped, is normally unpacked to take all the pieces one by one. This preliminary treatment of the meat is crucial to add value to this product. Therefore, using new culinary techniques into a very traditional dish can give a significant improvement of the original dish. *Sous vide* cooking is the process of cooking vacuum sealed food in a low temperature water bath to achieve a desired texture and it could be very helpful for the enhancement of this product (Roca and Brugués, 2003).

The aim of this culinary concept is to obtain a much tastier meat after using low temperature cooking (*sous vide cooking*) in sealed bags, preserving meat identity and keeping sauce flavors. This objective must be done without forgetting the traditional concept, the traditional ingredients and flavors and



Fig. 1. Ancestral Italian dish: *bollito misto*.

after all, the people. Sauces must also be kept in this new concept but it is needed to bear in mind that meat shows a more intense taste than the traditional recipe, so, these sauces work as a more subtle component. In summary, meat is tastier in this version and the sauces become a secondary elaboration.

Culinary concept: definition

Tradition and innovation can coexist by using culinary techniques in popular and typical dishes, for instance, the so-called *bollito misto* from the North of Italy. Low temperature cooking can be integrated within the traditional recipe and therefore considerably enhance the sensory and the nutritional properties of the dish.

Description of the culinary process

Cooking meat

Sous vide cooking or low temperature cooking is used to achieve much more interesting flavor and texture of the treated meat. This technique relies on a precise, temperature controlled circulator. In this recipe, different types of meat are put into individual bags, each type of meat separately, with several types of vegetables, herbs (carrots, onions...) and poultry consommé. This would keep all the water soluble flavors in the meat apart from the vegetable and herbs flavors (in the traditional way, added herbs are poured into the water). The bags were vacuum sealed and cooked at a gentle temperature in a precisely controlled water bath (Fig. 2). This system will promote correct heat transfer and convection, two crucial parameters to reach the optimum point in meat texture and flavor. Sealed bags avoid meat to be contacted with water; thereby less dehydration will exist at the meat surface retaining flavors and developing tender textures (Baldwin, 2012). Osmosis process is considerably reduced keeping higher mineral content in the product. By using this method, it is possible to improve the tenderness of the meat comparing to the traditional way of cooking.

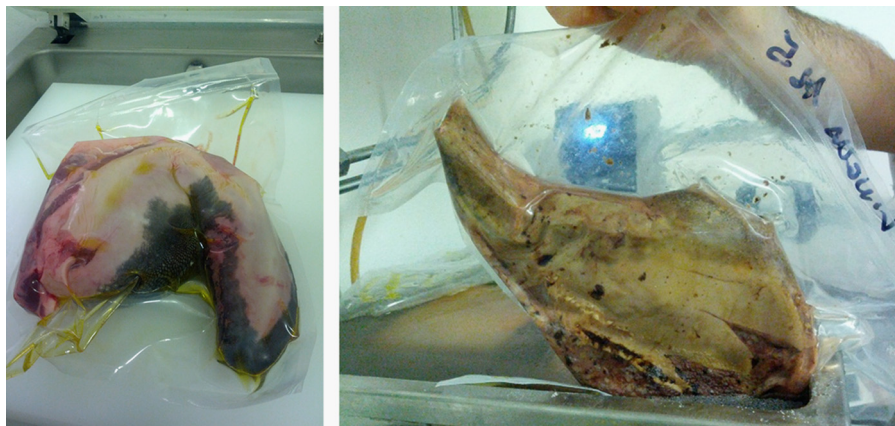


Fig. 2. Pieces of meat into vacuum sealed bags ready to cook in a controlled water bath.



Fig. 3. Detail of peperonata sauces with yellow and red pepperoni.



Fig. 4. First version of *Bollito non-bollito* inspired in a particular view of Central Park in New York.

Different temperatures and cooking times were selected to get a specific texture for each type of meat: cheek, tongue and belly (75 °C, 20 h), tail and *testina* (head) (75 °C, 36 °C), *cotechino* (pork) (63 °C, 15 h). Some of them, like the head or *testina* and tail, contain a higher content of collagen, therefore higher temperatures and longer cooking time must be applied to avoid a *gummy* sensation and get the best texture. On the other hand, the belly would need shorter cooking time. These parameters will also depend on the age of the animal.

Bearing in mind the traditional *bollito misto*, this culinary concept tried to maintain the characteristic flavor and taste that sauces grant to the dish but without hiding meat flavor. A new form of serving the sauce was proposed by making a foam, which contributes with a less intense but enhanced mouth feel. Foam was made by adding the broth from the sous vide bags, soy lecithin, salt and sugar to have a more direct flavor which remains the green sauce. Some ingredients from the green sauce are also in the base underneath, in a jelly base made with cappers and anchovies to strengthen the sensation of the green sauce. *Peperonata* (made with yellow and red pepperoni) was added to recover a sour sensation (Fig. 3). A first version of the improved traditional *bollito misto* was called *bollito misto non-bollito* (boiled non-boiled) and the dish presentation was inspired in some of Massimo Bottura passions: traveling and art. Fig. 4 shows the dish inspired in a particular view of Central Park in New York (USA), which represents the people (jelly base), the woods (foamed sauce) and the sky line with



Fig. 5. Final presentation of the second version dish *bollito non-bollito* (boiled non-boiled).

buildings (pieces of meat). A second version was also developed (Fig. 5) by settling the different six pieces of meat into a round dish. This new version kept the juice produced by the meat and mixed with the jelly base, which give a sweet and sour taste at the same time. Therefore, this last version would enhance the global flavor of the dish at a higher level. The order of eating the meat pieces in this second version dish must

start from the head meat (*testina*) and eat the rest of the pieces clockwise (cheek, belly, tongue, tail and *cotechino*) to appreciate better the differences in flavor.

This culinary concept clearly gives a step forward from a traditional product to an improved version from a nutritional point of view. These “new traditions” should give new hints to the normal food that people usually consume. Preliminary results have shown that this meat cooked by *sous vide* technique contains higher contents in multiple nutrients such as minerals than the meat cooked by boiling (Schellekens, 1996). The final and most important objective would be to change the traditional dish and incorporate this technique into the entire population. A new collaboration with the University of Parma (Italy) is carried out in order to integrate this technique in restaurants for workers to improve diet population. Therefore, working over the concept of linking tradition and innovation can give great benefits to society without forgetting the roots of our people.

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