



## Real or fake truffles? Synthetic aroma is the secret of most risotti and dishes that resemble the most famous mushroom. The mystery of its labels

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**The natural aroma of truffles** is composed by several components, which are not in the vast majority of products shown on supermarket shelves, which actually use a type of aroma obtained in laboratories synthetically. In laboratories, only one component of the natural aroma is chosen, which is able to give to the preparation a scent and taste that imitate the natural one. To make everything very simple, there is a legislative framework with some blind spots which certainly do not help understand what people are buying.

**When one buys any foods** that somehow reminds of truffles, frequently it is about food with aroma produced in laboratories. The most striking case is the one of White Truffles (Tuber Magnatum Pico) where the smell in food is given by the synthetic aroma bismethylthiometh-

ane, which should represent 40% of white truffles' components. This aroma can be extracted from truffles at very high costs and produced in laboratories at much lower costs. By carefully reading the labels on these jars, you can see that the amount of truffles contained is really small, almost nothing. In most cases, the quantity of truffles is 0.5% of the total weight. These little quantities allow producers to use the image of truffles on their packages, by making their products much more attractive. If you find a container with the wording "dressing made with white truffles" it is likely that you find a percentage of white truffles equal to 5% among the ingredients. The rest is composed by other types of truffles of little commercial value (but with high-sounding Latin names), or mushrooms, olives, and other ingredients that are able to absorb bismethylthiomethane, which then gives to products the taste of truffles indicated in the list of ingredients behind the word "aroma". For example, the cheese "Robiola Osella al tartufo" shows in the label 5% truffles in a cream that only contains 1.1% truffles, while "Fior Fiore Coop norcina" sauce shows in the label 1.3% truffle cream composed by 75% of Winter Black Truffles, but both contain the word "aroma".

**Even in packed products**, like risotto or pasta, there is freeze-dried aroma. In rice, for example, a minimum quantity of truffles is contained (from 0.5% to 2-3%) previously treated with a generous quantity of synthetic aroma, then freeze-dried. In this way, it is possible to give to the whole 250 gr rice-package the taste of truffles. The cost of it is peanuts for the producer, since they use not really precious Summer Black Truffles and the result is guaranteed since consumers are convinced that they are buying "risotto with truffles" and are even willing to pay six-seven times more, compared to the cost of a simple white rice.



**The aroma comes from some volatile chemical components** naturally present in certain products, which give food specific organoleptic characteristics. It is the result of a combination of smell and taste. Wherever the food industry perceives a weakness of the ingredients used, it acts by adding synthetic aromas that complement the flavour perhaps lost during industrial processing. It happens with very many products on the

market, for example, it is the case of strawberries, where furaneol is used, allilpropile disul

phide for onions, and apiol for parsley.

**At this point**, you better read labels well, the writing “ product containing aroma” or the simple word “aroma” refers to a substance obtained in laboratories , only when “natural truffle aroma” is written, the elements are extracted from truffles. In the last few years, I have realised that there is a tendency of some restaurant owners to buy low quality products to be used for purely decorative purposes, and correcting then the taste with some synthetic truffle oil. The experts suggest that, when it comes to bismethylthiomethane, you can feel a light tingling and a strong, pungent aftertaste. “The Italian Federation Truffle associates” (FITA) awards those restaurants a plaque who only use real truffles in their kitchens.

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