

# The Neapolitan Pizza

... a scientific guide about the artisanal process

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## Foreword

..... When pizza *meets* University

Pizza is a product of the traditional Neapolitan cuisine: indeed one might say it is the quintessence of Neapolitan cuisine as it has been handed down and improved in time. At first sight and to the careless observer, pizza might appear to be almost a banal product: a disk of leavened dough, garnished to taste according to the flare of the pizzaiolo, baked for a very short time in a wood-fired, refractory oven. Reality is much more complex; flour, water, yeast and salt are among the most common ingredients found in a kitchen and yet their nature, the mutual interactions, thus the sequence with which they are blended together, crucially influence the properties of the mix; time, humidity and the techniques utilized in all of the different phases of preparation and baking will reflect upon the characteristics of the pizza; the appearance, the aroma, the taste and its digestibility. A little nuance, a detail, a "secret" will ensure the uniqueness of a seemingly ordinary product, identifying the pizzaiolo who prepared it.

The production process of "Pizza Napoletana" consists of a limited number of phases: preparation of the dough, leavening, preparation and shaping of the dough loaves, obtaining of the disk of dough and garnishing, baking in a wood-fired oven made from refractory bricks. Like all artisanal activities, pizza making follows a well-defined sequence of procedures from raw materials to the finished product. Unlike industrially manufactured products it is not possible to rigorously systematise all process conditions. Every pizzaiolo, based on experience gained over time or acquired orally, performs each procedure according to his own personal approach. He adapts raw materials to these conditions, or the conditions to the raw materials available to him at any given time, in order to optimise the procedures and give the final product (pizza) the characteristics he considers optimal. For instance, the water/flour ratio, the time and method of kneading, the raising time and temperature, can vary from pizzaiolo to pizzaiolo. And that's not all! The moment in which the salt is added, the amount of yeast used to form the dough, the maturation time of the dough loaves and the temperature at which they are stored, differ by just enough to give the final product its uniqueness. The preparation of the dough loaves alone can be very different: some stretch the dough with regular movements from the inside outwards; others alternate fast compression stages to equally fast stretching stages. Finally, the baking process itself may differ from pizzaiolo to pizzaiolo: some prefer to expose the pizza to an intense thermal shock in the early stages of baking and then continue the baking process less aggressively; others work in the opposite way, preferring a less energetic baking in the initial phase and then finishing the baking process with an intense dose of heat.

The result is incredibly varied, providing consumers with a wide range of flavours and sensory characteristics. Some have a more pronounced rim, others have a greater number of bubbles, some have larger bubbles, some are more filling than others, some softer and more compact. You might say there is one to suit everybody's fancy and perhaps this infinite variability in sensory characteristics is the key to the success of this product of Neapolitan cuisine, which has always been much loved and imitated worldwide.

Given the global success achieved by this product and the degree of excellence reached by artisan pizzaioli everywhere, even outside of the country where this simple but

delicious product was born and reached its popularity, one wonders why we would want to observe it with the rigour of a scientific approach. After careful consideration this choice might not appear all that strange. If one wants to look beyond the folklore, the empiricism, the clichés and false beliefs, the only way to do that is to understand why certain phenomena develop in one way rather than another, why some raw materials give rise to some results and others to different results, why slight differences in the preparation lead to pizzas with certain sensory characteristics rather than others. Understanding the relationship between the composition of raw materials and the behavior of the dough, the structure of the dough and the organoleptic characteristics of the pizza, is the only way for a pizzaiolo to understand how and when to intervene in order to reach the desired result or correct any mistakes. This will enable him to achieve complete mastery of the pizza making process, an art which has developed thanks to the practical experience of Neapolitan pizzaioli through centuries, and made pizza a local speciality.

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