In the Molecular Kitchen
The Creation of Apple Caviar

'Molecular cuisine' is the latest hot discussion in haute cuisine; a topic that makes even a talented amateur chef's mouth water. We had the opportunity to find out more about this interesting research field during a visit with Max Eichmann, a chef who has earned an 18-point rating on the Gault Millau scale in the Swiss town of Niedergösgen, and how RAININ's multichannel pipettes become an indispensable tool in his kitchen.

Mr. Max Eichmann, Gault Millau awarded chef.

■ Mr. Eichmann, what is your understanding of the term 'molecular cuisine'?

'Molecular cuisine' is a continuation of established techniques and knowledge, so it is not a brand-new innovation. For example, people discovered the effects and advantages of using broiling or frying in their food preparation a long time ago without understanding the chemical correlations behind it. Cooking was therefore always molecular. What is new, however, is the targeted examination of these processes and their possible applications, often with the assistance of chemists and food engineers.

■ What is the objective of 'molecular cuisine'?

The fascination lies in deconstructing the existing and then reconstructing it. The objective is to optimally call attention to an ingredient and present it in an unexpected form. The point is to isolate or maximize the desired flavor components whilst eliminating the undesired ones. At the same time, the various reconstruction options, respectively the presentation, enable almost limitless creativity. It is always a pleasure to observe guests who experience a well-known flavor, such as that of an apple, in a completely new and intense manner.

■ How did you become involved in 'molecular cuisine'?

During my many years as a top chef, I was continuously searching for new ideas and techniques, and I traveled extensively during my quest. This is how I found out about this new research field and, after paying a visit to Ferran Adrià, the "molecular cuisine pioneer" in Spain, I was completely convinced. After this, I experimented a great deal in my kitchen and dedicated myself to this type of cooking.

■ How did you come across RAININ?

I was looking for a suitable device to help us efficiently make our apple and melon caviar. This is when I found RAININ's multi-channel pipettes. After I contacted the company, sales representative Laura Canonica came and met with me. Together we experimented a bit in the kitchen and soon discovered the right solution. Ms. Canonica was of great assistance and really helped me with my somewhat special application requirements.

■ Apple caviar? Can you tell us more about how you would make that?

Apple caviar is a classic example of molecular cuisine. It works just as well with oranges, melons, etc. Caviar preparation can bring out the wonderful taste of an apple beautifully while simultaneously eliminating the 'disruptive factors' such as the core and peel. To do this, we squeeze the juice from the apple and mix this with an alginate. Then we draw the mixture into the pipette and dispense it drop by drop into a bowl with calcium chloride solution. In a few seconds, a thin skin forms on the drops, giving the caviar its form. When you eat it, you let

the apple caviar burst onto your tongue in order to experience a wonderful sensation of 'pure' apple flavor.

Details Online

The entire interview along with a detailed recipe for apple caviar is available online at

▸ **www.mt.com/Molecular-Kitchen**

Mr. Eichmann is making 'apple caviar' with multichannel pipettes.

Gault Millau is one of the most influential French restaurant guides. Gault Millau is most famous for its rating system, on a scale of 1 to 20. The points are awarded strictly based on the quality of the food with any comments about service, price or the atmosphere of the restaurant given separately. Based on this rating, high ranking restaurants may display one to four toques.