

Vitolino Fruit Caviar - Adventures in Molecular Cooking

Molecular gastronomy is a subdiscipline of food science that seeks to investigate the physical and chemical transformations of ingredients that occur in cooking. Its program includes three axes, as cooking was recognized to have three components, which are social, artistic and technical. Molecular cuisine is a modern style of cooking, and takes advantage of many technical innovations from the scientific disciplines. The term "molecular gastronomy" was coined in 1988 by late Oxford physicist Nicholas Kurti and the French INRA chemist Hervé This. Some chefs associated with the term choose to reject its use, preferring other terms such as multi sensory cooking, modernist cuisine, culinary physics, and experimental cuisine.



A note on Ingredients:

The aroma and color compounds of a fruit or vegetable.

Agar - is a gelatinous substance. It acts similarly to gelatine, although it's made from algae and is completely vegan. It will remain in a gel state at room temperature as it solidifies around 32C. It makes a great garnish that won't bleed onto other food.

Stevia

Fruit Gets Dressed Up as Caviar

FIRST it was carpaccio, which went from beef to beets, and now it's caviar. Considering the cachet (and rarity) of caviar, it's not surprising that some chefs would borrow the word for their own creations and call it dessert.

Relax, eco-crusaders: the sturgeon are quite safe, and no one has bio-engineered a Granny Smith-flavored paddlefish (at least, not yet). The concoction is actually tiny caviar-like pearls of concentrated fruit purée in a gel-like shell. This isn't just tapioca; it's itsy-bitsy bursts of intensified flavor in your mouth, simulating a slight tingly effervescence.

"Caviar is an interesting medium to convey a familiar taste with a new texture," said Will Goldfarb, chef and an owner of Room 4 Dessert in NoLiTa. He is one of the various New York chefs who have put their own stamp on a technique pioneered by Ferran Adrià of El Bulli near Barcelona.

Mr. Goldfarb's mango caviar, named Mango 17480 as a nod to the postal code in Spain where the caviar was first created, is part of a tasting quartet called Voyage to India. It is a homage to Olivier Roellinger's similarly titled creation at his Maisons de Bricourt in Brittany, Michelin's newest three-star restaurant in France.

Sam Mason, pastry chef at WD-50, occasionally includes on the restaurant's tasting menu cocoa caviar atop a beet-and-tangerine ravioli, or maple caviar with French toast. Uptown, a spoonful of litchi caviar plays the overture to the dessert course at the newly reincarnated Tocqueville. George Mendes, the chef de cuisine there, punctuates his litchi caviar with cilantro and coconut, a colonial flavor combination that echoes his Portuguese heritage.

"It's fun and playful," Mr. Mendes said. "It adds a surprising element to the dining experience. The fruity flavored popping effect makes people happy." Mr. Mendes added that creating the caviar brings common food chemicals to the drawing board along with the kind of new techniques that make a chef's day interesting.

Even Ureña, which doesn't have caviar on its current menu, is experimenting with versions of blood orange caviar. Have chefs all turned into mad scientists? Not necessarily. A patient home cook with a good kitchen scale can create these caviars.

The basic concept involves three natural chemicals used in food-processing: sodium alginate, an agar-like gelling agent and stabilizer found in sea kelp and algae (Mr. Mason at WD-50 actually uses agar); sodium citrate, an anticoagulant used in ice creams; and calcium chloride, commonly used as a preservative.

While the caviar is great on its own, many chefs prefer to accent it with other dessert components like a light sauce or ice cream. Because of the agar-like thickener, these caviars are less chewy than tapioca, and contain very little starch. In addition, the fruit purée base means that there is almost no fat. With natural fruit sugar as the only no-no, these dessert caviars may be a dieter's dream.

They will never replace an ounce of genuine beluga, but considering the cost of the real thing, the ecological implications of sturgeon fishing and the glamour of casually mentioning that you had caviar for dessert, this trend may be a keeper.

Foie gras crème brûlée, anyone?

