

SCI

THE SCIENTIST

SCI is where we'll explore the questions "What if?" and "Why not?"

Making ice cream in 30 seconds? Hitting 26 restaurants in 24 hours? Eating 15,000 calories in 20 minutes? It's all nuts, but as the Cheshire Cat said to Alice, "Oh, you can't help that. Most everyone's mad here." The following pages double as a decadent cheat day smorgasbord, where slow-carb becomes "go-carb." I do love my chocolate croissants on Saturdays.

In the process of learning about the science of food (without really trying), you'll also learn tricks for next-generation fat loss. For instance, how can you consume 600% of your normal daily calories without getting fat . . . or while *losing* fat? Biochemical sleight of hand, of course. My specialty.

Above all, let's resurrect your childlike curiosity. Embrace the absurd, from forgotten ingredients to spectacular new techniques, and consider it a Choose-Your-Own-Adventure buffet: skip around, pick your favorites, and ignore the rest. Nothing here is mandatory (but I do suggest reading all the recipe headnotes).

Go nuts!



Everything a growing boy needs.

A TRIP TO SEATTLE

“Don’t worry about people stealing your ideas. If your ideas are any good, you’ll have to ram them down people’s throats.”

—HOWARD AIKEN, AMERICAN COMPUTER ENGINEER AND MATHEMATICIAN

THE HOST

“I bought a T-Rex, put it in my living room, and then . . . I found my own in Montana! It’s a bit like having someone else’s deer head on your wall.” Most people don’t have a T-Rex to greet them in the morning. Then again, most people aren’t like Nathan Myhrvold, former CTO of Microsoft and founder of Microsoft Research. He seems to have a hand in everything.

To start, his expedition team found not just one T-Rex, but 30% of all T-Rexes ever found (they tend to be in Montana, South Dakota, and Canada). He’s created laser systems to zap mosquitoes out of the air. Not long ago, he designed high-tech thermoses that keep vaccines for 10,000 people cool for up to six months . . . without power. It’s hard to keep track, since Nathan has filed more than 500 patents and acquired well over 30,000 more through his latest company, Intellectual Ventures.

Somewhere along the line, Nathan developed a small obsession with food.

First, he became a master chef in France. Then, he became fascinated with the micro-regional cuisine of the American south: BBQ. Naturally, he competed in the 1991 World Championship of Barbecue in Memphis, Tennessee, where his team finished first place in multiple categories, including pasta.¹

But then what? If you had worked on quantum theories of gravity under Stephen Hawking, were an award-winning photographer (yep, he did that, too), had earned a few hundred million dollars, and loved cooking, how might you spend your time?

Nathan’s answer, a book titled *Modernist Cuisine: The Art and Science of Cooking*, is what brought me to Seattle to experience a 32-course (!) dinner at his food lab. I had earlier met his son, Conor, then an undergrad at Princeton, who’d helped me finagle the invite.

Calling *Modernist Cuisine* (MC) a book is a bit like calling an aircraft carrier a boat:

- 2,438 pages, bound in five volumes, housed in a Plexiglas case
- 4 lbs of ink
- 1,522 recipes
- 5,000+ photographs, carefully selected from 147,000+ taken

For three years, his team of five full-time scientists and 10 world-class chefs (39 total staff) tested all the old wives’ tales and measured everything imaginable. The results were fascinating.

For instance, did you know that bacon and olive oil have near identical amounts of oleic

¹ Yes, BBQ pasta. Who knew?

acid, which is commonly touted as olive oil's healthy differentiator?

That cucumber has a higher water content (95%) than whole milk (88%)?

That you can inject your chickens with brine and hang them in the oven for a perfectly crisp exterior and succulent interior?

This isn't your grandma's kitchen. As Tim Zagat of *Zagat Survey* put it, "[This is] the most important book in the culinary arts since Escoffier."²

THE DINNER

Our evening in Seattle began around a conference table, where a cadre of luminaries had gathered from around the world. Nathan provided a science overview via flat screen as champagne was handed out. I wasted no time in embarrassing myself.

"Are you a chef?" I asked one iconic chef across from me. The person seated next to him cringed. Thankfully, the maestro found it amusing. I politely asked for more champagne.

A sympathetic server, witnessing my tomfoolery, pointed out the legends and rising stars:

- Chef Johnny Iuzzini, then head pastry chef at Jean Georges
- Jeffrey Steingarten, writer for *Vogue*
- Chef Andoni Aduriz from Mugaritz restaurant in Spain
- Chef Oswaldo Oliva, Andoni's development chef
- Chef Pierre Hermé, pastry chef from Paris
- Charles Znaty, Pierre's business partner
- Claire Robinson, Food Network TV host

- Fred Carl, Jr., CEO of Viking Range
- Sara Dickerman, freelance food writer
- Katrina Heron, editor-at-large for *Newsweek* and *The Daily Beast*
- Joe Hagan, writer for *Men's Journal*, *New York*, and *Rolling Stone*
- Chef Scott Boswell of Restaurant Stella! in New Orleans

We migrated to our assigned seats for dinner, and as my small table relaxed, the friendly banter poured forth.

Scott immediately put me at ease. Cuisine was his third career, and he *staged* (apprenticed) at Jean Georges at the age of 42. Johnny pointed out the subtleties of the Japanese citrus *yuzu*, which looks like a miniature lime but tastes markedly different. Everyone debated pressure cookers. The most experienced chefs pointed out that saving time wasn't the main advantage; you should use pressure primarily for enhancing flavor, as flavors don't evaporate off. The pressure cooker is best suited to stocks, for instance, and anything you'd like to caramelize to otherworldly levels, like carrots.

Around 20 dishes (and six wine pairings) later, I became infatuated with a centerpiece on our table: Buddha's hand, a fruit that looks like a mutant chicken foot with lemon skin. It smelled better than any fruit I'd ever encountered.

Then someone loudly recommended a restaurant called Red Medicine. I apparently had to visit L.A. to witness the most amazing "tweezer cuisine" on the planet. It's where Jordan Kahn ("Spelled like *Revenge of Khan*?" I asked, not entirely sober²) assembles plates like miniature MoMA pieces. He was a pastry chef who'd made the jump "from sweet to savory" and was reaping the rewards of transplanting technique.

² The *Star Trek* sequel is actually *The Wrath of Khan*.

After this anecdote, I grabbed my notebook and messily jotted down “Culinary cross-training?”

REVISITING NATURE, NOT REINVENTING IT

The powder-heavy cooking we ate that night is often referred to as *molecular gastronomy*, which is sometimes derogatory.³ Even smart people rail against the use of so-called “industrial” ingredients.

In reality, the majority of these ingredients, made famous by behemoths like Kraft and therefore hated by the granola crowd, have been used for hundreds or even thousands of years. Agar-agar for thickening? Derived from red algae, it’s been used for millennia in Japan for making jellies. Bromelain? That comes from pineapples, which have been used by cultures around the world to tenderize pork and other meats.

Beyond “nothing artificial added,” my favorite modernist cuisine actually focuses on *removing* things, not adding them. One of Nathan’s favorite tools is the centrifuge. Using it, he can separate flavor from filler, just as one might distill fine whiskey.

So why is all of this thought of as new? Easy: technology and interest have reached a point where it’s finally cost-effective for the amateur to play with one-off dishes. Making everything from Nutella Powder to Bacon-Infused Bourbon is surprisingly simple. Beet Foam or Olive Oil Gummy Bears? Far easier than much of WILD, certainly.

All it takes is a little experimentation, which brings us to your next step: outfitting the mini-laboratory.

³ Hence substitutes like “modernist cuisine.”