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Down the Rabbit Hole

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DOWN THE RABBIT HOLE



At times, for no obvious trigger or reason, memories climb to the surface. Or do I dive like (almost) everyone in *Alice in Wonderland* into the rabbit hole? The fact is that recently, specific recollections reoccur. Like my mother's passion for the *carp in its jelly*, a.k.a. Polish gelatin carp recipe: <https://polishforums.com/archives/2005-2009/food/gelatin-carp-recipe-137/>. Google was never on her horizon, but the recipe is faithful to her memory and skills.

But first, mom had to find the fish. It had to be alive, the right size, and –as she said – *with a friendly look*. She patronized a great fishmonger located 63 Rue du Bac (where *Naturalia* supermarket now sits). He liked my diminutive mother, always dressed up *to the nines*, with her singing Polish accent. And he chose *her* wriggling victim with care. Then the carp started her invasion in our familial universe. **She** (we knew: *she* would have a pouch of eggs!) was offered **the** family bathtub, for a loooong week. She swam there, disgorging the remnants of silt and slime, to get a pure, *clean* taste, royally ignoring us. All the while we had to submit to acrobatics, in the frigid air, to reach and scrub most of our skin surfaces. The week nurtured instincts of crime and hatred for the whole fish breed.

Finally, usually for lunch on Sunday, the carp was served, and –every time- we marveled at the artistic, mouth-watering presentation of the *Carassius Carassius*. Alignments of carrot slices, bay leaves, sprigs of parsley – all immobilized in a shivering feather-light jelly made from (most –but *NOT* all) fish bones, a thimble of white wine, and a secret (and ever changing) spice blend. It was really, *really* good, and we devoured it, sadistically taking a revenge on her week-long squatting of the communal bathtub.

My parents were not foodies. After we moved from the 26 Rue Vauquelin in the 5th arrondissement, to 191 Boulevard Saint-Germain in the 6th, our mother went every morning to shop fresh food at the nearby expert shops of the area (Rue de Grenelle – Rue du Bac), an excellent butcher (and a reputed *Boucherie Chevaline* that sold only horse meat, for *steak tartare*); the world-famous *Barthélémy* cheese store; a Tunisian grocery store full of spices and exhaling their flavors into the Rue du Bac; a *Cours des Halles* open store, displaying a cornucopia of fresh fruits and vegetables, brought on a hand-pulled cart every morning at 05:00am from the Beaubourg *Halles* by the owner, a red-cheeked, always laughing Aveyronnais; the artisanal bakery churning 24 baguettes every 4 hours; the pharmacy with its huge glass jars colored in red,

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blue, green and lit from behind for a symphony; and the occasional (or weekly) four-seasons merchant and her large wheelbarrow of super-fresh seasonal veggies and fruits from her own garden & orchard.

My father was very frugal: he knew that humans were digging their grave with their teeth, and there was strictly ***no junk food*** anywhere nearby. Food was fresh, freshly prepared, immediately consumed (or the scraps made the evening soup), and we had our very first *Frigidaire* refrigerator late 1948, when dad came back from a conference tour in the US. He got it checked on the French Line steamer *Liberté* (that I will sail in 1953!). The fridge was fairly small (inside); hence we had –and kept- a pantry, built under the kitchen’s window, with part of the outside extrusion in light metallic netting. Most food was kept there; in the summer, we would get a big block of ice that my father broke into chunks filling a tank with drainage. The pantry was at the ideal temperature for the proliferation of *Lactobacillus casei*: my father’s dinner was usually a plate of boiled potatoes, covered with clotted milk, aged 3 days in the pantry. (Milk was NOT pasteurized until the 1970’s; my mother bought it every day at Barthélémy and boiled it until it bubbled very high! – i.e. a few seconds). I must now confess that every morning I checked the whole milk’s surface and was first to skim and savor the layer of delicious real, rich cream! Dad had to add a slice of butter to his steaming hot potatoes... Dad’s lunch –that he prepared himself when he was working- was a long sandwich of a crispy baguette, smeared with butter and containing two slices of *jambon de Paris* (Paris’ ham), two artisanal yogurts, and one or two apples. That was it for decades.

There was no wine or beer in the house, and whenever my parents received a bottle of pricey wine, they stored it in the cellar –where they aged quietly, until I discovered them, decades later.

We never went to a restaurant together: food was *too rich, not for us* said our mother –and probably too expensive for them. But *they* were once invited by a *very* wealthy American (a New York Jew), who was a major beneficiary of the stratospheric success of Schering in large part due to antihistamines (introduced in human medicine by my father); this tycoon had hired my dad as a consultant (he helped develop *dexchlorpheniramine* or Polaramine®). To celebrate, their couple took my parents for dinner at the *Tour d’Argent*, a ***temple where the Schering guy had ordered a feast. When I asked my mother the next day what they ate, she just said ‘it

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was *TOO MUCH*, and I could not sleep well afterwards'. But one episode struck her: cheese had been ordered and mom said: 'Can you imagine?!!!! **He** (their host) asked for the Camembert to be served '**chaud**' (warm)!' That was her one unforgettable memory of an otherwise forgotten meal.

When, in 1933, my parents moved into their 4th floor apartment on 26 Rue Vauquelin, 5th arrondissement, that was the evidence of their achievements; not only did they live in an 'intellectual' district, but the building was very *bourgeois*; they had *succeeded*! Shopping for food was a treat: we were 2 blocks away from the Rue Mouffetard, the Mecca of fine, fresh, BEST food! I discovered it while carrying a (heavy for my age) bag for my mother, but it was whetting my appetite, each and every time. After 1945, when we returned to the 26 Rue Vauquelin, I would go there to explore and chat with the fishmonger, the fresh produce sellers, the butcher, and others. The Rue Mouffetard always remained my reference for fine food; in the 1970s, when I befriended Raymond Oliver, the grandest chef of our time, he took me to the *Poissonnerie* of my childhood for fish destined to be served raw as *sushi* or sashimi. This Fish market is now an *Authentic Japanese Restaurant 'Le Papillon'* (I could never make this up!).

And the future looked bright.

Until September 1st, 1939: France was at war, and my father was called to serve – which he did with fervor. He was a physician officer –an *aspirant*, i.e. a first level officer- with a uniform matching. He was in charge of a train ambulance car, equipped for medical emergencies, ambulatory surgery, and six beds; a nurse was assigned to help.

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The commander-in-chief of the French armies was Gamelin who had (for a long time) *general paralysis* or cerebral syphilis, with delirium of *grandeur*, and was ‘treated’ weekly at the Salpêtrière Hospital with malaria therapy –the standard treatment at the time, until penicillin was introduced, with the American-led liberation in 1946. Gamelin hallucinated and was claiming, high and loud on May 20, 1940 that the French troops were ‘*running to Berlin*’ –while Guderian tanks ran his *blitzkrieg*, just

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ignoring the Maginot line (*impregnable!*) and were rushing South to enter Paris, that fell on June 14. The French government of Paul Reynaud (and his formidable mistress) had decamped to Bordeaux where *la belle vie continue* (the good life goes on). We were living a tragedy, but from the outside it looked like a comedy of Georges Feydeau. On June 22, 1940, France signed an armistice with Germany; it was divided into German and Italian occupation zones, and an unoccupied rump state under the Vichy Regime, which was aligned with Germany:

In the occupied region of France, the German Reich exercises all of the rights of an occupying power. The French government undertakes to facilitate in every way possible the implementation of these rights, and to provide the assistance of the French administrative services to that end. The French government will immediately direct all officials and administrators of the occupied territory to comply with the regulations of, and to collaborate fully with, the German military authorities.

My father, his nurse and his train had been blatantly ignored by the *Blitzkrieg*, and on June 16th, 1940 he was de-mobilized and came home, starving and bored by 6 months spent twiddling his thumbs.

In fact, that was not the *end* of the war; it was just the beginning of our flight.

Dad had been informed by his employer, Rhône-Poulenc, that the plan was to close the main Research site in Vitry-sur-Seine (a Paris suburb) and move –over a year or so- all the equipment to Villeurbanne, near Lyon, in the puppet ‘*free*’ zone controlled by the Vichy snitches. In the meantime, we were advised to leave Paris STAT, and find a temporary shelter in the Vichy-controlled area. My parents contacted their closest friends, the Artigas, a couple of college teachers who were in fact Spanish (Catalans!) republican refugees, but had been naturalized French recently, and –most importantly- who were Christians (in fact they were ...atheists!). The Artigas helped my parents move the furniture they loved to a storage, took –and kept- the keys of the apartment; we piled up in the Peugeot 202 –and off we were to La Bourboule, a *station thermale* (a medical spa) dubbed the ‘capital of treatments for asthmatic and allergic children’ for all Europe.

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<https://www.lescuristes.fr/cure-thermale-La-Bourboule-65>

The place was eerily quiet, and the (Jewish Romanian) physician who welcomed us, and offered room and board, was honored and happy to host an already well-known and respected medical scientist –i.e. my father- and his family. The family meals were very friendly; our hostess was a skilled cook, who served a personal interpretation of Romanian + Jewish (kosher) + French *bourgeois* dishes, quite tasty and **rich** (lots of butter and cream!). But **NO pork**; my dad was cruelly missing his *jambon de Paris*. And we started feeling some weariness in our hosts.

That could not last, and my father, known to have ants in his pants, was turning around like a lion in a cage: he had to find a job, and one he loved. And he had to find it FAST! (*For the follow up, details can be found in my Essay 'O Tempora o Mores,' in Volume #1.*)

This long introduction was willingly focused on **daily food, supply and menus**. Budget was a permanent concern. Health was also on the forefront. Our food was affordable and close by. It was not (often) packaged; it was certainly seasonal, subjected to the whims of weather or strikes (a French 'national sport'). There was **no** processed, industrial food; even the charcuterie was artisanal, most of it made by

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the charcutier and his apprentices. The tectonic changes that the North American food –supply, processing, mind-boggling promotion- experienced was hard to swallow by a population whose culture was made of respect, appreciation, admiration and modesty. My father –as advisor to the Faculty of Pharmacy- reported against the introduction of *CocaCola* in France to the general public. He knew that, until 1935, *CocaCola* was a *pharmaceutical prescription*; but Dean Delaby managed to get a brand-new villa, built to his specifics, in St. Jean Cap Ferrat, the poshest site of the French Riviera; he then invited our family to spend a week there. (Atlanta’s) Money had won.

The food, the meals we ate were the daily fare of the **vast majority** of the French population, and the thin layer of the filthy rich who patronized the Michelin-starred pantheons kept a low, modest profile.

This contrasts dramatically with what the USA is experiencing now, as the article by Peter C. Barker describes so well.



The Limits of Home Cooking

A richly reported new book offers powerful insights into the cooking habits—and daily struggles—of working-class Americans, reviewed by Peter C. Barker on Jan. 21, 2019.

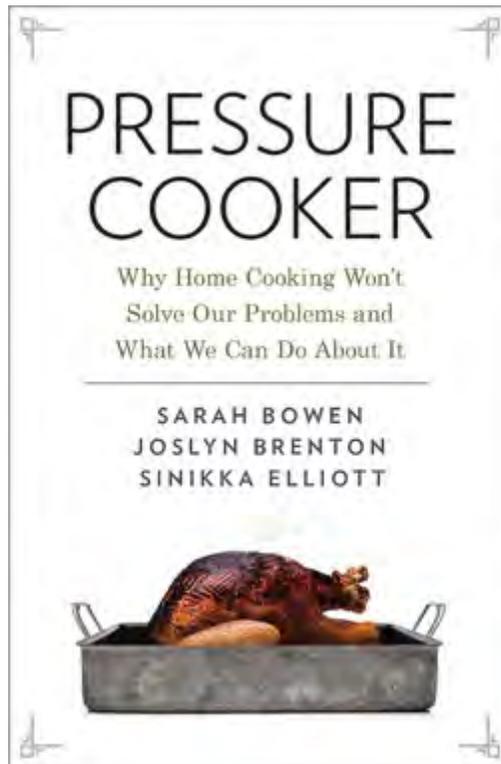


Photo: Oxford University Press

In 1870, the American cookbook author Jane Cunningham denounced an alarming new trend in the nation's mealtime habits: eating dinner in the evening. Since the colonial era, Americans had eaten their primary meal around midday, fueling themselves for the rest of the workday. But with more men spending their days outside the home as wage laborers, dinner was becoming a nighttime affair. Critics like Cunningham hated this sign of the changing times. "*Six o'clock dinners ... destroy health*," she wrote in one of her cookbooks. Late-day meals were harder to digest, she insisted. Perhaps worse, they gave women more daytime for idle "*gossiping and*

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visiting to shopping and the promenade." Of course, Cunningham's call to Make Dinner Early Again failed to stem the tide. Today, the idea that families should, whenever possible, gather around the table for their primary meal at day's end occupies an extraordinarily durable place in American culture. But if Cunningham's prescription feels hopelessly dated, its tone -prescriptive, judgmental, self-certain- is familiar. Today's prominent food writers would never dream of telling families to eat dinner in the afternoon. They do not hesitate, however, to instruct us on the types of food we should buy (healthy, fresh, organic), the way it should be prepared and served (at home, from scratch, family style), and how harmful it would be -for our bodies, our families, and the planet- to deviate from this model.

In *Pressure Cooker: Why Home Cooking Won't Solve Our Problems and What We Can Do About It*, the anthropologists Sarah Bowen, Joslyn Brenton, and Sinikka Elliott do not deny the value of healthy, home-cooked dinners. Instead, they argue that the way our food gurus talk about dinner is fundamentally disconnected from the daily lives of millions of Americans, especially but not exclusively low-income Americans. This discrepancy matters, the authors insist.

When Michael Pollan, Mark Bittman, and Jamie Oliver preach their influential, well-compensated sermons about how you -yes, *you!* - can (and should) improve your family members' lives by buying healthier food and preparing it at home, they implicitly frame the quality of our dinners as something over which we all wield a considerable degree of control. If you aren't doing dinner right, it's because you aren't trying hard enough for your family: not shopping smartly enough, not doing the right prep work, not using the best recipes. In addition to creating a lot of angst and guilt whenever we fall short, this censorious approach shifts our collective attention away from the bigger forces shaping our lives and meals, blocking the way to more realistic solutions located beyond the kitchen. Over a period of five years, Bowen, Brenton, and Elliott interviewed over 150 mothers and grandmothers, mostly low-income, who were primary caregivers for young children in North Carolina. (Though men are pitching in more with grocery shopping and meal preparation, the majority of both chores is still done by women -which, if you are a woman, you surely already know. The top tier of food punditry and celebrity 'chefdom' remains overwhelmingly male.) The authors asked these women detailed questions about what they serve their children, who shops for food, who cooks it,

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and how it all feels. With 12 families, they went deeper, tagging along on shopping trips and food-pantry runs, hanging out in the kitchen and dining room, watching dinner get made and eaten. The authors cannily juxtapose these dense, closely observed scenes with quotes from the likes of Pollan and Bittman, drawing attention to how wildly out of touch much of their advice is with minute-to-minute existence in wide swaths of America.

All the women profiled here have an intense desire to give their families the best dinners possible. All of them experience some variety of guilt that their dinners aren't as good as they could be and that their families are suffering for it. They want to buy the freshest, healthiest food possible but must stick to strict budgets. They want their kids and spouses to eat healthy and try new things, but also want to honor cultural culinary traditions, give their families pleasure, and avoid end-of-day conflicts over novel dishes. They can't afford to throw out their mistakes and order a salad or pad-thai from Grubhub. They'd like to do efficient meal prep ahead of time, but often have little or no control over their work schedules; the free time they have is scattered throughout the day and can be hard to take advantage of. They can't afford Blue Apron or the pre-prepped veggies from Whole Foods. They take pride in feeding their families but are almost constantly stressed by how hard it is. They make meal plans, only to have them undercut by transportation hassles, SNAP card malfunctions, unexpected bills, and price fluctuations at the grocery store -forces that we can't realistically fix simply by telling individuals to try harder.

Twice, while working on this review, Peter Barker wandered into his local bookstore to browse the latest home-cooking how-to manuals. These books are full of delicious-sounding, nutrient-rich meals, plus tips and shortcuts for making their preparation as efficient as possible. But they are completely divorced from the texture of real life and its daily challenges that runs through every page of *Pressure Cooker*. In an ideal world, this book would be required reading for every food pundit and cookbook author. Often, the way we talk about food makes it sound like fixing our meals will fix everything else: heal our bodies, save the environment, restore our family bonds. The proposed solutions in *Pressure Cooker* flip this equation on its head: Fix the big stuff -reduce poverty, recognize food as a human right- and families will figure out their own dinners just fine. In the meantime, the authors suggest that local schools, daycares, and churches with commercial kitchens start preparing healthy, affordable

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dinners that are easily re-heatable. They also nod to the promise of community dinners, where customers of all incomes, paying on a sliding scale, gather to share food and stories. It gives Barker no pleasure to admit that he has a hard time imagining such initiatives becoming a significant nationwide trend anytime soon, not least because no one stands to make a bundle of money from implementing them. He hopes he's wrong -and not just because, at 33, as he ponders becoming a parent, his wife and him already find themselves stressed out by the prospective challenge of feeding their family right. But who knows what is possible? After all, it was not so long ago that we were all serving dinner at midday.

After reading and editing this article, it was time for me to go shopping to replenish the fridge and the pantry with diverse foods -including fresh, perishable ones (vegetables, fruits). That was the 4th Thursday of the month, and Grocery Outlet,



Patch

in Redwood City, offered 10% discount on the whole bill to seniors (I qualify!). The crowd of patrons is mostly depending on 'food stamps' a.k.a. SNAP (Supplemental Nutrition Assistance Program), Hispanics, retired, African-Americans -the bulk of the population in the San Francisco Bay Area, and the *invisibles*. The ones who work two or three jobs, who walk, who clean and maintain, who smile faintly, and let you pass, the humble, the timid whom we -unknowingly- depend upon to make our area function and shine.



Their carts were loaded with (slightly wilted) vegetables, (spotted with oxidation) salads, or apples (that had been bruised) –all perfectly edible and healthy, and really cheap! In fact, unbeknownst to these SNAP beneficiaries, they were following the latest findings published in the February 1st, 2019 issue of *The Lancet*:

“Findings from prospective studies and clinical trials associated with relatively high intakes of dietary fiber and whole grains were complementary, and striking dose-response evidence indicates that the relationships to several non-communicable diseases could be causal. Implementation of recommendations to increase dietary fiber intake and to replace refined grains with whole grains is expected to benefit human health. A major strength of the study was the ability to examine key indicators of carbohydrate quality in relation to a range of non-communicable disease outcomes from cohort studies and randomised trials in a single study. Our findings are limited to risk reduction in the population at large rather than those with chronic disease.” (Health Research Council of New Zealand, WHO, Riddet Centre of Research Excellence, Healthier Lives National Science Challenge, University of Otago, and the Otago Southland Diabetes Research Trust).

All the propaganda about **Healthy Diet** or **Healthy Foods** suddenly became shaky. And –happy coincidence? - in the same issue of *The Lancet*, an editorial hammers reason and (current) truths, showing how the public using social media and watching television is being manipulated with dire consequences:

“Conflicts of interest in drug-company funded research have long been an issue of public concern. Pharmaceutical firms are accused of paying big money for research that will show their pills are better than those of their rivals and the scientists they employ, however good, are accused by some people of taking the company shilling and therefore not to be believed. Pharmaceutical companies these days operate in a climate of hostility and suspicion. Some would say they have only themselves to blame.

But food is different or has been. It has taken a long time for the Big Food companies to attract the same scrutiny as Big Pharma. There have been campaigning voices at the margin for decades, denouncing Nestlé for its marketing of baby milk formula, for instance. But it feels as though only now, with the food industry finally being publicly challenged over the marketing of

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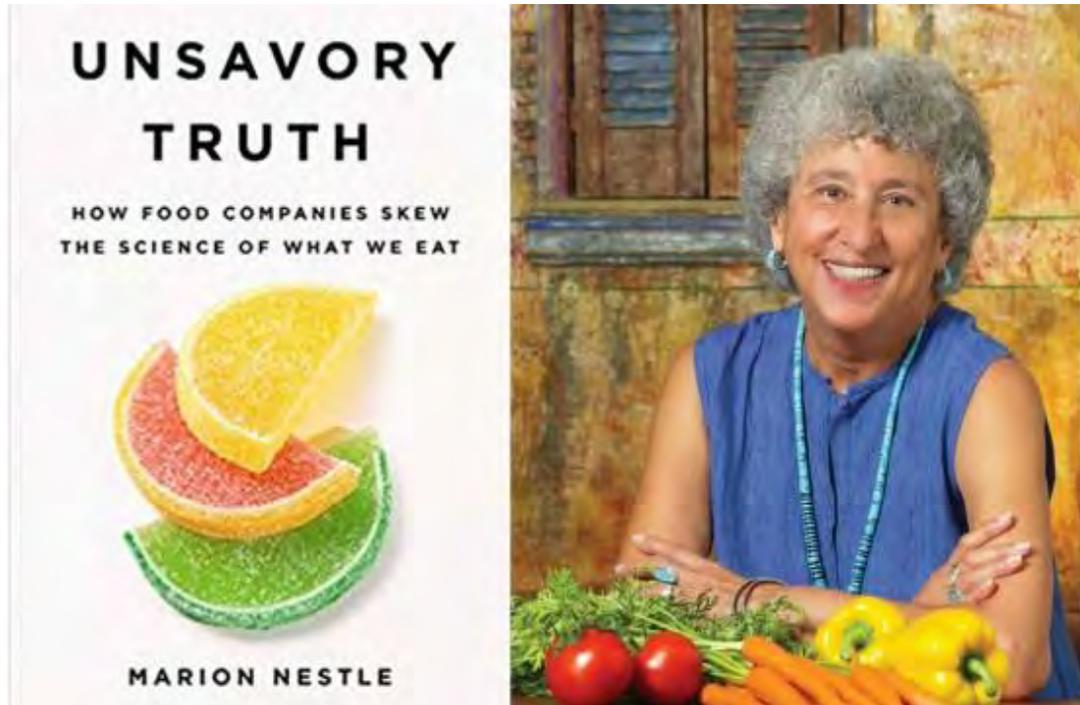
high sugar, high fat, high salt products that cause obesity and damage health, are the companies being seen in the same light as the drug companies -as commercial entities that may not always have our best interests at heart.

Marion Nestle -no relation to the company- has been one of the sternest critics of the Big Food companies for very many years. The Paulette Goddard Professor of Nutrition, Food Studies, and Public Health, Emerita, at New York University, USA, Nestle has rattled the companies' cages notably through her book, Food Politics, published in 2002, and her blog of the same name that is frequently revelatory and always a good read.

In her latest book, Unsavory Truth: How Food Companies Skew the Science of What We Eat, she probes the messy issue of conflicts of interest among experts in the world of nutrition. She finds it raises questions that are not easily resolved. Should an academic take money for research from a food company? Should a nutritional journal refuse to publish research paid for by a food company that will help their marketing by promoting one fruit over others? Should an academic institution take funds when the food companies have the only deep pockets in town? The purist might say no -don't touch their money because even if you produce high-quality, important research with food company cash, your results will appear tainted. Nestle has time and again exposed the methods of companies and those in their pay, and does so repeatedly in this book, but she says it's more complicated than that. "When it comes to industry funding...the issues are never simply black or white; they are usually more complicated shades of grey", she writes.

She herself won't take industry money (and fortunately doesn't need to), but she will attend a meeting and give a talk for which her travel costs and accommodation are reimbursed. She will occasionally advise food companies or answer their questions. She needs to know what they are doing and take an opportunity to urge them in what she feels is the right direction. Yet she knows interaction is dangerous. Influence is always a two-way street.

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Big Food is not Big Tobacco. It cannot be a pariah. We don't need to smoke. But we do have to eat. The companies that grow our vegetables and manufacture our ready meals and snacks are intertwined with our daily lives. We all have favorite foods that we buy. Many of us have our favorite food beliefs—about gluten, about sugar, or about chocolate as an aphrodisiac or coffee to help us focus. Just as there are no miracle pills, so there are no miracle foods. But untangling the truth from the myth is incredibly difficult when it comes to our diet, especially as the studies are so difficult to do because we forget what we've eaten or lie to researchers about the extra burger we ate yesterday.

All of that means that it's even more important for experts in nutrition to do their utmost to avoid bias or the perception of bias. The academics, the nutrition societies, which come out fairly badly from Nestle's book, the journals, and the universities all have to try harder, she says. Engage with industry? Certainly. But don't take the money if you can help it. She calls on nutrition journals to think again: "Marketing research does not belong in public health journals", she writes. "I wish the editors of nutrition journals would view such articles with skepticism



or at least label them as marketing research.”

We need the best possible, untainted guidance about the increasingly fraught issue of what to eat for our health. Nestle has advice for all of us lucky enough to have access to a good food supply: “eat your veggies, choose relatively unprocessed foods, keep junk foods to a minimum and watch out for excessive calories”. It’s a simple precept that, she says, should allow us to enjoy our food while staying healthy. It should also help us see through the disguised marketing that is all around us.”

And talking about **Nestlé**, it might be appropriate to copy some paragraphs of the company’s presentation in *Wikipedia*:

*A boycott was launched in the United States on 7 July 1977, against the Swiss-based Nestlé corporation. It spread in the United States and expanded into Europe in the early 1980s. It was prompted by concern about Nestlé’s “aggressive marketing” of breast milk substitutes, particularly in less economically developed (LEDCs), **largely among the poor**. The boycott was officially suspended in the U.S. in 1984, after Nestlé agreed to follow an international marketing code endorsed by the World Health Organization (WHO). The boycott was also ended in the UK by several organizations including the General Synod of the Church of England in July 1994, the Royal College of Midwives in July 1997, and the Methodist Ethical Investment Committee in November 2005 and the Reformed Churches in November 2011 as a result of the company’s inclusion in the responsible investment index FTSE4Good Responsible Investment Index. The boycott was relaunched in 1989.*

In May 2011, the debate over Nestlé’s unethical marketing of infant formula was relaunched in the Asia-Pacific region. Nineteen leading Laos-based international NGOs, including Save the Children, Oxfam, CARE International, Plan International, and World Vision have launched a boycott of Nestlé and written an open letter to the company. An independent audit of Nestlé’s marketing practices in Laos was commissioned by Nestlé and carried out by Bureau Veritas in late 2011. The audit found that “the requirements of the WHO Code and Lao PDR Decree are well embedded throughout the business”, but that “promotional materials in 4% of the retail outlets visited” violated either the Lao PDR Decree or the WHO Code.



And the list goes on... but Nestlé is far from being the only one that cares much more about “*profits-by-all-means*”, instead of food safety. In the US, the recent toxicogenic *E. coli*, lethal, epidemic due to contaminated romaine; or the quasi-daily episodes of food poisoning due to industrial ground meat; or the deaths due to poisonous peanut butter...The litany is endless.

When one looks at the policies implemented (just to start!) by the Trump administration’s Secretary of Agriculture, its Environmental Protection Agency (run by a coal industry lobbyist!), and other (now castrated) watchdogs, one should be wary and follow the multi-secular rules of Chinese food: *you boil it, you steam it, you sautéed it, you roast it, you bake it, you peel it...or you forget it!*

The Obscene Marketing of Food as a “Trend”

Yesterday, I googled *Food Trends in 2019*. After all, I do not want my grandsons to consider me a brain-damaged dinosaur. But what I found was unexpected and disturbing.

As an example, (most other websites were of the same barrel), **Supermarket News** (**sn**) has a richly illustrated entry that is a pleasure to *look at*; for the rest, you’ll have to decide:

Mean new green: *the SRG Culinary Council, “Top Chef” winner Hosea Rosenberg is calling **celtuce** — a lettuce cultivar — “the new kale.”*

“Better-for-you” desserts: *an array of sweetened superfoods is finding its way onto menus and into store shelves. That includes The Hummus & Pita Co.’s line of dessert hummus — **heavily sweetened and with chocolate or cookie dough added** (they introduced a pumpkin spice hummus shake this fall). It also includes gluten-free alfajores — a type of sandwich cookie — at Tanta, a Peruvian restaurant in Chicago that also sprinkles its chocolate mousse with toasted quinoa.*

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Oat milk: The Coca-Cola Co., citing Mintel data, said 36% of consumers said they would buy coffee with non-dairy milk, and 35% said they'd like coffee with added protein. The trend will also be getting a boost next year when **PepsiCo** launches an oat beverage under the Quaker brand in January.

Functional food ramps up wellness: According to Datassential, more than 300 new products feature nootropics (aka "smart drugs"). In New York City, a fresh nut milk bar and café, Tulo House, is set to open in January 2019 with fresh, organic nut and oat milks "custom-zhushed" with collagen, CBD, adaptogenic mushrooms and more.

Bringing fresh into shelf-stable: Take Perfect Bar, a highly processed protein bar that is made "using real food and clean ingredients to create a bar so fresh it belongs in the fridge," according to marketing for the company.

All this would be forgettable –and forgotten- if it weren't a canary in the coal mine telling us "these are the new Horsemen of the Apocalypse that will wipe you out –after wiping dry your bank account".

Seriously, all this is symbolic and symptomatic of a huge domain of our communication system, based uniquely and entirely on **profit** for the Facebook, WhatsApp, Apple and their memes or clones. Michel Eyquem (dit Montaigne) is probably turning wildly in his grave...

The abyss between the mass of people hurting to bring food (they can afford) to the table, and the **LaLa Land** universe of the marketing genial gnomes that promote useless –albeit expensive- concoctions is real and widening. The healthcare (physical and mental) providers are already overwhelmed. It will certainly get worse before (???) it gets better.

This week's magazines (in print and on the air) –as every week since the 1950s- are full of stories detailing the performances, competitions, creative recipes, promotion of utensils and whole kitchen installations by *chefs*: they are the ubiquitous, unavoidable stars of the media. Their creativity is never questioned; their recommendations are the new *Gospel* and questioning any is going to take you to the flames of Dante's *Inferno*.

Guy Debord's Society of the Spectacle is our daily fare: authentic social life has been replaced with its representation; "the decline of **being** into **having** and **having** into

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merely **appearing**...the historical moment at which the **commodity** completes the **colonization** of social life”.

In his analysis of the spectacular society, Debord notes that the quality of life is impoverished, with such a lack of authenticity that human perceptions are affected, and an attendant degradation of knowledge, which in turn hinders critical thought. Debord analyzes the use of knowledge to assuage reality: the spectacle obfuscates the past, imploding it with the future into an undifferentiated mass, a type of never-ending present; in this way, the spectacle prevents individuals from realizing that the society of spectacle is only a moment in history, one that can be overturned through revolution. In a consumer society, social life is not about living, but about having; the spectacle uses the image to convey what people need and must have. Consequently, social life moves further, leaving a state of "having" and proceeding into a state of "appearing"; namely the appearance of the image.



A group preparing a noonday meal in the 16th century. Public Domain

The Pantheon of Culinary Arts –and its controversies- is not recent. We do not know if Archestratos a.k.a. “*the Daedalus of tasty dishes*” in Sicily during the 4th century BCE, or Apicius in *De re coquinaria* (1st century AD in Rome) had to compete with others

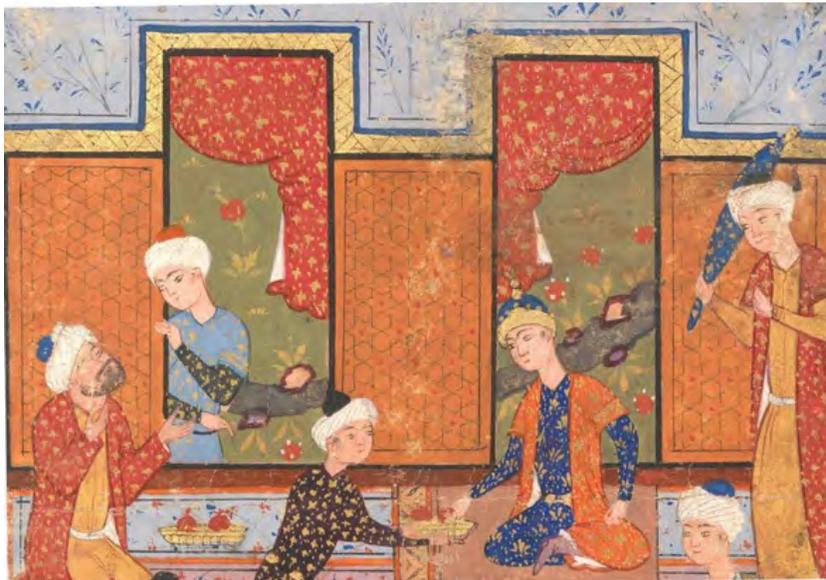
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to establish their credentials and attract the attention, then the support of the wealthy gourmets, but we do know that in medieval Baghdad, the *Iron Chef*-type competitions could have serious consequences.

We tend to think of cooking contests as a modern institution, whether featuring Alton Brown or nail-biting comparisons of British cakes. Yet cooking competitions actually have a much longer history. In the food-obsessed culture of ninth-century Baghdad, being a foodie was essential to getting ahead. Stories abound of the *caliphs'*, or rulers', passion for cooking, eating, and talking about good food. They even participated in cooking contests, including one that ended in near-execution and exile.

According to Iraqi food historian and scholar Nawal Nasrallah, Baghdad, at that time, was considered the “*navel of the nations*”: the center of the world. “*They had contacts with the four corners of the world,*” says Nasrallah, which meant the wealthy had access to spices from across Asia, citrus from China, and sugar from India. The city had the ingredients for a world-class food culture, and the wealth to enjoy it, as it was the Islamic Golden Age. And while Christianity had strict mores against gluttony, Nasrallah points out that Islam didn’t prohibit the enjoyment of food. “*So, the whole atmosphere was conducive to creating this kind of activity.*”



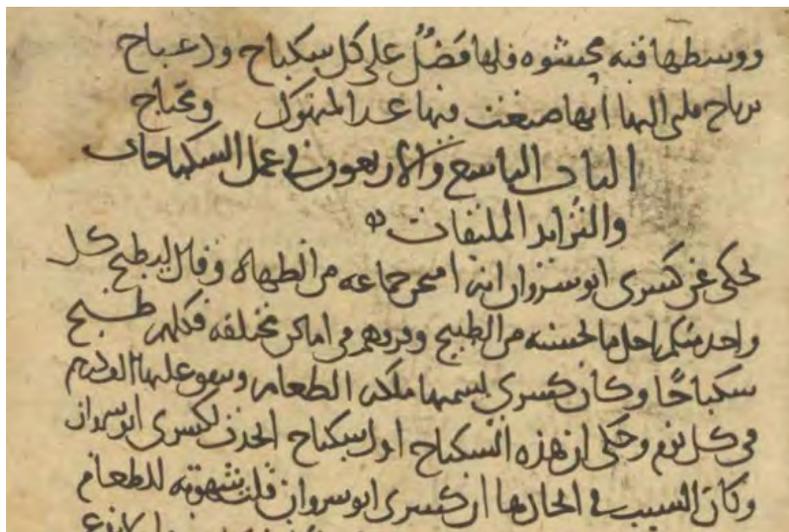
A prince trying some fruit and wine. Public Domain

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This obsession with food went straight to the top. One popular dish, *judhaba*, consisted of a sweet, layered bread pudding cooked in a *tannour* oven, with a chunk of meat roasted above it. The pudding would catch any drippings, creating a sweet and savory *mélange*. One recipe, made with bananas, sugar, and rose water, was a specialty of Ibrāhīm bin al-Mahdī, who Nasrallah evocatively describes as “*the Abbasid gourmet prince*.” (The Abbasids were the ruling dynasty.) Vendors sold *judhaba* in the marketplace, and some caliphs were known to commandeer especially tasty dishes cooked by commoners.

Caliphs may have even cooked competitively. According to one story, the caliph al-Ma’mūn, who reigned in the early ninth century, once faced off against his brother and boon companions. It was an “*Iron Chef of medieval times*,” laughs Nasrallah. In her description of the event, a cook named ‘Ibāda was present. Described as having a “*delightful and mischievous sense of humor*,” he was nonetheless jealous when al-Mu’taṣim, al-Ma’mūn’s brother, cooked a dish that smelled quite good. He coaxed al-Mu’taṣim into adding a bowl of fermented sauce to his dish, which then gave off a nasty odor. In true sibling fashion, al-Ma’mūn roasted his brother mercilessly. Unfortunately for ‘Ibāda, al-Mu’taṣim became caliph in 833 and exiled him in revenge, claiming “*he was not worth killing*,” writes Nasrallah. (‘Ibāda made troublemaking a habit but must have been a superlative cook. Another caliph brought him back, only for him to be banished again for another prank.)



An excerpt from a manuscript of *Kitab al-ṭabīkh*, a 10th-century cookbook. Public Domain

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Though Nasrallah notes that there are only a handful of similar stories, the fact that writers inscribed them into chronicles typically devoted to battles and successions means they were considered important social activity. Poets wrote elaborate food poems, and manuals describing how to be an ideal “*boon companion*” for a ruler emphasized the importance of cooking. One recommended that these men learn a repertoire of at least 10 exotic dishes. It was this gourmand culture that produced the first medieval cookbooks, containing the favored dishes of the elite. Nasrallah herself translated the earliest-known: a 10th-century cookbook called the *Annals of the Caliphs’ Kitchen*. So now we all can face off in the kitchen with our boon companions, Abbasid-style.

But these days, in our media-fed obsession of foods –*healthy foods*– one has survived unscathed since the Middle Ages. Its story is detailed by Amanda Ruggieri in a recent issue of the BBC Travel stories.



Parmigiano-Reggiano is aged anywhere from two to 20 years to develop a rich flavor and aroma
(Credit: Amanda Ruggieri)

Amanda is a talented guide worth following:

“It’s like a culinary riddle: what is a food made of only three ingredients where the main processing is done by invisible workers; which can be eaten as an

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appetizer, condiment or dessert; and which is prescribed by doctors to cure ailments?

“Need a hint? It’s also a dairy product... that can be eaten by the lactose-intolerant.

*“The answer: **Parmigiano-Reggiano**.*



Parmigiano-Reggiano is considered by many cooks and nutritionists to be a practically perfect food (Credit: Amanda Ruggeri)

“Much more than a fancy way to say *“parmesan”*, Parmigiano-Reggiano is a cheese that can only be made with extremely precise ingredients, in an extraordinarily particular process, in a 10,000-sq-km geographical area of Italy so carefully defined that you can make Parmigiano on one side of the small city of Bologna but not the other. The result of all that labor and legality is – as many cooks, nutritionists and Italians alike will tell you – a practically perfect food. There is Parmigiano’s taste: salty but sweet, grassy but nutty, sharp but rich. “There’s its texture: hard but grainy, popping with white crystals. There’s its evolution as it ages: a two-year-old cheese smells like fresh fruit and tastes sharply sweet; a three-year-old wheel reminds you of dried grapes and nutmeg, tastes more savory and more complex, and crumbles more

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easily in the palm. And there is its nutrition, a result of not only its ingredients but of the ageing process. Pound for pound, Parmigiano can compete with almost any food for calcium, amino acids, protein, vitamin A. *“Parmigiano has a thousand benefits, even for health,”* said chef Anna Maria Barbieri. *“It is, let’s say, a panacea. Something that gives health to everything it touches.”*



Although it is a dairy product, Parmigiano-Reggiano can be eaten by the lactose-intolerant
(Credit: Amanda Ruggeri)

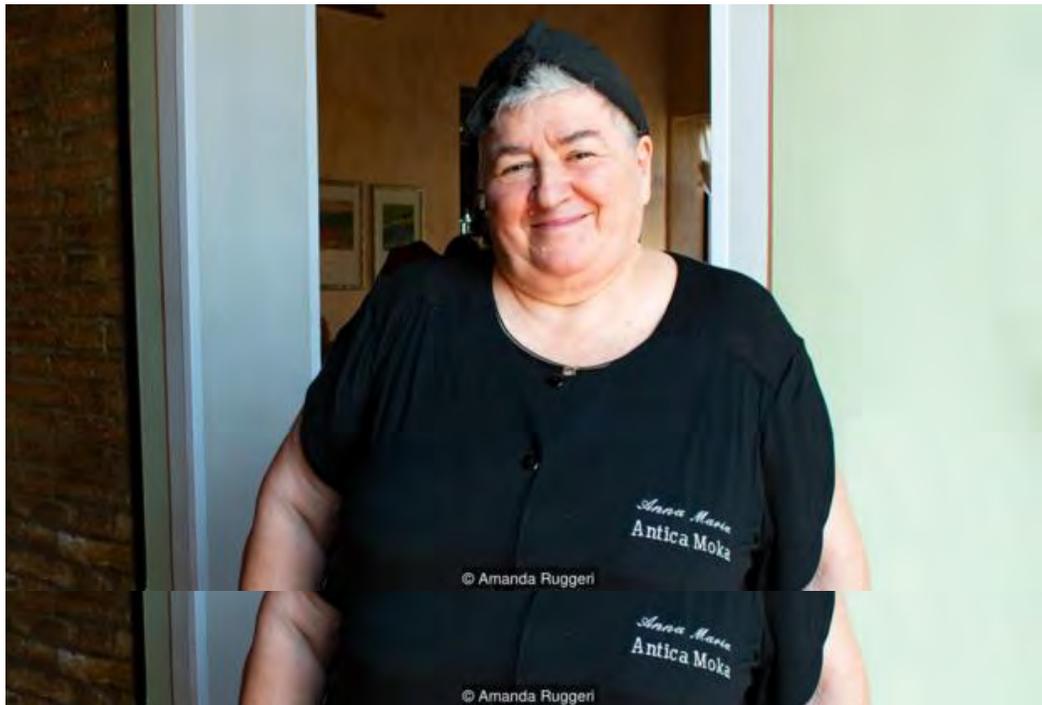
*“I hope so, because at Barbieri’s restaurant **Antica Moka**, a Michelin-listed restaurant in the heart of Parmigiano country in Modena, I eat the cheese until I feel like I’m going to burst. From a 24-month wedge as long as my forearm, I use the spade-shaped slicer, almost as ubiquitous in Italian kitchens as Parmigiano itself, to slice off shards for antipasto. I feast from a small cup of farro soup drizzled with crema di parmigiana (parmesan cream) accompanied with Parmigiano bread. “And then there’s Parmigiano again as a primo (first main course), twice over: tortellini in a sauce of Parmigiano, drizzled with balsamic vinegar of Modena, served in a fried Parmigiano bowl.”*

“Sometimes people tell me, ‘But Parmigiano, you put it in everything!’,” Barbieri said with a chuckle. “It’s my weakness. I really do put it everywhere.” Like so many others in the production area, Barbieri grew up with Parmigiano. She remembers

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*dairy farmers bringing their milk to her family's cheesemaking factory. As a little girl, she would accompany her grandfather, one of the first members of the **Parmigiano-Reggiano Consortium**, the association of producers established in 1934, on his trips to factories to verify the quality of each cheese wheel and give them their distinctive stamp of approval. "For those of us from Emilia-Romagna, Parmigiano is our 'daily bread'," Barbieri said. "It accompanies us throughout our lives."*



Chef Anna Maria Barbieri: "[Parmigiano is] my weakness. I really do put it everywhere" (Credit: Amanda Ruggeri)

"In Italy, particularly this part of Italy, Parmigiano is no mere luxury. It is a birthright. It's grated over countless bowls of soup and dishes of pasta. At aperitive with friends, it's as crucial as a glass of wine. At weddings, it's as abundant as well wishes. A friend from Turin told me that when she came to the UK to study, she tucked three staples into her suitcase: olive oil, tomato passata and Parmigiano-Reggiano. When I went to see a Roman friend visiting London, I

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smiled to see a wedge of Parmigiano on the kitchen counter of her rented flat. In my own home with my Italian husband, our refrigerator always is stocked with milk, eggs – and Parmigiano.

“Parmigiano’s devotees are hardly new. The 14th-Century poet Boccaccio set his maccheroni (pasta) eaters on a mountain of the cheese. The 17th-Century painter Cristoforo Munari placed Parmigiano at the centre of his kitchen scenes. The Pope sent England’s King Henry VIII 100 wheels as a gift. The French playwright Molière asked for Parmigiano on his deathbed. When the Great Fire of London bore down on the house of Samuel Pepys in 1666, the writer buried a wheel of the cheese to protect it.



Parmigiano-Reggiano can only be produced in one specific 10,000-sq-km geographical area of Italy (Credit: Amanda Ruggeri)

“Few of these fans would recognize much of what’s sold today. The white flakes many of us grew up shaking from a green can aren’t parmesan, not even close. Within the EU, both Parmigiano-Reggiano and its anglicized version, “parmesan”, are legally registered terms protected by the PDO – protected designation of origin – label since 1996. But in the US, the law protects only the

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name “Parmigiano-Reggiano” (In the EU, those green Kraft canisters are labelled “Parmasello”). Worse, much of what goes for grated cheese in the US isn’t cheese at all. Tests by Bloomberg News found that some versions included up to 9% wood pulp – an anti-clumping agent known as cellulose. Parmigiano-Reggiano doesn’t have this ingredient or any additives or preservatives at all, for that matter, salt aside. Then there’s fraud. At the headquarters of the Parmigiano-Reggiano Consortium in the city of Reggio Emilia, president Nicola Bertinelli, whose family has made Parmigiano at their farm since 1895, asked me to take a guess: out of 10 wheels of Parmigiano-Reggiano sold in the world, how many are real?

“One?” I guessed, expecting I’d be too cynical.

“Exactly. One,” he said.



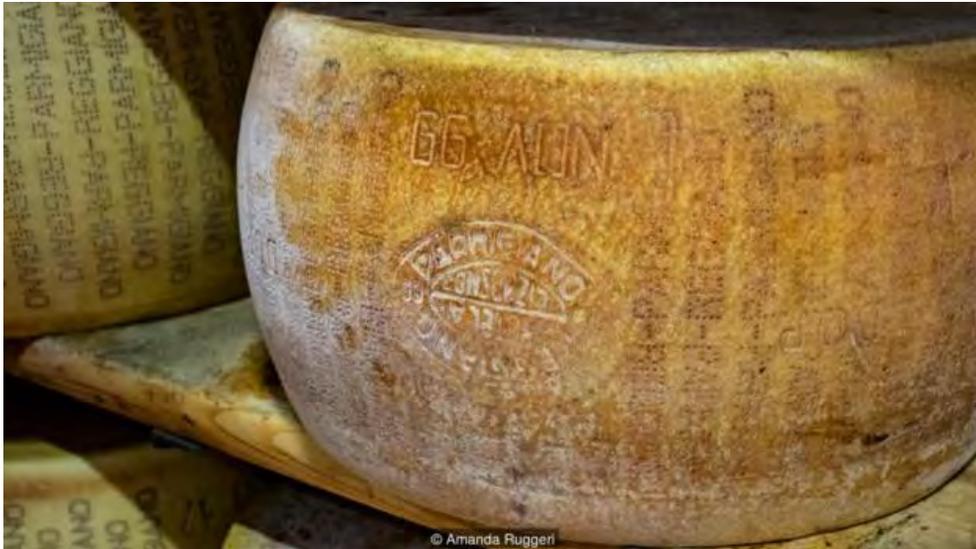
In the EU, the terms Parmigiano-Reggiano and parmesan are safeguarded by the PDO (protected designation of origin) label (Credit: Amanda Ruggeri)

“After all, there’s a great deal of money in Parmigiano. When the US’s wholesale chain Costco sold wheels for \$900, it made headlines – not least because it was a bargain. The reason Parmigiano is so pricey lies in its precision. There are only three ingredients: milk, salt and rennet, the enzyme that curdles milk. The milk

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comes exclusively from local vacche rosse, a rare breed of red cows that number just 3,000 total – 0.01% of all the dairy cows in the EU alone. But it’s more than that. “The secret of this cheese isn’t just the type of cow that produces the milk, but what the animals eat,” said Luca Caramaschi, the owner of Parmigiano factory Caseificio San Bernardino:



Because of the precise nature of the manufacturing process, authentic Parmigiano-Reggiano carries a high price tag (Credit: Amanda Ruggeri)

“Bertinelli outlines the rules. The production area is exclusively the provinces of Parma, Modena, Reggio Emilia, Mantua (to the east of the Po River) and Bologna (to the west of the Reno River). At least 50% of the cows’ dry food must come from hay, at least 75% of the hay must come from the Parmigiano production area, and at least 50% of that production-area hay must be produced on the farm where the cow itself was born and bred. “Why is this zone so precise? Because only here – naturally, historically, geographically – does the hay of the cattle have three specific strains of bacteria: the ‘three friends,’” Bertinelli said. “If these three bacteria are present in production, they trigger processes where the milk leads to the development of particular aromas, flavors and tastes – and to specific acidity levels, which is why [the cheese] can be preserved for so long.” Without these “friends”, even the finest of cheesemakers and vacche rosse

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wouldn't be able to produce Parmigiano.



Parmigiano-Reggiano is made using only three ingredients, including milk from a rare breed of cow known as vacche rosse (Credit: Amanda Ruggeri)

*"I watch the invisible workers in action at the **Caseificio Sociale Cooperativo Pongennaro**. Like 85% of Parmigiano factories, it's a cooperative, owned and run by groups of small local farmers. And at 08:00, production already is in full swing. Half of the milk was delivered fresh from the cows the previous evening; overnight, the fat rose to the surface. It's been skimmed off for butter. The rest of the milk was brought this morning, full-fat. Both are combined in a copper cauldron; the reason Parmigiano is called semi-grasso – "semi-fat". It takes 14 liters of milk to make 1kg of Parmigiano; 550 liters to make one wheel. One of the cheesemakers heats up the cauldron and adds the whey starter – the culture rich with good bacteria that kick-starts the fermentation process – from yesterday's production.*

"Now a kind of battle takes place: the good bacteria will defeat the bad bacteria by eating everything," said the consortium's Cristiana Capelli, who is showing me around. "The good bacteria start looking for more food and begin to eat the

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lactose of the milk. The cheese is cleaned, safe for a long fermentation.” This explains why the only preservative used, or needed, in Parmigiano is salt. It also explains why Parmigiano is safe even for the lactose-intolerant.



It takes 14 liters of milk to make 1kg of Parmigiano-Reggiano (Credit: Amanda Ruggeri)

“As we watch, one of the workers adds rennet to curdle the milk. After two minutes, the cheese begins to separate. In nine minutes, it’s coagulated completely. The next step is churning, first slowly and carefully, then faster and faster. The temperature goes up to about 45C. One cheesemaker dips his hand into the cauldron. “Watching the temperature is not enough,” Capelli said. “They keep their hands inside because they have to find out how the milk is behaving. Milk is different every day depending on air, the temperature, everything.” The mix has turned from creamy white to butter-yellow; the granules look like rice pudding. The cheesemaker squeezes them to test their readiness. It’s time. The heat switched off, the mixture is left to rest for an hour. The liquid, which weighs 10 times more than the granules, pushes out both air and bad bacteria. Then comes the moment we’ve been waiting for. At the bottom of each cauldron, 2.1m deep, a 100kg block has formed. The men push it up with a paddle and cut it in half: two 50kg wheels of what looks like packed-together rice.

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During the fermenting process, good bacteria consumes the lactose in the milk, as well as any bad bacteria (Credit: Amanda Ruggeri)

“The next steps of the process sound like nothing so much as going to a spa. In the sala di riposo, or “resting room”, the cheese loses weight: put in a mold, the wheel rests under a weight to squeeze out excess water. It’s stenciled with the stamp of origin, outlining the date, factory and DOP label. Then it goes to the pool: each cheese is plunged into a bath of water made up of 33% salt. Through osmosis, the cheese sheds fat and whey. After 20 days of brining, when the salt has penetrated 3cm or 4cm deep, it’s left in the sun to dry. Only then, finally, does the cheese go into the ageing room. Here, over the next two years, or three, or even 20, as in the case of one wheel that Caramaschi shows me at Caseificio San Bernardino, the magic happens. The salt penetrates the core of the cheese. The bacteria keep up their work. The cheese transforms from a block of milk and fat and salt to something else entirely: Parmigiano. “Over time, all the aromas and flavors that there are from the territory are concentrated,” said Caramaschi. “It’s much like what happens with wine.”

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After they are molded, the wheels of Parmigiano-Reggiano are pressed to remove any excess water (Credit: Amanda Ruggeri)

“In a year, professional testers from the consortium come to check each wheel, tapping it with a hammer-like tool and listening for evidence of inconsistencies, like cracks or holes. If it’s approved, it gets a final firebrand of quality. If not, it’s either judged a second-quality cheese, which must be labelled mezzano – middle quality – and can’t be aged further. Or, if beyond hope, the rind and its stamps are scraped off completely, erasing forever any association with Parmigiano. Some 8% of all the wheels produced in the region meet one of these lesser fates. The rest go on to be exported across Italy and around the world.

“A little later, I find myself standing in an 800-year-old chapel on Caramaschi’s estate. A painting above me shows the archangel Gabriel carrying a banner – not out of the ordinary, except for what’s depicted on it: San Lucio, the patron saint of cheesemakers, stirring a copper kettle of milk over a fire to make Parmigiano. “This is where I was married 30 years ago, where my sons were married, where my nephew and my sons were baptized, and where my father lies,” Caramaschi said. “It’s become the church of the family.” Before Caramaschi’s great-great-great-grandfather began making Parmigiano here in the 1700s, this was a small village, complete with a dairy farm. The church is no coincidence. Parmigiano was first made under the guidance of Benedictine monks about a millennium ago.

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“Without knowing what bacteria were, cheesemaking must have seemed mystical, even miraculous, to its first practitioners. So, too, the food’s health benefits. Traditionally, mothers gave rinds of Parmigiano to their teething babies. Even today, it’s prescribed in Italy to the old, the young, the sick. Because the good bacteria gobble up the cheese’s lactose, 26-month-old Parmigiano is safe for the lactose-intolerant. Thanks to that same breakdown of bonds, it’s also easier to digest, its proteins and nutrients are easier to absorb.

“Meat proteins need to be broken down into amino acids, which takes four hours for beef,” Bertinelli explained. “But thanks to the natural process of Parmigiano, they’re already broken down, so it only takes 45 minutes.” That means Parmigiano is ideal for those who need an immediate infusion of proteins, like athletes. Parmigiano also has nine free amino acids, the kind easily absorbed by the body – one of which, tyrosine, shows up in the white, umami-flavored crystals that develop. Then there are the nutrients. A single ounce (28g) of Parmigiano has 9g of protein, 2g more than beef, and 321mg of calcium, nearly 10 times more than milk. It has 12mg of magnesium (more than salmon), 28mg of potassium (about a third as much as banana) and 0.12mg of vitamin A (nearly as much as the same amount of raw carrots). There’s zinc and iron, copper and manganese, biotin and vitamin B6.

“Parmigiano is a veritable nutritional supplement, capable of providing a high amount of vitamins and proteins in a few grams,” said Florence-based nutritionist Valentina Fraton. She recommends it to children, to weight lifters, even to those expecting. “Even pregnant women should eat Parmigiano as an important source of calcium for the health of their bones and for the formation of the skeleton of the unborn child,” Fraton said. “Although Parmigiano is made with raw milk, therefore not pasteurized, its long maturing, at least 12 months, prevents any danger.”

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This precise process for making Parmigiano-Reggiano was developed by Benedictine monks about a millennium ago (Credit: Amanda Ruggeri)

"I end my exploration of Parmigiano much where I began: eating. I'm back home in London, far from the glossy red cows and copper cauldrons and 800-year-old churches of Parmigiano country. As I pull out a wedge, I remember what Barbieri said. "At 24 months, I like to eat it like it is," she told me. "With hot bread out of the oven. Or even with nothing – then you can really get a feel for it and its flavor, so delicious you can taste it even with your eyes closed."

Is Parmigiano a perfect food? I'm not sure. But right now, standing barefoot on a chilly London evening, it's a taste of the things I love about Italy: its beautiful countryside and culinary passions, long traditions and little miracles. And for me, that's enough.

Grazie Amanda! Buon Appetito e Salute!

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For me –my family and many of my friends- Parmigiano-Reggiano is emblematic; just like the bread of *Poilâne*; the real *Carnaroli* or *Arborio* rice for a risotto; *Frantoio Tuscus* or *Rincon de la Subbetica* extra-virgin olive oil; *Junmai Daiginjō-shu* or *Tokubetsu Honjōzō-shu* sake; Angus beef grass-fed hanger steak; Roquefort *Papillon* or *Gabriel Coulet*; a real *Brie de Meaux*; *De Cecco* or *Rustichella D'Abruzzo* pasta; and many, too many other authentic, artisanal products that keep you healthy and **happy**, but that will never make the list of **trendy** foods. We are not immune to messages and information, but we attempt to find out if there is any objective, verifiable truth behind the seduction, any benefit (for health or savings), any preoccupation about preserving natural resources and the environment. Gullibility is not –yet- our cup of tea (or glass of wine)!



Skills are a Must!

Most humans today do not eat food that they can (or could) gather by hand, and consume raw. We **process** most of our foods; cleaning, slicing, cooking, using spices –the list fills libraries, and set programs of Cooking Schools.



CourseHorse.com

When I (shortly) apprenticed at age 15 in a restaurant in Paris, I very rapidly discovered that I had **no** manual dexterity or basic skills. I am clumsy, dumb, and could never coordinate my vision with my limbs (including my hands) to master the very basic knife skills; I remained mostly a dishwasher and a *garde-manger*. When I attempted to strike a tennis ball with a racket, the ball **never** where I intended to land it; when I stroke a foot-ball (soccer), the goalkeeper ignored it.

Golf is a case-in-point: colleagues tried to convince me that playing golf would help build a network of wealthy patients. Although I doubted it –and wasn't interested in

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the *rich-and-(in)famous*, I gave it a try; twice. The first shot started beautifully, and the ball initiated a parabolic voyage that drew applause; then the ball crashed into the left cheekbone of a local official; I rushed to apologize, but he sympathized and claimed that he was 'OK'. The next day, his black eye had an impressive Moshe-Dayan aspect.

The second time, my ball started even better, but the finish was intensely melodious: a loud crystalline sound signaled a cataract of glass shards, and the total destruction of the large glass wall of the clubhouse. Insurance coverage proved effective.

There was NO third attempt.

And it got worse with age: I **must** look at my limb to tell if it's left or right! With my love of food, it was and remains a lost battle.

My recipes are not high-class: they are *good*, but *not great*, tasty and healthy, and will not upset your stomach or liver. My family, friends, and occasional guests are happy (or it seems) and congratulate me – but will easily forget the meal. Recent stints at the Chinese Cuisine Training Institute (now the impressive International Cuisine Institute) in Hong Kong, and at At-Sunrice Chefs' Academy in Singapore, where I taught, did confirm my role as educator, scientist, taster – but **not** for demos! So be it.

This probably started at birth: I remember these handicaps in my childhood. **Nature** took over before birth, and never allowed any trainer to instill desired change. Conversely my **senses**, with help of exposure, education and hedonism have developed to a professional level. Add to this the insatiable curiosity on **why** things are the way they are –and how to eventually change them for the better- and I am always ready! **Nurture** is my fate.

I was born too early: if editing embryos to enhance IQ is a sci-fi fantasy, a different approach aimed at enhancing IQ (or manual skills) is far less fantastic. We're calling it embryo profiling, and it could be done today.

Embryo profiling capitalizes on the ability to add up the minuscule effects associated with thousands of genetic variants to create what's called a polygenic score. Based on this score, researchers can make predictions about an embryo's likelihood of exhibiting given traits, from developing cardiovascular disease to going far in (cooking) school. The latter, known as educational attainment and often taken to be



a proxy for IQ, is a trait for which researchers claim to have made significant progress. The practical value of predictions based on polygenic scores in humans is still the subject of intense scientific debate. But the equivalent of calculating polygenic scores of sires and dams (though not embryos) is already being used to breed cows with enhanced milk production. Not waiting for the scientific debate to be settled about the accuracy of predictions regarding traits as complex as human IQ, a new company, Genomic Prediction, is now offering prospective the ability to identify and avoid implanting embryos that are likely to have very low IQs. Although the company says the same set of technologies can identify high IQ embryos, it has indicated that, at least for now, it will not offer that service because doing so would be unethical. However, Stephen Hsu, one of the founders of Genomic Prediction, has described his vision of the day when prospective parents can use genome profiling to select the “*smartest*” embryo, with a gain of 15 IQ points compared with the also-rans. It’s not a stretch to suspect that selecting for embryos with the greatest potential for high IQ, as wildly imperfect as the process may be at present, could soon be on the market. Whether or not Genomic Prediction really thinks that selecting for high IQ would be unethical, most do.

Parents have at least two fundamental ethical obligations that push in diametrically opposite directions. The first requires parents to shape their children. That’s what schools and religious traditions and piano lessons and household chores (including knife skills!) are for. The second requires parents to accept their children as they are, to nurture their dispositions and talents whatever they may be. Balancing those competing obligations is one of the central challenges of being a parent. Market pressures, however, are creating a grotesque imbalance between those obligations. One need only look at the proliferation of ridiculously expensive after-school enrichment and summer learning programs, which have taken the place of time for play and unskilled summer work, to see the pressures already on well-to-do parents to pursue every possible advantage for their children. For those who can afford to pay for in vitro fertilization and embryo profiling, which is likely to cost upwards of \$20,000 at current rates, selecting for high IQ embryos would be more of the same — on steroids. It would make it still harder to achieve the balance of obligations that parents need to strike if families are going to flourish. Moreover, it would be yet one more factor exacerbating the gap between the haves and have-nots.

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Placing limits on the genetic selection of embryos is one small way for our society to affirm the importance of achieving a balance between the ethical obligations to shape our children and to accept them as they are — and the importance of closing, rather than widening, the gap between the rich and the poor. With the emerging capacity to use polygenic scores to identify embryos with the potential for low or high IQs, there will be passionate calls to ban the entire practice. And there will be equally passionate calls to leave this to the market to sort out. Regulation represents a middle way between the bluntness of bans and the destructiveness of unchecked markets. Regulation would seek to draw lines between things that are — and are not — acceptable to do with embryos. As difficult as drawing such lines would be, it is not impossible. Other countries have managed to do it, e.g. the United Kingdom.

It is time –for me- to accept who I (still) am. The changes on the horizon will be incredibly challenging in terms of ethics, and lawyers are already salivating, drooling when forecasting the manna they will collect.

This will be developing *after my time*.



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