INHERITING HUNGER

Karen O'Connell

[W]e all have the plate in front of us that is our life, and we have to eat from it or die because it's what we're nourished on ...¹

You couldn't even find a frog or a mouse—everything had been eaten.²

AYING 'I'M STARVING' was like swearing in my family and was met with harsh correctives: 'No, you're not!' It took me a long time to realise that the memory of near-starvation was still raw for my immigrant Australian family. It seemed, instead, that I was surrounded by excess. When we sat at the dinner table, my father—already so big that he had to weigh himself on the industrial scales at the tin factory where he worked—was served his meal from a mixing bowl. Driving home each morning from the night shift at Gadsden Hughes, he ate a dozen bread rolls still warm from the bakery, washed down with a litre of cold milk.

This excess was driven by an original deprivation. My father had always been the skinniest kid, all bone and Adam's apple, never picked for the team. The first time he realised that he'd grown out of his gangliness, that he was *fat*, was when, marvelling aloud at how he could eat so prodigiously while remaining so thin, his workmates fell about laughing.

My father's hunger was the force that drove him through each day, time measured out meal by meal. The end of one feed marked the tick-ticking of thinking about the next. Hunger, in him, was a fierce drive, and—like all human drives—it was ultimately directed at survival. He was driven as if, without obeying the urge that impelled him, he would starve.

Today we know more about hunger than ever before, thanks to its association with the much researched experience of obesity. Yet an expert—scientist, public health official, doctor—would likely look at someone like my father and see obesity and not its underlying hunger. Hunger has been swallowed up so that it's no longer visible, and our obsession with fatness obscures the other significant aspects of our overeating. We might turn away from hunger but it persists, not only in its ghostly historical forms, but in the current deprivations that create newly stressed bodies. In Australia, 3.6 million people experience food insecurity at

¹ Paula Fox interviewed on *The Book Show*, ABC Radio, 24 March 2008, http://www.abc.net.au/radionational/programs/archived/bookshow/paula-fox/3286944.

² Svetlana Alexievich, *The Unwomanly Face of War*, Penguin Books UK, 2017.

least once a year, and families with children experience it more than those without.³ Hunger or the threat of hunger is everywhere, even in the privileged West. And it's in our families, where we share meals and cultures of eating, that we first experience food excess and deprivation.

In my own family, hunger was the theme of many stories and memories, which grew more disturbing over time. When I was young, there were pleasurable stories, small adventures in hunger. My Glaswegian nana, Nina, described begging for the scraps of batter from the bottom of the chip shops' deep fryers at closing time. She made the hot crisp scraps sound so delicious that I wished for my own, sprinkled with salt like hers and wrapped in a twist of newspaper. My great-aunt and -uncle, new immigrants from Scotland to outback Australia, fed their two baby girls boiled sugar when it was the last thing they had to eat. And in the little half-house in Petersham, where my Scottish paternal family and my Ukrainian-Canadian mother washed ashore from the European upheavals of the mid-twentieth century, and where I was born, my aunt and uncle came for cheap meals of porridge when their money ran out.

When there was food on our table, there was too much. If anyone held back, my mother urged them to eat, fuelled by the rich brew of guilt and care that was maternal love. She loved us immensely and scaled up all her food to match, so that her *pyrohy* were the size of fists, her cabbage rolls as large as saucers. The more we ate, the more of her love we'd taken in, and an unfinished plate was, to her, a painful personal rejection. I'm reminded of a girlfriend who, after her

first heartbreak, was presented with half a defrosted Sara Lee cheesecake by her mother: 'Here, darling, eat this, you'll feel better.'

If offering food is a form of love, with-holding or forcing food makes what we eat a mode of punishment. Anyone who has been well fed or gone without knows that food, like love, is more complex than comfort. My sister, who hated vegetables, especially peas, was made to sit before her plate until she ate everything on it. And in the brave and futile way that children can resist adults, she would stay for hours alone at the table, the cold plate before her. When she sat right through until bed time, the meal was put in the fridge and she was served it again for breakfast.

As her younger sister, I watched the loop of suffering in which she was caught, and I learned to eat whatever was on my plate. I think about her, my child-sister, now grown, in a network of relations with the children who came before, sitting before empty plates or full, who became adults who use food to comfort and deny, to fatten or starve themselves and the children in their care.

Family cultures like ours produce people with complex relationships to hunger and satiety. We are familiar now with the idea that obesity is heritable. Someone born with an overweight parent like mine is much more likely to be overweight themselves, possibly from poor family eating habits,⁴ but also from more complex and surprising origins of heritable weight gain. There is increasing evidence that parents who were *underfed* when they conceived also have overweight children, and that starving ancestors may cause future generations of overweight descendants. Megan Warin

³ Foodbank, Hunger Report, 2018.

⁴ UK Health Study 2017, December 2018; 28 per cent of children of an obese mother were also obese, compared with 8 per cent of other children; 24 per cent of children of an obese father were obese, compared with 9 per cent of other children.

and her co-authors call this transmission 'obesity lineages'.5

Where adults are exposed to famine conditions, changes to the chemical processes that regulate their genes can cause future obesity. Such discoveries in environmental epigenetics remain nascent and contested, but some findings show that the effects of famine and starvation persist epigenetically throughout an individual's life and the compromised genetic mark of the hunger experience passes on to future children. This impacts children in utero who experienced famine through their mother's body and, more speculatively, those children's future children. Heritable changes in gene expression create intergenerational effects such as increased weight, diabetes and cardiovascular disease. These changes seem to adapt the body to an environment of food deprivation. But if the environment changes to provide excess food, the body is still driven to eat as if deprived. We could say that we are persistently hungry because our ancestors starved.

My mother's family experienced mass hunger and famine, including the horrific Holodomor, named after the Ukrainian 'Death by Hunger' or 'the Hunger Plague'. This man-made famine was a genocidal act inflicted by Stalin on Ukrainian people in 1932–33. Millions died of starvation. Before Holodomor there were other famines, including one in 1921 when crop failures caused the deaths of hundreds of thousands of Ukrainians and left my grandfather scavenging already harvested fields for stray potatoes.

In Svetlana Alexievich's interviews with Soviet women, *The Unwomanly Face of War*, is the story of a girl, Oksana, who'd survived Holodomor:

It was from her that I first heard of the horrible hunger in Ukraine. Holodomor. You couldn't even find a frog or a mouse—everything had been eaten. Half the people in her settlement died, but she saved herself by stealing horse dung at the kolkhoz stable by night and eating it. Nobody could eat it, but she did: 'When it's warm it's disgusting but you can eat it cold. Frozen is the best, it smells of hav.'6

Hunger has the power to make people do things they thought only a different kind of person, a lesser person, could do. The atrocity photographs of the Ukrainian famines are stark reminders of how brutal it is to die of starvation and with what determination we cling to life.

My grandfather migrated from Ukraine to Canada after the 1921 famine but before Holodomor. My mother remembers sewing coins into the hems of coats to be sent back to Ukraine from Manitoba with food parcels. My grandfather had left another wife and daughter behind, but we didn't know this until years after his death. He died in his early fifties of a heart attack, one of the health effects associated with early exposure to famine.

Epigenetic famine studies began with research on survivors of the Dutch Hunger Winter of 1944–45. They found epigenetic effects, including obesity, six decades later in people exposed to the famine around the time they were conceived and in utero. More recent studies show that early foetal exposure to the Great Chinese Famine (1958–61) and the Ukrainian Holodomor significantly increased the risk of obesity and diabetes. These persistent effects of famine and starvation through inter-uterine exposure have profound consequences for how we think about the mother's body. A mother, herself injured by a hostile environment,

⁵ Megan Warin et al., 'Epigenetics and Obesity: The Reproduction of Habitus through Intracellular and Social Environments', *Body and Society*, 2015, pp. 1–26.

⁶ Alexievitch, The Unwomanly Face of War.

could be seen as incubating future harm that may persist for several generations. 'You are what your grandmother ate' is how some have reported these studies.

The tracing of family histories of obesity through epigenetics has occurred alongside new and complex ways of thinking about bodies. We once pictured bodies as individual entities, strata of skin over muscle over bone over organ, like the printed transparent sheets in my childhood *World Book Encyclopedia* that were overlaid to form a whole embodied figure, allowing me to construct a generically pink, male body simply by turning the pages. And to unmake him, to strip him back to bone.

This solitary individual, made up of distinct organs and layers, cannot survive the new sciences of epigenetics, neuroscience and microbiology that reveal how radically we are integrated with our environments. The individual has given way to a view of bodies as unbounded, enmeshed with their environments and with each other. If you put aside the misconception that your body has a simple boundary of skin (which is porous and teeming with the various bacterial, fungal and viral life forms that Donna Haraway calls our 'tiny messmates'),⁷ any clear demarcation from the environment dissolves. Social scientists, inspired by emerging scientific knowledge, now talk about bodies and their environments as processes of co-creation, in a constant flow of being made and remade.

Sociologist Maurizio Meloni writes of our 'deep entanglement' with the environment, which is 'flooding over the newly porous organism'. Anthropologist Jörg Niewöhner speaks of 'a body heavily impregnated by

its own past and [its] social and material environment'. And social anthropologist Megan Warin writes that 'bodies enfold molecular and social environments into their growth'. Once we acknowledge that social processes—family food cultures and eating habits, for example—are also biological processes because they change how our bodies function in abiding ways, we are well beyond the old distinctions between bodies and environments, nature and nurture.

The possibility that we inherit what happened to our ancestors is both tantalising and terrifying. It can revive eugenicist ideas by suggesting that certain people are born already unequal: damaged in ways that are biologically inscribed. It can also operate as an impetus to create better social environments for ourselves and future generations. Environments are not benign landscapes, but political constructions with unequal impact on those who live in them. In both Canada and Australia, the countries my family immigrated to for safety as well as for food, room was made for them by the violent removal of First Peoples from the land, including through starvation. James Daschuk has traced the catastrophic effect on Indigenous Canadians of the state-sanctioned starvation, hunger and malnutrition that removed them from the Canadian plains, including in Manitoba and Saskatchewan, where my family settled as farm labourers in the 1930s.¹⁰

It was a harsh environment—my mother spoke of walking to school through snow up to her thighs and eating sauerkraut ice blocks chipped from the frozen barrel at the back door on return—and one where disruptions to traditional life were deadly. Colonisation is often framed as power struggles over

⁷ Donna Haraway, When Species Meet, University of Minnesota Press, 2008, p. 165.

⁸ Jörg Niewöhner, 'Epigenetics: Embedded bodies and the molecularisation of biography and milieu', *Biosocieties*, vol. 6, no. 3 (2011), p. 290.

⁹ Warin et al., 'Epigenetics and Obesity', citing Deleuze and Bourdieu.

¹⁰ James Daschuk, Clearing the Plains: Disease, Politics of Starvation and the Loss of Aboriginal Life, University of Regina Press, 2013.

land, but those who control the land also control the food. Australian historians have described how hunger was used as a tool of colonisation by manipulating the movement of Indigenous populations, underfeeding Indigenous people already deprived of traditional sources of nutrition and instituting discriminatory responses to Indigenous and white hunger.¹¹

If we inherit bodies already epigenetically programmed to respond differently to environmental stressors, including the stress of hunger, we have taken into our bodies the damaging environments of our forebears. We effectively *inherit environments*. Jonathan Wells describes people who have experienced colonialism over generations as inheriting a 'metabolic ghetto' in the form of racially compromised health.¹² Instead of living in disadvantaged environments, these environments live in us.

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Peter, my Scottish paternal grandfather, his body permanently shortened by malnutrition, legs stunted by rickets, back scarred with wounds, was born into abject conditions in the notorious Gorbals in Glasgow in 1915. His childhood home was a oneroom kitchen with two beds in condemned stables. His parents slept in one bed, six kids shared the other—three girls at the top, three boys at the end. Each sister was paired with a brother to steal and scavenge. With his sister May, Peter would break into Coopers, the grocer, at night and steal fruit from the barrows; or wait outside the Theatre Royal to scavenge for uneaten chocolates in discarded boxes. They would take money from the collection plate at church: 'I'd get a handful of silver', Peter said. 'Even in my feeble mind I couldn't see the sense of it. There's all this money and we're starving.' They would take anything that could be cooked back to their mother who, Peter said, could make a meal out of anything. And there was a harsh pride in being able to stay alive amid the extreme conditions. Peter said:

Our main aim in life was to survive and we got around the place, fruit shops and all these other places where you could snatch a few spuds and a few biscuits ... We O'Connell kids, we were survivors. We would steal anything, anywhere.

After Peter teamed up with his brother John and a gang of older boys to steal a lamb to butcher and sell, the boys were caught. Peter took the rap—the others told him he had to because he was the only one too young to be sent to prison. He was placed in remand and then sent to a borstal, a brutal juvenile institution run by an ex-army sergeant, from age 10 to 15. When he returned to his family after five years, it was to a full adult working life.

On his arrival at Westthorn Reform School, after travelling by train with the probation officer, wearing his first-ever clean shirt, ten-year old-Peter was 'thrown to the wolves'. The older boys hung out over the balconies, watching and calling out, choosing one of the new arrivals for sex. At night, men were let into the room where the boys slept to abuse them. My grandfather claimed that he wasn't raped. He was the youngest and his malnourished body was so small that he says the older boys rejected him for sex. 'They said, "Jesus Christ!" They said, "What have they sent us? Is this a nursery?"

¹¹ Anne O'Brien, 'Hunger and the humanitarian frontier', Aboriginal History, vol. 39 (2015), pp. 109-34.

¹² Jonathan Wells, 'Maternal capital and the metabolic ghetto: An evolutionary perspective on the transgenerational basis of health inequalities', *American Journal of Human Biology*, vol. 22 (2010), pp. 1–17.

Asked about the experience at the end of his life, my grandfather, who'd never before spoken about his past, said: 'It was lovely. Like a holiday.' The thing he most appreciated? He was no longer hungry. The boys grew vegetables in the reform school garden and did their own baking. 'The pies!' said my grandfather, about the boys' home where he wasn't abused, wasn't raped. 'They were lovely pies ...'

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In understanding our life experiences, the new sciences of the body show that distinguishing what is social or cultural from what is biological is increasingly meaningless. Epigenetics seems to offer a simple, biological explanation for the compulsion to take in food at levels that are unnecessary, even destructive, if our bodies are programmed as starving. But in the entanglement of the social and the biological we should not privilege the biological. Another overlooked conduit of bodily harm is experiencing abuse as a child, particularly sexual abuse, which is implicated in obesity.

Researchers have found that some women who experienced sexual abuse as children use weight gain to attract less attention from potential abusers or to have a different body than the one they had when they were abused. They can experience post-traumatic stress disorder (PTSD) symptoms if they return to the weight they were when they were sexually abused, which—as one scientific study says, in the most anodyne way—'may interfere with weight loss attempts'. As well as being epigenetically set up for weight gain, we may need to make ourselves fat for reasons that ensure our psychological survival.

If the root of obesity is, at least in part, historical hunger, underpinned by the abject suffering of abuse or famine or severe deprivation, why do we not care more about that hunger? Why are we so punitive to our own and to other fat bodies? There seems no curiosity in our public conversations about what might be driving us to eat too much, only a conviction that it is rooted in greed, not need, and a ruthless desire to obliterate the fat body through discipline and punishment. We ridicule and disrespect those who are fat. Growing up with my father was to be painfully aware of the jostled elbows, whispers and stares.

It worried me, the social shaming, as he walked through shops eating as he went and handing the confused cashier a pile of empty wrappers. I cringed when he ate in public with blatant desperation, hardly able to breathe as he fed himself. 'No-one has ordered like that since Jeff Fenech was in here!' said the waitress at the Irish restaurant on Cleveland Street, when my father sat down and asked her to bring him the first seven things on the menu. Children are the natural observers of parental vulnerabilities. I saw my father's struggle with food up close. I saw that he couldn't stop eating. He was driven to it by a force so strong that even as a child I could see that he, the biggest and tallest of all the dads, was as helpless as an infant.

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My father, throughout his adult life, never accepted being fat. Once, planning a diet, he made my brother take 'before' photos of him. They returned, in their yellow-paper Kodak envelope, documenting his now extreme obesity, his serious mug-shot gaze.

¹³ Helen A. Smith et al., 'Sexual Abuse, Sexual Orientation, and Obesity in Women', *Journal of Women's Health*, vol. 19, no. 8 (2010), p. 1525.

¹⁴ Smith, 'Sexual Abuse'.

There was never an 'after' photograph. Instead, my father went on a series of failed and increasingly punitive eating regimens over the years: self-imposed starvation with days and weeks of water and lassitude, followed by the inevitable return to beer and buckets of fried chicken and self-hatred. His last diet, imposed by his doctor, was the most brutal. So heavy that he couldn't fit on the radiotherapy machine to be treated for the prostate cancer that would soon kill him, he consumed nothing but diet shakes for three months, starving himself down to a weight that would allow treatment. When I collected him from the hospital after his final treatment, he insisted that I drive him straight to his favourite curry house in Strathfield, where, distressed and desperate, he harangued and abused the polite waiter when the food didn't arrive quickly enough.

People who diet can feel as if they are starving. A plethora of diet studies show that, as a side effect of losing weight, people can experience ongoing hunger, and that to maintain even modest weight loss, they may need to operate at levels of food consumption and energy expenditure that are permanently uncomfortable and arguably unsustainable. One recent study of obese women showed a successful (but modest) weight loss sustained over two years.15 Over time, their feelings of hunger showed no sign of abating; in fact, they significantly intensified. To be just a little less obese, the women in the study would have to accept being increasingly and persistently hungry, possibly for the rest of their lives. We see this not as suffering, but as a successful diet, and weight loss as an achievement that eclipses any suffering.

How did we get to a point where being fat matters so much, and the suffering of hunger, it seems, not at all?

For many years, as our anxious attention has turned to fat bodies, studies have tried to determine whether and how obesity is heritable. But it seems to me that this is overlooking a more important question that is social as well as biological: have we inherited hunger? Is there a link between the desperate urgency with which my father ate-as if he were starving—and the earlier deprivations of his parents and grandparents? I inherited that hunger in a milder form and know how it feels. My grandfather, watching me eat—like my father—as a child, used to say that I was just like his sister Connie, who 'could eat one more potato than a pig'.

Is the root of that drive, then, the familial memory of hunger, observed and replicated from parent to child, so that food always seems scarce and eating always feels urgent? Or has the use of food as love and punishment in my family entangled emotion with eating so profoundly that a cheesecake really does feel like a necessary solace? Are we epigenetically 'programmed' by past familial deprivation to be hungry? And are there still hidden histories of abuse that may never now be spoken of or acknowledged, the way my grandfather's story, of which he was ashamed, nearly missed being told? The hungry children in my past invite me to think differently and with more compassion about the reasons we overeat.

As young boys in the East End of London, my father and his two brothers discovered a shed in their local park that stored fruit and vegetables. By prising up a corner of the corrugated iron and digging away soil, they could squeeze their skinny bodies through the gap. There, for a few blissful weeks, they feasted. Decades later, as my uncle John was digging vegetable scraps into his Sydney

¹⁵ S.R. Coutinho et al., 'Impact of Weight Loss Achieved through a Multidisciplinary Intervention on Appetite in Patients with Severe Obesity', American Journal of Physiology-Endocrinology and Metabolism, vol. 315, no. 1 (2018), E91.

garden for fertiliser and saw and smelt the rotting fruit and vegetables in the damp earth, he realised what had been inside that East London shed: a compost heap.

Hunger is what impels us to survive; it makes us beg and steal, scavenge and eat garbage. The compost heap, the potatoes dug from the frozen ground, the frogs and mice of Holodomor: people find ways to be nourished however they can. I see in my family history more than poverty and hunger. It's a kind of alchemy, the human capacity to make life out of the conditions of death, and there is something heroic in taking situations of abuse and deprivation and somehow still flourishing.

Just as humans have always sought life in the conditions of death, it seems that we are biologically programmed to take environments of deprivation and turn them into survival. Epigenetics may or may not turn out to be a scientific explanation for excessive hunger and the overeating that follows. While we know more than ever before about the way that starving and obesity are biologically connected across time and place, we do not yet know exactly what drives people to eat and their bodies to retain weight. But if our environments are taken into our bodies and passed on to our children, our obesity is a survival response to prior deprivation. The new sciences of the body should invite us to be curious rather than punitive about overeating. Rather than our obsession with body weight, and which diets might starve someone to thinness, we can hold the past generations of the famished, impoverished and abused in our minds and ask kinder questions. I think of how my mother greeted visitors at her door, often before they had a chance to say anything more than hello: 'Are you hungry?'

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