

4 The Physical, Mental, and Social Effects of Hunger

Lack of food affects individuals both physically and mentally. The physical effects of starvation on the body are wasting, swelling (edema), susceptibility to disease, and eventually death. Mentally, individuals undergo the psychological difficulties of the transformation of the body during starvation, behavioral changes, and food obsession, all of which drastically affect social and family life. The effects of hunger and starvation on the inhabitants of the ghetto were devastating to their daily lives and existence. Ghetto dwellers were keen observers of starvation and its effects, commenting on it throughout ghetto writings. The most extreme version of this observation was an actual medical study of the effects of starvation undertaken by doctors in the Warsaw ghetto, who, faced with their fellow inmates starving to death, documented the decline of starvation.¹ These observations and medical writings from the Warsaw ghetto are among the most important sources on the effects of starvation.² Having no ability to save their fellow inmates, the doctors in Warsaw took detailed notes of their decline and deaths. Many of the doctors died of starvation as well. Warsaw was not the only ghetto studying starvation. Professor Wilhelm Caspari, a German Jewish scientist who arrived in the Łódź ghetto from Frankfurt, studied “the relationship between nutrition and disease in the ghetto.”³ He too died in the ghetto with poor nutrition as major contributor to his death. Dr. Hugo Natannsen also studied malnutrition in the Łódź ghetto.⁴ Medical professionals in Warsaw, Kraków, and Łódź undertook a variety of methods to battle the affects of starvation, with treatments ranging from prescribing potato peels to various injections. Ultimately, however, in the words of Łódź ghetto diarist Hersz Fogel, “The rations keep getting smaller and smaller, so there’s nothing to write about, it’s a real tragedy for the Jews in the ghetto, a slow death of starvation.”⁵

Physical Transformation

Victims of starvation undergo a stark transformation of the body. Faced with a lack of food, the body first consumes all its fat. This causes a

decrease in body mass. In the ghettos, many first noticed their weight loss when their clothes – or sometimes skin – began to hang loose on their bodies. Łódź ghetto chronicler and diarist Oskar Rosenfeld observed that in the beginning, “the abdomen gets loose and eventually sags ... the hand feels the restless body, finds bones, ribs, finds limbs, and discovers the self, suddenly becoming aware that not so long ago one was fatter, meatier and one is surprised how quickly the body decays.”⁶ The weight loss also results in thin faces with hollow spaces under the eyes. One Warsaw ghetto writer noted, “The people sitting here all have such long faces, not-having-eaten faces, with swollen ghetto spots under their eyes.”⁷ The weight loss could be quite substantial among those experiencing starvation in the ghetto. Reports of weight loss of forty-five to sixty-five pounds were not uncommon.⁸

Once it has used up all of its fat, the body burns muscles and eventually the organs to survive. Starvation did not just make people appear physically thin, it stunted the growth of the young, stopped menstruation, decreased sex drive, caused impotence, and turned the skin pale or even bluish. Sometimes after losing weight, starvation victims were puffy with edema.⁹ Many diaries and testimonies relate to this phenomenon. One record from the Warsaw ghetto was written by a hospital nurse:

In the entrance hall lies a boy of five, swollen with hunger. He is in the last stage, his life ending because of hunger. He came to the hospital yesterday. Eyes swollen, hands and feet puffed up like balloons. Every possible analysis is being made; maybe kidneys, perhaps heart. No, neither this nor that. The child still moves his lips, he begs for some bread. I try to feed him something, hoping he could take something down. Alas, he throat is swollen shut, nothing passes down, too late. The doctor asks him “did you get anything to eat at home?” “No.” “Would you like to eat now?” “Yes!” Some few minutes later he utters for the last time “a piece of bread,” and with this he sinks into sleep. Dead for a piece of bread.¹⁰

Many diarists pointed to edema as a sign that death from starvation was near. Numerous descriptions in ghetto diaries attest to the swollen limbs of many inhabitants, which also made movement difficult. Rachel Auerbach, the Warsaw ghetto chronicler who ran a soup kitchen at 40 Leszno Street, recorded that a German-speaking refugee from the Sudetenland, Abraham Brockmier, referred to his hunger-induced swollen hands as “*pätchenhändchen* (patty-cake hands).” She described his swelling as having, “progressed so far that he can’t get up. Those ‘patty-cake hands’ and legs like logs.”¹¹ Brockmier died six weeks after he could no longer make it to the soup kitchen due to his edema.

The physical effects of hunger in the ghetto made recovery from that hunger more difficult. Hunger brought low energy, preventing people

from dragging themselves to work, where they might get food or money for food, and in the end leaving them with even too little energy to make it to the soup kitchen. Starvation disease leaves those suffering from it with the need to conserve energy through resting.¹² People could not move from their beds or exert much physical effort. In his sketches of a welfare worker visiting the poor of the ghetto in daylight and finding an adult man in bed, Łódź ghetto chronicler Josef Zerkowicz answers the worker's unspoken question: "So where should an adult person be lying when he is both alive and swollen with hunger? Where, if not in a bed?"¹³ Many people experiencing hunger took to their beds, but without work to obtain more food, bed rest might lead to death. Warsaw ghetto survivor Henry Greenblatt described the summer of 1941, noting, "you see a lot of people laying in the streets, swollen from hunger. People were dying from hunger."¹⁴ In his Łódź ghetto diary David Sierakowiak wrote, "I can't walk up the stairs or even any distance in the streets. Legs are the best pointer to the starvation, exhaustion."¹⁵ Mary Berg noted that one of the models they hired for her drawing class in the Warsaw ghetto fainted from hunger: "we were compelled to carry an old man out of the classroom; he had fainted from hunger and could not even finish the bread we gave him."¹⁶

Another effect of starvation on the body was an inability to stay warm. The body needs calories to keep warm. The colder the weather, the more calories are required to maintain body temperature.¹⁷ The ghetto inmates themselves also noted the connection between cold weather and an increased need for food. The Łódź ghetto *Chronicle* notes that gravediggers working in the wintertime were unable to bury all the dead in a timely manner and attributes this inability to their poor health.¹⁸ This poor health was undoubtedly due to the lack of food available to these manual laborers, compounded with the strain of working outdoors in winter. Scientists conducting starvation experiments at the University of Minnesota noted that subjects made "use of additional clothing to compensate for the lowered heat production of the body."¹⁹ Warsaw ghetto diarist Michael Zylberg described encountering his friend Gershon Fraenkel in the Warsaw ghetto. He noted that his emaciated friend wore, "two suits and a heavy winter top coat" despite it being summer time.²⁰

In addition to transforming the body through loss of physical mass, malnutrition, and hunger left the body more susceptible to disease.²¹ The most common diseases in the ghetto were hunger diseases and hunger-related diseases. Avraham Barkai, in his article on relations between Western and Eastern Jews, notes that those diseases caused by hunger were called, "ghetto disease."²² Many so-called ghetto diseases

were related to nutritional deficiencies, even when they did not manifest as such. Researchers report that, “most hunger-related deaths are due to infectious disease rather than starvation per se: with severe malnutrition, ability to resist infection deteriorates sharply.”²³ For example, the rise in tuberculosis and lung diseases in the ghetto was attributed by ghetto chroniclers to malnutrition. Lung disease was particularly rampant among the hungry. A reduction in the number of people suffering from contagious diseases was noted in the *Chronicle* in July 1941. This was attributed to improving sanitary conditions; however, it was noted that lung diseases had increased as “a direct result of malnutrition.”²⁴ Lack of vitamins also led to diseases like rickets in children, pellagra, and anemia.²⁵

Hunger and disease further aggravated each other as, “disease impairs absorption and utilization of nutrients, raises nutritional needs and may also reduce appetite.”²⁶ One disease, however, that was surprisingly possible to survive with in the ghetto was diabetes. Several people with diabetes survived the ghettos and concentration camps of World War II. Interestingly enough, “hunger favorably affects the carbohydrate metabolism of diabetics, [so] sufferers from this disease showed few of the usual symptoms.”²⁷

These are not the only changes to the body’s chemistry as a result of starvation. It also affected digestion. Those suffering from hunger urinated frequently and had stomach problems. This manifested itself in multiple ways. One anonymous writer in the Oyneg Shabes Archive recorded, “You often see women stop in the middle of the street or courtyard, spread their legs, and relieve themselves in front of everybody. Excrement lies everywhere: on doorsteps, on staircases, on stairs, and in courtyards. It is the result of stomach problems, diarrhea, and poor nourishment. Bowels are giving out.”²⁸ Many of these physiological effects of starvation affected the brain and its functioning as well.

The Mental Effects of Hunger

Lack of nourishment had multiple effects on those suffering from hunger and those watching their fellow ghetto inhabitants waste away. The physiological effects of hunger include apathy, irritability, and other behavioral shifts.²⁹ Many testimonies and diaries bewailed the uncivil behavior of people on the streets of the ghetto.

In her immediate postwar testimony in June 1945, Łódź ghetto survivor Flora Herzberger stated that during her time in the ghetto as a result of the hunger, “even fistfights broke out.”³⁰ It was not only on the street that people were quick to anger – hunger and irritability took a toll on

relationships in the ghetto. Gusta R., writing about her hunger in the Kraków ghetto, noted that friendships were impossible to maintain when a person was hungry because they were jealous of what others had.³¹ In her Kraków ghetto diary, Halina Nelken complained about the effects of hunger on her family, noting, "Worst of all is that in our distress we harass and torment one another. The four of us, so close at one time, have stopped understanding each other, as though we were each locked in our own separate worlds."³² Thus a cost of hunger was the loss of social support and interaction.³³

The irritability, in part, came from the physical discomfort of hunger. Those who experienced hunger wrestled with the pains of their body and the rebellion of their stomachs. Yehuda Elberg recorded in his Warsaw diary, "A dybbuk has entered my belly. My belly talks, shouts, even has complaints and drives me mad."³⁴ The irritability of those suffering from hunger was commented on by many ghetto writers and in a number of postwar testimonies. It caused a strain on social and family relations. Rosenfeld described how hunger led to bickering and fighting.³⁵ An anonymous girl wrote in her diary, "I have no idea why I don't live more harmoniously with my sister. We fight all the time and scream at each other. I must cause my parents a lot of worry."³⁶ The doctors researching hunger in the Warsaw ghetto noted that victims might become aggressive, particularly at the sight of food. These conclusions have been reached by modern researchers as well.³⁷ Rosenfeld described one particular moment when an older woman was sent into a delirious, violent state by the sight of another woman eating bread and margarine. The woman was so affected that she had to be calmed with an injection.³⁸

Mental alertness is reduced in persons experiencing hunger. Scientists conducting starvation experiments at the University of Minnesota noted, "In the case of famine ... coherent and creative thinking is impaired."³⁹ They additionally cited research on the famine in Russia between 1918 and 1922, in which intellectuals noted a decrease in their mental abilities.⁴⁰ David Sierakowiak recorded in his diary, "I descend lower and lower. I find even reading difficult. I can't concentrate on anything for any length of time. I count the time from meal to meal."⁴¹ In her June 1945 testimony, Herzberger said of her time in the Łódź ghetto that she had "practically nothing to eat ... swollen from hunger and marked by death, [she was] mentally no longer alert."⁴² The doctors of the Warsaw ghetto noted that victims suffering from starvation were, "depressed, and uninterested in everything around them until they saw food."⁴³ Ultimately, extreme hunger reduced people to base, animal instincts. Scientists of hunger studies at the University of

Minnesota noted that among those suffering from famine, “the usual social amenities and graces are dropped.”⁴⁴

Food Fantasy and Hunger

In the mental life of the victims, one of the most significant manifestations of hunger was fantasies about food. Scientists at the University of Minnesota noted that “in the case of famine, food becomes the central topic of conversation and writing.”⁴⁵ For the Jews in the ghetto, their lack of food was the overwhelming concern of daily life. Victor Frankl discusses prisoners’ reactions to the lack of adequate food, noting that “because of the high degree of undernourishment which the prisoners suffered, it was natural that the desire for food was the major primitive instinct around which mental life centered.”⁴⁶ Food consumed all aspects of existence for the starving ghetto dwellers. Their thoughts, actions, and even dreams were devoted to food and its acquisition. Warsaw ghetto diarist Chaim Kaplan recorded, “Our constant song—potatoes! This word is repeated a hundred and one times at every moment. It is our whole life. When I am alone in my room for a few moments of quiet, the echo of that word continues in my ears. Even in my dreams it visits me.”⁴⁷

In trying to understand why the Jewish masses were passively going to their deaths due to hunger, Ringelblum recorded the following: “Recently I talked with one of these refugees, who had been starving for a long time. All he thinks about is food, particularly bread: wherever he goes, whatever he does, he dreams of bread; he stops in front of every bakery, in front of every window. At the same time, he has become resigned and apathetic; nothing interests him anymore.”⁴⁸ Zerkowicz noted, “when a Jew in the ghetto wakes up in the morning, he first checks to see whether anything is missing from the package of bread that he had weighed and tied up before he went to bed the night before. Only when he is convinced that even a mouse could not get to his bread, does the pounding of his heart slow down.”⁴⁹

Food fantasy and food obsession in the ghetto could be so overwhelming as to be a torment.⁵⁰ Rosenfeld wrote that the desire for food overrode all other feelings. He stated, “For the sake of bread, people turn into hypocrites, fanatics, boasters, miserable wretches. Give me bread and you’re my friend.”⁵¹ In May 1944, an anonymous boy wrote in the margins of the French novel *Les Vrais Riches*, “All I should like to have in life, at the present moment, is plenty to eat.”⁵² At the time he was writing, rations were a mere 1,132.6 calories per day.⁵³

It was not only individuals’ own hunger that had to be borne, parents had to contend with the cries of miserably hungry children. In an oral

history given after the war, a woman under the pseudonym Leah told of what it was like to be a young mother in the ghetto, "I can tell you, I pulled my hair from my head many, many, many times, on account of the children they ask for bread and there was not [*sic*] to give them anything! What could a mother do! Just to kill yourself. This was all you could do, to kill yourself."⁵⁴ The trauma of these parents was well rendered by Zerkowicz, who recorded the visit of a social worker to the home of a woman and her daughter. The social worker inquired what means the woman had at her disposal. The woman's response was to break into tears and ask the social worker, "My daughter is hungry.... If I owned anything that mattered to me, would I deny it to my daughter? Would I let her starve?"⁵⁵ Even so, some were so driven by hunger that they took food from their children. Caretakers for children who delivered meals at their home noted, "A meal, even handed over to a child in person in their apartment, is not always eaten by them. Guardians, middlemen, and even parents force some barley or bread away from them. This takes place in particular among younger children up to 7 or 8 years old."⁵⁶

Zerkowicz described the small extra food rations being distributed to the ghetto of "two kilograms of potatoes, one hundred grams of sugar, fifty grams of margarine, and other commodities," as a "treasure" – the kind of treasure that might keep ghetto inhabitants from sleeping as they waited for the morning dawn, when the food shops might open and begin distribution.⁵⁷ It was not only waiting for food distribution that kept ghetto inmates from sleeping. One diarist noted that his daughter could not sleep and cried all night from hunger.⁵⁸ Survivor Alfred Dube stated in his postwar memoir that "Hunger pains did not allow us to sleep."⁵⁹ Some ghetto inhabitants went as far as taking sleeping pills to shut out the hunger and get some rest.⁶⁰ Leon Leyson, writing of his time in the Kraków ghetto, noted, "I was hungry, really hungry, all the time. Sleep became my only relief, the only time I wasn't thinking about eating but frequently visions of food filled dreams."⁶¹

Instead of eating food, people would dream about and discuss food. Rosenfeld described how, after first experiencing hunger, some Jews began to fantasize about foods they had eaten before. He noted that they "savored pleasures of the past, tasting all kinds of flavors with a parched palate."⁶² Lucille Eichengreen discussed the people she and her family shared a room with in the Łódź ghetto: "our roommates, when not sullen, talked about food incessantly."⁶³ Warsaw ghetto survivor Lubra Librowitz recalled that all anyone spoke about on the street was food.⁶⁴

Rosenfeld noted that diners at the soup kitchen discussed and fantasized about specialties at famous European restaurants they had eaten at in the past.⁶⁵ Nelken, writing in the Kraków ghetto, mused, "My wish is

to own a modern villa beneath the blue Italian sky—and to stuff myself with pastries as mortals do with bread! ... In vain I try with my wish of a villa under a blue sky to kill my hunger and my wish for a piece of gray wartime bread.”⁶⁶ Similarly, Dube described his experience while working: “I was assigned to a group of older people who spent the whole day talking about food and how hungry they were. They were reminiscing about what they ate at home and they exchanged recipes for their favorite foods. It made me think of how hungry I was so I realized I had to get away from them to survive.”⁶⁷ This type of fantasy was not limited to ghetto dwellers. Samuel Pizar noted that, “When I was an adolescent in Auschwitz lying on the hard shelf that was my bed and hallucinating from hunger, I would often try to recall the shape and savory aroma of the *kuchen* [cake] we used to eat at home in Bialystok.”⁶⁸

While those who were suffering from hunger fantasized about food they had eaten before the war, they also imagined the lives of others who were not suffering a similar plight. In his ghetto song, “A Policeman,” Yankele Hershkowitz fantasized that in his native Kielce district “people eat radishes with cream, carrots, beets for a few pennies, for next to nothing one can get eggs. There life is a delight. There one can gorge oneself, there is to eat.”⁶⁹ Numerous ghetto songs were about bread and about potatoes and other things to eat.⁷⁰ Another Hershkowitz song contained the lyric, “Why have you abandoned us, little bread ... you torture us constantly without pity, we are already close to death.”⁷¹

Numerous diaries and memoirs of the ghettos speak about food. In his article “Diaries and Memoirs from the Łódź ghetto in Yiddish and Hebrew,” Robert Moses Shapiro notes a “preoccupation with food in all the diaries,” including reports on the food available, prices, and preparation methods.⁷² Writing in her diary, Nelken confessed, “My life before the war seems to me as unreal as a buttered roll, a glass of real tea with lemon and sugar, or the roasted thigh of a goose.”⁷³ Food was such an important preoccupation that even devastating events were soon forgotten in the search for food. Rosenfeld reported on the Western Jews being forced to witness the hanging of a man accused of escaping from the ghetto: “for a few hours it was the main topic of conversation, by evening all was forgotten.... Talk turned to the price of bread, of margarine, of sugar.”⁷⁴

The focus on food extended to prayer. Daily prayers were adapted so that variations of prayers normally said on Jewish fast days were used in daily prayer in the ghetto.⁷⁵ Henryk Goldszmit (1878–1942, pen name Janusz Korczak), writing in his Warsaw ghetto diary, expressed his desire for food in terms of prayer, adapting the well-known Christian prayer with the notation, “Our Father who art in heaven.... This

prayer was carved out of hunger and misery. Our daily bread. Bread.”⁷⁶ Ghetto chronicler Zelkowicz, relating the tragedy of a Hassidic rebbe whose followers had abandoned him in the ghetto when times became harsh, noted of the followers: “Instead of dreaming about ‘Torah,’ they dreamed about ‘flour.’”⁷⁷ In the ghetto, even the days of the Messiah and the time of redemption were described in terms of food. Zelkowicz told the story of a religious man who watched his family wait for the delivery of their welfare money as they had once waited for the Messiah.⁷⁸ More telling was one of the ghetto fantasies of the days of redemption: “When the Messiah comes, we will eat all the bread we can.”⁷⁹

Some writers have viewed food fantasy (manifested as recording recipes and foods eaten before the war) as a type of resistance, but these fantasies were not psychologically healthy for ghetto inmates, and many ghetto writers felt that focusing on food was rather deadly. Rosenfeld recorded one woman who said, “We don’t talk about eating.... It happens frequently that people who talked themselves into the illusion that they were eating foods from which they had long abstained displayed severe nervous disorders and turned outright wild during the night.”⁸⁰ Łódź ghetto survivor Eichengreen noted that the people she and her family shared a room with fantasized about food, “and delicacies they would eat after the war. In this way, they increased both their torment and ours.”⁸¹

Humor

Only when they noticed that their clothes were getting looser, the shirts around the neck became wider, skirts, blouses, hung loose around the body, they began to turn their attention to this phenomenon—at first with cheerful, laconic laughter, showing off to each other the lack of fat and flesh; they even made fun of their bodily deformity, which had resulted from the lack of nourishment.

– Oskar Rosenfeld, *Notebook A*

One means of dealing with the stress of starvation was to face it with humor. Many ghetto dwellers made jokes about their hunger and despair. As Rosenfeld records in his Łódź ghetto notebook, during Passover 1942 a man in the ghetto said that if God had left the Jews in Egypt, they would be in Cairo drinking a Turkish coffee.⁸² In the Warsaw ghetto, jokes were made as well. Shimon Huberband, a Warsaw ghetto Oyneg Shabes chronicler, recorded numerous jokes that dealt with hunger. One was: “We eat as if it were Yom Kippur.” (Yom Kippur is a holiday on which Jews do not eat anything.) Another was that Jews “have as much bread as on Passover.”⁸³ (Passover is a Jewish festival on which the eating of bread is forbidden.)

The head of the Warsaw ghetto, Adam Czerniaków, peppered his diary with jokes overheard in the ghetto about hunger, even those at his own expense.⁸⁴ Sometimes he shared jokes told to him by orphanage director and prewar personality Janusz Korczak, who recorded some of his own ghetto jokes in his diary. One such incident he recorded was an encounter with a saleswoman: he asked her whether the meat she was slicing for him was human, as the price seemed too low for horsemeat sausage.⁸⁵

One place where humor about the lack of food was amply evident was in songs written in the ghetto. One song sung in the Łódź ghetto was a spoof of a humorous ditty about a goat in which a woman who works in a soup kitchen is cajoled for more food and reprimanded for skimming. One refrain mocks her: “Madame Wydzielaczka: You’re fat like a wash-tub, when the President gets here [h]e’ll make you a gutter-sweeper.”⁸⁶ There were also street musicians and performers who joked about hunger. One well-known “jester” in the Warsaw ghetto, Abraham Rubinsztejn, had several catchphrases including one that demanded another’s ration card: “hand over your coupon.”⁸⁷

In all of the ghettos, cabarets and satirical performances touched on hunger and other tragedies within the ghetto. At one point, members of the Provisioning Department in the Warsaw ghetto created their own performance, poking fun at their own division to an audience of people from their organization.⁸⁸

Death from Starvation

Ultimately, the most significant effect of starvation on ghetto inhabitants was death. As Łódź ghetto survivor Dube wrote, “We were sentenced to death by starvation.”⁸⁹ The high mortality rate of Jews in the ghetto from hunger and hunger disease is attested to in a number of sources. Physician Elie Aron Cohen, relying on records that indicated cause of death, calculated in a published medical treatise the approximate percentage of deaths by starvation in the Warsaw ghetto. In 1940, before the ghetto was sealed, he found approximately 1 percent of the population dying from starvation. In 1941, that number went up to 25.41 percent.⁹⁰ Similarly, an examination of the documents in the Łódź ghetto shows that over 30 percent of the causes of death for those who died in the ghetto between June 30 and August 8, 1941, were given as hunger or malnutrition.⁹¹ This, however, does not reflect the true percentage of individuals who died of hunger. In Warsaw, nearly the same number of deaths are listed with cause of death unknown. Dr. Cohen noted that in all likelihood, many of the unknown cases were also due to starvation.⁹² Zelkowicz, in a vignette recording the duties of a ghetto official (and written in direct

address, speaking to this official), spoke about the ledger entries for the cause of death of six people who died in an apartment across about as many months: “the book is official and therefore dispassionate, it does not tell you why they died. So in that place, write down that they died from an illness called ‘ghetto.’ Not from hunger, Heaven forbid! No one dies from hunger!”⁹³ In the ghetto, hunger or starvation were rarely recorded as cause of death; instead another cause was recorded. Often this was “heart failure” or “weakness” or a hunger-related disease. In a July 27, 1942 sketch, Oskar Singer recorded the shocking tale of a man who dies of hunger. At the end of his life, the doctor who has seen the man slowly die of hunger fills out the death certificate as “heart failure.”⁹⁴ In *Famine: Social Crisis and Historical Change*, David Arnold notes that “assessment of famine mortality is further complicated by the disease factor. In most famines the mortality from epidemic disease has greatly exceeded that from actual starvation deaths.” He cites the Irish and Bengal famines as examples of famines where diseases directly related to famine caused more deaths than did starvation.⁹⁵

Adolf Eichmann, during his interrogation by Israeli police, conceded that a man who died of a heart attack due to weakness deriving from heavy physical labor and insufficient food would be classified by the Nazis as having died of natural causes.⁹⁶ Young people whose bodies were returned to the ghetto after being tortured to death in German prisons had heart failure listed as cause of death.⁹⁷ Thirty-three-year-old Chaim Jakubowicz, who was found unconscious on the street, had his cause of death registered as a “heart attack.”⁹⁸ One reason that hunger was so often accompanied by heart failure is that when the body has consumed all its fat, it begins to draw energy from muscles and organs. The body cannibalizes the liver, spleen, and heart in an attempt to continue living. Eventually, this causes organ failure and death.⁹⁹ Individuals collapsing and dying on the street were not uncommon events in the ghetto. The *Chronicle* of the Łódź ghetto, survivor memoirs, and postwar trial testimonies all relate to the tragedy of people falling down and dying in the streets from hunger. In the Łódź ghetto, there was even a term for someone who was so emaciated he was expected to soon die – *klepsydra* – which literally means obituary.¹⁰⁰

Many of those who died of hunger eventually found their way to the street, even if they did not die there. Those with so little could not afford to pay for the burial or even the body removal so families left the body – stripped of clothes – in the street. Newspaper held down by stones was used to cover the body until it was taken away. Due to this unfortunate situation, bodies of the starved were often found in the streets of the Warsaw ghetto.¹⁰¹

Death from starvation in the ghetto affected people at different rates. Amartya Sen identified three stages of the great Bengal famine of the early 1940s, beginning with an initial stage of unrest, mass hunger, and starvation. In the second stage, starvation death was at its peak (these deaths were directly due to lack of food), but the third stage had the highest death rate (with deaths caused by starvation-induced diseases).¹⁰² High mortality rates were noted by ghetto chroniclers in the winter months. In January 1942, in Łódź, the mortality rate was so high that there was a backlog of bodies to be buried.¹⁰³ The *Chronicle* reported over two hundred deaths in the first four days of the month, with an average of forty-six deaths per day during the first two weeks. The major cause of death was hunger or hunger-related diseases.¹⁰⁴ February 1942 saw an increase in the average daily number of deaths to over sixty-seven. A further increase in mortality was noted in March.¹⁰⁵ The increase in mortality during the winter months was undoubtedly linked to the cold weather, for which insufficient heating materials were provided. The winter was so cold that people waiting for deportation from Radogoszcz train station to Chelmno death camp froze to death.¹⁰⁶ Orders forbidding ghetto residents from owning items such as fur coats and winter boots compounded the problem of protecting oneself against the cold.¹⁰⁷ The body burns twice as many calories in cold weather. Thus, the poor allotment of heating materials not only led to death from exposure but also increased the number of those dying of malnutrition.

Numerous writers, both those within the ghetto and historians writing about the ghetto, have noted that women had a higher survival rate. This observation is consistent with scholarship on famines. Kate Macintyre, in her article "Famine and the Female Mortality Advantage," explores the various biological, sociological, and cultural reasons for this phenomenon. Ultimately, however, Macintyre is unable to settle on a single reason, and she calls for further research.¹⁰⁸ One reason for the imbalance is simply that famines often have disproportionate gender demographics due to out-migration of men and are thus identified as feminine events. During wartime sieges, for example, able-bodied men have already left the area to fight, leaving behind women of all ages, children, and the elderly. In nonwar famine conditions where there is the ability to migrate out, men often leave the famine region in search of work and food. In the case of the ghettos, however, quite a number of able-bodied men remained. The ghettos thus provide an interesting space to examine female mortality alongside that of men, as a counterpoint to more generalizable cases in famine studies. In "The Status and Plight of Women in the Łódź ghetto," Michal Unger noted that "the hardest year for the Jews in the ghetto was 1942, when starvation claimed more than 18,108

victims, approximately 40 percent women and 60 percent men.”¹⁰⁹ This data, as well as other data demonstrating the high survival rate of women in the ghetto, begs the question of whether there is gender differentiation in susceptibility to famine. One factor that might play a role was that women were less likely to be assigned to hard labor, which required a great expenditure of calories. Even so, women were generally responsible for housework in the ghetto, a strenuous task that (unlike the labor detail) did not come with supplemental food, as well as tasks such as standing out in the cold in food lines, which consumed a great number of calories due to the conditions.¹¹⁰

Some have seen women’s biological need for less food as the reason for their higher survival rates in ghetto conditions. Rosenfeld noted that “the mortality among men is three times that of women,” and hypothesized that this was “since women have always been eating less than the men.”¹¹¹ There are several theories about women’s biological durability, including a higher percentage of body fat that acts as a buffer against starvation, a superior immune system, and greater physical endurance, among others. Related to these is the notion that women, in general, have a smaller physical frame than men. In the Łódź ghetto, food was rationed out in equal portions without regard to physical size or sex. For many women, then, the meager food ration was proportionally more substantial than that received by men, who were generally larger and required more calories. This reasoning, however, presupposes that women ate the entire food portion allotted to them. As Unger has pointed out, women often favored their families over themselves. She notes that the women who worked in the upholstery workshop “shared their meager soup ration with their children, thus spreading their insufficient portions among several mouths.”¹¹² Historian and Warsaw ghetto survivor Yisrael Gutman recalled, “When we were in the [Warsaw] ghetto we had to make sure Mother ate something too; otherwise, she wouldn’t eat, so that we would have more.”¹¹³ Selflessness with food was not a trait solely exhibited by women, and it did not extend only to family members. Łódź ghetto survivor Miriam Harel related:

Once, when my father was still alive, he came home from the synagogue and said, “There is a man dying on a bench.” He asked my mother to give me a bowl of soup and send me to feed the dying man. This bowl of soup was the children’s soup. I went to the synagogue. The man was really dying. I tried to feed him, holding his head with one hand and feeding him with the other. He swallowed slowly but he swallowed, he was very hungry. The next day he died. I was the last person to see him. He told me that he came from Warsaw, he had a family and was very wealthy, and if I could rescue him he would give me everything he had. And he died. When I came home my parents said to me,

“You did a big mitzvah.” From a Jewish religious point of view, maybe I did what I had to do, but believe me I was jealous of every spoonful I fed him, as I wanted to eat it myself. I was very hungry. At this moment I saw the Angel of Death in front of my eyes.¹¹⁴

Conclusion

Starvation manifested in the bodies of those who went hungry. Individuals moving through the ghetto showed signs of their hunger, whether through looser clothing or bloated bodies. The corpses of those who had succumbed to starvation littered the streets. Those living in the ghettos walked among, over, and around the signs of hunger even as they might experience it themselves. The *atrocities of hunger* is a visible as well as internally felt reality for those living in a society undergoing hunger and starvation.

The embodied experience of hunger not only has physical but also psychological impact on individuals and a community. Many testified to growing immune to others' suffering from hunger due to coping with their own. Some tried to stave off death from starvation for loved ones and others they encountered – oftentimes without success or only in limited ways due to a recognition that they endangered their own health. Hunger did not just move people to act, it also has a physiological impact on an individual's moods and thoughts. Manners became coarser, irritability ran high in those who were malnourished, and pains from hunger and hunger-related illnesses plagued ghetto inhabitants. This physical, mental, and social breakdown caused by starvation is key component of the *atrocities of hunger*. Ultimately, starvation caused increasing numbers of deaths. These deaths were not the result of poison gas or bullets in a ravine but nonetheless decimating the population.