Eugene Fisk died suddenly, collapsing from a cerebral hemorrhage on his way to visit the Museum of Hygiene in Dresden and passing away a few days later. It was the summer of 1931, and Fisk, an American physician in his early sixties, was only in Europe on a visit. Fisk wasn't old, but he had already lived several years past the life expectancy of the average American man at the time—fifty-eight. In any case, he was old enough that practically no one commented that his death was surprising or ironic.1

As he crumpled to the Dresden sidewalk, however, Fisk himself was probably surprised to find death so close at hand. Fisk was the United States’ most vocal proponent of radical life extension and the medical director of the Life Extension Institute, a private institution devoted to the cause of extending human life expectancy. Fisk's crucial point—and the guiding philosophy of the Life Extension Institute—was that the human body did not simply wear out. Instead, the body was “infected out, poisoned out, starved out or deficiencied out.”2 In other words, Fisk liked to suggest, if people could be protected from external dangers then there was no reason to believe they might not live years, maybe decades, longer than previously imagined.

At first glance, rising life expectancy seems like a dull topic. When historians have talked about it at all, they have generally treated it peripherally, as the province of gerontologists or demographers. Yet the radical lengthening of global life expectancies over the past two centuries is of monumental importance. It's called “life expectancy,” after all, and people shape their lives based on a reasonable expectation of how long they will probably live. In the United States, the change from a life expectancy at birth in the thirties in 1800 to a life expectancy at birth near eighty by the early twenty-first century has had wide-ranging social implications. Although they may not have articulated the thought to themselves, it is no coincidence that during the twentieth century, at the same time that it became clear that they could reasonably hope to live decades longer than previous generations, Americans prolonged their...
educations, delayed marriage and reproduction—and correspondingly supported expanding roles for women outside the home, created a formal period of life called retirement, and reorganized the government in order to provide for the elderly.  

In the first decades of the twentieth century, Americans were talking more about life expectancy than they ever had before. One reason for the sudden interest was that a growing public health apparatus, together with new methods of statistical analysis, gave people new power to track changes in life expectancy. An even more important reason was that these data revealed that average life expectancy at birth was rising with remarkable speed, leaping from around fifty years of age in 1900 to more than sixty by 1930. Although life expectancy had been nudging upwards since the revolutionary era, its dramatic jump in the early twentieth century gave contemporaries good reason to think they were living through “the golden era of life prolongation,” as one journalist put it.  

Today, discussions about rising life expectancy tend to focus on the social costs of caring for an aging population. But rising life expectancy didn’t immediately result in large numbers of people who were elderly and dependent. On the contrary, throughout the twentieth century rising life expectancy translated into expanding numbers in every age group, a fact with eugenic as well as social and economic implications. As a result, and because industrializing agriculture and food distribution methods were easing Malthusian fears, Americans rarely described the swelling population as a drain on national resources, seeing it instead as a national resource in itself, a crucial source of power in an age of industrial production and global war.  

This article focuses on the unprecedented jump in life expectancy that occurred in the first decades of the twentieth century and the corresponding revolution in Americans’ attitudes toward aging and death. Rising life expectancy had many causes, including better nutrition, a reduction in epidemic diseases through vaccinations and the widespread implementation of modern sanitation measures, and successful educational campaigns aimed at reducing infant mortality. Despite the broad, society-wide causes of rising life expectancy, however, Americans during these decades overwhelmingly described life extension as a matter of personal, not social, responsibility.  

In fact, when considering actions that they could take as individuals to extend their own lives, Americans came to place inordinate emphasis on preventive medicine, a broad category encompassing both the notion that individuals had a duty to schedule regular, presymptomatic medical appointments and the notion that individuals should apply medical rigor to controlling their own diet, physical fitness, and stress levels. “We must look upon old age and death as provoked phenomena,” Eugene Fisk declared in 1917, and in his mind it was individuals themselves who most often provoked them. By the 1920s and 1930s, Americans increasingly agreed, describing aging and even death itself as phenomena that were determined, to an extent unimaginable a few decades earlier, by willpower. This powerful series of associations—between youth, health, and willpower on the one hand and between aging, death, and laziness on the other—would intensify gerontophobia in the decades that followed and justify formal and informal discrimination against the middle aged and the elderly. Indeed, the associations between youth, health, and willpower would profoundly shape U.S. society and social policy throughout the century and beyond.
Selling Preventive Medicine

Life expectancy is a moving target. Thus while the life expectancy of all Americans jumped at the turn of the twentieth century, that jump was higher the younger one was. Declining infant mortality was by far the single most important reason for the sudden rise in life expectancy in the early twentieth century, and its decline signaled an important demographic shift. In the United States through the late nineteenth century, child death had been tragically ordinary, with roughly one in four or five infants dying before reaching their first birthdays. Just a generation or two later, however, by the late 1920s, infant mortality rates had dropped to about one in fifteen, a figure that struck contemporaries as wonderfully low.

But twentieth-century life extension wasn’t just about reducing infant mortality. Americans were not only surviving childhood in greater numbers, but more of them were surviving middle age, too, and that fact was pushing scientists to ask whether the human body might be capable of living significantly longer than previously imagined. At the turn of the century, most Americans had assumed that the biological limit of human life—life span, as opposed to life expectancy—was around seventy years of age, the three-score-and-ten mentioned in the Book of Psalms. While people knew that individuals occasionally lived to be as old as eighty or ninety, those seemed like exceptional cases, while living much longer seemed scientifically impossible. Even well into the twentieth century, some scientists publicly doubted whether any human had ever lived to be a hundred. After all, age records at the time were hard to verify, because any centenarians would have been born in the early nineteenth century or before, when formal documentation was scant. A typical skeptic dismissed all claims of living to a hundred as tall tales put out by “Indians, Negroes, and white illiterates,” people in his estimation who were either liable to fabricate stories or who had so little education that their counting wasn’t reliable. Despite early skepticism, however, it was becoming clear by the 1920s that old assumptions about the human life span had undershot the mark. Life extension enthusiasts now said that anyone who took reasonable care of themselves could reach seventy. Dying younger than that was starting to seem like dying young.

Interest in longevity was hardly novel. Debates over human life expectancy and the possibility of extending it date from the Classical Era at least. Beyond quixotic endeavors like alchemy or the search for the fountain of youth, some Renaissance tracts began to propound the idea that people might take actions that would significantly lengthen their own lives. Best known of these was Lewis Cornaro’s “Discorsi della vita sobria,” a popular sixteenth-century work that argued that anyone could live long by eating, drinking, and living moderately. Cornaro’s work, along with his own long life, spurred a longstanding interest in the effects of behavior on longevity. In the United States itself, life expectancy had long been a source of medical debate and a point of pride. In the late eighteenth century, for example, Americans used data from church records and bills of mortality to argue that they enjoyed longer lives than Europeans thanks both to the wholesome New World environment and to the helpful effects of a republican political system.
Medical developments in the nineteenth century muddied the connection between environment, behavior, and longevity, however, as vaccines, epidemiology, and advances in surgery all seemed to diminish the significance of individual actions, and as mid-nineteenth-century doctors generally agreed that aging and death were natural parts of physiological development rather than the results of specific diseases. Yet as more doctors turned to the formal study of senescence in the late nineteenth century, they reexamined the relationship between aging, disease, and death. In the early 1880s Dr. Alfred Loomis published an influential study expanding upon work by the French scientist J. M. Charcot, arguing that diseases associated with the elderly did not simply result from the vague state of old age itself, but rather that they had specific medical causes that might, in theory, be prevented. Meanwhile, Charles Asbury Stevens, one of the most popular writers of the late nineteenth century, helped to promote the idea that people could take actions that might radically extend their lives through several books on scientific life extension, the most famous of which was his 1903 *Natural Salvation; The Message of Science; Outlining the First Principles of Immortal Life on Earth.*

While most doctors and scientists in the first decades of the twentieth century focused on extending life expectancy by a decade or two, some speculated openly that humans might actually be capable of surviving drastically longer still. They pointed to species like redwood trees, which had life spans in the hundreds of years, and to recent experiments in which scientists had extended the lives of fruit flies by 900% by keeping the flies in icy cold, protected environments. Given the right conditions, some scientists proposed that humans might be capable of living to 200, 500, or even 2000 years old. At the most extreme, Eugene Fisk himself sometimes argued that if the human body was vigorously defended from disease and held to the highest standards of fitness and hygiene, it might have no natural life span at all. In other words, humans might be capable of living forever.

While the idea of living for hundreds of years or more sounds like quackery, the most outspoken proponents of radical life extension in the 1920s and 1930s considered themselves modern men of science. The Nobel Prize–winning German chemist Fritz Haber, for example, thought it quite possible that humans could live to be a thousand. The quest for extended life in the 1920s and 1930s was a secular, scientific goal pursued by men and women who were generally respected in their fields and conservative in their worldviews, and whose religious beliefs, if any, found expression outside their professional lives.

These straight-faced speculations about the elasticity of the human life span had much to do with declining rates of epidemic diseases. But less intuitively, perhaps, new interest in radical longevity also had much to do with the rising incidence of chronic disease, and that was because chronic diseases seemed to a much greater extent to be subject to individual control. Throughout the nineteenth century, the most common diseases in the United States had been epidemic diseases like smallpox, typhoid, yellow fever, and cholera—sudden infernos that swept through populations, killing quickly and often indiscriminately. By the World War I era, however, the threat of epidemic diseases was steadily declining, the influenza epidemic notwithstanding, and chronic diseases like cancer, diabetes, and heart disease had become the most common cause of death in the United States. Heart disease was taking an especially alarming toll
on Americans, affecting four times more people by 1920 than it had fifty years earlier. The American Heart Association, whose mission was to reduce deaths caused by cardiovascular disease, was formed in the mid-1920s.

Precisely because of their invisibility to laypeople, chronic diseases advanced the popularity of preventive medicine. Chronic diseases did not rage through populations like sudden infernos, but they had terrors of their own, and contemporaries compared them to “smoldering fires,” burning slowly and invisibly inside people who were blithely unaware of their existence until it was too late. Practicing preventive medicine relies on convincing seemingly healthy people that they might actually be sick, or on their way to becoming so, and by the 1920s American doctors were broadcasting the news to current and potential patients that they might be in the advanced stages of a chronic disease and yet have no idea they were ill.

To make the argument that everyone should undergo a preemptive medical exam—a check-up, as Americans would call it by the mid-twentieth century—physicians and scientists stated again and again that in the age of chronic diseases, appearances could be deceiving. Until the recent past, Americans had taken a sleek, well-fed appearance as the best indicator of good health, but in the age of widespread cardiovascular disease and diabetes, they began to think that ruddy plumpness might not be a sign of good health at all. One ad promoting preemptive medical exams reported a conversation that a doctor had supposedly overheard between two men discussing the sudden death of a co-worker: “Frank was always in perfect health as far as I could see. Strong, husky fellow, looked fit as a fiddle.” As far as they could see, their friend was healthy. The point of the ad, of course, was that where health was concerned, laypeople couldn’t see very far at all. Doctors could.

Selling the importance of preventive medicine to the American public also meant selling the idea that it was indeed desirable to grow old. After all, reaching an advanced age seemed like a dubious accomplishment if you were idle, decrepit, and miserable once you got there. The prospect of long twilit years of physical decline and dementia was frightening, and in order to convince people to adopt life-extending habits, longevity boosters had to argue that old age could potentially be a time of high energy, good health, and mental sharpness. In the future, boosters predicted, people would routinely live to be one hundred, “but instead of being wrinkled and crippled they will still be in their vigorous prime.” What was more, they pointed out, better nutrition, more physical exercise, and regular medical check-ups not only extended life but gave people happier, healthier, more fulfilling lives along the way. Life extension advocates, many of them middle aged themselves, were relatively successful at recasting middle age and old age as periods of potentially robust physical activity and accomplishment.

The Life Extension Institute, whose medical section Eugene Fisk chaired, was an early epicenter of the belief that preemptive medical exams were the best way for ordinary people to assess the state of their health. The Institute was founded in New York in 1913, and by the 1920s it had become a bastion of the hardening belief that exams of presymptomatic patients promoted longevity, along with individuals’ own careful attention to diet, fitness, and stress levels. Besides Fisk, a host of early twentieth-century luminaries served on the Institute’s board or as regular consultants. Among them were Irving Fisher, the
Yale economics professor and eugenicist; William Taft, the former U.S. president; John Harvey Kellogg, the renowned health authority who ran the Battle Creek Sanitarium; Harvey Wiley, the pure food reformer; William Mayo, the surgeon and later the co-founder of the celebrated Mayo Clinic; Alexander Graham Bell, the inventor and eugenicist; and Charles Davenport, the grandfather of the American eugenics movement.42

With backing from the Life Extension Institute, in 1915 Eugene Fisk and Irving Fisher published a slim manual called *How to Live*, which focused on extending life expectancy. The book went on to become one of the most spectacularly successful health texts of the twentieth century, going through more than twenty editions and multiple translations by mid-century.43 During these decades, U.S. physicians regularly recommended it to their patients, corporations distributed it to their employees, and it was routinely used as a health textbook in American schools and universities.44 Royalties from the sale of the book went back to the Life Extension Institute.45 *How to Live*’s straightforward advice on everything from diet to clothing to posture to dental hygiene promised Americans that they already had the tools at hand to make their lives healthier and longer, if they only followed the authors' instructions.

Besides its promotion of *How to Live*, the Life Extension Institute also shaped popular ideas about longevity by its ongoing publicity campaign about the importance of regular check-ups. Despite claims that it was “essentially philanthropic,” the Life Extension Institute was a for-profit company from the beginning, and it made money principally by charging for preemptive medical exams, although it was legally barred from profiting from any medical treatment that might result from their doctors’ findings.46 In the Institute’s first years, its contract physicians performed the majority of exams on individual subscribers and it advertised lavishly in the biggest New York papers in order to attract them.47 Ads Needled viewers: “Perhaps you think you are in sound health. But how do you know?”48 And they often concluded ominously when urging readers to make an immediate appointment: “We do not wish to frighten you. But don’t put it off too long. Every day counts.”49 Physical exams, ads assured readers, could expose the body’s secrets and make knowable those parts of the body that laypeople had no hope of seeing on their own.50 The fact that X-Ray technology had been in standard medical use for more than two decades helped them claim to reveal the body’s inner workings.51 Without expert help, Institute ads stressed, it was impossible for ordinary people to know whether they were healthy or not.

Though they started by focusing on individual subscribers, by the mid-1920s Institute doctors performed the great majority of exams on the behalf of insurance companies, which found it profitable to pay for annual exams for their policyholders.52 Information about individuals’ health remained confidential, and the Institute did not communicate the results of its health exams to the insurance companies that paid for them.53 But by identifying risk factors and providing education about how people could take better care of themselves, the Institute promised to help patients live—and pay insurance premiums—longer.54 By the 1930s, the Institute had performed more than a million and a half exams, using a national network of associated doctors, and more than forty insurance companies were paying them to examine their policyholders.55 As to whether preemptive exams actually worked, a survey of insurance policyholders
concluded that the incidence of mortality among those who underwent regular physical exams was about twenty percent lower than those who had not. The Life Extension Institute positioned itself at the forefront of a revolution in scientific medicine stressing prevention, and in the decades that followed its founding, preventive medicine became a standard medical practice with explicit ties to life extension.

As chronic disease rates rose throughout the early twentieth century, personal responsibility became a central way that people thought about individuals' roles in delaying death. According to a range of doctors of the time, people's actions were the most important influence on their longevity. As Life Extension Institute literature claimed in 1919, modern individuals should "be able to decide today" whether to die at fifty or to live decades longer. Or as one doctor blandly put it in the late 1920s, physical decline had been revealed as "a matter of personal hygiene," and thus the fight against disease and death was "no longer primarily the burden of the Health Officer and his organized forces." Instead, the burden was on the individual. Good habits resulted in physical wellbeing, while bad habits resulted in disease and death. And what were habits, after all, but choices?

Young at Any Age

Extending life meant prolonging youth as well as delaying death, and thus the emerging ethos connecting health to personal responsibility also applied to aging. In the first half of the twentieth century, age discrimination was open and routine in the United States, taking the form of mandatory retirement ages and official limits against hiring older job candidates, practices the economic pressures of the Great Depression intensified. Businesses regularly refused to hire women past the age of thirty-five, with the excuse that "women begin to break down in their thirties" and that their deteriorating health would drag down company productivity. Likewise, men past the age of forty could find it hard to get hired, with businesses justifying their discrimination by saying that "men of that age lack the essential flexibility of body and mind and suffer with impaired health."

Life extension boosters fought the letter, if not the spirit, of such discrimination by drawing sharp distinctions between age in body and age in years. Doctors stressed that with the right diet and exercise, patients could not only look years younger than they were, but that in all measurable physical terms, they could actually be younger. In the same way, of course, a twenty-five year old in poor condition could be physically middle aged. Fisk, for one, disliked thinking in terms of numerical age at all. In his early sixties at the time of writing, he declared that the tradition of celebrating birthdays caused people to grow old prematurely, and he imagined a physically young woman greeting another birthday with depressing thoughts: "Mustn't expect anything more from life; mustn't go in for sports and amusements I enjoy today; mustn't expect men to be interested in me ... I must remember I am getting older, older. Before I know it I'll be 50—and then good night." Instead, Fisk and others suggested, someone could be forty or fifty or even older but could still be truly, physically young if they were in good health and good shape.
So while life extension boosters objected strenuously to hiring restrictions based on the date on someone's birth certificate, they rarely objected to restrictions against the physically aged, and some detailed ways that employers could examine prospective employees to determine their age in bodily terms. Boosters also claimed that mental acuity came from regular mental training, and that senility only affected the lazy. Like physical age, then, mental age supposedly resulted from personal decisions. In essence, by claiming that it was possible to be young in body and mind even if relatively old in years, life extension advocates were redefining youth itself.

They weren't the only ones. Rising life expectancy and new questions about the nature of biological aging were factors that helped to blur categories of youth, middle age, and old age in the 1920s and 1930s. Writing about chronic disease in *The New York Times*, Eunice Fuller Barnard asked: “What, after all, is old age? How far are these diseases preventable? ... Must man deteriorate in one or more of these ways at a certain age or is his life-cycle under perfect conditions indefinitely extensible?” Or as one Life Extension Institute ad asked briskly, “Why Do People Die?” Eugene Fisk had an answer. The only way that old age differed from other diseases was that the changes associated with aging were subtle and slow. Aging had definite physical causes, and therefore the symptoms of aging should be “preventable by definite physical means.” Old age was not a state, but rather a series of discrete symptoms that savvy individuals could address one by one. Fisk marveled that even “hard-headed scientists” had swallowed the idea that old age resulted inevitably from time, and he loved to say that Albert Einstein’s new theory of relativity had proven that time “cannot exert a physical influence over anything,” and thus it certainly couldn’t directly cause physical decrepitude. For a modern woman or man in the know, he claimed, physical deterioration was preventable until the age of fifty, and possibly even later. Fisk and others sometimes even suggested that aging was potentially avoidable altogether.

Most biologists, however, boiled at such a suggestion. One science editor summed up the dispute: “There is a battle raging in scientific circles today over the subject of old age.” He emphasized that while an aggressive minority, championed by Fisk, promoted the idea that aging could “be staved off like any other disease,” the great majority of scientists “feel that old age is physiological, that is, a natural condition, and that nothing is to be done about it.” According to most scientists, it was as natural for an adult to grow old as it was for a child to grow big.

Despite such skepticism, however, the notion that aging was a series of symptoms rather than an inevitable stage of life proved to be a profoundly appealing one. Americans in the 1920s and 1930s latched onto the medicalization of aging, responding eagerly to advertisements for medicines, creams, diets, and procedures that promised to treat aging as a series of separate, preventable ailments. By 1930, Eunice Fuller Barnard declared in the *New York Times* that the search for youth had become “a country-wide obsession” and that Americans were “scour[ing] laboratory and golf course for the secret” of health and youth. Indeed, according to new beliefs linking aging to personal responsibility, health and youth were virtually synonymous. And if both health and youth were obtainable by those with the will to work for them, then visible aging, poor health, and even many forms of death itself could all potentially be
considered an individual’s fault. The notion that aging was a failure of willpower only intensified Americans’ exuberant celebration of youth in the post-World War I years, as they both insisted that youth was a special and uniquely valuable time and increasingly defined youth as normative.

At the same time, while doctors stressed that appearances could be deceptive in the age of chronic disease, Americans didn’t cease using outward appearance to assess health. On the contrary, they enthusiastically accepted the idea that health remained legible in certain ways and that it was only increasingly crucial to look young, trim, and healthy in the fast-paced modern world. Life Extension ads in the interwar years adeptly played on the fear of looking old in a culture that valued youth. Being “enthusiastic,” “wide-awake,” “buoyantly healthy,” “red-blooded,” and “vigorous” were descriptions of youthfulness as well as the prerequisites for success in the modern economy: “Big business is looking for producers—men of unquestioned physical stamina and personal force.” The successful man, they said, was almost invariably “the healthy man.” And businessmen had to be especially vigilant because the very things that fueled success in the short run—long hours at the office, social drinking, and rich business dinners—were the handmaidens of chronic disease, resulting in physical and business decline in the long run. Life Extension Institute ads claimed that physical failure at middle age caused the majority of business failures, and they warned that a middle-aged man’s “lack-lustre eyes and flabby, pasty face” were the glaring badges of his “declining earning power,” and they painted grim pictures of middle-aged sad sacks trolling the city streets for jobs they would never be given.

Despite warnings about premature aging and businessmen, the growing conviction that individuals had the power to slow their own physical decline had a disproportionate effect on women. This was in part because home economists in the 1910s and 1920s so publicly and successfully described nutrition and health education as the province of educated women. Indeed, if modern wives and mothers were credited with somewhat less responsibility for the moral oversight of their families than their nineteenth-century forebears, they were handed more responsibility than ever for their family’s physical health. According to home economists and public health observers of the era, responsible wives and mothers maintained skilled oversight over their family’s diets, habits, and health, which entailed not only taking care of their children but keeping tabs on their husbands, too. While a shrewish wife was undesirable, a wife who nagged about eating well and keeping healthy could be an unqualified good to her family. This was the kind of wife, according to Lillian Genn in The Washington Post, who “nags her husband to take his umbrella and his rubbers when it rains; who insists upon his putting on his overcoat and changing to his winter flannels as soon as the thermometer goes down … She’s at him when he eats fattening foods,” and she will “get him to go to the doctors when he would otherwise go around coughing his head off in the early stages of pneumonia.”

Advocates of selective nagging had the statistics to back them up. According to a range of studies, married men lived significantly longer than bachelors. Yet the aging for which women were most responsible—and most to blame—was their own. Ideas linking women’s aging to personal responsibility weren’t wholly new, as they drew upon nineteenth-century ideas about the relationship between personal habits, physical appearance, and mental attitude.
Around the turn of the twentieth century, a woman named Susanna Cocroft had made a name for herself as a regular on the national lecture circuit and the author of more than a dozen books with her mantra that a woman’s health and beauty were interrelated, and that she could control them both. Cocroft frowned upon beauty aids like cosmetics and corsets, and she stressed instead that diet, exercise, and good hygiene alone would produce a beautiful body and a perfect complexion. Indeed, the fresh-faced American ideal of beauty celebrated throughout the mid-twentieth century was indebted to turn-of-the-century celebrations of good looks as the outward manifestation of good habits.

Building on this association, by the 1920s and 1930s a major theme of health and beauty advice was that real female beauty came not from artifice but from health and youth, and that these were obtainable to a very great degree through hard work and attention to science. In 1927, for instance, the beauty writer Dorothy Cocks wrote, “The keynote of modern beauty is naturalness. By this, I do not mean the bucolic naturalness of freckled nose and shiny cheeks and grubby nails. On the contrary, we insist on the most exquisite grooming and a rigid standard of cleanliness. But all our efforts to be beautiful are based on an understanding of the processes of nature. Our potions are not the products of necromancy, but of science. The modern Pied Piper carries a retort and an X-ray machine.” Women with sufficient discipline to submit to the demands of fighting age, whether that fight took them to the bathroom mirror, the gymnasium, or the doctor’s office, could supposedly stay young years longer than previously assumed.

Accordingly, popular descriptions of women’s aging made growing old the equivalent of growing careless. Women aged when they grew careless of appearance, careless of diet, and careless about maintaining active social lives. One Chicago Daily Tribune article provided women with an inventory of signs tipping them off that they were getting older, virtually all of which were related to attitude and effort rather than to physiological changes. Women could tell they were getting older when they dressed “for comfort rather than for style,” failed to take part in bridge, golf, or dancing, or laughed at the thought of undertaking “a rigid reducing diet.” One woman quoted in the article said she knew she was middle aged when she found herself thinking “My will is weak. I cannot help it.” And this fundamental suggestion—that aging was a failure of the will as much as a failure of the body—licensed real vitriol against those who failed to stay young. Indeed, exactly as more women than ever were living to middle age and beyond, popular culture stressed that it was crucial for women to look young and to be young in the fast-paced modern world. Although expectations about looking young and youthfully slender affected both sexes, women bore the brunt of this health-cum-aesthetic burden.

As women’s political, economic, and social roles expanded throughout the early twentieth century, there was brisk debate about whether modern life made women healthier or less healthy than their predecessors. On one side, observers argued that modern women were healthier than ever. Some said that the light and unrestrictive clothing popular for women was a boon to health, while others pointed to women’s growing participation in sports. For example, Lucy Adams, the athletic director of the Atlanta YWCA, cheered that the popularity of “the ‘delicate’ woman” was waning and that the vigorous “athletic girl” was
striding into her old place in the limelight. Some said that because modern women got fresh air and wholesome food and heeded the teachings of health science, they were more robust than ever and would bear stronger children.

Others begged to differ. Middle-aged male commentators, themselves at the greatest statistical risk for chronic disease, were particularly interested in the ostensibly perilous effects of modern life on the health of young women. A few studies in the 1920s suggested that women from their late teens to their early thirties had higher tuberculosis and death rates than men in the same age group. Given such figures, Fisk scoffed at claims that “the girl of today is healthier and more robust than those of the past generation.” A newspaper article summarizing his views was headlined, “Is the Modern Girl PAYING for ‘FREEDOM’ With Her Health?” Fisk argued that she was, and a chorus of other doctors agreed that modern life was wearing women down and killing them young.

Notably, the things they pointed to as the causes of young women’s supposed ill health and premature aging were generally the very things women were doing by the 1920s to define themselves as young and modern: working outside the home, staying up late, wearing short skirts and make-up, exercising, smoking, drinking, dieting, and even holding their spines in a less rigid posture.

Doctors targeted women’s dress and diet as particular threats. Styles in the 1920s were drastically shorter and less cumbersome than the clothing western women had worn for centuries, and critics blamed much of women’s ostensible ill health on the revolution in fashion. According to commentators, short skirts, thin stockings, “scanty undergarments,” and high heels all failed to protect women’s bodies from the elements, making them more susceptible to disease.

More even than clothing, weight loss was a major source of concern. Despite growing evidence that slenderness actually contributed to longevity, doctors blamed rising female death rates on the “grim determination of every young thing to be flat and thin,” and they shook their heads that thin women were starving their blood, leaving their nerves unprotected, and providing themselves with insufficient energy even as they were doing more than ever before.

So if the ill-clad, undernourished modern woman was only a stiff gust of wind away from falling sick and wasting away, why were so many people convinced that women were healthier than they’d ever been? Fisk had an answer to that, too, and his answer was make-up: modern women’s healthy appearance was a sham perpetrated by their use of cosmetics. Indeed, the explosion of cosmetics use in the 1920s spurred widespread fears that women were masking pallid complexions and other signs of illness. Worst of all, the quick-fix bloom of blush and lipstick encouraged women to shortchange diet and exercise, the authentic route to good looks. Fisk warned that the made-up woman would go on “living a life of physical neglect so long as she can persuade herself that she is looking well when she is ‘touched up.’” According to him, 100 outwardly healthy women had recently undergone physical exams, and it turned out that a quarter of them had some degree of tuberculosis. “These women didn’t look sick,” he wrote darkly. “They were rouged rosily, and had all the appearance of health and vitality. It took the X-ray to reveal the secret.” Because cosmetics allowed women to look younger than they were and to look healthy when they were not, critics painted them as tools of female duplicity and a threat to national health.
Life Expectancy and Race

As with women, the public attention focused on life expectancy levels presented opportunities to criticize African American habits and to suggest new ones in their place. Life expectancy among African Americans was significantly lower than that of white Americans in the early twentieth century. In 1912, life expectancy at birth for African American Metropolitan Life policyholders had been only forty-one years, and that figure was likely significantly higher than average since the data included only those well off enough to be able to afford life insurance in the first place. Life expectancy at birth among African Americans in general was estimated to be about thirty-five years.109 Whites, in contrast, had a life expectancy at birth of around fifty at the time. Systemic poverty, low levels of education, and poor medical care all made African Americans more likely to die young. Of course, income affected life expectancy regardless of race. Prosperous white Americans were in the vanguard of cardiovascular disease victims in the early twentieth century because they could afford lavish amounts of saturated fat and were more likely to have desk jobs or servants that allowed them to be sedentary. But the poor of all ethnicities fared more poorly still because the demands of industrial labor, unsanitary living conditions, inferior or insufficient food, and spotty access to quality medical attention more than made up for the difference. In the 1920s, for instance, the average American industrial worker who entered a factory at age twenty could only expect to live to be forty-two. At twenty, he was already middle aged.110

For African Americans, however, the life expectancy gap spoke to more than socioeconomic conditions. As a solution to the so-called “race problem,” some whites had been predicting for decades that evolutionarily maladapted African Americans would die off within a few generations anyway, and experts had suggested that genetic differences among the races might affect longevity. When U.S. census data collected in 1910 revealed that African American children had a higher death rate than the children of immigrants, who in turn had a higher death rate than native-born white children, a typical critic explained the difference by concluding that “the white stock is naturally healthier.”111 As late as the mid-1910s, dismal life expectancy rates among African Americans seemed to bolster theories about eventual African American extinction.112

As a result, life expectancy was not an idle question for African Americans. Given the stakes, the growing belief that personal choices affected life expectancy spurred middle-class African Americans to criticize the habits of poor blacks. One writer in The New York Amsterdam News, an African American paper, blamed high death rates among poor African Americans on lack of exercise, patent medicine abuse, and, most of all, on their diets, supposedly composed of cheap candies, hot biscuits, too many condiments and spices, and “putrified, decomposed meats.”113 While a few journalists pointed to death rates as hard evidence that structural discrimination was harming African Americans as a group, middle-class African American commentators frequently laid the responsibility for poverty at the doorsteps of poor blacks themselves, saying they simply needed to exercise greater “thrift.”114 Others dismissed the notion that poverty contributed to death rates at all, saying that “[b]ecause an individual is poor is no reason why he or she cannot practice the laws of health and individual hygiene.”115
On the whole, however, it was becoming clear by the 1920s that instead of weakening and dying out, African Americans were in fact living longer, just as whites were. Incrementally rising real wages, along with greater dissemination of information about health and infant care were helping to lower death rates among African Americans. In fact, due in large part to educational campaigns waged in the black press, infant mortality rates among African Americans were falling faster than among any other group.\textsuperscript{116} By the mid-1920s, African American life expectancy at birth was estimated to be about forty years.\textsuperscript{117} While still significantly lower than that of whites, it was rising fast, and that increase allowed African Americans to argue vocally against the “old notion that the American Negro might become extinct.”\textsuperscript{118} African Americans also pointed out that this lengthening of life was not confined to rural, southern African Americans, an important point because southern newspapers regularly attempted to staunch the flow of the northern migration by declaring that “in the North Negroes die fast.”\textsuperscript{119} By 1930, the Commission on Interracial Cooperation released a statement affirming that far from “dying out, as was at one time predicted, the Negro race in America is steadily growing more healthy and the life span of Negroes is increasing.”\textsuperscript{120}

For eugenicists, growing longevity among all Americans had broad implications. Delayed deaths contributed to exploding population growth, and eugenists were sensitive to the ways that longevity could positively increase the proportion of supposedly desirable populations.\textsuperscript{121} Indeed, many of the leading proponents of life extension were ardent eugenicists who saw targeted life extension as a way to assure white race health in the present and demographic dominance in the future.\textsuperscript{122} Editions of \textit{How to Live} published through the 1940s included sections on eugenics, later revealed to have been written by the leading American eugenicist, Charles Davenport.\textsuperscript{123}

Eugenicists had a complex relationship to the life extension movement, however, because of real tension over the question of population quality versus quantity.\textsuperscript{124} Many eugenicists were distinctly uncomfortable about declining infant mortality rates since they believed, as the prominent eugenicist Paul Popenoe put it, that “pulling weak babies through the first year would result merely in saving that many more to die in succeeding years.”\textsuperscript{125} Even worse, eugenically speaking, many of those saved babies weren’t dying in succeeding years but were instead living to reproduce their supposedly inferior genes. By these bleak eugenic lights, disease control itself was far from universally benign.\textsuperscript{126} While black reporters celebrated the fact that diseases “which used to kill thousands of Negroes are being controlled,” that fact struck some white eugenicists as ominous.\textsuperscript{127} As Irving Fisher put it, “it may well be true that misapplied hygiene—hygiene to help the less fit—is distinctly dysgenic.”\textsuperscript{128} Indeed, the mission of the Life Extension Institute, as articulated in the original press release announcing its founding in 1913, was to reduce the death rate “in certain groups of people in America.”\textsuperscript{129} That exclusivity was no accident.

\textbf{Conclusion}

At a 1932 meeting of leading health administrators in New York City, a few months before Franklin D. Roosevelt’s election, someone proposed that the federal government should establish “universal health insurance” for its citizens,
an idea that had been popular at the high point of the Progressive Era but that had been successfully vilified throughout the 1920s as a foreign and socialist idea.\textsuperscript{130} Indeed, after discussion, almost everyone present at the 1932 meeting condemned the proposal, claiming that universal health insurance would remove “the initiative and responsibility of the individual in preserving his own health.” Instead, the administrators agreed they simply needed to “induce” working people to take better care of themselves through good hygiene, modern habits, and, of course, regular physical examinations.\textsuperscript{131} Living healthily and long was ultimately the individual’s responsibility, they concluded, not the state’s.

In the first third of the twentieth century, rapidly rising life expectancy seemed like a preeminent sign of individual and community progress, on a par with other major progressive reforms. But even as Americans prided themselves on living longer and more comfortably than their ancestors, it also seemed clear that modern conditions brought modern health problems.\textsuperscript{132} Indeed, the new prominence of chronic diseases seemed like a uniquely twentieth-century phenomenon, the result of sedentary office jobs and mechanical labor-saving devices, the abundance of rich food made possible by industrial agriculture and modern transportation networks, and the high stress and fast pace of twentieth-century life.

Ironically, though, it was the very prominence of degenerative diseases in these decades that sparked interest in the possibility of radical life extension, precisely because chronic diseases responded, in a way epidemic diseases never could, to individuals’ decisions and habits. As it came to seem that long life and, by extension, prolonged youth were attainable by those who made good living choices, Americans profoundly reconceptualized the relationship between willpower and physical decline. Indeed, attainment and achievement became central tropes in the discourse about aging and longevity that emerged throughout the twentieth century, as youth and health came to seem more and more like the result of personal choices and personal virtue.

\textbf{Endnotes}


5. Starting in 1910, the federal census began tracking deaths according to age, sex, and marital status, while some states had started such record-keeping even earlier. “Proof Married Men Live Longer,” MS2, August 31, 1913, The Washington Post.


12. Life expectancy figures can be misleading because they generally include statistics for infant mortality. For example, while life expectancy in western Europe in the eighteenth century hovered in the mid-twenties, anyone who actually survived childhood could realistically expect to live to be thirty-five or forty years old. Riley, Rising Life Expectancy, 33.


17. Also, by the late nineteenth century, some of the earlier claims of unusually long life had been exposed as fraudulent or flawed, as, for example, when three of England’s most celebrated cases of unusually long life were disproven in the 1870s. Gerald Gruman, “A History of Ideas about the Prolongation of Life: The Evolution of Prolongevity Hypotheses to 1800,” Transactions of the American Philosophical Society, Vol. 56, Part 9, Philadelphia: The American Philosophical Society, December 1966: 3-102, 74.


23. Proponents of hygienic longevity, as Gruman describes them, argued for centuries after Cornaro that humans would be naturally disease-free and long-lived if they could only avoid corrupting environmental influences. Gruman, “A History of Ideas about the Prolongation of Life,” 71.


32. In 1870, heart disease had caused 50,000 deaths in the United States. Fifty years later, it caused well over 200,000 deaths. Although the U.S. population had grown and more people were living to an age when they would suffer from chronic diseases, since heart disease was especially prevalent among the middle aged and elderly, these factors alone do not account for the jump. Heart disease was actually becoming markedly more prevalent. “Donate $1,000,000 to Prolong Life,” 1, January 9, 1928, *New York Times*. Barnard, “Science Attacks Slow Ills of Old Age.” See Riley, *Rising Life Expectancy*, 23.


42. “National Society to Conserve Life,” 2, December 30, 1913, *New York Times*. By the 1930s, it was revealed that it was Davenport who had contributed the sections on eugenics in *How to Live*. Hirshbein, “Masculinity, Work, and the Fountain of Youth,” 95. Spokesmen for the LEI also claimed it was “irrevocably opposed to fads and quacks and charlatans.” “At What Age Does a Man Grow Old?” Life Extension Institute ad, Display Ad 224, 75, September 7, 1919, *The New York Times*.


45. Fisher and Fisk, How to Live.


47. The doctors in the employ of the LEI were all licensed doctors. “Life Extension,” April 22, 1935, Time magazine, online.


51. See Bettyann Kevles, Naked to the Bone: Medical Imaging in the Twentieth Century (New Brunswick, 1997).

52. Hirshbein, “Masculinity, Work, and the Fountain of Youth,” 96. By 1935, 95 percent of the people LEI doctors examined were insurance policyholders, two percent were employees of other businesses that paid for their exams, and three percent were individuals who contacted the institute on their own. “Life Extension,” April 22, 1935, Time magazine, accessed online.


55. Ley, “Health Conservation Accomplishments;” “100 questions which only You can answer,” LEI ad; “Life Extension,” April 22, 1935, Time magazine. See also Daniels, Life Extension Institute at 75, 42.


57. By the late 1920s, the philanthropists Albert and Mary Lasker gave a million dollars to the University of Chicago to found an institution devoted to fighting degenerative diseases with the goal of “increasing the life expectancy of persons 50 or more years of age,” a foundation that is still going strong. “Fund to Aid Life Span,” 1, January 9, 1928, Los
Angeles Times; “Donate $1,000,000 to Prolong Life,” 1, January 9, 1928, New York Times.


60. Armstrong, “A Long Life and a Merry One,” 494-5.

61. There was “but little doubt that we bring nearly all diseases and disorders upon ourselves through ignorance” or “neglect and carelessness.” And if people educated themselves about the physical needs of their bodies, they could “ward off all symptoms of approaching disease.” Sherwood Percy Snyder, The Practical Hygienic Preparation of Foods: A Treatise on Foods and Their Effects upon Health and the Physical and Moral Life, 10th ed. (Dayton, OH, 1913), MSU Special Collections, 14-5, 13. Fisk, similarly, wrote that illness and infirmity were most often “developed and confirmed by faulty living habits or bodily neglect.” Fisk, “Life Insurance and Life Conservation,” 338. Many of the epidemic diseases that people had formerly viewed as impersonal scourges could be avoided if only people were “willing to take a little trouble” by taking simple sanitary precautions and getting vaccinated. Even measles, by the mid-1920s, was coming under increasing control. Mary Ross, “Life Lengthened by Health Work,” X6, August 1, 1926, New York Times.

62. At this time, the verb “to retire” didn’t simply mean an individual choosing to stop working; “to retire” could also mean a company forcing an employee to stop working—retiring them. In the 1930s, state and federal governments regularly “retired” their employees at age sixty-two. Frank Ernest Hill, “At What Age Should a Man Quit Work?” SM6, August 12, 1934, New York Times.

63. In both this quote and the following one, Alsaker was paraphrasing what he described as a common opinion among prospective employers. Rasmus Larssen Alsaker, Eat Well—Live Long (New York, 1939): 183.

64. Ibid, 183.

65. They stressed that in modern times an individual’s numerical age no longer accurately indicated their age in physical terms. For example, Alsaker devoted a chapter to asking, “What Is Your Physical Age?,” Ibid.; As the dietician Alida Pattee wrote, “there is a radical difference between a person merely old in years and one who is physiologically old.” Alida Frances Pattee, Practical Dietetics with Reference to Diet in Health and Disease, 15th ed. (Mt. Vernon, NY, 1925): 607. “At What Age Does a Man Grow Old?” Life Extension Institute ad. “Yes We Have No Birthdays,” C6, October 7, 1923, Chicago Daily Tribune.

66. The author of the article, however, did not fully agree with Fisk, pointing out that busy, active women did not necessarily fear the passage of time. “Yes We Have No Birthdays.” Keene Sumner, “Don’t Tell Anybody When You Have a Birthday,” American Magazine 9, (September 1923): 24-5.


75. Alsaker, Eat Well—Live Long, 183.


79. “Once Refused $32,500 for a Horse,” LEI ad.


82. “Once Refused $32,500 for a Horse,” LEI ad.


86. Between the ages of thirty and fifty, the death rate of bachelors was about twice as high as that of married men. Ibid; “Proof Married Men Live Longer.” Higher Mortality
among Bachelors,” A20, August 24, 1926, Boston Daily Globe. Meanwhile there was little difference in life expectancy between married and single women. “Proof Married Men Live Longer.”

87. Susanna Cocroft, The Woman Worth While (New York: G. P. Putnam’s Sons, 1916): 71. Similarly, according to Lucy Adams, the “majority” of women could attain near-perfect health if they were willing to work for it. Adams, quoted in “Popularity of ‘Fainting Girl’ Wanes: Real Road to Health Pointed Out,” A4, November 5, 1922, The Atlanta Constitution.


89. Or, as Adams put it, women needed only exercise, fresh air, wholesome food, and “clean thoughts” to look beautiful. Lucy Adams, quoted in “Popularity of ‘Fainting Girl’ Wanes Real Road to Health Pointed Out.”


92. Alsaker, Eat Well—Live Long, 190. Fisk, for example, declared that women “have it in their own power to neutralize the wear and tear of the passing years.” Fisk, “Is the Modern Girl PAYING for ‘FREEDOM’ With Her Health?” pg. SM3, December 28, 1924, The Washington Post.


95. Adams, quoted in “Popularity of ‘Fainting Girl’ Wanes Real Road to Health Pointed Out.”


98. Fisk, “Is the Modern Girl PAYING for ‘FREEDOM’ With Her Health?”


101. Dr. Irving Cutter, who wrote the nationally syndicated column, “How to Keep Well,” for instance, warned readers that professional life was unhealthy for women because most of them found “the strain of a responsible position wearing and enervating.” Irving S. Cutter, “The Business Woman’s Health Program,” How to Keep Well, 10, May 16, 1938, Chicago Daily Tribune. “Flappers Buy Freedom With Health and Life,” 3,

102. “Health Officer Warns ‘Flappers,” 6, February 17, 1922, *Boston Daily Globe*; “Scanty Dress + Boyish Figure = HIGHER DEATH RATE.”

103. “Scanty Dress + Boyish Figure = HIGHER DEATH RATE”; Antoinette Donnelly, “Reducing May End Disastrously,” E6, December 29, 1929, *Chicago Daily Tribune*; Blake, “Kindly Interest Is Best Medicine for Flighty Flappers.”

104. Fisk, “Is the Modern Girl PAYING for ‘FREEDOM’ With Her Health?”


106. Fisk, “Is the Modern Girl PAYING for ‘FREEDOM’ With Her Health?”

107. Ibid.

108. For an excellent overview on this controversy, see Kathy Peiss *Hope in a Jar: The Making of America’s Beauty Culture* (New York, 1998).


119. Met Life figures showed, they said, that “The city Negro, North and South, is not dying out, but increasing.” “The Average Man And Woman Can Now Expect to Live Fifty-Six Years,” 1, October 12, 1923, *Afro-American*.
120. “Death Rate Steadily Declining; Still High,” 9, May 24, 1930, *The Pittsburgh Courier*.


131. Wiggam, “Saving Billions by Keeping Well.”