

The history of a habit: jogging as a palliative to sedentariness in 1960s America

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Abstract

This article provides an account of the emergence of jogging as mass physical fitness practice in America in the 1960s. It explores how jogging was configured as a physical fitness activity suitable for sedentary middle-aged men and women. Jogging developed as a counter to the ill-effects of habits entrained by the increasingly sedentary lifestyles of modern industrialized urban and suburban dwellers. The paper traces the development of jogging as a defined exercise routine at the University of Oregon, Eugene, Oregon. Focusing on the moment when jogging is ‘invented’ as a recognizable fitness practice tells a great deal about the origin of contemporary regimes of physical fitness for the middle-aged population and how they have evolved. It also points to the significance of understanding how the shaping of corporeal habits play into the making of (1) individual bodies, (2) common practices of corporeal care and activity, and (3) environments of physical activity.

Keywords

America, coronary heart disease, corporeal skill, habit, jogging, physical fitness, sedentary lifestyles, urban environment, William Bowerman

In 1963 a four-page pamphlet appeared in Oregon banks. Sponsored by the Oregon Heart Foundation and The US National Bank of Portland, *The Joggers Manual* set out the basic principles of a new form of physical exercise, jogging. ‘Jogging is a bit more than a walk,’ the pamphlet explained. ‘Start with a short distance then increase as you improve. Jog until you are puffing, then walk until your breathing is normal again. Repeat until you have covered a mile or two, or three.’ Jogging, it further assured its readers, can be done ‘anywhere’ and by ‘anyone – six to 106 – male or female.’ Requiring nothing more than that the jogger ‘wear a pair of comfortable shoes with thick, moderately soft soles’ the pamphlet signed off with a jaunty ‘Good jogging to you!’¹ It is difficult – perhaps impossible – to find a single text or moment when most new

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mass practices of any kind are invented. However, this modest 250 word pamphlet, so brief that it fails to even outline the benefits that the prospective jogger might expect from her or his new exercise activity, is arguably a good candidate for marking the birth of jogging as a mainstream mass physical fitness activity in America. These days the jogger has become a ubiquitous urban figure – in North American, European, and Antipodean cities at least. Women and men joggers of all ages and shapes populate city walkways, parks and sidewalks such that their presence goes largely unnoted. The following pages offer a short account of the emergence of jogging as a mass physical fitness practice in America. In particular, they focus on how the prosaic act of ‘jogging’ was put together as a routine habit – one that could be easily learned and put into use without direct expert intervention.

Thinking about how jogging first emerged as a mass physical fitness practice in America – and how it was routinized as habit – is worthwhile for at least three reasons. First, while physical fitness practices have become ubiquitous within the contemporary urban environment, we know surprisingly little about how these practices came to be so embedded.² It is easy to forget that as simple a practice as jogging had to be invented. In the post WWII decades it was rare for American men or women over the age of 30 – outside of work – to partake in any physical activity more strenuous than yard work, bowling, golf, or light calisthenics.³ Why did millions of such people suddenly take up vigorous exercise? And why jogging?⁴ Second, as shall be seen, practices of physical fitness are not necessarily simply ways to a certain kind of body aesthetic (although of course they may well be that), they are also often enfolded into intricate regimes of somatic care and therapy that seek an accommodation with the socio-technological-environment within which their practitioners inhabit. As it developed in the 1960s, jogging was configured by medical experts and its layperson practitioners as an everyday palliative to the sedentary nature of much of modern American urban and suburban life. An increasing weight of medical evidence suggested that the corporeal inactivity associated with sedentary lifestyles had significant short- and long-term health impacts. As such, jogging was designed to counter the systematic diminution of necessary corporeal effort occurring throughout the urban environment – whether that be through the substitution of the automobile for walking, lifts and escalators for stairs, or television for more physically demanding pastimes. Again, this prompts the question why jogging? Why was jogging understood by large numbers of middle-aged Americans and their medical practitioners as a sensible solution to the problem of sedentarism? And, what relationship – if any – did this attempt at mass self-medication have to then contemporary medical knowledge about the relationship between sedentary-ism and ill-health?

Third, and finally, thinking about the process of establishing jogging as a recognizable and coherent practice, both at the level of the individual and a community or society more generally, brings to the fore the question of how habit works on and through the sensate body – and how that work helps tie the social together. Much social theory understands habit as simply that which is routine – that which is not thought about, what is largely beyond intentionality and forethought, and indeed often that which is imposed from without.⁵ However, habit can also be understood in a more productivist vein as containing within it a certain embodied ‘intelligence’ about the world. Habits of all different kinds help organize how people interact with and make sense of the field of action they find themselves within. Rather than simple empty repetition they can also act as a prime for action. And as such, habit, or rather the cultivation of certain kinds of habits, can be generative in all sorts of ways. Attending closely to specific habits and the ways those habits unfold over time might tell a great deal about how certain patterns of inhabitation come to possess a certain solidity, or sense of taken for granted-ness. Thinking how habit works on the body also invites us to ask how habits get formed, how habits come to persist over time, how they fade away.⁶ As an exercise

practice, jogging is remarkable not just for its ubiquity but also for its longevity. The way people jog now is not in essence all that different to how they did so 40 or 50 years ago. This longevity is a product both of the distinctive ways that the practice of jogging works with the nascent corporeal capacities of the sedentary individual, and the intuitive intelligibility of the way it configures a 'solution' to the problem of sedentarism.

The following sections will trace out the development of jogging as a structured 'regulated' fitness program at the University of Oregon, Eugene, Oregon.⁷ Led by William J. Bowerman, the author of the *Joggers Manual* mentioned above, working with the cardiologist Waldo Harris, the project also enrolled a diverse range of other experts from the University of Oregon and elsewhere, along with hundreds of ordinary men and women, participants in a series of controlled trials exploring what effects the development of a regular jogging habit had on previously sedentary bodies. This was a process that culminated in an article outlining the benefits of jogging in the influential *Journal of the American Medical Association*, along with the publication of a book, *Jogging: A Physical Fitness Program for All Ages*, syndicated in the widely distributed *This Week Magazine* and published by the New York publishing house Grosset & Dunlap, which eventually went on to sell over a million copies.⁸

Sedentary habits and an epidemic of heart disease and other maladies of affluence

On 1 November 1961, Seymour Lieberman, an attorney at law, sat down at his desk in Houston, Texas and composed a letter to William Bowerman, Professor of Physical Education and University of Oregon track and field coach. In his letter he asked Bowerman to endorse the regime for heart and bodily fitness that Lieberman had developed. A former Loyola University track athlete and sitting member of the governing board of the US Track and Field Federation, the 51-year-old Lieberman was a self-styled 'lecturer on physical fitness' and keen advocate of the unusual idea that physical exercise was an antidote to heart disease and other ailments of middle and later life. 'I am convinced,' Lieberman wrote in a 10 page precis titled 'The Dance of Socrates' accompanying his letter, 'after exhaustive study and practice that this simple exercise – requiring only five minutes of your time in the morning and another five at night – will lengthen your life, decrease considerably your chance of suffering a heart attack, reduce your weight, make you as muscular as you have any reasonable wish to be; in short make you what the average American male is certainly not; physically fit.'⁹ Based around observations on how boxers and football players prepare before a bout or a game, Lieberman's regime had the beauty that it could be done anywhere, in a bedroom, living-room, hall, even in a hotel room.

Start the exercise by running slowly, no faster than a walk. You are merely attempting to run in slow motion, to move leisurely . . . The ball of the foot hits the floor first and then the heel comes down. Keep the rest of your body limp like a rag doll. Your arms and fingers shake along the flesh and muscles of your body. Move to and from a certain point in your living room or hallway. Every fourth or fifth stride, roll your head on your shoulders . . . After two minutes of jogging, your heart will increase. A normal pulse of 70 may go up to 120 or more, after five minutes. This is good . . . Jogging for five minutes gives the entire body exercise equivalent to thirty minutes of bending stooping or any other type of exercise imaginable. The perfect Exercise!

This is the 'Lieberman Trot' (subsequently jauntily rebranded in a four sided self-published pamphlet as 'Lieberman's Rhythmical Jogging').¹⁰

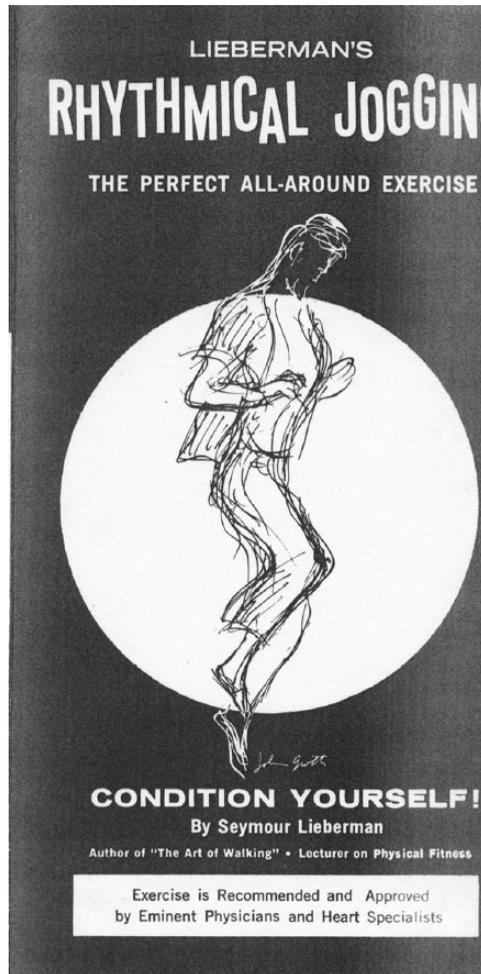


Figure 1. Lieberman's Rhythmical Jogging.

Source: Courtesy of the University of Oregon Special Collection and University Archives.

Lieberman was not alone in his concern for the health and fitness of America's adult population, especially that moving into the physical comfort of middle age. In 1955 the national magazine *Sports Illustrated* devoted an article to the physical 'conditioning program' developed by Professor Thomas Cureton, to return somnolent middle-aged men to youthful vigor. Cureton, head of the Physical Fitness Research Laboratory at the University of Illinois had developed his program after testing the physical fitness of 20,000 men and women and discovering the vast majority chronically unfit. 'Once the sedentary man passes 30,' the article warned, 'he begins to take a physical nose dive. Thousands of microscopic blood vessels that carry oxygen and nutrients to the muscles, lungs and heart and other organs slowly fall into disuse. "The key to turning back the clock on physical aging," says Dr Cureton, "is to force open and use those blood vessels"'¹¹

Hans Kraus, advisor to President Kennedy's Council on Physical Fitness, and Wilhelm Raab, director of the Cardiovascular Research Unit at the University of Vermont, went further. They were

convinced that the decline in physical effort in everyday life had created a new class of disease; hypokinetic disease – diseases of under exercise.¹²

When we analyze our daily lives, we can see how the active function of our muscles has been taken over step by step by labor-saving devices. We do not walk, but ride; we do not climb stairs, but use elevators; we do not lift anything of any weight, but we have devices that do that lifting for us. Most of the chores that used to require a certain amount of physical activity have been taken over by machines. We do not mow our lawns by pushing a lawnmower – it has become motorized. We have pushbutton heating, we have vacuum cleaners, we have dish washers. In short, we do not move at all.¹³

Hypokinetic disease was not a single malady, rather it encompassed a host of interconnected illnesses from cardiovascular diseases, to lower back pain and psychiatric disorders that affected those who were physically inactive.¹⁴

Central to the arguments of Kraus and Raab, Cureton, and Liebermann, and others like them, was that the routine habits of Americans had become pathogenic.¹⁵ ‘It is a sad medical fact,’ Lieberman wrote,

that in the next 12 months 9 million people will have their first heart attack. Most of them will be men. It was depressing thoughts such as that one that plagued me at age 35. I began adding up three score and 10, deducting the difference and figuring the odds. I was constantly suffering with pains in my back, with sore shoulders and aches here and there. I had gained 25 pounds in 10 years. Not much, but on my 5-10 frame it didn't look good.¹⁶

The health crisis was that Liebermann was not alone in his failing middle-aged body. Rather his ailments were the product of habits of living woven (so it seemed) thickly into the fabric of the modern American and Western European environment. ‘High living standards, industrialization, urbanism, the rise of professions, of white-collar employment, reduction of physical effort in work and life generally – these social forces appear to make up the epidemic constitution of coronary heart disease, and represent the successes of our society, not the failures,’ the University of London epidemiologist Jerry Morris told the second International Congress of Cardiology in Washington, DC in 1956. ‘We thus seem to be dealing with what, as a mass phenomenon, may be a new kind of maladaptation between men and their environment.’¹⁷

Lieberman constructed his argument through his own personal tale of decline and physical rediscovery – following established 19th century America tropes of self-improvement and personal responsibility.¹⁸ Scientifically oriented medical researchers like Morris, Kaus and Raab, and Cureton, however, mobilized more sociologically and epidemiologically sophisticated arguments. Having largely conquered diseases of infection and nutritional insufficiency, they argued that the problems of ill-health and disease facing wealthy industrialized societies such as America in the 1950s and early 1960s were qualitatively different to previous eras. The incurable diseases modern medical practitioners faced were now products of the strived for *benefits* of wealth and industrialism. Diseases such as coronary heart disease, hypertension, and many cancers were novel in having their origins in the super-abundance that accompanied an urbanized industrial society. These diseases were also novel in not having a simple easy to isolate etiology. Their causes were in the statistical language that wove through much of this writing, ‘multi-factorial.’ So, while the leading expert on heart disease Paul Dudley White proclaimed that a ‘great epidemic’ of heart disease was sweeping through post WWII America he could suggest little to immediately curtail it.¹⁹ What was more, in addition to their etiological opaqueness, the diseases only manifested themselves over years or even decades. Because these diseases of affluence developed over long periods of time, and because they seemed to be the product of some indefinite mix of etiological factors, the

greatest possibilities for the control and prevention of these diseases appeared to be altering the underlying behavioral habits of those susceptible to these diseases – getting rid of those habits that generate disease, and engendering those that prevent it. Acting onto everyday habits of eating, travelling, working, relaxing, socializing even, was becoming the new frontier of public health. The question, then became threefold: (1) which habits needed uprooting and which fostering; (2) how to bring those habits which were dangerous into awareness; and (3) how to foster new or altered habits that were beneficial?²⁰

A different approach to physical fitness, running as an everyday habit

Bowerman responded warmly to Lieberman's November letter. He had, he wrote, started doing "The dance of Socrates" type exercise' each morning and 'was very much impressed with it.' The 'program,' he assured Liebermann, 'has tremendous possibilities for the forty plus population.' In fact, he was thinking of introducing a physical fitness program for faculty at the university based on 'The dance of Socrates.' Bowerman never got around to organizing his faculty session. It was a different set of circumstances that pushed him into spearheading a program of physical fitness.

In January 1963 Bowerman returned from a month touring New Zealand with the University of Oregon track team. The *Eugene Register Guard* was keen to hear how the team had fared.²¹ Bowerman, however, wanted to talk about 'jogging.' Bowerman had travelled to New Zealand principally to see the techniques through which Arthur Lydiard – a self-educated, amateur track coach, who trained a host of Olympic middle and long distance champions – had produced so many exceptional athletes.²² Early Sunday morning on the second week of his stay Lydiard took Bowerman to a meeting of the 'Auckland Joggers Club.' Founded in February by Lydiard and the businessman Colin Kay (a gone to seed former New Zealand Empire Games athlete), the 'Joggers Club' had been created to foster a community where men of all ages could run together to develop their physical fitness.^{23,24} The club had settled into a routine of Sunday morning 'pack jogs' in Cornwall Park in the south east of the city. These pack jogs were based on the British 'harrier' cross-country group training tradition, but stripped of any competitive element. The point was to complete the 'jog' not to beat one's fellow joggers to the finish.²⁵

Lydiard invited Bowerman to jog along with the slowest group. 'I set off happily with the pack for the jog around Two Pine Mountain [actually One Tree Hill],' Bowerman recalled in an early draft of *Jogging*:

I did quite well for the first half mile. Then, just as I was beginning to feel a little winded and expect a slightly slower pace, the group turned up to cross a shoulder of the mountain without any slackening at all. By twos and threes the joggers passed me, helping me work from the middle to almost the tail end of the crowd. Then I noticed a nice gentleman graciously matching his pace to my own . . . By the time we had reached the mid-point of the trail, he led me on a short-cut down the mountain which brought us back to the finish at almost the same time as everyone else. It saved public embarrassment, but not private.²⁶

Bowerman had been confident he would be able to keep up – after all, along with his dance of Socrates he also spent his days as a track and field coach demonstrating 'techniques and practice training routines, including at least a mile or two of running a week.'²⁷ So, the fact that a 74-year-old man with no athletic history – who it turned out had previously suffered three heart attacks – had slowed down for the 51-year-old track coach was a bit too much to bear. 'The slipshod way I had been exercising – when there was time – and about as much as I felt like at any given time, was not doing the job,' Bowerman concluded.²⁸ He was going to have to get serious. So, drawing on his own physiological



Figure 2. Auckland joggers, Cornwall Park 1963 – Andy Steedman center.

Source: G. Gilmour, *Run for Your Life: Jogging with Arthur Lydiard* (Auckland: Minerva, 1965), facing p. 31.

expertise in training athletes, and borrowing from some of Lydiard's ideas on jogging, Bowerman devised – just as he would for his athletes – an exercise schedule to get himself into physical shape.

His schedule for the first two weeks was:

Monday: Jog 4 minutes, walk to recover. Repeat 6 times.

Tuesday: Stretching exercises, 5 to 10 minutes brisk walk.

Wednesday: Lydiard Fartlek, 20 minutes.

Thursday: Stretching exercises, 5 to 10 minute walk.

Friday: Jog 8 minutes, walk to recover, repeat twice. Jog 4 minutes. Walk, easy.

Saturday: Long easy run

Sunday: rest.

Sticking to this regime for four weeks, Bowerman left New Zealand with his waist reduced by three inches and able – he claimed – to partner Lydiard on a 20 mile run through the McKenzie country.²⁹ It was about this transformation that Bowerman wanted to tell Jerry Uhrhammer – *The Register Guard* sports reporter – when he rang to ask him about his time in New Zealand. Liebermann might have had the right idea. Middle-age men might need physical exercise. To do this effectively they need to get their heart rates up. But the kind of fitness a middle-aged or indeed elderly man or woman could achieve through jogging in the manner of Lydiard's joggers was of a whole different order to that achieved by trotting around one's living room in 'soft slippers' doing 'the dance of Socrates.'³⁰ The vigor of the 74-year-old Andy Steedman who helped Bowerman on his first Auckland jog seemed a testament to that – as did the physical vigor of all the men, many of them like Steedman recovering heart patients, out running with the Auckland Jogging Club. Indeed, taken together Lydiard's men seemed compelling proof that jogging improved the physical health of middle-aged sedentary men. So, having first introduced *Register*



Figure 3. Eugene Joggers University of Oregon, early 1963.

Source: Gilmour, *Run for Your Life: Jogging with Arthur Lydiard* (Auckland: Minerva, 1965), facing p. 95.

Guard readers to the concept of jogging, on 30 January 1963, Bowerman invited them to join him down at the University of Oregon athletics track to form Eugene's own joggers club.³¹

Strenuous exercise, a dangerous habit?

Jogging swept through Eugene like a fever, despite the fact that Bowerman was launching his campaign in the dead of an Oregon winter. 'The first day about 200 showed up at the track; the second day about 300; and the third day about 1,500,' Bowerman recalled, writing to the New Zealand journalist Garth Gilmour (who was gathering material for a book on Lydiard's jogging). 'It got completely out of hand. I told the people to go home until I could work out some programs.'³² His first stab at a program was the *Jogger's Manual*.³³ This offered only minimal advice on how to learn how to jog. 'Jogging,' it informed the reader, 'is a bit more than a walk. Start with a short distance (50-100-150 yards), then increase as you improve.' That was it. Go out, jog for a bit. Then try and do a little more the next day.³⁴ *The Runners Manual* was not a training schedule in the sense Bowerman had used to get himself fit, nor like those he used for his University of Oregon runners. It did include a six-week chart where the nascent jogger could log his or her progress – the simple repetitive act of filling in this log offered a pathway towards becoming a proficient jogger. But it was a long way from providing a systematic, step-by-step guide, through which the formerly sedentary individual could reliably develop a daily jogging habit.

The problem was that Bowerman did not really know if jogging would in fact help most sedentary middle-aged men and women. And he had no real idea how fast or slow such people should build up their training to avoid physical injury or worse. He knew jogging had helped him. He had, remember, lost three inches around the waist while in New Zealand and gained enough stamina to run for over two hours. He also had the evidence of the joggers encountered in New Zealand. There was Lydiard himself who as a physically unfit 27 year old had turned himself into a national Marathon champion and at 47 still ran 22 mile training runs with his Olympic level athletes.³⁵ He also knew there was sound physiological evidence that medium intensity cardio-vascular exercise

Patience + Work = Improvement

Check off each day's jogging, and this chart will be a reminder to keep your workout schedule, as well as yourself, in good shape. Check it daily.

✓	1st Week	2nd Week	3rd Week	4th Week	5th Week	6th Week
Mon.						
Tues.						
Wed.						
Thurs.						
Fri.						
Sat.						
Sun.						

Figure 4. *Joggers Manual* table.

Source: Courtesy of the University of Oregon Special Collection and University Archives.

could improve the physical function of the human body – that after all was the principle to which he trained his University of Oregon runners. Anything more than that, however, was conjecture.

Indeed, while – as we have seen – there was a growing body of medical opinion in America during the early 1960s concerned with the ill effects of the physically sedentary habits of western societies in general and America in particular, there was little systematic knowledge about the capacity of physically aging bodies to respond to training stimulus. That is to say, no one really knew with any certainty what effect inculcating a habit of daily cardio-vascular exercise would have on a middle-aged population. This lack of knowledge about the physiology of exercise of the middle-aged body was partly due to the intense focus physiologists and others had paid to the development of the bodies of children and young adults. Childhood and adolescence were after all the periods when the physical capacities of the body were most obviously shaped.³⁶ The lack of knowledge was also the product of the widespread belief amongst the medical professions and the general population that upon entering middle-age the body embarked on a slow and inevitable journey into physical decrepitude; a decline that one could do little if anything to ameliorate or prevent. In the popular imagination, and that of much of the medical profession, the danger for the exercising middle-aged and older person was not that they would exert themselves too little. The problem was that through over exertion they would wear their body out. Or worse bring it to collapse.

This fear of collapse marked a profound division between exercise physiologists' and physical educationists' understandings of the effects of routine training on the body, compared to those of mainstream cardiology. It also marked out a division between these different medical groups about the effect (if any) medium or high intensity cardio-vascular exercise might have on the manifestation of coronary heart disease in middle-aged men and women. For exercise physiologists the heart was a muscle like any other. The habitually un-extended heart would over time weaken and lose its capacity to function. Repeated exercise – if done at the proper intensity and for long enough – would cause the heart, and all the various systems that supported it, to adapt to the stress placed upon it, strengthening it and improving its efficiency. Through an on-going habit of physical exercise the weak or sedentary heart could be transformed.³⁷

Cardiologists – and along with them most family doctors – were doubtful of this.³⁸ The problem was not so much that a physically active man or woman who carried that activity into middle age

was at danger. Those at danger were the habitually physically inactive who then attempted to undertake physically strenuous exercise; that is to say, exactly the people jogging was targeted at. The medical literature was littered with reports of heart attacks (or rather myocardial infarctions) brought on by over exertion.³⁹ Thus, Aldo Luisada, Professor of Medicine at the University of Chicago in his 1954 textbook *Heart: A Physiological and Clinical Study of Cardio-Vascular Diseases*, advised that a key dimension in preventing a coronary occlusion involved the ‘avoidance of severe exertion or excessive excitement.’ He went on to write:

In cardiac or hypertensive patients without heart failure . . . a tremendous saving of energy is obtained by avoiding physical strain; sitting whenever possible; climbing slowly; and talking slowly. This does not mean that the patient should behave like an invalid. On the contrary, moderate physical activity, such as walking on flat ground and respiratory gymnastic should be advised.⁴⁰

In a similar vein, Henry Schoeder in the textbook *Hypertensive Diseases* advises physicians to be wary of exercise:

Exercise of a more strenuous nature should be approached with caution, especially in older individuals who will not admit they are subject to the aging process . . . [T]he questions to be answered [with respect to exercise] are: will this advice help the particular patient to relax and avoid tension and nervousness? Will the activity strain his heart or blood vessels?⁴¹⁻⁴³

In short, having introduced jogging to Eugene – and being startled by its remarkable popularity – Bowerman was confronted with the question was jogging *really* helping people?⁴⁴ Or was it simply setting them up for a heart attack? If too much strenuous exercise too quickly could induce a heart attack – and most experts in America at the time seemed to agree that this was the case – what levels of physical exertion could safely be demanded of sedentary bodies seeking a return to fitness?⁴⁵ Following from this, as the fitness of newly started joggers improved, how quickly and to what level should their exercise routine progress? More generally, assuming that jogging was not killing people through over-exertion, what was the most effective way to develop the capacity to jog in the formerly sedentary individual? And, once fitness had been restored, how could the exercises through which this transformation had been achieved be turned into a long-term physical fitness habit? Lastly, having claimed that jogging was beneficial, what exactly were the measurable benefits that people could expect from nurturing a regular habit of cardiovascular exercise? ‘We have an estimated 2,000 regular joggers in Eugene,’ Bowerman wrote to a friend, ‘and we don’t know what it’s doing for them except they are going around beating their chests.’⁴⁶

Experiments in learning how to jog

It was concerns about finding answers to such questions that led Bowerman to the Eugene-based cardiologist Waldo Harris. Harris was known for his medical conservatism.⁴⁷ However, he was open to exploring the question of whether a physical exercise program, like Bowerman’s jogging, might be beneficial to those participating in it. Certainly if one looked, it was possible to assemble a range of reliable medical evidence that pointed to the possible benefits of cardiovascular exercise. (Although by the early to mid-1960s the weight of scientific evidence suggested that the main culprit in America’s epidemic of heart disease was diet.⁴⁸) What was needed, Harris and Bowerman agreed, was a systematic controlled study of a cohort of sedentary middle-aged individuals (that is to say those aged 30 and over) undertaking a program of jogging. The study would facilitate the collection of scientifically rigorous data on the effects – beneficial or otherwise – of a regular

jogging routine. It would also provide a medically rigorous testing ground for devising a safe and effective jogging program.

Working with Harris – and supervised by Herbert Griswold, head of Cardiology at the University of Oregon Medical School – Bowerman worked up a 12-week conditioning schedule based upon principles used to train his competitive distance runners.⁴⁹ The schedule employed the ‘hard-easy principle’ – days of hard effort were followed by easier days to allow the body to recover and adapt to the stress put on it the previous day. It involved steady, incremental, increases in duration and intensity as participants worked through the schedule and their physical fitness improved. It involved careful attention to the pace and intensity prescribed in the schedule; the jogger – like Bowerman’s university runners – should never train at maximum effort.⁵⁰ Lastly, the schedule involved a weekly mix of interval, fartlek, and steady jogging at varying tempos. In essence, this was a refined version of the schedule Bowerman had improvised for himself whilst touring New Zealand.

These variations of jogging style were all ‘diluted’ versions of techniques widely used to train high-level middle and long distance runners.⁵¹ Interval training was originally developed in the 1930s by the cardiologist Hans Reindel and Woldemar Gerschler, track coach at the University of Freiberg. Working (ironically enough) on rehabilitating heart patients, Reindel and Gerschler developed a system for exercising individuals that involved raising the exerciser’s heart rate near its maximum for short bursts, followed by a period of rest that allowed the exerciser’s heart beat to return to 120 beats per minute. This sequence of exercise and rest was then repeated; hence the term interval.⁵² Fartlek or speed-play was borrowed from the Swedish coach Gösta Holmér. It involved running at variable speeds as the mood takes the runner; ideally practiced through forests or open countryside.⁵³ Steady jogging – what Bowerman called the ‘New Zealand Fartlek’ as it had been popularized through the success of Arthur Lydiard – involved a period of steady jogging at whatever pace the runner felt comfortable running.⁵⁴

Obtaining sponsorship from the Oregon Heart Association and the Lane County Medical Society, along with a small US\$1000 grant, Harris and Bowerman began recruiting sedentary men for an initial trial to start in April 1965. Arriving at the University of Oregon’s running track for their first jogging session participants were given an explanation of the paces involved in the exercise schedule they were going to work through, along with a demonstration of the basic mechanics of jogging.⁵⁵

The first week of the schedule looked like this:

Wednesday, April 14

Observing the big clock: jog 55 yards at a pace of about 25 seconds, then walk 55 yards. Repeat those distances – a total of eight jogs and walks. This is 880 yards, a half mile. Jog 110 yards, walk 110 yards, for a total of two jogs and two walks. 440 yards. Jog 55 yards, walk 55 yards, 4 jogs, 4 walks, ¼ mile. You have covered one mile.

On your second, 4th, and other light days, take 10 to 15 minutes of easy stretching and very short [walks] in place of jogs.

...

Friday, April 16

Jog 55, walk 55 4 times, pace 25 440

Jog 110, walk 110 4 times, pace 50 880

Jog 55, walk 55 4 times, pace 25 440

Saturday and Sunday, April 17–18

10–15 minutes of easy stretching, very comfortable jogging.⁵⁶

Each week slightly more work was added. For some sessions the number of repetitions increased. In others the distance increased. In week three a New Zealand or constant fartlek was added to the weekly workout. Week six, the speed of the repetitions was increased from ‘4 to five miles per hour’ to a ‘pace of 5 to 6 mph . . . Or if you are feeling particularly full of jog and can handle it easily, 6 to 7 mph.’⁵⁷ In week seven a short hill run was introduced – a variant on the New Zealand fartlek. This variation continued up to the end of 12 weeks at which point the formerly sedentary participants should have been transformed into competent joggers.

Many were indeed so transformed.⁵⁸ But as Bowerman noted in a letter to Bill Boni, sports editor of the *St. Paul Pioneer Press*, in May of 1965, they were ‘trying to make this as scientific as possible.’⁵⁹ And the systematic monitoring of participants as they worked through Bowerman’s schedule was generating a range of questions about the effectiveness of the schedule. Some men complained of it being too easy, others found it too hard. Still others found themselves incapacitated by the aches and strains arising from their attempts to jog. Indeed, Bowerman and Harris had encountered some of these issues in a short pilot study run prior to the April 1965 trial. As they reviewed the results of their first full trial program, Harris and Bowerman understood that they needed to do more than just tweak their original schedule; a range of schedules were needed for those starting from different levels of physical fitness. They also came to the realization that what had started as a single trial would need to evolve into a series of trials if they wanted to convincingly answer the questions they had set out to ask. The first and second trials (the second was held in the autumn of 1965) showed (more or less) that sedentary individuals could be trained as joggers.⁶⁰ By the third round of trials in spring of 1966 the major objectives of the trial had shifted from collating the benefits of jogging on participants, to finding out how best to ensure participants could complete the program.⁶¹ In effect, the central problem Bowerman and Harris were now faced with was how best to work on embedding the practice of jogging into the somatic routines of those caught within a sedentary lifestyle.

Configuring jogging as an everyday habit

To think about somatic routines is to return to the question of habit, the question of how they are formed and how they may be broken. The sedentary habits within which many American adults were caught were the product of an ecology of practices that did not individually aim at creating sedentary bodies, but which cumulatively had had that effect. Men and women were spending more time sitting at desks not because they necessarily wanted to spend their working days at rest, but because the American economy was increasingly dominated by desk-based occupations. People were driving not because they were lazy, but because of the convenience and flexibility afforded by motorcars. Household labor saving devices like vacuum cleaners, dish washers, or motorized lawnmowers, allowed people to get ordinary household tasks done faster and more effectively than previously.⁶² Understood somatically these were habits operating at what, following John Dewey, might be called the level of ‘unintelligent habit.’⁶³ They were enrolling the body in a series of actions with little thought of how these actions (or more accurately somatic inactions) might impact on the on-going capacities of that body. In an immediate sense, all of these activities increased the capacity of the individual

body. They allowed the body to travel faster, to do more work. Even working at a desk is part of the intricate machinery of acting at a distance that allows the projection of activity over space and time so central to a modern bureaucratic society. But over longer durations such somatic practices corrode the body's capacity for independent action. Sitting for large chunks of the day, surrendering the body to the pleasures of powered locomotion of all different kinds, spending increasing amounts of leisure time in sedentary pursuits such as television viewing, leads the bodies enmeshed within these habits to forget their earlier capacities to generate movement.

Bowerman and Harris did not aim to uproot the ecology of somatic practices within which sedentariness was enmeshed. Their aim was more modest. They sought to devise a more self-consciously somatically intelligent routine to counter the ill effects of a lifestyle otherwise defined by sedentary habits. 'The purpose of the [jogging] program,' Bowerman and Harris wrote in a short self-published booklet published in 1966 after completing their first three rounds of trials, 'is to establish a habit of regular exercise.'⁶⁴ Crucially this was a routine or habit that was to be *added* to an individual's existing daily schedule. It was not intended to replace existing ones. 'Jogging is reasonable,' Bowerman and Harris wrote in *Jogging: A Physical Fitness Program for All Ages* their definitive statement on jogging produced by the New York publishing house Grosset and Dunlap. 'You can grow fit without greatly changing your personal habits. Within reason, you can still eat what you like . . . take a drink. Remember only that good sense is the best guide to healthful living.'⁶⁵ Given that the attraction of jogging was in essence so simple it is worth asking what exactly were Bowerman and Harris training the cohorts of jogging recruits to do? And how did such training work to establish jogging as a habit?

Well firstly, Bowerman and Harris were teaching their joggers how to train themselves. Part of this involved setting out a basic set of physiological principles and techniques that, if followed, should allow a sedentary individual to develop and maintain cardiovascular fitness. But more compellingly the principles were built into the very schedules that the aspirant joggers followed, day-by-day, week-by-week, month-by-month. Doing intervals they experienced the repetitive recuperative powers of rest. The physical effort of each session of jogging was followed by a day of rest to allow the body to recover for the next day's effort. Each week the amount and intensity of effort gradually increased as the body adapted to the stresses put on it in training. As the jogger became more proficient he (and in subsequent trials, she) was taught techniques for varying their jogging – jogging faster, longer, in hills, cross-country. This not only varied the physiological impact of jogging, importantly it also created variety. The structure, duration, or intensity was always slightly different to that which preceded it. It also helped push the jogger to find new environments in which to practice their jogging. For convenience sake the jogging trials were held at the University of Oregon's athletics track. But as joggers became more proficient Bowerman encouraged them to seek new places to jog. 'Jogging country is everywhere,' Bowerman and Harris wrote in *Jogging*. 'Jog right out the door, jog in a schoolyard, on a city street, at the beach, on a country road or a vacant lot. Jog down a bicycle path, on a school track, around a golf course, through a park, in a backyard, in a gymnasium, in a supermarket parking lot – anywhere.'⁶⁶

Secondly, they were teaching participants how to work with their bodies. Of course, one aspect of this involved the basic principles of training outlined above – changing bodies took time, the body should not be overloaded by exercise, rest was as important as exercise, that conditioning the body needed to be done within a structured routine. But joggers were also learning to understand the ways practicing regular physical exercise could have a host of unexpected and temporarily unpleasant effects on the body. 'Getting into shape is a complicated physiological process,' Bowerman and

Harris wrote. 'Muscles, ligaments and tendons must adjust to the new and increased stresses. Remember the sore knees and stiff muscles when you turned out for football after a lazy summer, or the sore calves following the first long ride on your bike in the spring? If you did more than usual, the next day you had tender muscles. These normal aches and pains corrected themselves as you kept exercising. As you grow older, normal aches and pains still correct themselves, but not so easily or at the same speed.'⁶⁷ They also offered techniques to deal with the most predictable of these problems. They suggested stretching routines. They outlined simple back strengthening exercises. Participants with lower back, shin, or foot pain should try practicing on grass or other soft surfaces. They gave advice on footwear and running gait. They developed a reconditioning schedule for runners affected by such injuries that allowed them to continue their training but at an altered intensity.⁶⁸

Thirdly, Bowerman and Harris were training trial participants in a corporeal skill. It is perhaps strange to talk about jogging as a skilled activity when Bowerman and Harris promoted jogging precisely because 'it requires no special skills or equipment.'⁶⁹ The attraction of jogging as an exercise medium was that it centered on the near universal ability to run. It tapped directly into the body's established capacities. This did not mean that running itself is not a skill. It was simply a skill that most people acquired very early in their physical development as a byproduct of normal childhood play. Nonetheless, it was a skill that sedentary Americans had largely forgotten. Part of learning to jog involved simply remembering how to run. Bowerman and Harris did offer advice on the mechanics of jogging.⁷⁰ But mostly joggers would become proficient in jogging simply through the routine act of practice. What is notable about much of this skill acquisition is that it is largely non-conscious. The jogger became better at jogging, more skilled, more proficient simply by jogging.⁷¹ The skilled jogger is not simply the individual who through a schedule of training has attained a greater level of muscular and cardiovascular fitness. They are people whose feel for jogging, for how their body works together as it moves itself forward, how it interacts with the ground it is crossing, has been honed through the endless repetition of one foot after the other.⁷² In short, through following Bowerman and Harris's training schedules the joggers were habituating their body into interacting with their environment as runners.⁷³

Fourthly, and finally, Bowerman and Harris were providing their joggers with a defined route through which the jogger could establish a reliable routine of exercise. This was a routine that with time and repetition would sink into the background of personal habit. A large part of this was simply mapping a path from unconditioned adult to a conditioned one. By developing weekly schedules that set out day-by-day, week-by-week exactly what a jogger was going to do, the nascent jogger could not only see what she or he was doing this week. They could also anticipate exactly where the schedule should be taking them. Indeed, the schedules with their tedious, almost hypnotic, repetition of exercise tables and pace instructions took up neatly two-thirds of the pages in *Jogging: A Physical Fitness Program for All Ages*. 'These schedules,' Bowerman and Harris wrote, 'are at the heart of the jogging program. They tell you how far, how fast and how often to jog. They leave little to chance. The schedules assume that, unlike the runner, you may have to be your own coach and trainer. *If you follow the instructions, you do not over work.*'⁷⁴ In addition, by mapping out an on-going routine the schedules pushed the budding jogger into finding a routine way of scheduling jogging into their day (see figures 5a and 5b). This was a neat way of insinuating exercise into the routine rhythms of everyday activity. Like so much activity in a modern, industrialized society – eating, working, sleeping, socializing – physical exercise would become a scheduled and temporally defined part of the day.⁷⁵

yards at just above walking pace and then walk – as the neophyte jogger is instructed to do. The point is through doing this exercise and developing the capacity to run faster and run further, the jogger gains the ability to take on and sustain a regular routine – a habit – of physical exercise. In a sense, through following the routine of the schedules, joggers gain the capacity to will themselves into a habit of physical exercise.

So, in part, the success of jogging is that it offered a straightforward, easy to follow, way into exercise. Which leads to a second point about habit: for new habits to get taken on they need to have a certain social intelligibility. And this intelligibility is closely intertwined with a society or social group's entrenched habits of thought.⁷⁷ The initial spread of jogging owed a great deal to the public profile of William Bowerman as coach of the University of Oregon Athletics Team. However, its popularity was also rooted in the recognizability to many Americans of the arguments Bowerman and Harris made for jogging. Jogging plugged into a long-standing current of concern in American culture about the effects of urbanization and affluence on individual and national health.⁷⁸ The novelty of jogging to this current was its medical narrative of cardiovascular degeneration, along with the suggestion that jogging was a clinically grounded solution to this problem. But jogging was also intelligible in a wide range of other senses. It constructed a prudential link between an individual's current activities and their future prospects. In using schedules it rested on a widely held utilitarian sense of time as something to be 'managed,' 'invested,' 'budgeted.'⁷⁹ In focusing on well-defined (if simple) exercises, it built on a sense that physical fitness was something that was established and maintained away from the normal day-to-day routines of living.⁸⁰ In short, whilst the actual practice of jogging around a neighborhood or park might have been strange and novel, many of the groundings for doing so were not.⁸¹

Conclusion

In December 1955, the *New York Times* ran a profile on the up-and-coming welter-weight boxer Bobby Murphy. 'Commuters driving into Boston by the right bank of the Charles River between 6 and 7:30 A. M. these days have developed a tooting acquaintance with a young man they see jogging along in sweat clothes,' the *Times* wrote. '[T]he friendly tooters might not recognize the figure as Bobby Murphy. But they will.'⁸² Sixteen years later the *Times* reported a rather different story. In broad daylight a woman walking along 81st street had been attacked, pulled into bushes, and slashed with a razorblade. This, sadly, was an all too familiar story in early 1970s New York. What makes the story notable, is that the attack was stopped only on the intervention of – in the words of *The Times* – 'two men jogging nearby who heard her screams and alerted police.'⁸³ These two different stories speak to a sharply altered landscape of physical fitness between the America of the 1950s and the early 1970s. The first story is that of an exceptional individual, a gifted professional athlete, pursuing a lonely and idiosyncratic act as he completes his 'road work,' the extraordinary but willful physical sacrifice required to hone a champion's body. The second story, an account of a violent trauma, is also a story of how the jogging body has become part of the commonsensical, popular lexicon, of New York City.

From Eugene to New York City is a long way. And, if time permitted, we might map the spread across America of newspaper reports of Bowerman and Harris's experiments, along with the distribution of their initial self-published guide to jogging.⁸⁴ Nevertheless, given this paper's interest in habit and routine, what is most interesting about the spread of jogging as a fitness practice is not so much its spatial diffusion per se, as the stability of that diffusion. Bowerman and Harris had worked hard to configure jogging not just as another fitness fad, but as a specific *medical* intervention into the lives of sedentary Americans. In doing so they set out a careful reasoning of why and how the sedentary American should jog. This configuration of routine, reasoning, and practice

would prove to be remarkably enduring. People should jog because jogging had the potential to improve cardio-vascular fitness and thus potentially hinder the development of a range of chronic coronary diseases. Jogging had to be part of a regular routine. As such, a specific time during the day needed to be set apart during which the body could be exercised – during this time the damage from an otherwise physically sedentary life could be ameliorated. At the same time as they defined the need for a specific time for exercising the body, Bowerman and Harris sought to reanimate the environment within which those exercising bodies could inhabit. Pushing against the tendency to confine routines of physical exercise to evermore specialized and geometrically codified spaces of the gymnasium, health club, or running track, jogging pushed the physically active body back into the public environment – into parks and public reserves, onto sidewalks and city streets, onto beaches and golf courses.⁸⁵

This way of configuring routine physical exercises as a palliative to an otherwise sedentary society has had all sorts of surprising consequences. One was simply the degree to which it became a normal part of the urban landscape. Another has been the proliferation in the way people use running as an exercise. Once the habit of jogging became widely established it became generative of all sorts of novel practices that extended or built upon jogging's basic architecture. Think of fun runs, running clinics, big-city marathons, the contemporary fad for barefoot running, to name just a few examples. But habits do not only surprise, they can also 'catch' us in all sorts of ways. Bowerman and Harris' solution to the problem of the sedentary body did not attempt to push back at the sedentariness that had come to dominate the American urban environment. They did not advocate walking or cycling instead of driving. Or taking stairs instead of lifts and escalators. Or getting rid of all the labor saving devices that Americans had invited into their homes and yards. In fact, with their success in promoting jogging Bowerman and Harris played a pivotal role in cementing a certain framing of the solution to the problem of the becoming sedentary middle-aged body. And, if this has not necessarily proved to be a very effective way to deal with the health problems of sedentary living, it has proved to be a remarkably enduring way of framing solutions to the problems of sedentariness.

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Notes

1. Bill Bowerman, *The Joggers Manual* (Portland, OR: U.S. National Bank, ND), The William J. Bowerman Papers, University of Oregon Special Collections and University Archives, box 68, folder 10 (hereafter WJBP).

2. Certainly there is a diverse literature that looks at the evolution of cultures of physical health and fitness within America, see for example J. Whorton *Crusaders for Fitness: The History of American Health Reformers* (Princeton, NJ: Princeton University Press, 1982), H. Green, *Fit For America*, (New York: Patheon Books, 1986), H. Schwartz, *Never Satisfied: A Cultural History of Diets, Fantasies and Fat* (New York: Doubleday, 1986), C. Elliott, *Better than Well: American Medicine Meets the American Dream* (New York: W. W. Norton and Company, 2003), C. Thomas de la Pena, *The Body Electric: How Strange Machines Built the Modern American* (New York: New York University Press, 2003), S. Syman, *The Subtle Body: The Story of Yoga in America* (New York: Farrar, Straus & Giroux, 2010). Within geography see E. Gagen, 'Making America Flesh: Physicality and Nationhood in Turn-of-the-Century New York Schools', *cultural geographies* 11, 2004, pp. 417–42, E. Gagen, 'Too Good to be True: Representing Children's Agency in the Archives of the Playground Movement', *Historical Geography*, 29, 2001, pp. 53–64. But there is a dearth of literature that focuses on specifically on the urban manifestations of these trends with reference to the mature adult population. And there is little work focusing on post WWII developments, although see D. McPhail, 'What to do with the "Tubby Hubby"? "Obesity", the Crisis of Masculinity and the Nuclear Family in Early Cold War Canada', *Antipode*, 41(5), 2009, pp. 1021–50. Looking beyond America see M. Qviström, 'Landscapes with a Heartbeat: Tracing a Portable Landscape for Jogging in Sweden (1958–1971)', *Environment and Planning A*, 45(2), 2013, pp. 312–28.
3. D. Levy and S. Brink, *A Change of Heart: How the Framingham Heart Study Helped Unravel the Mysteries of Cardiovascular Disease* (New York: Alfred Knopf, 2003), J.D. Reed et al., 'America Shapes Up', *Time* 118, 2 November 1981, p. 95.
4. According to a 1969 article in *Sports Illustrated* by the respected sports writer Tex Maude, 'Fifteen years ago a few solitary eccentrics jogged. Today there are more than 10 million joggers. No longer do small children run alongside making faces and snide remarks, and dogs bark only perfunctorily at the previously barkable spectacle of middle-aged men lumbering down the road'. T. Maude, 'A Jog-In for Dear Life', *Sports Illustrated*, 28 July 1969.
5. E. Shove, F. Trentmann and R. Wilk (eds), *Time, Consumption and Everyday Life* (Oxford: Berg, 2009).
6. T. Ingold, *Being Alive: Essays on Movement, Knowledge and Description* (London: Routledge, 2011), pp. 149–51. Three sets of literature inform the approach to habit (and with that routine) in this essay. The first is the work of practice theorists such as Elizabeth Shove, Mica Panzer, Billy Ehn and Orvar Löfgren and others. Of particular interest is the insight that habits have taken on a certain shape they are often carried along by practice, see E. Shove, 'Converging Conventions of Conflict, Cleanliness and Convenience', *Journal of Consumer Policy*, 26, 2003, pp. 395–418; E. Shove and M. Pantzer, 'Consumers, Producers and Practices: Understanding the Invention and Reinvention of Nordic Walking', *Journal of Consumer Culture*, 5(1), 2005, pp. 43–64; B. Ehn and O Löfgren, *The Secret World of Doing Nothing* (Berkeley: University of California, 2010). The second, is the work of social-psychologists such as Wendy Wood on how individual habits form and are broken, see W. Wood, J. Quinn and D. Kashy, 'Habits in Everyday Life: Thought, Emotion, and Action', *Journal of Personality and Social Psychology*, 83(6), 2002, pp. 1281–97; B. Verplanken and W. Wood, 'Interventions to Break and Create Consumer Habits', *Journal of Public Policy and Marketing*, 25(1), 2006, pp. 90–103; D. Neal, W. Wood and J. Quinn, 'Habits – A Repeat Performance', *Current Directions in Psychological Science*, 15(4), 2006, pp. 198–202. Thirdly, a diffuse strand of philosophical tradition that has sought to understand how 'thought' or 'intelligence' is contained in or actively involves the corporeal. See F. Ravaissan, *Of Habit* (London: Continuum, 2006); M. Merleau Ponty, *Phenomenology of Perception* (London: Routledge & Kegan Paul, 1958); R. Schusterman, *Body Consciousness: A Philosophy of Mindfulness and Somaesthetics* (Cambridge: Cambridge University, 2008). This third strand of thinking is closely related to much contemporary geographical writing grouped under the banner of non-representational theory. Non-representational work that has been directly focused on habit includes P. Harrison, 'Making Sense: Embodiment and the Sensibilities of the Everyday', *Environment and Planning D: Society and Space*, 18(4), 2000, pp. 497–517; B. Anderson, 'Time-Stillied Space-Slowed: How Boredom Matters', *Geoforum*, 35, 2004, pp. 739–54; D. Bissell, 'Thinking Habits for Uncertain Subjects: Movement, Stillness, Susceptibility', *Environment and Planning A*, 43(11), 2011, pp. 2649–65.

7. 'Introduction' [to the spring 1965 program], WJBP, 67, 12.
8. W.J. Bowerman and W.E. Harris, *Jogging: A Physical Fitness Program for All Ages* (New York: Grosset and Dunlap, 1967), 'Jogging – Easy Way to Health', *This Week*, 27 February 1966, pp. 6–7, WJBP 68, 1. W.E. Harris et al., 'Jogging', *JAMA: the journal of the American Medical Association*, 201, 1967, pp. 759–761.
9. Letters between Seymour Lieberman and William Bowerman, WJBP 66, 6, 'The Dance of Socrates' typed manuscript, WJBP 67, 10, Jogging with Mr L. *Houston Post Sunday Magazine*, 13 June 1965, WJBP 68, 1. Shusterman, *Body Consciousness*, notes the importance of Socrates' 'dance training', p. 17.
10. Lieberman, 'The Dance of Socrates', and 'Lieberman's Rhythmical Jogging: The Perfect All-Around Exercise, WJBP 67, 10.
11. W. White, 'Exercise to Keep Fit', *Sports Illustrated*, 17 January 1955.
12. Raab is credited as the first medical scientist to suggest a direct relationship between the prevalence of atherosclerosis and heart disease in a population and the level of fat within their diet. See W. Raab, 'Alimentar Faktoren in der Entstehung von Arteriosklerose und Hypertonie', *Medizinische Klinik*, 28, 1932, pp. 487–521.
13. H. Kraus and W. Raab, *Hypokinetic Disease: Diseases Produced by Lack of Exercise* (Springfield, IL: Charles C Thomas). It is worth pointing out that the physical seditariness that Kraus and Raab are concerned about is paradoxical; whilst the individual gestures of the physical body become increasingly contained, its *total* movement through space is amplified through the very machines that have brought it physically to rest. For many then, America of the late 1950s and 1960s was a hyper-mobile sedentary society.
14. Kraus and Raab, *Hypokinetic Disease*, p. 7.
15. For further examples see, J.H. Currens and P.D. White, 'Half a Century of Running – Clinical, Physiologic and Autopsy Findings in the Case of Clarence DeMar (Mr. Marathon)', *New England Journal of Medicine*, 16 November 1961, pp. 988–93; Letter to editor, *New England Journal of Medicine*, 8 February 1962, pp. 314–15; W. Guild, *How to Keep Fit & Enjoy It: A Step-By-Step Approach to Fitness After 30* (New York: Harper and Row, 1962); M.F. Graham, *Prescription for Life* (New York: David McKay Company, 1966).
16. Lieberman, 'The Dance of Socrates'.
17. J. Morris, 'Incidence of Coronary Disease in Population Groups in England', in A. Keys and P.D. White (eds), *Cardiovascular Epidemiology* (New York: Hoeber Harper, 1956), p. 45.
18. Whorton *Crusaders for Fitness*.
19. P.D. White, *Heart Disease* (New York: Macmillan, 1951).
20. H.L. Blumgart (ed.), *Clinical Progress in Cardiovascular Disease* (New York: Grune and Stratton, 1952), A. Keys and P.D. White (eds), *Cardiovascular Epidemiology* (New York: Hoeber-Harper, 1956), J. Gofman, *Coronary Heart Disease* (Springfield, IL: Charles C, Thompson, 1959), p. 26–7; T. Dawber, *The Framingham Study: The Epidemiology of Atherosclerotic Disease* (Cambridge, MA: Harvard University Press, 1980).
21. *Eugene Register Guard* (20 June 1980), p. 23a; K. Moore, *Bowerman and the Men of Oregon: The Story of Oregon's Legendary Coach and Nike's Cofounder* (Emmaus, PA: Rodale, 2006), p. 152.
22. Throughout the 1950s Lydiard had coached athletes such as Murray Halberg, Barry McGee and Peter Snell while working full time as a foreman in a shoe factory and – toward the end of the decade – running a milk delivery round in the Auckland suburb of Remuera. In 1962 after the success of his runners at the 1960 Rome Olympics he was offered a job as promotions manager for the cigarette company Rothmans. This allowed Lydiard to work full time training coaches and promoting athletics around the county. Lydiard was offered this role by Rothman's to keep him in New Zealand after receiving numerous offers to coach overseas. Indeed, Bowerman had tried to arrange a coaching job for Lydiard in America. A. Lydiard and G. Gilmore, *Run to the Top* (Wellington: A. H. and A. W. Reed, 1962); G. Gilmour, *Arthur Lydiard: Master Coach* (Cheltenham: Sports Books, 2004), p. 106, Bowerman letters to Forrest Jamieson WJBP.
23. It was not a club as such. It had no membership list, no subscription to join, and it was not incorporated as an association. It is worth pointing out that this non-bureaucratic approach to organizing the club was itself a quite radical idea. New Zealand had a notable enthusiasm for organizational formality. This

- formality reasserted itself in the Jogging Club in the late 1960s after Lydiard had left New Zealand to coach in Finland. The club became an officially incorporated association and introduced a uniform to be worn on all club jogs. See Wellington Methodist Harriers Club Scapbooks, ref. no. 88-282-1105/6/7/8, Auckland Joggers Club archive.
24. The club was specifically aimed at men over 40. In the early years participation was largely restricted to men. This reflected in part the fact that the problems jogging were directed at – the side effects of a sedentary lifestyle, heart disease, and excessive weight – were understood as a being those of middle-aged men not women. It also reflected the pattern of homo-sociality that defined New Zealand society – and especially New Zealand sports – at the time. See J. Phillips, *A Man's Country* (Auckland: Penguin, 1987).
 25. In New Zealand the Harrier packs would run non-competitively over a route, finishing with a competitive 'run in' over the last mile or half mile. Harrier running was a strongly established tradition in southern New Zealand cities such as Wellington, Christchurch and Dunedin with results from weekly training pack runs published in daily newspapers such as the Wellington's *Evening Post*. The first harrier clubs were established in Auckland in the late 1940s. By-and-large, harrier cross country was practiced by men in their teens and 20s. It was unusual (but not unheard of) for a runner to continue into their 30s. An article on harrier running from the late 1930s in the weekly national newspaper *New Zealand Truth* estimated that 'there must be at least a hundred or so [men around the country] bordering on 40 who run regularly'. Wellington Methodist Harriers Club Scapbooks, ref. no. 88-282-1105/6/7/8, Alexander Turnbull Library, Western Suburbs Amateur Athletic and Harrier Club, *Twenty one years of the Western Suburbs Amateur Athletic and Harrier Club* (Auckland: Self published).
 26. W. Bowerman, 'How Jogging Found Me Out', manuscript, no date, WJBP, 68, 8.
 27. W. Bowerman, 'How Jogging Found Me Out.'
 28. W. Bowerman, 'How Jogging Found Me Out.' The following day the *Auckland Star*, 23 December 1963, p. 16 carried a photograph of Bowerman with the caption: "'The winner" says tired American coach Bill Bowerman holding 74-year-old jogger, Mr Andy Steedman's arm aloft in submission after a four-mile workout at Cornwall Park yesterday morning."
 29. W. Bowerman, 'How Jogging Found Me Out.' Letter to Garth Gilmour, 16 September 1963, WJBP 66, 6; Letter to Bill Boni, 27 May 1965, WJBP 66, 9; G. Gilmour, *Run For Your Life: Jogging with Arthur Lydiard* (Auckland: Minerva, 1965), pp. 95–6; Gilmour, *Master Coach*, p. 113.
 30. 'Dance of Socrates', 'Lieberman's Rhythmical Jogging'.
 31. 'Jogger's Club about to be Born', *Eugene Register Guard*, 30 January 1963, p. 23; Moore, *The Men of Oregon*, p. 152.
 32. Letter to Garth Gilmour 1963, WJBP, 66, 6; Gilmour, *Run for Your Life*, p. 96.
 33. 50,000 copies of *The Joggers Manual* were distributed around Oregon. Letter to Mr Comer, 24 April 1964, WJBP, 66, 7.
 34. This was pretty much exactly the method recommended by Lydiard. Lydiard and Gilmour, *Run to the Top*, pp. 146–7; Gilmour, *Run for Your Life*, pp. 74–5.
 35. Gilmour and Lydiard, *Run to the Top*.
 36. The President's Council on Youth Fitness founded by President Eisenhower in 1956 – and prompted by an article unfavourably comparing the fitness of American children to those elsewhere co-authored by Hans Kraus – was aimed at child- and early adult-hood groups. In 1963 President Kennedy retitled the council The President's Council on Physical Fitness and expanded its remit to include Americans of all ages. Nonetheless, the council largely focused on the issue of fitness for those under 30. Thus, President Elect Kennedy in an article 'The soft American' published in *Sports Illustrated* in December 1960 concluded his argument for a national focus on physical fitness with these lines: 'All of us must consider our own responsibilities for the physical vigor of our children and of the young men and women of our community. We do not want our children to become a generation of spectators. Rather, we want each of them to be a participant in the vigorous life.'
 37. Kraus and Raab, *Hypokinetic Disease*; T. Cureton, *Physical Fitness and Dynamic Health* (New York: The Dial Press, 1965), M. Graham, *Prescription for Life* (New York: David McKay Company, 1966).

38. The most high profile exemplar of this point of view was the prolific Peter Steincrohn M.D. See, for example, *You Don't Have to Exercise! Rest Begins at Forty* (New York: Doubleday, 1942), and *You Can Increase Your Heart-Power* (New York: Doubleday, 1958).
39. For example, W.A. Sodeman and G.E. Burch, *American Heart Journal*, 15(22), 1938; E.P. Boas, *JAMA*, 112, 1939, pp. 1887–92; W.B. Cooksey, 'Letter to Editor', *JAMA*, 113, 1939, p. 351; G. Fitzhugh and B.E. Hamilton, *JAMA*, 100, 1933, p. 475; A.J. French and W. Dock, *JAMA*, 124, 1944, p. 1233; J.C. Paterson, *Archives of Pathology*, 25, 1938, p. 474; *JAMA*, 112; 895, 1939; W.M. Yater et al., *American Heart Journal*, 36, 1948, p. 481. A sense of the entrenched belief that heart attacks were triggered by physical over exertion is evident in Columbia University cardiologist Charles Friedberg's discussion of the precipitating causes of 'acute coronary occlusions' in his widely read textbook *Diseases of the Heart* (Philadelphia, PA: W. B. Saunders, 1949), pp. 408–9. Friedberg starts by quoting the work of Phipps and Master, Dack and Jaffe which implied that an 'acute coronary occlusion' was as likely to happen while eating or sleeping as when undertaking physical exertion. He goes on to say, 'such studies may be invalidated by the difficulty of obtaining an accurate and complete history and especially by the nature of coronary occlusion.' 'In conclusion,' Friedberg writes, 'while the evidence adduced by Master and his associates might indicate that physical exertion is not an essential or even important precipitating cause in most cases of acute coronary thrombosis, it does not exclude the possibility that it induces at least in some of the instances of coronary Thrombosis.' The popularity of jogging and other forms of physical exercise from the mid-1960s onwards spawned a further literature on both heart attacks, and sudden death, during exercise in journals such as *JAMA* and *Circulation*.
40. A. Luisada, *Heart: A Physiological and Clinical Study of Cardio-Vascular Diseases*, 2nd Edition (Baltimore, MD: Williams and Wilkins Company, 1954).
41. H. Schroeder, *Hypertensive Diseases: Causes and Control* (Philadelphia, PA: Lea & Febiger, 1953), p. 382.
42. Cardiologists by and large understood arteriosclerosis – which was understood as central to the development of coronary heart disease – as an inevitable part of the ageing process. The prevention of heart attacks was understood as living with this fact. Thus, Harold Steward advised in *Cardiac Therapy* (London: Cassell and Company, 1952) that to prevent myocardial infarctions (heart attacks) '[p]atients should be told to live in a manner commensurate with their chronological age or with the indicated age of the coronary vessels. Adequate rest, avoidance of obesity and excesses in diet, and regular vacation periods may be of benefit' (p. 547). That some people seemed to develop it earlier than others, or indeed barely at all, was largely discounted by physicians.
43. It is worth stressing that exercise physiologists arguing for the need for regular cardiovascular exercise also saw a causality between an over extended heart and heart attacks. However, they stressed the idea that exercising strengthened the heart, prepared it to deal with situations of stress. In the melodramatic words of Thomas Curton in his book *Physical Fitness and Dynamic Health* (New York: Dial Press): 'The average middle-aged man in this country is close to death. He is only one emotional shock or one sudden exertion away from a serious heart attack – this nation's leading cause of death' (p. 21).
44. Aside from Eugene, jogging also became widespread throughout the state of Oregon – largely through the distribution of *The Joggers Manual*. The jogging phenomenon was also picked up by a number of national and out of state newspapers and magazines.
45. It is worth stressing here that this is not a problem that Lydiard paid much attention to when popularizing jogging in New Zealand. In *Run for Your Life: Jogging with Arthur Lydiard* the instructions to the jogging starting out was simply to run as far as you could and each day try and extend the jog's duration.
46. Letter to Bill Boni, 27 May 1965, p.4, WJBP, 66, 9.
47. WJBP.
48. See, for example, P.D. White, 'The Role of Inactivity in Production of Disease', foreword in Kraus and Raab, *Hypokinetic Disease*, pp. v–vi; J. Gofman, *Coronary Heart Disease*, pp. 290–303; T. Dawber, F. Moore and G. Mann, 'Coronary Heart Disease in the Framingham Study', *American Journal of Public Health*, 47, 1957, pp. 4–24; W. Kannel, T. Dawber, A. Kagan, N. Revotskei and J Stokes, 'Factors of Risk in the Development of Coronary Heart Disease – Six Year Follow-Up Experience: The Framingham

- Study', *Annals of Internal Medicine*, 55, 1961, pp. 33–50; A. Keys, 'Human Atherosclerosis and the Diet', *Circulation*, 5, 1952, pp. 115–18; A. Keys, H. Taylor, H. Blackburn, J. Brozek, J. Anderson and E. Simonson, 'Coronary Heart Disease among Minnesota Business and Professional Men Followed 15 Years', *Circulation*, 28, 1961, pp. 381–95. These studies did not discount the link between habitual physical exertion and coronary heart disease. They did suggest its importance was secondary to a number of other risk factors.
49. B. Benson, 'Jogging' manuscript for *Old Oregon* magazine, December 1965, WJBP, 67, 8.
 50. For an account on how Bowerman trained his college athletes, see Moore, *Bowerman and the Men of Oregon*; W. Bowerman, 'Clinic Notes: Training for the 1500 Meter (or Mile) Run', *International Track and Field Digest*, pp. 81–2, 84–5.
 51. B. Bowerman, 'Intervals Can Be for Everyone', *Runners World*, December 1978, pp. 58–61.
 52. Interval training was popularized through the late 1940s and 1950s through the successes of prominent international coaches such as the Austrian Franz Stampfl (trainer of Roger Bannister) and the Hungarian Mihaly Igloi. See F. Wilt, *How They Train*; T. Gotaas, *Running: A Global History* (London: Reaktion, 2008), pp. 191, 210–11, J. Bale, *Roger Bannister and the Four Minute Mile* (London: Routledge, 2004).
 53. B. Bowerman, 'Fartlek Workouts Improve Speed and Style through Running Games', *Runners world*, January 1979, pp. 70–5.
 54. This was borrowed from Lydiard. See Lydiard and Gilmour, *Run to the Top*. Bowerman appears only to have started using this type of work out for his runners in the early 1960s. He had been using variations of interval and fartlek training since the early 1950s,
 55. Prior to starting the program recruits were given a medical examination to ensure they did not have any underlying health issues and establish their underlying level of fitness. This involved taking 'recordings of pulse rate and blood pressure at rest and after 50 hops on one foot, an estimation of vital capacity and maximum expiratory flow rates, and measurements of height, weight, girth of abdomen, and circumference of chest after normal expiration (Harris et al., *JAMA*, p. 759).
 56. Bowerman and Harris, Guide for Joggers, Undated Mimeo, WJBP, 67/12.
 57. Joggers – 6th and 7th week, WJBP, 66, 12.
 58. About 50 percent according to Harris et al., *JAMA*, p. 760.
 59. Letter to Bill Boni, 27 May 1965, WJBP 66, 9.
 60. None of the 363 participants involved in the first three trials suffered a heart attack whilst in the jogging program. Participants on average dropped 6 pounds in weight; those who had been overweight to start with had lost 7.8 pounds. (This still left the overweight men almost 10 pounds heavier than they should be based on standard life insurance tables.) Overall participants' systolic blood pressure had dropped by 11.4 mm Hg and diastolic pressure by 7.8 mm (Harris et al., *JAMA*).
 61. The first six 'major objectives' of the spring 1966 trial were: '1) To find the causes of drop-outs. 2) To find the causes of pain in the legs and back that develop in joggers. 3) Methods of preventing and correcting these leg and back pains. 4) How many that develop leg and back pain have gout. 5) How many participants can follow the regular program without difficulty. 6) How many of the participants need to progress slower or faster and for what reasons', WJBP, 66, 11.
 62. Many practices that came to be seen as intimately bound up with the rise of sedentary ways of living where on the introduction understood as enhancing corporeal dynamism. Thus, motoring initially was understood as a physically invigorating, healthful, pursuit. See E. Shove, M. Pantzer and M. Watson, *The Dynamics of Social Practice* (London: SAGE, 2012).
 63. The quote is Schusterman paraphrasing Dewey. See R. Schusterman, *Body Consciousness: A Philosophy of Mindfulness and Somaesthetics* (Cambridge: Cambridge University Press, 2008).
 64. Bowerman and Harris, *Jogging: An Adult Physical Fitness Program* (Self Published, Eugene, 1966), p. 7, 68/10. This was published whilst Bowerman and Harris continued running jogging trials. By this time trials had expanded to include women (although these were not reported in the *JAMA* article) and a small cohort of men who recovering from coronary infarctions (again not reported in the *JAMA* article). The work with heart patients did form the core of a PhD thesis: Curtis Nelson, 'Radioelectrocardiographic Analysis of Post-Cardiac Subjects Following Periods of Training' (University of Oregon, 1969).

65. Bowerman and Harris, *Jogging: A Physical Fitness Program for All Ages*, p. 7.
66. Bowerman and Harris, *Jogging: A Physical Fitness Program for All Ages*, p. 29.
67. Bowerman and Harris, *Jogging: A Physical Fitness Program for All Ages*, p. 17.
68. Bowerman and Harris, *Jogging: A Physical Fitness Program for All Ages*, pp. 37–9.
69. Bowerman and Harris, *Jogging: A Physical Fitness Program for All Ages*, p. 7.
70. They suggested that the jogger should ‘stand up straight,’ that ‘legs should move freely from the hips,’ and that ideally the joggers foot should hit the ground in ‘heel-to-toe’ motion. But the jogger was reminded that ‘*how you jog is never as important as that you jog*’ (Bowerman and Harris, *Jogging: A Physical Fitness Program for All Ages*, p. 25). Bowerman had carefully studied the running mechanics of his middle and long-distance runners. However, he had a pragmatic approach to the application of this knowledge: ‘[B]ody mechanic should be taught,’ he wrote in an article in *Athletics Journal*. ‘[H]owever, if the athlete achieves better results without them, then they should be abandoned’ (Bill Bowerman, ‘Mile Mechanism and Training Techniques’, *Athletics Journal*, January 1960, p. 9).
71. Bowerman and Harris, *Jogging: A Physical Fitness Program for All Ages*, p. 9.
72. Running economy increases the more one runs. This is as true of untrained runners as it is of elite runners. Thus, faster runners are not simply fast because they have high levels of cardiovascular fitness but also because they become highly skilled in the biomechanics of running. See Tim Noakes, *Lore of Running*, 4th Edition (Champaign, IL: Human Kinetics, 2003); Bernd Heinrich, *Why We Run: A Natural History* (New York: Ecco, 2001).
73. This suggests interesting links with the phenomenological framings of body consciousness and intelligence. ‘We said earlier that it is the body which “understands” in the acquisition of habituality. This way of putting it will appear absurd, if understanding is subsuming a sense datum under an idea, and if the body is an object. But the phenomenon of habituality is just what prompts us to revise our notion of “understand” and our notion of the body. To understand is to experience harmony between what we aim at and what is given, between the intention and the performance – and the body is our anchorage in the world’ (Merleau Ponty, *Phenomenology of Perception*, p. 144).
74. Bowerman and Harris, *Jogging: A Physical Fitness Program for All Ages*, p. 9.
75. See E. Zerubavel, *Hidden Rhythms: Schedules and Calendars in Social Life* (Berkeley: University of California, 1981).
76. This is to follow the argument John Dewey made in *Human Nature and Conduct* and those made by practice theorists such as Elizabeth Shove and colleagues. See Schusterman, *Body Consciousness*, pp. 189–202; Shove, ‘Converging Conventions of Comfort, Cleanliness and Convenience’.
77. See J. Dewey, *The Public and its Problems* (Henry Holt: New York, 1927), pp. 158–61.
78. See Whorton, *Crusaders for Fitness*; Thomas de la Pena, *The Body Electric*; Tom Lutz, *American Nervousness, 1903: An Anecdotal History* (Ithaca: Cornell University Press, 1991).
79. Zerubavel, *Hidden Rhythms*, p. 54.
80. Given the pervasiveness of the idea that physical fitness is a discrete task that requires the scheduling of a particular part of the day to maintain or develop (an idea that is fostered from school onwards with its slots for physical education and sport) it is challenging to imagine alternative approaches to physical exercise. Recent work within public health on so-called ‘active travel’ (cycling and walking instead of using motorized transport) is one contemporary example to think beyond the exercise schedule. See, for example, I. Roberts with P. Edwards, *The Energy Glut: The Politics of Fatness in an Overheating World* (London: Zed Books, 2010).
81. It is perhaps also worth stressing at this point that the emergence of jogging is entwined with an ongoing shift in how public health bodies were thinking about governing a population’s health. This has been the focus of a great deal of interesting work in geography, much of it influenced by the writings of Michel Foucault. See, for example, B. Evans and R. Colls, ‘Measuring Fatness and Governing Bodies’, *Antipode*, 41, 2009, pp. 1051–83; C. Herrick, *Governing Health and Consumption: Sensible Citizens, Behaviour and the City* (Bristol: Policy Press, 2010).
82. ‘Star Boxer also a Star Citizen’, *New York Times*, 30 December 1955, p. 30.
83. ‘Women Slashed in Attack in Daylight in Central Park’, *New York Times*, 18 November 1971.

84. In August 1965 the progress of the University of Oregon jogging trials was reported in numerous newspapers including the *LA Times*, *The Chicago Tribune*, *The Telegraph Herald* and *The Spokesman Review*. The magazine *This Week*, a weekly magazine syndicated to a large number of regional newspapers, ran an in-depth article about Bowerman Harris's work on jogging in February 1966. The following year *This Week* published excerpts from *Jogging: A Physical Fitness Program for All Ages*. The fad for jogging in Eugene was reported in the *LA Times* as early as May 1963 by the columnist Al Wolf ('As Wolf Sees It', *LA Times*, 18 May 1963, A2). According to Bowerman around 10,000 copies of the original self-published *Jogging: An Adult Physical Fitness Program* were sold. See Bill Bowerman letter to Harold Roth, 23 March 1967, WJBP, 66, 14.
85. On the rationalization of spaces for sport and exercise see H. Eichberg, *Body Cultures: Essays on Sports, Space and Identity* (London: Routledge, 1998); J. Bale, *Sport, Space, and the City* (London: Routledge, 1993); and J. Bale, *Sports Geography*, (London: Routledge, 2003).

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