

HEALTH

The great vape debate

They spark safety rows, yet help thousands quit. GQ puts e-cigarettes to the test

EVEN THE world's 1.3 billion smokers would have to agree: cigarettes are dirty, expensive and they kill you. In fact, according to the World Health Organisation, tobacco claims the lives of five million smokers per year, plus 600,000 of those unlucky enough to be in the vicinity. Long-term tobacco users have a 50 per cent chance of it killing them. To put it more succinctly, if you smoke, toss a coin: it's heads you live.

An increasingly popular alternative is the e-cigarette: a term for the range of battery-operated devices that dispense nicotine by vaporising a special fluid ("vaping"), rather than burning tobacco. Invented in China in 2003, e-cigarettes have caught on like, well, a highly addictive substance, with 2.1 million users in the UK alone and estimated global sales of £6.2 billion over the next few years. Whatever the style pitfalls of huffing on a sonic screwdriver, there's no denying the market is massive, and rapidly diversifying. East London has its own Vape Lab coffee shop; the Dutch, bless them, have developed an e-joint. Yet exactly how safe vaping is remains a maddeningly moot point.

The NHS "does not support the use of e-cigarettes" because "they are unregulated, which makes it difficult to be sure of their ingredients or how much nicotine they contain, no matter what it says on the label". Yet government policy advisor Public Health England says, "It is never better for the health of a smoker, or those around them, to smoke tobacco rather than use even an unlicensed e-cigarette." No wonder everyone's confused.

With the aid of London's Whittington NHS Trust (whittington.nhs.uk), which helps (and, indeed, prefers) people to give up nicotine completely, I decided to play guinea pig. I swapped a 17-year-long, on-and-off cigarette habit for vaping (and jogging) for two months, measuring the health effects in terms of fitness, blood pressure, carbon monoxide (CO) levels and – key for many lapsed smokers – weight change. Though

THE STATS

10 million adults smoke in the UK

2.1 million adults in the UK use e-cigarettes



Tab bar: The Vape Lab in London's Shoreditch

35% of British adults believe that e-cigarettes are good for public health

THE HARD FACTS

5 million

smokers die worldwide every year thanks to their habit

+ **600,000** very unlucky passive smokers

Photograph: Corbis

disapproving of my methods, the NHS supported my aim, possibly to shave a few quid off the £1bn cost of smoking-related maladies.

After a final cigarette, my first port of call was an NHS smoking-cessation session to measure the CO in my lungs. At 15 parts per million [ppm] it wasn't a dangerous amount, but sobering when, after a week of vaping, it dropped to 2ppm. During this period I felt a lurching dizziness akin to seasickness, which my doctor attributed to there being *more oxygen in my blood*: one of the more chilling diagnoses I've had this millennium. Just to clarify, that's oxygen, the third most abundant element – the one you need to not die.

Once the dizziness subsided, I ran a "bleep" fitness test with strength and conditioning specialist Alex Reid (performfitness.co.uk) and reached a better-than-average level 8.3. Vaping made regular exercise much easier, and I didn't suffer the usual anger/hunger linked to nicotine withdrawal. As Mason Lennick of e-cigarette brand Socialites (socialiteszero.com), explains: "I was a smoker for years. It's a routine. The drawing, the inhalation, the catch at the back of the throat, the exhalation – they're all part of the theatre of smoking. E-cigarettes fulfil every one of those needs – that's the secret." Not to mention reducing the chance of heart disease, strokes, cancer, impotence...

But bureaucratic concerns that e-cigarettes will re-normalise actual smoking seem not just unfounded, but unfair. A survey by Ash, a charity that works to reduce tobacco harm, found that only 0.1 per cent of e-cigarette users are nonsmokers. Why would anyone want to suck on flavoured incense if they weren't chasing a nicotine fix? And UCL

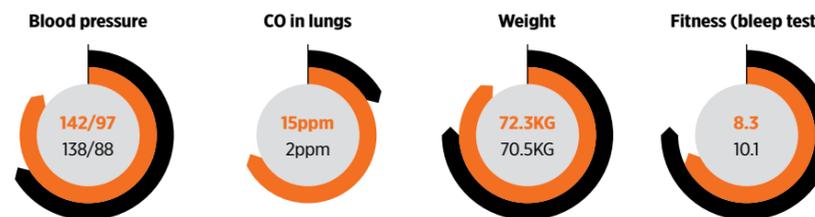
research suggests that quitters are 60 per cent more likely to succeed with e-cigarettes. Some safety worries are more legitimate. "E-liquids" (the vaping fluid) vary, but many contain tiny amounts of toxins. Even so, toxicology consultant Bibra declared e-liquid only as hazardous as washing-up liquid. Regulations on ingredients and labelling are due in May 2016.

"The lethal part of smoking is the smoke, not the nicotine," says Ash's Hazel Cheeseman. "We just don't know what the health risks might be from e-cigarettes [yet]. But they have none of the smoke and far fewer of the concerning chemicals of cigarettes. So if the alternative is smoking, e-cigarettes have got to be better." UCL professor Robert West agrees, estimating that, for every million UK e-cigarette converts, 6,000 deaths could be avoided per year. More research is needed – and pending – but the only problem I found is that I remain addicted to nicotine, perhaps more than ever: e-cigarettes only go out when you put them down.

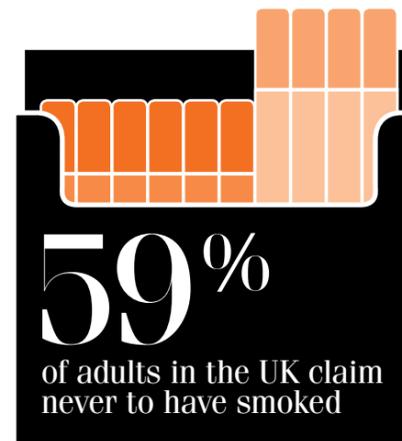
However, when I began vaping and jogging (something I could never keep up as a smoker), I found that my blood pressure dithered, then fell, my CO levels flatlined, my weight dropped, and my fitness levels spiked (see chart, below). Except, perhaps, for the weight loss, these things would still have happened if I had given up nicotine completely – but that's so much harder to achieve, as my 17 years off and on attests. On this evidence, even those 1.3 billion smokers would have to agree: e-cigarettes are (relatively) clean, (comparatively) inexpensive, and – as far as we know – they don't kill you. Or they could just toss that coin. **Matt Glasby**

MATT'S STATS

■ As a smoker ■ After 2 months vaping/jogging



Quitters are 60% more likely to succeed with e-cigarettes



E-cigarettes

£1.7bn

The current value of the global e-cigarettes market

Tobacco

£411bn

The value of the global tobacco industry

50.6% of UK smokers have tried e-cigarettes



8% of 11-18 year olds in the UK admit to having tried e-cigarettes

