

# The quiet return of... DEADLY DIET PILLS

**Y**ou'd probably think of diet pills as a public health crisis we've already dealt with, legislated for and moved on from. But after a steady fall in cases over the past few years, poisonings from DNP – a chemical that's almost as explosive as TNT, the compound in dynamite – are at a record high once again. *WH* reports on the unlikely comeback of a worrying trend...

WORDS MEGAN TATUM



*Get yours today!*







Abigail Davies felt like she was on fire. Within an hour of swallowing two small pastel-yellow capsules, the teenager began to sweat profusely and lay down on the sofa at her parents' house, attempting to conceal the overwhelming effects of the chemical she'd just chosen to ingest. Her body began to heat at such an alarming rate, the noise from the TV quickly melted into nothing and she lost the power of speech. What Abigail, then 15 years old, had taken was poison. The tablets she'd ordered online days earlier were marketed as a weight-loss supplement, but they contained 2,4-dinitrophenol (DNP) – a chemical that's nearly as explosive as TNT, the compound used in dynamite.

'It felt like I was burning from the inside out,' Abigail, now 27, tells *WH*. 'That's the only way I can think to describe it. There was a point where I thought to myself: "This is it. This is where it ends."' The circumstances that led the teenager from Swansea to this point were complicated and, with hindsight, she describes her mindset that day as 'desperate', so intent was she on shedding weight. While Abigail's story is deeply distressing, it isn't unheard of – because we've been here

before. DNP has been in and out of the headlines for decades. It was in the munitions factories of the First World War where its use as a potential weight-loss drug was first recognised; workers exposed to the chemical suffered fatigue, excessive sweating and elevated body temperature, plus an unbidden drop in weight. By the 1930s, it was being billed by pharmacists and drug firms in the US as a magic bullet for slimming, until its severe side effects – everything from fever and vomiting to heart attacks and comas – led to it being banned in many countries around the world. The UK took longer than most; it wasn't until 2003, nearly 70 years after the US, that the Food Standards Agency (FSA) issued an urgent warning that DNP wasn't fit for human consumption. The warning came in response to the rising use of DNP among amateur bodybuilders, who were using the drug to burn fat and build muscle, trading advice and stockists on online forums.

It was arguably the death of 21-year-old student Eloise Parry in 2015 that cemented DNP in the British public's consciousness. In the weeks leading up to her death, Eloise was admitted to hospital multiple times, suffering from side effects of taking the drug. On 12 April 2015, she took eight capsules and died hours later at Royal Shrewsbury Hospital. Her tragic death reignited the debate around DNP, leading the FSA to launch an awareness campaign around its dangers. The statistics suggest it was effective; data from the National Poisons Information Service (NPIS) shows that use of DNP steadily declined in the years following. Until 2018 that is, when cases suddenly spiked. In the 10 months between January and September 2018, there were 17 cases referred to the NPIS, compared with 12 in the whole of 2017 – an increase of 40%, with 35% of these cases tragically proving fatal. Considering the cases noted by NPIS are only those that make it to A&E, there's really no way of knowing how widespread use of DNP currently is. What is clear, experts say, is that young and often vulnerable women are making up a far bigger proportion of users than before. In these switched-on, health-literate times, why is this deadly drug making a comeback?

## CHEMICAL REACTION

When Abigail typed her details into the online form to purchase a pack of DNP, she was fully aware of the risk – but in her mind, in that moment, it was a risk worth taking. She was first taken to the doctor six years earlier, but while her GP suspected she was suffering with anorexia, she was told her weight wasn't low enough to receive treatment. 'An eating disorder is like a cancer,' Abigail says. 'If left untreated, it spreads and gets worse. The longer it went on, the more it controlled my thoughts. I needed to do anything I possibly could to satisfy my eating disorder and was already taking up to 100 laxatives a day when I discovered DNP.' A simple online search into fast ways to lose weight promptly led her to a website selling DNP as a diet aid. There were no age or health restrictions to prevent her from purchasing the pills and, within a week or two, they arrived at her parents' house. By that point, she was so severely unwell that she had given up all hope of surviving the disease. 'I'd read that DNP had been used

in explosives and I knew that it could be fatal, but that wasn't a deterrent. Anorexia makes you rationalise the irrational. I'd been told by doctors that if I carried on as I was, my organs were going to start shutting down. By that point, I'd already stopped having periods and was regularly passing out.' She took DNP and, in less than an hour, the severe side effects kicked in. She started sweating profusely and became confused and delirious, but she was ultimately lucky – her body didn't heat enough to induce fatal hyperthermia. Lasting evidence of its effects and other symptoms of her eating disorder were picked up at a hospital appointment a few days later and she was admitted for in-patient treatment for anorexia. It was the first and last time she took DNP.

Why Abigail survived when others have died is difficult to explain, as it's impossible to predict how DNP might affect any one person. During a criminal case brought against the man who sold the drug to Eloise Parry, a lawyer for the prosecution compared ingesting *any* amount of DNP to playing Russian roulette. 'Each of your body's cells contain mitochondria, whose job it is to generate energy,' says Professor Gino Martini, chief scientist at the Royal Pharmaceutical Society (RPS). He explains that within an hour of taking DNP, it inhibits the ability of these mitochondria to regulate energy output efficiently. 'As a result, the cells are stimulated to work harder and faster, generating more and more energy – and heat. This means that your core temperature rises, and you can reach the point of overheating or dying from heat exhaustion.' In the worst-case scenario, DNP can raise body temperature from the average of 37.5°C to a potentially fatal 43.1°C.

Following the death of Eloise Parry, the RPS was among the organisations calling for tighter controls on the sale of DNP. It may be illegal to sell the chemical as a diet pill – which must adhere to strict food safety standards enforced by the FSA – but DNP can be sold legally as a fertiliser, wood preservative or pesticide. As of 2019, DNP doesn't appear in any registered pesticides for sale in the UK or the EU, and it's widely thought to have been withdrawn from commercial agricultural use. But given that information about its use as a dieting aid exists online, even the wholesale outlawing of DNP may not be enough to prevent women in the UK from purchasing DNP-containing products from websites registered abroad. 'Policymakers need to be conscious that there's still a global platform where people can purchase and access anything they want,' says Elisabeth Julie Vargo, a social psychologist who has worked on one of the

# A prize-winning body could be yours...







If you  
do one thing  
this summer...

ADDITIONAL WORDS: NARZRA AHMED; ISOBEL BRIDGE PHOTOGRAPHY; GETTY IMAGES

few research papers on DNP use. Indeed, it took one *WH* contributor less than five minutes to find a site based in Asia selling DNP capsules, with a pack of 30 costing the equivalent of around £23, plus postage. 'Not for newbies,' the bright red packet warned, while describing the capsules as being ideal for 'powerful shredded, ripped condition' and 'burning calories super-fast'. On another site, the product blurbs make similar claims, though in small print is the caveat: 'Not recommended for human consumption.'

## DIET CULTURE

That DNP remains affordable and relatively easy to get hold of could explain why an increasing number of women appear to be buying it. Between 2011 and 2014, women made up just 23% of DNP cases referred to the NPIS, but this proportion rose to 42% by 2018, as it became talked about as a more mainstream weight-loss solution. 'Type "diet pill" into Google once and it'll throw up all kinds of weight-loss supplements, then you'll start seeing them on social media because they're targeting you – it becomes very tempting,' says Helen Hine, 36, a former model from Dorset. She believes that the addictive nature of weight-loss products and the behavioural psychology of digital advertising led her down a path that, looking back, leaves her incredulous. She was working an 80-hour week across several jobs and going to the gym every day when she first started using dieting aids a decade ago in an attempt to lose weight to elevate her modelling career. Names of diet pills were dropped in the gym like PT recommendations and discussed as a way of accelerating weight loss without ramping up your workouts or changing your nutrition. Using terms like 'fat stripper' and 'lypo tech', they were available from mainstream fitness websites, and Helen describes how using them became a kind of compulsion. 'What was attractive was the ability to transform my body in minimal time, so they gave me a rush,' she says. 'Those effects were enough to make me want more and more.' She ended up ordering a supplement containing DNP and, after receiving an initial pack containing 10 pills, she took them on and off over several years, alongside a number of other diet pills.

It wasn't long before her body began to respond to the toxic cocktail; with the most severe of her symptoms – heart palpitations, sweats, headaches, severe fatigue and abdominal pains – regularly coinciding with when she was taking DNP. So acidic were the capsules that she began spitting blood. 'I knew this supplement was stronger than anything else I'd taken, and the ingredients read like a list of crazy chemicals but, in my mind, it was just the next step to losing more weight, which I thought I needed to do to make a success of my career,' she recalls. Becoming a parent and realising the symptoms were impacting on her ability to live a normal life forced her to stop using diet pills. 'I became so unwell that I couldn't tie my shoelaces, walk up the stairs or put my son on a playground slide without my legs burning. If I pushed through the pain to go about my day or do a workout, the fatigue would make me ill for days on end. My health was destroyed.' Though it was never confirmed by a doctor, Helen – teetotal and active in

## THE SKINNY ON DIET PRODUCTS

### DETOX TEAS

**THE PROMISE** Natural, cleansing teas that speed up your metabolism.

**THE REALITY** 'Some of the added ingredients will be laxatives,' says dietitian Priya Tew (dietitianuk.co.uk). 'When they're saying that they aid with weight loss, it's because they're helping you lose fluid. These products can also be triggering for those with disordered eating habits.'

### APPETITE-SUPPRESSING LOLLIPOPS

**THE PROMISE** Kim Kardashian famously endorsed Flat Tummy Co lollipops. The idea is that you stave off cravings with low-calorie sweets.

**THE REALITY** 'The ingredients alleged to control cravings haven't been properly tested to show that the amount contained in a product has an effect,' says Tew, who advises steering well clear. 'They 100% do not work.'

### DIET PILLS

**THE PROMISE** Diet pills can act as metabolism stimulators, appetite suppressants or blockers – they prevent fat being absorbed from food.

**THE REALITY** 'Some appetite suppressants do work,' says Tew, with the vital caveat that they should only ever be taken under medical supervision, since you risk malnourishment. 'The key is to be sceptical about any diet product. If it sounds too good to be true, it probably is.'

her everyday life – is convinced that the supplements were behind the deterioration of her health.

Registered nutritionist Mel Wakeman believes the behaviour of women like Helen, who gamble with their health in the pursuit of weight loss, can be explained by a culture in which unscrupulous companies have multiple platforms to prey upon their vulnerabilities. 'Companies pushing products like "skinny teas" and appetite-suppressing lollipops on Instagram and Facebook know exactly what buttons to push with their messaging: that to be healthier, worthy or successful you should be thinner,' says Wakeman. Only specific health claims authorised by the EU around weight loss and fat-burning can be used for weight-loss supplements, and companies can't make promises about how much weight can be lost over a certain period of time. But these rules are difficult to enforce on digital platforms, even by the platforms themselves, Wakeman explains. Consider, too, that the internet doesn't fall under UK jurisdiction and policing these companies feels a bit like a game of whack-a-mole. 'Even with the recent move from Instagram to ban accounts promoting products that are ethically dubious, they're always one step behind,' she says, as sellers can open new accounts under different names. Factor in, too, that the women who are looking to these products for help may well be battling poor mental health or low self-esteem, and it's not difficult to see the path from those perfectly legal teabags containing laxatives to the illegal but no less available packs of DNP. 'It's not unlike the person taking a legal prescription painkiller who moves on to an illegal substance,' agrees Chevese Turner, chief policy and strategy officer at the National Eating Disorder Association.

The fact that the digital age has made it easier to purchase DNP, while simultaneously making diet products more seductive, only highlights the need to support vulnerable people before they become desperate enough to swallow poison, says Abigail. 'Unfortunately, lack of funding means many cases are left to escalate, as mine was. There isn't that early intervention that's necessary to prevent people from getting to the stage of trying something like DNP.' In the early stages of disordered eating, red flags include grazing or bingeing, skipping meals and cutting out food groups, as well as using diet pills, laxatives or supplements, advises Turner. 'Anxiety tends to increase as people get closer to having a disordered relationship with food and, for this reason, many people will begin to engage in fewer social interactions, too.'

For those considering buying a weight-loss product – any weight-loss product – online? Know that any unregulated or unapproved diet pill bought off the internet – DNP-containing or otherwise – can be dangerous. 'This is because of the unpredictability of how your body might react,' says Professor Martini, who also urges caution around supplements or weight-loss aids sold over the counter, which contain high levels of caffeine. 'If you're looking to lose weight, do so through a balance of nutrition and exercise, and always consult with your GP or pharmacist first.' **WH**