Is testosterone the answer to a plummeting sex drive and lack of energy for fortysomething women?

T thetimes.co.uk/algo.html



Dr Martin Galy's consulting rooms stand on a quiet road in probably the most enchanting corner of London, slap bang between the museums of South Kensington and the King's Road shops, flanked by the gazillion-pound homes of Premier League footballers and oligarchs, but still with a cosy butcher, greengrocer and cobbler just around the corner.

I'm worried I've come to the wrong place. The shiny plate-glass windows bounce light off the rain-streaked pavement and reveal a Courchevel-white mirrored interior lined with bold white and blue portraits of glamorous women. It looks like a jewellery boutique rather than the clinic of the man *Tatler* calls "one of the best hormone doctors in the UK". But it's in these luxurious surroundings that glossy middle-aged women come to pour out their hearts.

I rub on the cream, then four hours later I get these crazy tingles

These are high-maintenance creatures who are convinced their relentless regime of cheek fillers, yoga retreats, fortnightly highlights, not to mention their recent embracing of veganism, must be keeping the ageing process at bay. But the vast bills for personal trainers and personalised green juices can't stave off the unwelcome sensations that arrive in their forties of heart-clenching anxiety, chronic insomnia and general listlessness.

Worst of all is the absence of desire. They're running out of excuses to fob off their husbands. They've been googling "Viagra for women", but found nothing. They hope Dr Galy, 53, can provide some answers.

"Lack of libido is very common in pre and perimenopausal women," says Dr Galy, a small, spry man in a suit but no tie, reading glasses propped over his specs, with a hypnotic accent of native Trinidadian topped off with a dash of Irish (he did his medical training in Dublin). "More than 90 per cent of the women I see complain, shyly, about it."

Certainly, after hitting our mid-forties, that's been the number-one complaint among more and more of my friends. A decade ago, they were blaming teething babies for leaving them too tired for sex. But now their adolescent offspring lie in until midday, the urge has vanished.

None of them has yet gone through the menopause, but all suspect its looming presence is to blame. This is the generation that refuses to give in to age. A few years ago, they were swapping numbers for the best Botox person (the thinking being that early intervention would stave off the need for drastic "work" later).

Martie Haselton, author of HormonalBarry J Holmes

Now they're texting each other the names of their hormone person, in the hope that preemptive doses of HRT might stop the dreaded M word in its tracks and keep them forever vital, unplagued by night sweats and eternally frisky.

Another buzzword is circulating: testosterone. My friends and I know that hormone replacement therapy can restore vanishing oestrogen and progesterone, but suddenly all talk is of this other "male" hormone, which, far from making us look like gorillas and giving us the voice of Barry White, is now, if reports are to be believed, the source of eternal youth.

I first heard about testosterone a few years ago when Jane Fonda, then 76, announced that her sex life had been transformed after she'd been prescribed the stuff at the age of 70. (Later she said she'd stopped it because it gave her acne, a not uncommon side effect.)

Then a couple of years ago, I interviewed TV star turned beauty vlogger Trinny Woodall, who was then 52 but looked 37. She told me how she was spending a fortune on regular visits to a menopause doctor in New York because GPs here "just give you Premarin piss" (she meant HRT, which is made with the urine of pregnant mares). Now that she was taking progesterone five times a week, oestrogen twice daily and testosterone every morning, she had, she said, "the energy of a 25-year-old". Certainly, as she marched me round Zara on the King's Road like a drill sergeant, that was how it seemed.

The first Mrs Noel Gallagher, Meg Mathews, 51, who has set up a website, Meg's Menopause, to help tackle ignorance surrounding the subject, rings me to rave about testosterone. "I started taking it a year ago," she says. "It's amazing stuff. I'm shouting from the houses. When the menopause hit me, I thought my life was over. I was depleted of everything. I had chronic fatigue, there was no libido, I felt nauseous and had these terrible headaches. I couldn't walk to the toilet in the morning my joints were so inflamed.

"Somebody I bumped into at the hairdressers told me about testosterone. She said, 'Doctors won't tell you about this. You need to go and ask for it and make sure the GP refers you to someone who'll prescribe it.' It changed my life. At the time, I could barely

walk my dog. Now I'm doing these mad gymnastics flips at the gym.

"It's like a car. All of a sudden you're running on empty, then you get the petrol in – the oestrogen and progesterone – and it runs, but you need the oil – the testosterone – to bring it up to 100 per cent. I've had no side effects. It's given me back my zest for life and the friends I know who take it feel the same."

It's not all straightforward, though. Potential side effects of testosterone can be extra facial and body hair, spots, changes to the menstrual cycle, deepening of the voice and abnormal enlargement of the clitoris. This is, after all, the hormone used by transitioning women who wish to become male. Lowering the dose can usually reverse these symptoms.

I'd say at least half of women have inadequate levels of testosterone

This is complex stuff. All three hormones – oestrogen, progesterone and testosterone – need to be present and in balance to function properly. Once oestrogen and progesterone levels are steadied in menopausal women, testosterone may start to rise naturally.

"Testosterone forms an integral part of our psyche," says Dr Galy from behind his desk, a funky portrait of David Bowie hanging to his right. "It gives us our motivation and drive and what I call emotional stamina, keeping us emotionally healthy. That's why a loss of testosterone can result in the anxiety so many of my patients describe."

As for those hundreds of women bewailing their vanishing libido? "I'd say, anecdotally, that at least half of them have inadequate levels of testosterone."

According to Dr Galy, although men have much higher levels of testosterone in their blood than women, its reputation as a male hormone is "a myth". Testosterone is what gives us our femininity, since most of it – secreted in our ovaries – is converted to oestrogen.

One of testosterone's many benefits is the boosting of neurotransmitters, the brain's messenger chemicals. Hence why a lack of it can leave us feeling fuzzy and forgetful. It's also instrumental in the production of serotonin and dopamine, which aid sex drive. It keeps your bones, muscles and hair strong and can relieve joint pain.

Testosterone is highest in women in their twenties. Levels have usually halved by the time we hit 40, which triggers an endocrinal cascade of symptoms, such as the ones outlined by Mathews.

I'm happy to risk developing a Jeremy Clarksonesque fascination with fast cars and a new appreciation for the 21-year-old Ocado man if it means avoiding all that. Give me testosterone, Dr Galy!

"Are you depressed?" he asks. "Are you low in energy? Is your libido suffering?" I'm tempted to lie just to lay my hands on the wonderstuff, but the truthful answer to all these questions is no, not really. But we can always do with a bit more va-va-voom, can't we? Dr Galy's having none of it. "You're asymptomatic, so normally I wouldn't even test your hormones," he says.

But then comes a ray of hope. He will test me because I am, apparently, "very slight" and therefore at risk of osteoporosis. "You're not the kind of person I'd like to leave without

testosterone in the long term because it supports bone health," he says. "At least, we can assume it protects your bone health, though there have been no tests in women to prove this. We do, however, have very definitive studies in men. And my bones are the same as your bones."

Dr Martin Galy, 53, photographed at his clinic in London last monthTom Jackson

And there's the nub of the issue. While there is lots of research into testosterone and men, there's hardly any into how it might help women. "Over the decades, the science on testosterone has conflicted," says Dr Galy. "We're still unsure of its long-term impact on women, and that puts a lot of companies off investing."

In 2007, Intrinsa, a testosterone patch designed for women and billed as "the female Viagra", was launched in Europe. Tests showed that women who used it had four times more sex over a period of two months than women who used a placebo. But in 2012 it was discontinued, after the NHS bought only 20,000 packs in a year. In 2013, testosterone implants for women were also withdrawn as a "global profitability decision", which the British Menopause Society described as "immoral but not illegal".

"Doctors were reluctant to prescribe it because they didn't have enough information," says Dr Galy. "They thought testosterone's a man thing and so did their patients."

Indeed, when Dr Nick Panay, consultant gynaecologist at Queen Charlotte's and Chelsea and Westminster hospitals and a past chairman of the British Menopause Society, recently called for testosterone to be more widely available on the NHS, saying that he had seen patients who, once they were on it, "go from feeling drained to being able to run marathons", GPs flocked to online forums to knock him and post pictures of women with beards.

When I mention to various doctor friends (admittedly not gynaecologists or endocrinologists) that I'm researching this article, they snort with scorn. "Do you want women looking like werewolves?" they snigger. "Do you want them salivating over porn like teenage boys?"

The reason there's been so little research into hormones until now is sexism. 'Hormones elicit stereotypes about women going crazy'

"The education simply isn't out there," says Dr Galy. "Really, it's shocking. There's evidence that testosterone should be put into the standard HRT mix to reduce the risk of breast cancer, but the drug companies won't do the research and the doctors who are trying to do something about it are being frowned upon. But imagine if you could have a patch of all three with two or three variable doses available for use en masse. What could be wrong with that? It would be a wonderful thing. Not every woman would need it, but a simple test would rule out women who would not benefit from it."

It certainly seems odd that drug companies aren't investing in something that could potentially help half the world's population. Later, when I talk to Martie Haselton, professor of psychology at UCLA and author of *Hormonal: How Hormones Drive Desire*, *Shape*

Relationships and Make Us Wiser, things start to fall into place. She is a leading researcher in sexuality and ovulation. Her work has been described as "provocative" and "paradigm-shattering".

In her book she shows that there are no simple answers, but lots of fascinating possibilities, when we start to think about the biological aspects of our sexual lives. She argues that the reason there's been so little research into hormones until now is sexism. "Hormones elicit stereotypes about women going crazy," she says. "People from the academic world are concerned about women's issues and concerned their research will lead to women being confined to girlish stereotypes and used against women in positions of power." She reminds me how in 2016 Donald Trump accused a hostile female journalist, Megyn Kelly, of having "blood coming out of her wherever".

She also recalls how, in 1970, Dr Edgar Berman, an adviser and personal physician to Vice President Hubert Humphrey, caused a furore when he said "raging hormonal influences" meant there should never be a woman in the White House. The menopause would have led her to make the wrong shout on the Bay of Pigs or the Cuban missile crisis, he said. The public outcry led to him resigning from his position (though he continued to defend his argument).

More recently, during the 2012 US election campaign, CNN ran an item about a study that claimed that during ovulation women were more likely to favour Democrat Barack Obama over his rival Republican Mitt Romney, because their hormones were peaking, which made them feel "sexier" and therefore more liberally inclined.

"The feminist blogosphere exploded," says Haselton. "There were headlines such as 'CNN thinks crazy ladies can't help voting with their vaginas'. CNN was forced to retract the story, even though it was factually correct. The result is that academics tend to see this area as one where you tread very lightly, or avoid altogether."

All this caution may be well intentioned to further equality, but it could well be damaging women's health. "Their health and their wellbeing," says Haselton. "There are a lot of things we don't understand now that could potentially affect women's enjoyment of life and women's transitions to different phases of life."

When it comes to testosterone, the politics become even more heated. For every woman on a menopause forum bewailing how tough it is to persuade her GP to prescribe unlicensed (though legal) stuff, there's another poster berating her for wanting to stay eternally sexy, pointing out that lack of desire is usually far more about psychology than physiology and that many women who don't want sex are either suffering with body-image problems or are simply bored with their partners.

Angie Macdonald, who blogs at writehealth.co.uk, says low libido is normal for most single women or women in long-term relationships, and suggesting otherwise is just another stick with which to beat already guilty women.

"In today's highly sexualised society, women are supposed to look young for ever and be sexually available until the day we die," says Macdonald, who briefly took testosterone after the menopause, but soon found it stopped working, probably because too much of it was

being converted into oestrogen, with worrying side effects.

"Women in popular media have libidos that we are all meant to aspire to and emulate. If we're not up for it, then there's something wrong with us. We're labelled dysfunctional and told we need to take hormones. It is debatable whether or not a low libido should even be seen as a medical problem if it's the norm for so many women. Rather than women feeling inadequate and doctors prescribing hormones, we should be taught the reality about female sexuality and all its complexities."

I see her point, but then I speak to Elaine, 54, another testosterone devotee.

"This isn't about wanting to please my man," she says. "It is about how menopause robbed me of a sense of being a woman. It made me feel that I'd stopped being a sexual being, that a whole part of my life had been shut off. Previously, I'd enjoyed sex with my husband. I'd masturbate a couple of times a week. I used to feel a reaction to seeing something vaguely erotic. Suddenly all that stopped and it was depressing. Testosterone gave those fundamental feelings back."

If you want to feel like Elaine, you will need to find an understanding GP, who's happy to refer you to an equally understanding gynaecologist, who may then issue you with a prescription for Testogel, a bio-identical hormone (ie, made from natural sources that are identical to hormones made by our bodies) designed for men.

Is my life about to be transformed into a hybrid of Wonder Woman meets Fifty Shades of Grey?

Even if you lay hands on this, things are far from ideal. "This is the daily dose for a man," says Dr Galy, producing a white Testogel tube the size of the toothpaste they give out on planes. "It's 50mg, but the average dose for a woman is 1mg. Most doctors tell their patients to use a pea-sized amount, but the problem is the drug is not spread evenly, so a pea-sized amount one day might give you 1mg, but tomorrow it might give you the entire 50mg.So I'm uncomfortable prescribing this."

Dr Galy and his colleagues can get round this by prescribing "bespoke" doses of bioidentical testosterone (as well as oestrogen and progesterone). Inevitably, this costs. A Galy consultation is £380, a blood test is £480 and then you have to cough up for the hormones to be made in a specialist pharmacy and then for extensive follow-ups.

"We monitor you with blood tests, we look at scans, at mammograms – a lot of things that would not be necessary if we were prescribing regulated hormones," says Dr Galy. "There's nothing illegal about what we're doing, but we have to be very careful."

Of course, you could always buy your testosterone on the net and hope for the best, I say flippantly. "This is medicine," says Dr Galy. "In the wrong dose, it could negate the bone protection and cause bone softening. It could provoke hair loss, acne and in men too much testosterone can reduce fertility, not enhance it."

Doses of all three hormones – oestrogen, progesterone and testosterone – need constant readjusting. Dr Galy says that about a quarter of his patients find it hard to reach the perfect level. "My patients tell me that they used to have a week after their period stopped,

which they knew inherently was the nicest of the month. Everything feels great and in balance," he says. "My aim is to recapture the ratio of progesterone to oestrogen they had in that week that made them feel like they were themselves again."

The only way he can know this level is if he tests your hormones when you are about 35 and keeps the results on file. "Ideally, all women would do this," he says. I've missed the boat on that one. I sit on Dr Galy's couch while he takes my blood ("Relax the arm, just a little scratch here") and tells me a bit about his background.

He went to school in England, then, after medical training in Dublin, worked in addiction medicine, before becoming a GP before his own "burnout" led him to investigate bioidentical hormones. His wife and the mother of his three children, Dr Suha Kersh, is a cosmetic doctor who works in the same building, administering Botox and fillers and other rejuvenating treatments to a legion of fans.

Blood taken, I reluctantly leave the delights of Chelsea and return home to my less prestigious postcode where I google ways to enhance testosterone naturally, but they all sound too much like hard work: drink less, exercise more, boost your vitamin D levels, eat more protein.

Why bother, when by the weekend Dr Galy may have written a prescription that will not only save me from living out my days in a wheelchair, but will also transform my life into a hybrid of *Wonder Woman* meets *Fifty Shades of Grey*? Who knows, I might even finally find the long-mislaid zest to tackle the cupboard under the stairs.

That evening at a party, I share my fantasies with a dermatologist to the (very) rich. "I see hundreds of menopausal women every week," he says. "I remember a few years ago one woman who'd been completely transformed by testosterone. She'd been so listless before, but now she was buzzing. She looked fantastic. Her hair had this astonishing sheen. I thought, wow, this is the meaning of life. But since then, I've seen dozens more who are taking it and the effect is nothing like so pronounced. Even if someone's testosterone levels were zero, taking it might not change anything. The science is so inexact. So don't get too excited."

Oh well. I remember this when Dr Galy rings me the following day.

"Your hormone levels are all fine," he says. "You don't need testosterone – or anything. But you need to monitor them regularly. Things could change in just six months."

This could get expensive. Then again, the cupboard under the stairs won't tidy itself.

Hormonal: How Hormones Drive Desire, Shape Relationships and Make Us Wiser by Martie Haselton is published on March 1 (OneWorld, £12.99)

My orgasms are stronger. I feel like I'm 30 again Emily, 45, mother of two, tries testosterone. And likes it. A lot

I booked an appointment at the London Hormone Clinic because I was starting to get desperate. At the age of 45, my libido seemed to have just gone. My partner was understanding, but not especially happy. I felt guilty, but this was not just about him. I

missed that fantastic sensation of craving sex, then having it, like it used to be in my thirties. There had to be something I could do.

And so I found myself sitting in front of a chic, if slightly boho-looking doctor in Harley Street, while she studied the results of a very expensive blood test. She told me that my levels of testosterone were noticeably low, something quite common for women of my age. I was down on progesterone, too, but my oestrogen levels were still flying. When I told her about my libido, she nodded reassuringly, having clearly heard this a million times before. She prescribed me creams of bio-identical testosterone and progesterone to be rubbed on my skin five times a week. She said I should soon start to feel a lot better.

My consultation cost £275, plus £190 for the blood tests and £162 for the hormones – a lot of money, but worth it, I felt, especially after I talked to a friend who was already taking testosterone. "It's like a miracle," she said. She told me how, post-40, it had been taking her nearly an hour to have an orgasm and that oral sex wasn't working any more. Then five days after beginning to apply testosterone to her clitoris and surrounding area (that's where they tell you to put it), her desire for sex had come roaring back. "I rub on the cream at 8am, then four hours later I start to get these crazy tingles," she said. "Luckily, my husband works from home."

Now she can orgasm in about three minutes, and they are stronger and more intense than ever before. A side effect has been that it has given her acne on her back, but she's willing to put up with that.

When my own electric-blue cylinders containing the creams arrived from the Customised 4U Pharmacy, which apparently all the hormone clinics use, my partner made a crack about bio-hacking. I did suddenly wonder if I was mad to be so gung-ho about messing about with something as complex as my hormone levels. Especially as the blue cylinders come with a large note that says, "You have been prescribed a medicine that is unlicensed." I started them anyway.

A month on, I am still waiting for some wild rebirth of my libido. If a miracle took place for my friend, I'd call mine more of a slow progression to a better place. After the first week, we had sex three nights in a row, but I suspect this was more down to the anticipation of a returning libido than the actual return.

Now we have it about once a week, which is certainly an improvement. Like my friend, my orgasms come quicker and stronger now. A little too quickly, actually. Mostly, I think, by trying to do something about it, my mind has been more focused on sex. It still takes an effort to get in the mood, but it doesn't take as long as it used to.

What is most striking is how much better I feel the rest of the time. I am just a lot less tired. I used to slog through my weekly keep-fit class in the park. Now I want to push myself. When I do yoga, I feel strong and focused, rather than floppy and bored. I feel like going out again mid-week, which I haven't done for years. Several people have commented on how glossy my hair looks. I think I am a bit slimmer, too. In that sense, taking testosterone has made me feel like I'm in my thirties again. Shame I don't get some great horny feeling four hours after I have applied it, but I'm back on my game.