A terrifying future for female fertility - by the man who created the Pill

By HELEN WEATHERS

Last updated at 1:46 AM on 28th May 2011

Professor Carl Djerassi is often asked what might have happened had he not invented the birth control Pill.

Would there have been a sexual revolution, free love, and the cataclysmic shift in attitudes which continues to shape society? Would the world have been a worse or better place?

Did the Pill empower women by giving them control over their own fertility and the freedom to enjoy sex without fear of pregnancy?

Or is it, as one writer put it, one of 'the biggest disasters of the 20th century medically, morally and ethically'?

Professor Djerassi raises an eyebrow and admits to feeling 'p***** off" and offended by the 'hogwash' spouted by those who lay the blame

for society's ills on the Pill.

Revolutionary: The contraceptive pill is now 50-year-old

'Without the Pill the sexual revolution would have happened regardless, but there would have been a lot more misery along the way in terms of unwanted pregnancies and illegal abortions,' he says.

This year marks the 50th anniversary of the licensing of the pill in the UK, and in October Professor Djerassi celebrates the 60th birthday of his scientific discovery.

Now aged 86, but far from retired, he has agreed to meet me at his London flat to discuss his legacy and present his startling — and some might say unsettling — vision of the future.

Professor Djerassi believes that, with more of today's women delaying motherhood for economic reasons, his own invention could soon be redundant.

'There are an enormous number of well-educated, proficient women who, when facing the biological clock, first pay attention to their professional ambitions,' he says.

'Before they know it they are in their 30s. By the age of 35, they have lost 95 per cent of their eggs, and the rest are ageing rapidly.

Sooner or later, in the next 20 years, more young people will freeze their eggs and gametes in their 20s, and bank them for later use.

They will do away with the need for contraception by being sterilised, and withdraw their eggs and sperm from the bank when they are ready to have a child via IVF.'

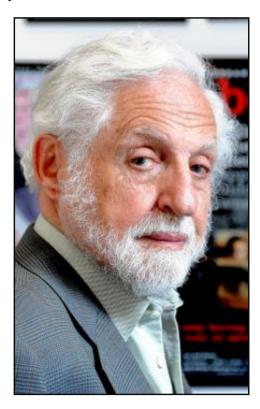
The Father of the Pill, as Djerassi has been dubbed, leads me into an elegant living room adorned with fine art. He is a small, smart man, with white hair and a neatly-trimmed beard.

A professor at America's Stanford University, he regards himself more as an author and agent provocateur than a scientist these days.

Through his writing he explores the social consequences of technological advance, hoping to bring the issues involved to a broader audience.

He calls it science-in-fiction, as opposed to science fiction, inviting the reader to make their own judgments, based on the facts.

Professor Djerassi eyes me slightly warily, wondering if I am the kind of person who deals in facts, or a fully paid-up member of the moral majority, a religious fundamentalist for whom contraception contravenes God's law.



The 'father' of the pill: Professor Carl Djerassi

'If I think the world is round and you think the world is flat, all argument is pointless,' he says. 'You will not change my belief, and I will not change yours.

'I am not religious, I do not believe in God. Although I respect the right of others to hold those beliefs, arguing over fundamentals is pointless.'

Worse still, in his eyes, could I be one of those feminists who has brought with her a long charge-sheet accusing the male inventors of the Pill of interfering with a woman's natural fertility, pumping them full of hormones, in order to make them sexual playthings for men?

Religious objections he can understand, but he expresses amazement that some highly-intelligent, well-educated women could remain such 'reproductive Luddites'. These views — bemoaning the medicalisation of female fertility and conception — he regards not just as hogwash but as 'sentimental hogwash'.

'Feminists at the time were against the Pill on ideological grounds, considering it a male invention which impinged on the most intimate aspects of their body.

On an emotional level, I completely understand and sympathise with that, but it happens to be illogical,' he continues.

'They told us we should work on male contraception, but that would have left women in exactly the same position as before — dependent on men to decide when and whether they get pregnant.

'The most important thing about the Pill is that it gives women that power, which they did not have before, and anyone who does not acknowledge that is living in another world.

There are, today, around 100 million women worldwide who are voluntarily on the Pill. They are not on the Pill because someone made them take it,' he adds.

'These women have a reason for not wanting to get pregnant, mostly economic. Are you telling these women, who want to plan their families, that they are idiots, being fed a lie? 'Feminists at the time were against the Pill on ideological grounds, considering it a male invention which impinged on the most intimate aspects of their body'

'There are also hundreds of millions of women who are not on the Pill. They don't want to take hormones every day, and that is also understandable. It is their choice.

The 1960s was an ideal time to introduce this compound as an oral contraceptive. It may have been a contributory factor to the sexual revolution, removing one barrier to liberal sexual intercourse, but it is nonsense to say it caused it.

'The negative aspects of the sexualisation of our culture today I accept completely, but to blame it on the Pill doesn't make sense.'

It was on October 15, 1951, that, as a young research chemist working in a laboratory in Mexico, Carl Djerassi made his big breakthrough.

The son of a Viennese mother and Bulgarian father — both doctors, who divorced when he was four — he fled Austria, aged 15, when Hitler invaded, and eventually settled in America.

After completing a college degree and unable to afford to study further to become a doctor, he turned to chemical research, taking a job with the pharmaceutical company Syntex in Mexico City.

Until Professor Djerassi's research, no one had been able to convert progesterone — produced during pregnancy to stop the normal cycle of eggs being released by the ovaries, and thus serving as nature's own contraceptive — into an orally-active form.

Biologist Gregory Pincus, at a different laboratory, co-ordinated its experimentation as a contraceptive, and physician John Rock oversaw the first clinical trials in Puerto Rico before it was approved by the Food and Drug Administration in America in 1960.

Professor Djerassi prefers to describe himself as the 'Mother of the Pill' as opposed to the father, in the sense that he created the egg — the nucleus of the pill. He sees Pincus as the father and Rock the midwife.

'There was no Eureka moment,' says Professor Djerassi of his scientific breakthrough. 'As a synthetic chemist, you are an architect.

You create a building, but it is not until the windows are put in, and the electricity turned on, and the purpose of that building decided, that it is finished.'



Tragic: Professor Djerassi's beloved daughter Pamela committed suicide in 1978 aged 28

Certainly, at the time of his discovery, Professor Djerassi had no idea of how the Pill would transform society.

'When I started my research there was no interest in contraception. Progesterone was being developed to treat menstrual and fertility problems, although it had long been recognised as nature's contraceptive,' he says.

Its rapid take-up for contraception astonished its creators. 'The end of the clinical trials coincided with the beginning of the sexual revolution, but no one expected that women would accept oral contraceptives in the manner in which they did in the Sixties.

The explosion was much faster than anyone expected.

'I thought the Pill would be obsolete in 20 years, replaced by a whole supermarket of contraceptive alternatives, but that hasn't happened.

'There is now no interest in new forms of contraception in affluent ageing Western populations.

For the pharmaceutical companies, the money now lies in developing drugs to treat the diseases of old age which are a bigger problem: Alzheimer's, cancer, cardiovascular disease.

'Scientifically, we could produce a male pill, but there is no interest.'

Can Professor Djerassi really see no link between the widespread use of birth control, the spread of promiscuity and the breakdown of the traditional family?

He argues that it is not the contraceptive 'hardware' which is to blame, but society's 'software'. Namely, poor public health and sex education, poverty, low female status, and a lack of family-friendly policies.

'Britain and America should be ashamed of their teenage pregnancy rates,' he says. 'Why, when birth control is freely available, do different countries differ so much? It's all down to the software.'

Today, it is not unusual to find childless menopausal women giving birth, or same-sex couples becoming parents via using donor eggs, sperm and IVF. This, Professor Djerassi argues, is the logical consequence of separating sex from reproduction. If you can have sex without babies, the progression is to have babies without sex.

'The European average is 1.5 children per family, so if you are going to have a child, why not make it planned or desired? A planned child is obviously a desired child, and a desired child is a loved child.

'A loved child, to me, is probably the best cement for a stable relationship between two parents. And who is to say heterosexual couples are better parents than those of the same sex?

'People talk about sex in the age of mechanical reproduction as destroying the nuclear family, when it is actually the opposite. If you have no unwanted pregnancies, you are less likely to have unhappy relationships or marriages.'

In this regard, Professor Djerassi appears to speak from personal experience. At 19 he married his first wife, a teacher, but seven years later they divorced when his mistress accidentally fell pregnant with his first child.

'I was far too young to get married and I had one affair. I am not here to justify adultery, but it was not a trivial affair and that woman got pregnant by me,' he says.

'These were the pre-Pill years, and here was a professional woman who was pregnant. In those days it was very tough for single mothers. I decided I should marry her. I felt obligated.

'I asked my first wife for a divorce, and amazingly enough she accepted it and was not bitter. I was married to my second wife for 25 years and had two children, but would I have married her if she hadn't fallen pregnant? Absolutely not.

'When we divorced it was very bitter on her part, but not mine, and I then met my third wife, who was the great love of my life, in my 50s. We were married for 22 years, until she died three years ago.'

For the record, Professor Djerassi's personal choice of contraception was the condom, and he had a vasectomy after his children were born. So he never took personal advantage of his invention.

There have been financial rewards, however — the result of his buying shares in Syntex, the company where he made his discovery, and of which he later became Vice-President.



Professor Djerassi had no idea how his discovery would transform society

Apart from his London flat, he also has a home in Vienna and a 1,200-acre estate near San Francisco, where he has established an artists' colony in memory of his artist daughter Pamela, who committed suicide in 1978, aged 28, having suffered from depression.

Indeed, for all the plaudits, awards and honorary doctorates he has received for his scientific work, Pamela's death remains, for him, 'the biggest tragedy of my life.'

Three years before she died, Pamela appeared to take a decision that went against the grain of her father's great discovery by choosing to be sterilised. Married to a doctor, she had decided she wanted no children of her own.

'Of course I tried to dissuade her, because it seemed such a drastic thing to do, but she put forward a very logical argument.

This, remember, was the time of the Vietnam War, and she didn't want to bring a child into such a horrible world when there were so many orphans,' he says. 'She said that if she ever wanted children in the future, it would be better to adopt.'

Professor Djerassi does not think this decision caused the depression which, he believes, resulted in her suicide.

'She had a lot of ups and downs in her life,' he says. 'She felt her work wasn't going well, and felt very keenly the discrimination against women artists. It was an act of desperation, pure hopelessness.'

Back to his vision of the future, Professor Djerassi sees egg freezing as a fundamental tool of family planning — empowering women further.

Those who find it objectionable, he argues, are those who like to 'romanticise' conception.

'It is already happening at Stanford, where I teach. Women assistant professors on a tough ten-year career path, working 60 or 80 hours a week, are freezing their eggs for later use.'

But why should women have to freeze their eggs and delay motherhood to their 40s, just so they can compete in a professional environment designed by men for men?

'I accept that argument completely,' he says. 'Why should women fit in with a society which suits men better? But to change the climate, you need far more women in positions of power and influence, and that is still a long way off.'

Until then, Professor Djerassi says women have little choice but to live in the existent society. If they want professional advancement and motherhood, they should take advantage of all science can offer them.

It is a future many might find profoundly unnatural, far removed from what we would wish for our daughters. But are these thoughts, as Professor Djerassi might argue, just sentimental hogwash?