

No Sweat, No Tears, No Bleeding

A new HRT for the menopause which seems a change for the better

AGEING actresses — to say nothing of the occasional politician — have given a public thumbs-up to HRT, the menopause treatment which restores the body's dwindling supply of hormones and relieves the symptoms of hot flushes and night perspiration.

Yet despite the endorsements, specialists have been disappointed that HRT has not been more popularly adopted by women in their middle years. Not many women opt for the therapy, and, of those that do, few stay on it.

Cheshire menopause expert Dr Jean Coope has cited three reasons why women have turned their backs on HRT —

the need for regular medical check-ups; a fear of serious disease, like breast cancer or thrombosis; and, for women who have not had a hysterectomy, the continued misery of their monthly periods, at a time when they expected an end to their menstruation.

That — and especially the last objection — is now set to change, and doctors are confident that a new bleed-free HRT is poised to raise the popularity of hormone therapy. Livial, the new treatment which does away with monthly bleeds after the menopause, has just become available for doctors to prescribe in Britain. It has all the hormone influence of conventional HRT, and

in studies appears just as effective in cooling hot flushes, maintaining muscle tone — and increasing libido.

"I think this new preparation will make a big difference to the popularity of HRT," said gynaecologist Mr John Studd. "It removes one of the big obstacles of HRT — regular bleeding."

One study of Livial carried out on 50 women at Guy's Hospital in London achieved a result remarkable for any medical investigation. HRT or not. After one year all but two of the women who set out on the study were still taking the tablets. Livial was tolerated excellently by the women, and

compliance was high," said chief investigator Mr Mike Chapman. Elsewhere, studies have shown that compliance with traditional HRTs has been very poor — no more than one in three women continued with HRT in one investigation conducted by Dr Coope.

Livial, which has been under investigation for more than ten years, combines the influence of the two female hormones oestrogen and progesterone in a single once-a-day tablet.

And, apart from controlling menopausal symptoms, doctors are now sure that all HRT with oestrogen can cut the risk of heart disease and stroke by a massive 50 per

cent. One monumental mathematical study of HRT — in which all possible risks and all known benefits were thrown in the soup — showed a net HRT effect of 300 lives saved for every 100,000 users.

Since Livial is a bleed free HRT, it is only recommended for women after the menopause. Women who experience hot flushes and irregular periods before the menopause seem best treated with traditional hormone therapy, according to doctors. Only when the last period is gone, and menstruation is an unacceptable side effect, will Livial be seen to advantage.

— Family Health

The ABC of Vitamins

THERE are those who swear they've never had a winter cold because of their diet bursting with vitamin C. Capsules, fizzy lozenges, freshly squeezed fruit juice. There are even those who claim vitamin C protects against cancer.

The cancer claim has been exploded in American studies, but the necessary place of vitamins in our everyday diets is now beyond dispute.

Indeed, if experiments just starting in the USA, Israel and Britain confirm pilot studies in Wales, vitamins could be high on the menu of school dinners — because some reports say children whose diets are rich in vitamins perform better than kids starved on junk food everyday. Vitamins might yet be the elusive food of the brain.

But what history has already proved is that vitamins can prevent disease. New research into the death of portly King Henry VIII showed that he died not of syphilis — as every schoolboy knows! — but of scurvy, the disease in which teeth become loose and blotches of blood appear like ulcers under the skin's surface.

There is only one cause of scurvy, and that's a deficiency of vitamin C, nature's vitamin found in fruit and vegetables. In those Tudor days when Henry was changing wives more often than he changed his shirt, fruit and vegetables were despised as fodder for the masses. The nobility preferred venison and poultry.

And in those dark days of winter, when Britain was gripped in its Little Ice age, fruit and most fresh vegetables were simply unavailable. One lemon for his coronation feast cost six silver pennies, says Henry's historian.

Scurvy was the plague of sailors on long sea voyages till 1795 — when the Admiralty made all crews drink lime juice with their daily tot of rum. After that, the disease virtually disappeared from the high seas.

Today, scurvy is almost unknown in Britain. And the reason? A daily diet with adequate quantities of vitamin C. Supplements are not necessary, say the experts, just the normal amounts which come with a balanced varied diet.

And that's the message about all vitamins vital to our looks, energy, health and protection from ailments. All recommended daily allowances of vitamins will be found in a diet containing bread, cereals, fresh fruit and vegetables.

And except in special cases — like pregnancy — there's absolutely no virtue in taking more than the recommended daily intake. In excess, vitamins A and D can even cause disease.

Here's what the vitamins do, where they're found, and how much of them you need.

Vitamin A, also known as retinol, is found in liver, milk, eggs, butter, yellow vegetables like carrots, and yellow fruit like peaches and bananas. It's necessary to maintain the

healthy turnover of body cells, especially those of the retina of the eye, lining of the lung and digestive system.

There may, then, be some truth in the old wives' tale that carrots help you see in the dark. And some truth that vitamin A helps keep skin fresh and complexion bright. Recommended daily intake is about 1 milligram.

Vitamin B is really a complex of several different vitamins. B1, also known as the corn flake packet as thiamin, ensures that carbohydrates burn away to provide the body with energy. You'll find vitamin B1 in pork, nuts, cereals, potatoes, whole grain bread and muesli. No more than 1 milligram a day is recommended.

B2, known to cereal buffs as riboflavin, is found in milk, cheese, eggs, liver, kidneys

maintains resistance to infection. It's found in eggs meat and dairy produce. Recommended daily allowance is tiny — just 3 micrograms — but vegetarians may nevertheless sometimes need supplements.

Vitamin C, often spelled out on the label as ascorbic acid, is found in all citrus fruits, tomatoes, raw cabbage, green vegetables and blackcurrants. It's renowned for fighting colds, keeping tissues and skin in good repair, and maintaining healthy teeth and gums. Long exposure to high temperatures inactivates vitamin C.

Recommended daily allowance is 30 milligrams — through some have said that women on the Pill need more. Most doctors disagree, and insist that women on modern low dose Pills need no vitamin supplements.

Vitamin D is the sunshine



A child suffering from rickets on a hospital bed.

and green vegetables. Vitamin B2 also helps the turnover of cells, especially maintaining tissues of the skin. There are those who claim that vitamin B2, like hormone replacement therapy, can prevent ageing of the skin.

B6, known also as pyridoxine, is the champion of premenstrual tension sufferers. It's found in liver, wholegrain cereals, egg yolk, fish, bananas and avocados. Vitamin B6 plays a role in synthesising certain chemicals in the brain which regulate hormones. Those who recommend vitamin B6 supplements for PMS say the normal dose range is 40 milligrams twice a day, rising to 75 milligrams twice a day if necessary. Supplements would usually be taken from just before to just after a period. Normal dietary daily recommended allowance is 2 milligrams.

B12 increases energy and

vitamin because some is switched on in the skin by sunlight. Other sources are oily fish, dairy produce and eggs. Vitamin D is important for preventing tooth decay and making bones grow, because it helps blood absorb calcium.

Vitamin E is needed for regenerating cell membranes and so keep a healthy balance of oxygen in the body. Cramp, varicose veins and aching muscles have all been linked to vitamin E deficiency. Recommended daily allowance is about 10 milligrams, and it's found in vegetable oils, whole grains, eggs and avocados.

Recommended daily allowances vary, of course, according to body weight and lifestyle. However, for the best vitamin value it's best to eat food in its freshest possible way — both storage and the heat of cooking can destroy vitamins.

— Family Health

Drugs : A Very Real Problem

ZURICH is famous world-wide, not only for being the Swiss business capital, but also because of the Plattsplatz. The centre of the open drug scene in Zurich is known in the United States as the Needle Park and is well-known to the American public, after being the subject of countless articles in the "New York Times" and other regional newspapers, as well as being shown on television. In July 1990, the Belgian newspaper "Le Soir" published a damning condemnation of the city's plans to legalise the consumption of heroin under certain circumstances. "Switzerland and, above all, the German part, has become a center for trafficking heroin and depositing drug money. But the other West European countries are not prepared to tolerate this any longer. The European Community cannot increase its links with a country that practices such a policy: it could then run the risk of contaminating the entire European market. Why is Switzerland, otherwise known as being a peaceful and idyllic place, making the headlines with its drug policy. For several reasons. Switzerland is particularly affected by the drug problem. A drugs expert assessed the situation: "On the one hand, because it is an important junction for international traffic and a financial centre, in which the banks handle huge amounts of money, it also attracts shady business people. On the other hand, the sixties drug craze hit Switzerland later but much harder."

1990, the dangerous cocaine derivative, crack, was still unknown in Switzerland, although it was widely used in the United States. A month later, the picture had changed. By that time, crack had appeared on the Zurich scene. Many observers are astounded by the liberal attitude with which certain authorities and large groups of citizens regard the drugs problem, in comparison with the international position. In some cantons (state

Swiss population. With the growth in the narcotics trade and in the number of drug consumers, it was necessary to adopt a tougher policy towards dealers, at the same time as taking a more liberal stance towards consumers. In 1975, the illegal consumption of drug became a criminal offense and it was decided that illegal drug-dealing should carry a prison sentence of up to 20 years and a fine of up to a million francs.

AIDS eventually prompted the search for a new starting point in the fight against drugs and in help for addicts. New laws were introduced against laundering drug money, and there were efforts to set up a medical-social infrastructure whereby help could be given to drug addicts. This included the distribution of syringes and condoms, in order to stop the spread of the deadly virus caused by the exchange of needles and prostitution. Drug meeting points were no longer systematically cleared.

Suspension but no Liberalisation

This report on drugs, which has been read by foreign specialists with great interest, ends with recommendations, which are worth citing in full: "If the law was to be revised, it should lay down that the consumption alone of narcotics is no longer a punishable offense. The new law should apply to all types of drugs. The possession and acquisition of small quantities of drugs, the exact amount of which still has to be defined, should also be considered legal. However, all forms of drug trade should remain illegal. We recommended that drug consumption and the possession of drugs, with a view to consumption should no longer be punishable. This recommendation is based on the fact that the repressive policy as largely ineffectual. The way in which the new policy is carried out should not lead people to believe that a liberalisation process in taking place. From the point of view of specialists, the commission is unanimous in thinking that nothing justifies a more permissive attitude towards drugs of all kinds."

The commission also recommends a new framework of lighter penalties for drug-addicts who only deal with drugs because they have to support their addiction. At the same time, the commission is calling for tougher laws and more police intervention against drug-traffickers. The ball is now in the politicians' court.

Switzerland - 700 Years After

Switzerland has the highest number of drug deaths in Europe per head of population. There is an open drug scene in various towns throughout the country and popular support for the liberalisation of drug policy. All this has attracted international publicity. Is Switzerland a special case as far as drugs are concerned? The increasing consumption of heroine in this country is not the only addiction problem. A prominent Swiss psychiatrist has warned against focusing on drugs: "The preoccupation should not let us forget that alcoholism is increasing all the time. These days, it's our biggest social-medical problem."

members of the Confederation) the authorities have opened fixer-rooms. Where addicts can inject themselves in a hygienic environment. They are also discussing the controlled distribution of heroin to addicts. An opinion poll shows that the general public is also liberal. 80% of the people questioned agreed to first aid and therapy for addicts; 75% said they were against prison sentences for illegal drug-taking. Will Switzerland become "a pioneer in drug policy", as one journalist has suggested.

Hard-Line Approach Yields Nothing

The formula was "intimidation" but the policy was a failure. A new drug scene involving heroin, cocaine, etc. grew from the anti-authoritarian movement, which had its roots in the romantic hash-smoking hippy scene. The authorities ignored the growing calls for the controls on cannabis to be lifted, with the aim of stopping the tendency of moving on from cannabis to heroin and cocaine. During the eighties, the drug situation grew dramatically worse with the appearance of AIDS, transmitted by dirty syringes. The misery of the drug addicts grew, drug-takers took up a third of the place in prisons, and the market became more professional and more brutal.

High Drug Prices Attract Dealers

The federal narcotics commission, a consulting organ of the government has recently made what could be considered the most important contribution in recent times to the debate over prevention and help for addicts. The commission's report, published in 1989, stresses the seriousness of the situation in Switzerland. It showed that, despite the fact that Switzerland is small and has a tiny population compared to other western European countries, it is hugely important as a transitland for drugs. Zurich and Geneva airport evidently play an important role as trafficking centers. Moreover, as it says in the report, the prices paid on the Swiss black market for heroin, cocaine and cannabis products "are among the highest in the world, making the Swiss drug market particularly attractive for the foreign dealers."

The Change in Drug Policy

The laundering of drug money and the increase in the immune deficiency disease,

The Spiral of Addiction

Statistics released in 1989 show increases in all areas of drug consumption: the cocaine boom was continuing, there were more drug deaths, and about eight per cent more first-time drug offenders. Official reports showed a 43% increase in deaths connected with illegal drug consumption over the previous year, bringing the total to 248. The usual reason was an overdose of opiates, and particularly heroin. And the problem seems to be spiralling out of control. When the 1989 statistics were published in May

The debate over drugs has become less tense, so unconventional ideas have a better chance of being discussed. It wasn't always like that. Over the past 30 years, Switzerland's drug policy has undergone considerable change. During the sixties, the appearance of "exotic" drugs like hashish came as a shock to the

You Should Live So Long

Human life-span, despite medical advances, has an upper limit

MOST everybody wants to live as long as possible. And given the enormous strides made in medicine and the health sciences during the past 150 years, people could be forgiven for hoping that someday human beings will live, if not quite forever, at least far longer than at present. Since the mid-19th century, average life expectancy at birth has nearly doubled: from 40 years to 75.

pectancy at birth would increase much beyond 85.

What makes the report so compelling is that it is based on simple mathematics. In the past, the upper limits of life have been extrapolated from actuarial tables by estimating how death rates would change if, say, the incidence of heart disease is halved. "We reversed the question," says Olshansky. Taking an "engineering approach," his team members asked themselves how much mortality rates would have to be reduced in order to increase average life expectancy to 120 years. What they discovered, after running the numbers through a computer, was that big hits in current death rates in the US would give only small lifts to life expectancy. For example, if through some miracle of medicine and risk avoidance no one ever again died before reaching age 50 (thus eliminating more than 12% of all deaths), the increase in average life expectancy would be only 3½ years.

There seems to be kind of built-in biological limit programmed into the cells of the human body. In laboratory experiments, human cells divide only about 50 times before they begin to fall apart like old jalopies. This planned obsolescence on nature's part makes a certain amount of evolutionary sense. Survival of the fittest,

after all, rewards only those who reproduce, not necessarily those who reach old age. Once procreation is over, human bodies may as well be disposable goods, biologically speaking.

The best way to combat cellular aging is to postpone its effects at the molecular level. Basic research is now under way to understand the mechanisms that make human cells wear out and to try to find the genes that cause the major degenerative diseases of old age — arthritis, osteoporosis, Alzheimer's disease. This work could have a double benefit: extending life expectancy and helping to make those extra years worth living. But researchers have no idea when, or if, breakthroughs will take place.

In the unlikely event that scientists do manage to unlock the secrets of aging, some experts believe tomorrow's children could reach 130, 150 and even 170. But the authors of the Science report are extremely dubious. Among the increasing numbers of aging baby boomers, contends Olshansky, "very few people are going to live past 110 or 120." And what about Methuselah, the grandfather of Noah, who lived 969 years before he died? Simple, says the researcher. Someone misplaced a decimal point. PE.

The 60-second life saver

Timing a child's breath rate can be a means of early diagnosis of pneumonia

• 4 million child respiratory deaths per year

Danger signs

- Increased breath rate
- Indrawing of rib muscles (unable to expand chest fully)

Healthy child's breath rate

0-2 months:	60 bpm (breaths per minute)
2-12 months:	50 bpm
1 year and over:	40 bpm

Source: WHO

CAUSES OF INFERTILITY

DOCTORS describe infertility as the inability to conceive following frequent unprotected intercourse for at least a year. According to the World Health Organization, some one in ten couples might be affected.

The causes are either male or female, or a combination of both, or unknown.

Male causes

- Not enough sperm cells — about 20 million per millilitre are needed.
- Sometimes the sperm produced can't swim properly, so can't travel up the female's tubes to fertilise her eggs. This is known as poor "motility."
- Sperm cells may be of abnormal shape. This is known as poor "morphology."
- There may be damage to the testis or penis which prevents the release of sperm.

Female causes

- Egg production at ovulation might be disturbed, which indicates a problem with hormones.
- The fallopian tubes may be damaged or blocked, which prevents sperm reaching the egg for fertilisation.
- Mucus in the cervix may be so thick that sperm is unable to swim through to the tubes.

FERTILITY TREATMENT: SOME OPTIONS

- For structural cases of infertility — like blocked fallop-

ian tubes in women — correction can be tried by surgery.

- If the ovaries are producing few or no eggs, or there's not enough sperm, hormone treatment can be helpful.
- Artificial insemination is also used when sperm cells are of insufficient number. The technique gets enough sperm to the right place at the right time, and fertilisation is sometimes achieved.
- Other options involve moving both the sperm and the egg before fertilisation takes place:
- In GIFT — or gamete intra-fallopian transfer — mature eggs are removed from the ovary, mixed with sperm cells and transferred immediately to the fallopian tube. Eggs and sperm are each examples of gametes.
- The ZIFT (zygote intra-fallopian transfer) technique is almost the same, but the eggs and sperm are not immediately replaced. Instead, the first stage of fertilisation is allowed to take place, the result of which is a "zygote". This is then transferred into the tube.
- In IVF fertilisation also takes place in the laboratory. However, unlike ZIFT, the fertilised egg develops into an embryo over two to three days before being replaced not into the fallopian tube but directly into the uterus.
- Before any of these procedures takes place, it is now accepted practice to use fertility drugs to increase the number of eggs which mature in each monthly cycle.

A Dozen Things You Never Knew About Fertility

- In nature intercourse oc-

curing at the mid-cycle fertile time has only a one in four chance of producing a child.

- The female is born with about 20,000 eggs in the ovaries. So the eggs in a woman's ovaries are as old as she is.
- At the beginning of each cycle about 20 eggs begin to grow in the ovary, but only one reaches maturity. The rest are wasted.
- On average, the male must produce about 100 million sperm at ejaculation to have a reasonable chance of fertilising an egg.
- There are normally about 100 million sperm in 5 millilitres of semen, about a teaspoonful.
- Of all the millions of sperm deposited during intercourse, only a dozen or so will actually reach the egg.
- Women reach their maximum ability to conceive at about 24 years of age.
- Females are responsible for 40 per cent of infertility cases; males for 30 per cent. About 13 per cent will never discover a reason.
- About one in four women seeking treatment for infertility become pregnant during the several months of investigation.
- Once a woman has conceived and missed her first period, she has a 72 per cent of a successful pregnancy — and a 28 per cent chance of a spontaneous abortion.
- Sperms develop better at temperatures slightly less than body temperature. That's why tight trousers and hot baths have been linked to male infertility.
- Appropriate treatment will result in pregnancy for 60 per cent of infertile couples.

— Family Health