

Hormone Replacement Therapy

Hormone Replacement Therapy (HRT) is the outcome of the recent developments in the treatment of women during menopause. Menopause is the irreversible cessation of the female reproductive cycle and menstruation, which follows a permanent loss of ovarian follicular activity. Natural menopause is recognized to have occurred after 12 consecutive months of amenorrhoea for which there is no other obvious pathological or physiological cause. In India, on the basis of studies conducted from different parts of the country, an average woman gets menopause between 43.5 and 48.5 years of age.

The hormones used for hormone replacement therapy are either estrogens or combination of estrogen and progestins. It is generally prescribed to relieve menopausal symptoms such as hot flashes, sleep disturbance, vaginal dryness, mood swings, and urinary symptoms. It also reduces the risk of osteoporosis and prevents cardiovascular disease. There is some evidence that it is also useful in preventing Alzheimer's disease and colon cancer. Estrogens given alone (called "unopposed estrogens") stimulate endometrial hyperplasia, and therefore have the risk of inducing endometrial cancer. Prescribing progestin along with estrogen to women who have not had a hysterectomy alleviates proliferative effect. A woman who still has an intact uterus is generally not a candidate for unopposed estrogen therapy, at least not for prolonged use, since the risk of endometrial cancer would be very high.

In women with intact uterus, progesterone has to be added to negate the stimulatory and carcinogenic effect of estrogen on the endometrium. When combined with progestogens, the therapy is known as Estrogen Progestogen Replacement Therapy (EPRT). Progestogens can be administered either in sequential or combined form. In Sequential Estrogen Progestin Replacement Therapy (SEPRT), estrogen is given with sequential progesterone therapy (addition of cyclical progestogen for 12 to 14 days per

month) and women experience cyclical or withdrawal bleeding. In the Continuous Combined Estrogen Progestin Replacement Therapy (CCEPRT), estrogen is combined with continuous low-dose progestogen throughout the month. There is no cyclical or irregular vaginal bleeding in majority of women after three months of initiation of this therapy. If present, this bleeding generally settles down by six months of starting this regimen.

Most of the postmenopausal symptoms are due to estrogen deficiency and therefore estrogen forms the mainstay of HRT, particularly for symptom relief. The basic principle of estrogen replacement therapy (ERT) is to achieve physiological levels of estrogen (45200 pg), which helps in relieving menopausal symptoms and minimize the long-term risk problems associated with estrogen deficiency on various organs. The lowest possible dose of estrogen, which is easily acceptable, cost effective and has minimal side-effects, is usually prescribed. Numerous forms of estrogens are available and can be given by oral and non-oral routes in different regimens according to the need of individual patients. Route of estrogen administration determines the action of estrogen. Commonly used estrogens in HRT are natural or semi-synthetic. Synthetic estrogens are unphysiological and are not used in HRT due to their high potency and extended half-life. Modifications of natural estrogens (conjugated estrogen, estradiol valerate, and micronized estrogen) for making them more water soluble for oral administration and gastrointestinal absorption are made for better action. One problem with oral estrogens is that they must pass through the liver after absorption. This causes measurable changes in clotting factors, but any clinical effect due to these changes is unlikely. Transdermal estrogens patches are now also available. They do not cause clotting changes, but they do favorably affect hot flashes, cholesterol, and bone density, but their positive cholesterol effects may be less than oral estrogens.



सुरोपम् सुखसम्पदा

Vol. VI Number 2 April-June, 2004

Newsletter

National Institute of Health and Family Welfare

— Inside —

Events

Visitors to the Institute

Training Courses

Nuggets

Retirements

Health Capsules

For Restricted Circulation

A unique problem during such therapy is skin irritation, which usually can be avoided by application on the buttocks and regular rotation of application sites. Intravaginal estrogens are effective in relieving local symptoms of estrogen deficiency, but do not have a major effect on other parameters. Short-term application of intravaginal estrogens after an inflammatory or atypical post-menopausal Pap Smear is often used to 'normalize' the cervical epithelium.

For mimicking the natural cycle the sequential cyclic regimen with conjugated equine estrogens (CEE) 0.625 mg combined with either 5 mg of medroxy progesterone acetate (MPA) or 0.7 mg of norethisterone or 200 mg of vaginal micronised progesterone is preferred. This is the preferred regimen in perimenopausal women as it gives side-effects in fewer patients (8%) compared to the continuous regimens (14%). However, in women who have menopausal symptoms on pill free days, estrogen can be administered continuously with progesterone just added for 12-14 days each month. For ease of administration and compliance the continuous combined regimens with either 2.5 mg of MPA or 0.35 mg norethindrone or 100 mg vaginal micronised progesterone daily is quite popular. This has the added advantage of inducing amenorrhoea in 60-65 per cent of the patients. The rest of the 35-40 per cent who get breakthrough bleeding will have to use a sequential regime. It has been postulated that giving continuous combined estrogen progesterone without allowing the endometrium to shed may be responsible for increase in the incidence of invasive adenocarcinoma. Hence the combined cyclic regimen with a 7-day pill free interval is to be preferred. This also induces amenorrhoea in 75 per cent of the patients by four months with one or two days of spotting in the first four months. This is more endoprotective than continuous combined regimes.

Risks

Risks of hormone replacement therapy include side-effects like withdrawal bleeding with cyclic dosing, spotting during the first three to six months with combined continuous therapy, nostalgia, edema, abdominal bloating, and increase in the size of uterine leiomyomata. Rarely, symptoms of anxiety and depression can be worsened with initiation of HRT. Although there is no increase in asymptomatic gallstones, a 2.7-fold increase (3.4% to 9.8%) in cholecystectomy has been noted. A possible increase in the incidence of breast or endometrial cancer has long been a concern with HRT.

Endometrial Cancer

Unopposed estrogen therapy has been associated with endometrial cancer in women with an intact uterus. Endometrial hyperplasia, which is thought to be a precursor to cancer, occurs in 20 per cent to 30 per cent of patients who receive unopposed estrogen therapy. Certain women who have undergone hysterectomy should also receive progestogens like women with previous severe endometriosis, treated endometrial or endometrioid cancer and, possibly, severe osteoporosis. The risk increases with the use of long-cycle HRT. With unopposed estrogen, risk of endometrial hyperplasia is 5-20 per cent; relative risk of endometrial cancer is 3.8. This risk is dependent on dose and duration and persists for 5-10 years after discontinuation of estrogens. Patients should be informed of this and may be put under strict surveillance. With combined estrogen and progestin, using

progestin for at least 10 days/cycle, risk of endometrial hyperplasia is <1 per cent relative risk of endometrial cancer is <1.

Effects on Lipid Profile

The effect of progestogens on the lipid profile of subjects has been of much concern. The synthetic androgenic forms are not lipid friendly but the natural micronised form by the non-oral route has minimum adverse effects. It has been shown to blunt the rise in high density lipoproteins (HDL) caused by estrogens but does not alter the levels of lipoprotein A (LPA) and low density lipoprotein (LDL). The vaginal route of administration of natural progesterone is considered most beneficial due to maximum local absorption. Such a combination is considered to be equally effective as estrogen monotherapy.

Breast Cancer

It was earlier thought that since carcinoma of the breast was mostly estrogen receptor positive, progesterone would be protective against breast cancer. Ever since it was shown that mitotic activity of the breast increased in the luteal phase, importance was attached to association of malignancy with progestin therapy. Recent trials did in fact show an increase in breast cancer in women using EPRT as opposed to ERT¹. The increased risk of breast cancer with continuous CEE and MPA has also been borne out by the recent Women's Health Initiative (WHI) trial. However, the Nurses Health Study reported no difference in the two groups using ERT and EPRT.

Ross et al. (2000) compared 1,897 postmenopausal women diagnosed with breast cancer from 1986 to 1996 with 1,637 matched controls in the Journal of the National Cancer Institute (JNCI). The JNCI study reported separate analysis of risk on women on estrogen only and on two types of combination replacement therapy: continuous combined replacement therapy (CEE and daily low dose MPA) and sequential replacement therapy (CEE and higher dose MPA for less than 15 days a month). This study reported an odds ratio based on five years of use for developing breast cancer for women on no hormone therapy as 1.0; the odds ratio for five years of use for women on estrogen only was 1.06 and the odds ratio for five years of use for women on combined replacement therapy was 1.24. In analyzing breast cancer risk based on the regimen of combined hormone replacement, the odds ratio for five years of use for women on continuous combined replacement therapy was 1.09 while the odds ratio for five years of use for women on sequential replacement therapy was 1.38. Because of small numbers in the subgroups, the difference in the odds ratios between women on continuous combined replacement therapy and sequential replacement therapy was not statistically significant.

Data on HRT in women with a family history of breast cancer is inconclusive; some studies have found an increased risk with this therapy while others have found no difference. In women with a high risk of developing cancer of the breast, tibolone and raloxifene may be considered as good alternatives to the conventional EPRT since they have antiestrogenic effect both on the breast and the endometrium. HRT may be used after a therapeutic trial with other non-hormonal treatments in the patients who have earlier been treated for breast cancer. For some women whose quality of life is so impaired by estrogen deficiency that withholding HRT is unreasonable, yearly monitoring and explanation of the risk of recurrence must be maintained and a fair trial with alternative therapies may be given prior to starting of HRT. The dosage should be the least required to resolve symptoms.

Addition of a progestin to ERT may enhance the risk of lobular breast cancer relative to estrogen use alone. These findings have important implications for the risk benefit equation for ERT in women using combined HRT. Combined HRT use increases the risk of lobular, but not ductal, breast carcinoma in middle-aged women. Mammographic features in lobular carcinoma are specific and different from those of ductal carcinoma and these have to be taken into consideration.

Thromboembolism

The Nurses Health Study (NHS) Cohort found a 2.1 to 3.6 fold increased risk of deep vein thrombosis in current (not past) users; the risk of pulmonary embolism was increased two-fold in current hormone users. Heart and Estrogen Progesterone Replacement Study (HERS) recorded a 2.89 relative risk of venous thromboembolism (VTE) comparable to that reported in other observational studies. The WHO trial has reported a 2.11 relative risk of VTE and 2.13 of pulmonary embolism. Women who have been on HRT should be reassured that there is no evidence of further increased risk. The actual risk is very low because of the low frequency of the event.

Contraindications

Contraindications to HRT include pregnancy, undiagnosed abnormal genital bleeding, impaired liver function, acute thromboembolic disease, history of thromboembolic disease with hormone use, and a history of breast or endometrial carcinoma. Estrogen is contraindicated in women with a history of endometriosis because of possible reactivation of the disease. It also is not recommended in women with active gallbladder disease because of changes in the bile, and should be used with caution in patients with uterine fibroid or a history of menstrual migraines.

Follow-up and Monitoring

The follow-up schedule for monitoring patients on hormone therapy generally should be after one month, after 3 months and thereafter at every 6-12 months as appropriate. Therapy compliance, blood pressure, side-effects, mammography every 2 years (annually in women at risk of breast cancer, with a history of breast cancer in the family, or with dense breasts on mammography), lipid profile annually, bone densitometry, pelvic ultrasounds every year for measuring endometrial thickness should be assessed and documented at each follow-up visit.

Conclusion

Asymptomatic menopausal women may be prescribed HRT on an individual basis for the prevention of osteoporosis and to improve the quality of life. It has now been demonstrated that it should no longer be initiated or continued for cardio protection. If there are other reasons for advising ERT or EPRT as mentioned above it may be given after an individualized assessment and explanation of the risks and benefits to the woman concerned. Advice regarding healthy eating and life style changes must be provided and the importance of physical exercises stressed upon. Family support should be ensured by creating awareness in the community as a whole. Use of appropriate non-hormonal therapy should also be encouraged whenever required. Non-hormonal therapies are now available to reduce the symptoms of menopause, varying from the use of soy products, lubricants, and vitamin supplements, to prescription medications that stabilize the autonomic nervous system.

References

1. Gambell Jr RD (1995) Progestogens in estrogen replacement therapy. *Clin Obstet Gynaecol* 38 (4):890-901.
2. Pickler JH, Thameycraft I and Whitehead M (1998) Effect of hormone replacement therapy on the endometrium and lipid parameters: A review of randomized clinical trials 1985-1995. *Am J Obstet Gynaecol* 178 (5): 1087-1099.
3. Ross RK, Paganini-Hill A, Wan PC and Pike MC (2000) Effect of hormone replacement therapy on breast cancer risk: Estrogen versus estrogen plus progestin. *J Natl Cancer Inst* 1692 (4): 328-332.

(The Editor-in-Chief acknowledges the help rendered by Dr Mrs. Pikee Saxena, Lecturer, Department of Reproductive Bio-Medicine, in preparing the Editorial)

Events

Self-Defence for Women

The NIHFW Staff Welfare Association in collaboration with the Delhi Police organised an 'inter-face-cum-live-demo' on 'Self-Defence for Women' on 13 May 2004 at the NIHFW auditorium. The Delhi Police team was headed by Mrs. Neeta Malhotra, Police Inspector, Crime Against Women Cell, Nanakpura, New Delhi. The other members of the Delhi Police team included Ms. Naval, Head Constable; Ms. Shantosh, Constable; and Ms. Banita, Constable; who conducted a 'live-demo' on 'self-defence.'



Ms. Shantosh and Ms. Banita, Constables of Delhi Police, performing a live-demo on 'Self-Defence for Women' in front of staff members of the Institute.

World Health Day

World Health Day was celebrated by the Institute at the Field Practice Demonstration Area (FPDA), Rangpuri, New Delhi, on 7 April 2004. 'Road Safety' was the theme of the day. On this occasion, MD (CHA) and DHA students of the Institute organized focus group discussions, quiz competition, poster competition etc. for the students of Government schools (Boys and Girls) at Rangpuri on the above subject.

Visitors to the Institute

The Institute had the privilege of receiving the following visitors during the quarter:

Dr. Eric Hean-Tat Goon and M.O. Schroll, WHO Headquarters;
Ms. Deepika Nag, WHO, South East Asia Region, New Delhi;
Prof. A. Rajasekaran, President, National Board of Examinations, New Delhi.

Training Courses

Professional Development Course in Management, Public Health and Health Sector Reforms for District Medical Officers.

Coordinators: Prof. (Mrs.) M. Bhattacharya, Prof. N.K. Sethi and Prof. A.K. Sood

Co-coordinators: Dr. V. Adhish, Dr. Sanjay Gupta, Dr. V.K. Tiwari, Mrs. Reeta Dhingra, Dr. U. Datta and Dr. (Mrs.) Neera Dhar

Dates: 17 May-23 July 2004

Regional Level RCH Orientation Workshop for the Faculty of Medical Colleges

Co-ordinator: Prof. (Ms.) K. Kalaivani

Co-co-ordinators: Dr. (Mrs.) S. Menon and Dr. (Mrs.) Renu Paruthi

Associate: Dr. (Ms.) Savita Mehta

Dates: 2-4 June 2004

Training in Quality of Care for Provision of RCH Services for State and District Health Care Managers/Providers

Co-ordinator: Prof. (Ms.) K. Kalaivani

Co-co-ordinators: Dr. (Mrs.) S. Menon and Dr. (Mrs.) Renu Paruthi

Associate: Dr. (Ms.) Bindoo Sharma and

Dr. (Ms.) A.M. Elizabeth

Dates: 7-11 June 2004

Training Course on Stress Management among Clinicians and Health Administrators

Co-ordinator: Dr. (Mrs.) Neera Dhar

Co-co-ordinator: Dr. (Mrs.) Uma Vasudeva

Associates: Mr. A.K. Verma and Mr. S.P. Singh

Dates: 14-18 June 2004

Management Training of CMHOs and BMOs of Madhya Pradesh

Co-ordinator: Dr. U. Datta

Co-co-ordinator: Dr. Sanjay Gupta

Associate: Mr. S.S. Mehra

Dates: 21 - 25 June 2004

Training Course on Applied Health Economics and Financing

Co-ordinator: Mr. B.B.L. Sharma

Co-co-ordinators: Dr. M. H. Meitel and Mrs. Reeta Dhingra

Associates: Mr. R.K. Gautam and Mr. Sherin Raj, T.P.

Dates: 21 - 26 June 2004

Forthcoming Training Courses

(Dates are tentative. *Courses under WHO fellowship Programme)

Training Course on Logistics, Supplies and Materials Management in Health and Family Welfare (5-16 July 2004)

Training Course on Application of Research Techniques in Reproductive Biomedicine (12-23 July 2004)

Training Course on Medical Negligence, CPA and Medical Ethics (19-23 July, 2-6 August, 27 September-1 October 2004)

Training Course on Demography for District Level Statistical Personnel (26-30 July 2004)

Orientation Training Course for M.Sc. Students in Reproductive Bio-medicine (26-30 July 2004)

*Training Course on Dynamics of Health System and Role of NGOs (16-27 August 2004)

*Training Course on Training Technology (16-27 August, 30 August-10 September 2004)

*Training Course on Health Planning (30 August-10 September 2004)

*Training Course on Hospital Administration for Senior Hospital Administrators (6-24 September 2004)

Professional Training on Capacity Building for IEC Officers in Communication Skills for RCH Programme (13-24 September 2004)

*Training Course on Health Management for Medical College Faculty (20 September-8 October 2004)



Prof. Arindam Choudhury (IIPM) (3rd from L) and Prof. N.K. Sethi, Director-in-Charge, NIIFW (2nd from L), with the members of the coordinating team and participants of the Professional Development Course in Management, Public Health and Health Sector Reforms for District Medical Officers.

Nuggets

Director's Activities

Dr. M.C. Kapilashrami, Former Director, participated as an expert in the following :

Meeting regarding Reproductive and Child Health Project held at the Ministry of Health and Family Welfare, Nirman Bhawan, New Delhi on 7- 8 April and 20 April, 2004; Annual General Body Meeting of Hospital Administration at Safdarjung Enclave, New Delhi on 8 May, 2004; and Meeting regarding HIV/AIDS Surveillance at the Ministry of Health and Family Welfare, Nirman Bhawan, New Delhi on 11-12 May 2004.

Besides, he visited Dai Training Centres (DTCs) and Auxiliary Nurse Midwife Training Centres (ANMTCs) of Haryana and had meeting with the State Authorities of Punjab and Haryana to discuss about RCH Training in these states on 23- 24 April, 2004. Also, he visited Rural Health Training Centre (RHTC), Najafgarh; on April 30, 2004 to involve this centre as a Field Practice Demonstration Area for the Institute.

Prof.. N.K. Sethi, Dean and Head of Department of Planning and Evaluation, took over as Director-in-Charge of the Institute from Dr.M.C. Kapilashrami on 1 June 2004. Besides, he participated in the following :

Launch of 'New ORS' by the Union Minister of Health and Family Welfare at Vigyan Bhawan, on 2 June 2004;

Meeting of National AIDS Control Organization in New Delhi on 11 June 2004; and

Meeting of Senior RCH Officers at Nirman Bhawan, New Delhi, on 15 June 2004.



Mr. Andrew Headey, First Counsellor, European Union, Delegation of the European Commission in India (2nd from R) is sharing dais with Mr. P.K. Hota, Secretary Family Welfare (C), Dr. M.C. Kapilashrami, Former Director, NIIHFW (2nd from L), Ms. Frederika Meijer, Advisor (Health), Delegation of the European Commission in India (L) and Mr. S. Pattanayak, Advisor, WHO, SEARO, New Delhi (R) at the Inaugural Session of the Professional Development Course for DMOs.



Dr. N.K. Sethi, Director-in-Charge, NIIHFW, presenting a bouquet to Dr. M.C. Kapilashrami, out-going Director, NIIHFW, on the last day of his tenure in the Institute on 31 May 2004.

Awards

Prof. (Mrs.) M. Bhattacharya was awarded 'Women Achievers Award' for her outstanding service to the community, specially HIV/AIDS, by the All India Women's Conference, New Delhi, in the Platinum Jubilee Celebrations of Delhi Women's League on April 20, 2004 at India International Centre, New Delhi.

Faculty Activities

Prof. (Mrs.) M. Bhattacharya participated as an expert in the review meeting held at Indian Council of Medical Research, New Delhi, on 14 April, 2004, 27 April 2004 and 14 May 2004 regarding "Finalisation of HIV Estimates in the Country." She also served as a member of the task force of the Ministry of Health and Family Welfare, Government of India, to roll out the "Professional Development Course in Management, Public Health and Health Sector Reforms for District Medical Officers" in West Bengal and North-Eastern States and she visited a few institutions in Kolkata.

Dr. T. Mathiyazhagan, Reader, served as an expert in the Technical Advisory Group, constituted by the Population Foundation of India (PFI), New Delhi, for its project on "Innovative Communication Strategy for Promotion of Family Planning in the EAG States" and attended a meeting in relation to this project on 2 May 2004, at 2.00 p.m. at PFI, New Delhi.

Dr. Sanjay Gupta, Senior Lecturer, participated in the orientation meeting on Annual Sentinel Surveillance for HIV Infection, organized by NIIHFW, on 11 and 12 May 2004, for Project Directors, Programme Officers and Computer Staff from all States AIDS Control societies. He also participated in the orientation meeting on Annual Sentinel Surveillance for HIV Infection, organized by the Institute on 11-12 June 2004 for Regional Coordinators.

Health Capsules

Ramadoss to Stub out Smoking on TV

Amitabh Bachchan's stylized pan-chewing and Rajnikanth's cigarette-backflips will soon be history – at least on TV. Health Minister Anbumani Ramadoss announced on Monday that he would ask the Information and Broadcasting (I&B) Ministry to edit or digitalise scenes on television that show actors smoking or consuming tobacco.

"Actors are role models and have a huge youth fan-following. I want to appeal to them and their directors to desist from smoking in movies," said Ramadoss on the occasion of World No-Tobacco Day. "Under the new tobacco-control law, tobacco consumption can't be shown in the electronic media and we are talking to the I&B Ministry to edit smoking scenes and also take stringent action against erring people," he said.

De-glamourising tobacco use is likely to dissuade youth from taking to smoking. "In my home state, 21 per cent people consume tobacco, which is the highest consumption rate in South-East Asia. According to the WHO, children start smoking at the average age of 13-15 years in Tamil Nadu," he said. About 9 per cent of the tobacco users in India are under 18 years old, WHO data show.

The WHO has chosen actor Vivek Oberoi as its brand ambassador for the year for publicity asking his fans, directors and actors from not smoking in film or real life. He also got the Saathiya team to make free spots asking people not to consume tobacco.

India has banned tobacco advertising, sale to minors and smoking in public places under the Cigarettes and Other Tobacco Products Act that came into force from May 1. How effective it would be in controlling tobacco use remains to be seen.

The Hindustan Times
New Delhi, 1 June 2004

Asthma Drug May Bring on Deadly Attacks

One of the most commonly prescribed medicines to treat asthmatics may actually make asthma worse and contribute to heart problems, two studies find.

Daily doses of beta-agonists may increase the risk of a fatal asthma attack and more than doubles the risk of cardiac events such as heart attacks, the studies found.

Beta-agonists help relax muscles in the lungs when they spasm during an asthma attack. They are administered in two ways, as a fast-acting 'rescue' drug at the beginning of an attack and in a longer-acting form designed to prevent attacks from occurring. The latter is frequently given in combination with inhaled steroids, as both drugs help prevent asthma attacks.

The researchers found that patients who took the drug daily developed a tolerance and had more inflammation in their lungs than those not taking the drug at all, making them more susceptible to a potentially deadly attack.

The team's second study was on the effects of beta-agonists on the heart. The researchers found that asthma patients who took beta-agonists were more than two times more likely to have adverse cardiovascular events such as congestive heart failure, heart attacks and sudden death.

USA Today
The Hindustan Times
New Delhi, 23 June 2004.

Dual Effect

A single diet for both diabetes and a polycystic ovary is being advised. Because, both of these diseases are two sides of the same coin, Shikha Sharma says. Both fall under the metabolic syndrome which requires dietary management, and foods that are recommended for these pathologies can be handled by both weak and hyper insulin levels. Slowly, by following this diet, insulin, obesity, water retention and lethargy will come under control.

To improve insulin function, one must cut down on all artificial foods, such as fizzy drinks, packed/canned foods, diet chocolates and drinks, aspartame and related products, juices and very sweet fruits.

Comflour, white rice, fried potatoes and too much dairy and eggs should be avoided.

Bring down your intake of tea and coffee as they decrease nutrient absorption and act as a diuretic.

Cut down on butter, ghee, oils and fried foods as a high concentration of fat in food tends to decrease the insulin action on cells.

Use a judicious mix of poly-unsaturated oils like sunflower/corn and mono-unsaturated oils like olive oil and rice bran oil.

Herbs and certain vegetables can improve the insulin response. Karela can be drunk raw as a juice as it has plant insulins. Methi seed, sprouts, neem, jamun fruit (all of which are also available as a dried powder which can be taken twice a day) are also beneficial.

Besides being useful in decreasing cholesterol, garlic also lowers blood sugar. It has zinc, sulphur and manganese, which are beneficial to diabetics.

A high-fibre diet is the cornerstone of the treatment of most diseases, and specially insulin related disorders.

Soya beans are excellent for a polycystic ovary and diabetics and can be eaten as a mixed atta (soya atta), tofu, tempeh, miso soup, nuggets and granules.

Potassium is helpful and can be found in vegetable broths and raw, sprouted peanuts.

Other low sugar/low glycemic index diet foods include black channa, legumes, buttermilk, turmeric and amla.

And finally, here's a reassurance: such dietary changes benefit everyone, so even if you enjoy perfect health, this diet is good for you.

Brunch
HT Sunday Magazine
30 May, 2004, New Delhi



A participant expressing his views about the training course on Stress Management among Clinicians and Health Administrators.

Sperm Count Downwardly Mobile

There's bad news for men who use mobiles. New research suggests that the radiation given out by mobile phones reduces their sperm count by up to 30 per cent. Most at risk are those who carry their phones in their trouser pockets or belt holsters.

And that is not all the research, conducted on 221 men over 13 months, says that even those sperms that survive are partially damaged, further reducing fertility.

The research says the damage to fertility could also be caused while the mobile is on stand-by-mode, because it continues to make transmissions to the nearest radio masts.

The study, led by Dr. Imres Fejes of the University of Szeged in Hungary, is the first to link male fertility with the use of mobile phones. Its findings will be presented on Tuesday at a conference in Berlin.

The Sunday Times quoted Fejes as having said: "The prolonged use of cell phones may have a negative effect on spermatogenesis (sperm production) and male fertility that deteriorates both concentration and motility (spontaneous movement)".

Scientists say that while the new research has suggested a connection between mobile use and male fertility, further research has to be conducted to confirm the findings and establish how exactly sperm production is effected. An emeritus professor of Physics at Nottingham University has already announced plans to launch a worldwide study of the impact of mobile phones on health.

A spokesman of the Mobile Phone Operators has disputed the findings.

The Hindustan Times
New Delhi 28 June, 2004

Subscribe:

**Health and Population:
Perspectives and Issues**

June 2004

FACTS

Tobacco use is the highest among the poor in India.

In Madhya Pradesh, 65 per cent farmers and 70 per cent daily-wagers consume tobacco.

In Mumbai, street children spend 43 per cent of their income on tobacco.

84 per cent of the world's smokers live in developing countries.

In Mumbai, people earning less than Rs. 2,000/- a month spend 29.63 per cent of the income on tobacco. In comparison, people with income of over Rs. 10,000/- spend only 4.27 per cent.

10 per cent price increase of tobacco lowers consumption rate by 3.6 per cent among the middle-class users and 7.5 per cent in the lower income groups.

Tobacco use claims nearly 5 million lives a year and the number is expected to double over the next 25 years.

In Delhi, during the period April 2003 to March 2004, 1,655 and 52 smokers were fined by the Health Department and the Delhi Police respectively. 15,445 and 70,365 raids were carried out in public places and public vehicles respectively. From 1 June 2004, fine for smoking in public places has been up from Rs. 100/- to Rs. 200/-.



The Hindustan Times
New Delhi, 1 June 2004

Retirements

The Institute gratefully acknowledges the services rendered by the following faculty and staff members:

Mr. B.B.L. Sharma, Reader
Dr. V.K. Singh, Research Officer
Mr. Om Prakash, Assistant
Mrs. Sudesh Khanna, Senior Public Health Nurse
Mr. M.P. Tiwari, IBM Typist (Hindi)

Obituary

With profound grief and sorrow, the Director, faculty and staff members of the Institute condole the untimely demise of Mrs. Ramwati, Peon.

Irregular Periods

Irregularity in the Menstrual Cycle

Menstrual cycles vary in length from one woman to another. They may occur at the same time each month or be irregular. Typically, a cycle occurs about once a month, but can be as short as 21 days or as long as 35 days and still be considered normal. Menstrual flow lasts about 3 to 7 days. A menstrual period is considered late if it is 5 or more days overdue according to the usual pattern of periods. A period is considered missed if there is no menstrual flow for 6 or more weeks.

What is the cause?

A late or missed period could be because of any of the following:

1. Pregnancy
2. Stress
3. Normal development
4. Hormone imbalance

When will periods return to normal?

It is important to identify pregnancy early so that you can discuss the options available to you and start prenatal care. Early prenatal care helps ensure a healthy baby. If the irregularity is due to stress then your periods should return when the activities or situations that are stressing you are eliminated or changed. As part of normal development, most girls' menstrual cycles become fairly regular as their hormone levels become mature and synchronized. A few women will continue to have irregular cycles as their normal pattern. Most often the doctor can treat a hormone imbalance, once the cause is discovered.

DoctorNDTV.com

Announcement

Revision of National Health Programme Series

NIHFW has a large number of publications in different areas of health and family welfare. The following publications on National Health Programme Series have recently been revised and are available for sale:

National Non-communicable Diseases Control Programme	Rs. 15.00
National Iodine-deficiency Disorders Control Programme	Rs. 25.00
National Leprosy Eradication Programme	Rs. 15.00
National Tuberculosis Control Programme	Rs. 20.00
National Programme for Control of Blindness	Rs. 25.00

(Postal Charges will be extra)

MEMORABLE DATES IN THE NEXT QUARTER

July		
1	July	Doctor's Day
10	July	Safe Motherhood Day
11	July	World Population Day
August		
1	August	World Breast-Feeding Day
1-7	August	World Breast-Feeding Week
5	August	Filaria Control Day
September		
1-7	September	National Nutrition Week
8	September	International Literacy Day
27	September	World Tourism Day

Editorial Board

Editor-in-Chief

Dr. N.K. Sethi

Editor

Dr. T. Mathiyazhagan

Assistant Editor

Mr. Bishnu Charan Bhatra

Members

Dr. (Mrs.) M. Bhattacharya

Mr. B.B.L. Sharma

Dr. (Mrs.) S. Menon

Dr. (Mrs.) Gita Bamezai

Mr. Salek Chand

Layout and Execution

Mr. Ravi Tiwari

Mrs. Shashi Dhiman

Mr. Ambika Prasad

Printed and Published by the National Institute of Health and Family Welfare

Munirka, New Delhi-110 067

June 2004/600

E.mail: editor@nihfw.org Web Site: www.nihfw.org