What is H.R.T.?
H.R.T. is hormone replacement therapy, which is designed to counteract the effects of reduced estrogen levels. It mainly consists of natural, low dose estrogen and can be taken as a daily tablet, a weekly or twice weekly patch or daily gel. Most people start with tablet form of HRT but non-tablet form can be used:

a) If the woman prefers another option.

b) If there are specific medical problems for which non-tablet form is advisable.

c) If estrogen deficiency (menopausal) symptoms are not controlled with tablet therapy.

Hormones involved
1) Estrogen – should be given continuously

2) Progestogen – given in addition to estrogen to women who have not had a hysterectomy.

For women in whom the uterus (or womb) is present, a progestogen is added to reduce the risk of estrogen causing thickening of the endometrium (lining of the womb). Progestogen can be taken in tablet form, by patch, vaginal gel, or by using the progestogen-releasing intrauterine system – (Mirena coil). The duration and frequency of the progestogen determines the presence and pattern of bleeding. A progestogen is usually unnecessary in women who have had a hysterectomy, when estrogen alone is used. However, in some circumstances e.g. when a hysterectomy is done for severe endometriosis, progestogen may also be used.

Risks and Benefits of H.R.T.
Benefits of HRT
The two current licensed indications for prescribing HRT are:

1) Relief of menopausal symptoms

2) Prevention / treatment of osteoporosis

Symptom relief
Systemic HRT can be very effective in relieving menopausal symptoms and currently is the most effective treatment available, reducing symptoms by 70-80%. If HRT is taken for symptom relief after the age of 50, then it would be worthwhile considering stopping it every 2-3 years to determine whether or not treatment is still required. If symptoms return, HRT can be restarted after discussion of the risks and benefits which should be weighed up on an individual basis. If HRT is commenced following an early menopause, (before the age of 45), then it should be continued at least until the age of 50 (which is average age of menopause) for both control of any symptoms and bone protection. It is important to remember that there are no arbitrary limits on the use of HRT and this should be an informed, individual choice.
Osteoporosis
Systemic HRT has also been shown to be beneficial in the prevention and treatment for women who have or are at risk of osteoporosis. Many studies have shown HRT to improve and prevent loss of bone density and reduce the risk of fracture.

It is particularly important for women with an early menopause who have an increased risk of osteoporosis, and for older ladies with osteoporosis who still have menopausal symptoms.

Risks of HRT
Risks associated with HRT include an increased risk of breast cancer, blood clot, and possibly cardiovascular disease. For many women the benefits outweigh the risks, but for some women, alternative treatments for either symptom control or bone protection may be recommended.

Breast cancer
Many women worry about the risk of breast cancer. The view is that HRT may promote the growth of breast cancer cells in some women which are already present, rather than cause cancer to develop. HRT does not affect risk of dying from breast cancer.

HRT with estrogen alone is associated with little or no risk increased risk of breast cancer. HRT with estrogen and progestogen can be associated with a small increased risk of breast cancer which is related to duration of treatment and risk reduces after stopping HRT. It is unclear whether or not different types of progestogen are associated with different risks. Progestogen is still recommended for women who have a uterus (womb) to reduce the risk of endometrial cancer.

It should be noted that being overweight, smoking and alcohol are associated with a greater risk of breast cancer than HRT.

Clotting problems
Tablet form of HRT has been shown to cause a small increase in the risk of blood clots (e.g. deep vein thrombosis) of an additional 1.5 per 1000 women per year from a baseline risk of 1 per 1000 women per year. There does not seem to be the same risk with non tablet (patch or gel) HRT.

Women at high risk of venous thrombo-embolism (blood clot) including those with a body mass index (BMI) of 30 or over should be offered trans-dermal (patch or gel) HRT.

Cardio–vascular disease
There appears to be no increased risk when HRT is started in women under age 60 but here does seem to be a small increased risk of stroke with tablet form but not transdermal (patch or gel) HRT. The baseline risk in women under age 60 is however very small. Studies have shown that starting HRT before age 60, or within 10 years of the menopause may reduce the risk of heart disease, but evidence so far is not strong enough to confirm this. Risk should again be assessed on an individual basis.

Endometrial cancer
Giving estrogen only HRT to women who still have a uterus can increase the risk of endometrial hyperplasia (thickening of the lining of the womb), and endometrial cancer. Daily estrogen combined with progestogen given for 10-14 days per month (sequential HRT) reduces this risk and estrogen combined with daily progestogen (continuous combined or period free HRT) eliminates this risk.
Balancing the risks and benefits
While for many women HRT used appropriately provides more benefits than risks, it is important to understand risks and benefits, which will vary from woman to woman and are strongly influenced by factors such as diet, lifestyle, past medical history and family history.

Generally though, for women who become menopausal early (before age 45) or prematurely (before age 40), the benefits of taking HRT up to at least age 50 far outweigh the risks. For women under 60 and having menopausal symptoms, the benefits also outweigh the risks.

Since the duration of menopausal symptoms are difficult to predict, there should be no arbitrary limits on duration of use of HRT with the previously held view of stopping HRT after 2-5 years or at age 60 being unfounded.

Side effects

Bleeding
For women who are still having some periods when HRT is started, HRT is given in a way in which monthly bleeds will continue. In some cases, if the periods have been infrequent, the bleeding can be reduced to once every 3 months. Heavy or irregular bleeding in the first few months of treatment is quite common and usually settles. If not, the HRT can often be changed to help the problem.

For women who have not had a period for more than 1 year, or who are aged 54 or over, HRT can be given in a way that monthly bleeds do not resume. Irregular bleeding may occur in the first few months of treatment but should have stopped by 6 months. This type of HRT is known as "period-free" and in the appropriate situation, can offer the benefits of HRT without the nuisance of the monthly bleed, and is thought to be safer in its effect on the lining of the womb in the longer term.

Fluid Retention
This is very closely related to weight gain, but can be aggravated by HRT. Fluid retention can cause bloating, ankle swelling, facial swelling, headaches, leg discomfort and breast tenderness. If possible, losing weight can help, but sometimes the dose or type of HRT may need to be changed if the problem persists beyond the first few months of treatment. Because low doses of HRT are generally used the risk of bloating is minimised.

Weight Gain
This is often greatly feared by patients. In fact, changes in metabolism and body shape, and weight gain are common around the menopause and HRT has not been shown to significantly add to this.

Pre-menstrual Syndrome
PMS type symptoms can occur with HRT when the progestogen is taken for part of each month (the preparations which cause a monthly bleed). These symptoms can often be helped by changing the preparation to one using a different progestogen, or by giving the progestogen by a different route. PMS can sometimes worsen in the few years before the menopause due to the changing hormone levels. Some types of HRT can help this.
**Vaginal Estrogens**

Vaginal estrogen can be used alone or in conjunction with systemic HRT for the relief of bladder and vaginal (urogenital) symptoms.

It is well recognised that the lack of estrogen can cause significant vaginal and bladder symptoms. Vaginal symptoms include vaginal dryness, which can cause discomfort during intercourse, irritation, itch and discharge, and bladder symptoms include passing urine more frequently, leakage of urine and infections. Although well recognised these symptoms are hugely under recognised and under treated.

Vaginal estrogen preparations can be very helpful in relieving these symptoms and are available as vaginal tablets, creams or a ring pessary. The ring pessary is changed every 3 months and vaginal tablets, creams and pessaries are normally prescribed nightly for two weeks then twice weekly thereafter as a maintenance dose. These low dose preparations can be used in the long term with the choice and duration of treatment being tailored to individual women.

**Conclusion**

HRT is neither necessary nor appropriate for every woman, but for many women, HRT can provide significant benefits both for relief of distressing symptoms, improving quality of life and/or prevention / treatment of osteoporosis. The majority of women who take HRT do not have troublesome side effects but for those who do, adjustments can be made and many different treatment options are available.

No arbitrary limits should be placed on the duration of usage of HRT. The type and duration of treatment should be individualized, taking into consideration symptoms, past history and family history, and balancing risks against benefits.

**Useful Contact numbers / Addresses:**

Dumfries based Helpline - 01387 241121, run by Sr Katrina Martin, Menopause/ Osteoporosis Nurse Specialist Thursday mornings 9am to 12 noon (Gives advice / information about menopause, HRT, alternatives, and osteoporosis). Website - [www.menopausematters.co.uk](http://www.menopausematters.co.uk) / [www.bladdermatters.co.uk](http://www.bladdermatters.co.uk)

British Menopause Society - [www.thebms.org.uk](http://www.thebms.org.uk)

Women’s Health Concern - [www.womens-health-concern.org](http://www.womens-health-concern.org)

National Association for Premenstrual Syndrome (NAPS)
Telephone – 0844 8157311  Email; contact@pms.org.uk  Website - [www.pms.org.uk](http://www.pms.org.uk)

Royal Osteoporosis Society, Manor Farm, Skinner’s Hill, Camerton, Bath BA2 0PJ
Telephone – 0176 147 1771 (Office) 0808 800 0035 (Helpline)  Website - [www.theros.org.uk](http://www.theros.org.uk)

Daisy Network, PO Box 71432, London, SW6 9HJ
[www.daisynetwork.org.uk](http://www.daisynetwork.org.uk)
(Daisy Network is a registered charity for women suffering premature menopause)