What is perimenopause?
- A natural part of aging that lasts an average of five years
- The transition period leading up to menopause that can be challenging and disorienting for many women
- Most women experience the physical and emotional changes of perimenopause in their late 40s or early 50s when:
  - Their monthly cycle begins to change
  - Estrogen and progesterone production becomes unpredictable
  - The number of stored eggs in the ovaries decreases
- Each woman experiences menopausal transition differently – some women may have many difficulties and others may be symptom-free

Menopausal Symptoms

### Menstrual cycle
- Irregular periods or variable length
- Changes in bleeding patterns (heavier or lighter flow)

### Urogenital symptoms
- Vaginal dryness
- Vulvovaginal atrophy
- Sexual dysfunction and change in sexual desire
- Bladder control
- Recurrent urinary tract infections

### Sleep
- Disruptions of normal sleep patterns
- Insomnia

### Menopausal symptoms may vary over time

Prevalence of menopausal symptoms among women as they advance from pre-menopause to post-menopause in population studies.

<table>
<thead>
<tr>
<th>Symptoms</th>
<th>Pre-menopause</th>
<th>Perimenopause</th>
<th>Post-menopause</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lack of energy</td>
<td>43%</td>
<td>43%</td>
<td>43%</td>
</tr>
<tr>
<td>Depression</td>
<td>26%</td>
<td>38%</td>
<td>32%</td>
</tr>
<tr>
<td>Aches / joint pain</td>
<td>41%</td>
<td>53%</td>
<td>57%</td>
</tr>
<tr>
<td>Insomnia</td>
<td>31%</td>
<td>38-39%</td>
<td>43%</td>
</tr>
<tr>
<td>Memory change</td>
<td>31%</td>
<td>44%</td>
<td>42%</td>
</tr>
<tr>
<td>Vasomotor</td>
<td>10%</td>
<td>42-58%</td>
<td>41-48%</td>
</tr>
<tr>
<td>Vaginal dryness</td>
<td>3%</td>
<td>21%</td>
<td>32%</td>
</tr>
<tr>
<td>Bladder control issues</td>
<td>12%</td>
<td>14%</td>
<td>26%</td>
</tr>
<tr>
<td>Sexual dysfunction</td>
<td>12%</td>
<td>42%</td>
<td>88%</td>
</tr>
<tr>
<td>Dry mouth</td>
<td>18%</td>
<td>23%</td>
<td>29%</td>
</tr>
</tbody>
</table>

Adapted from: Dennerstein et al., 2000; Woods et al., 2005; Asplund et al., 2005.
Menopause Management Algorithm

General Health Assessment
Pap test, bimanual breast exam, mammogram, 10-year fracture risk, CV risk profile (blood pressure, lipids, fasting glucose), thyroid function, bowel cancer screening, safe sex, influenza shot

Symptomatic
Intolerable menopausal symptoms interfering with quality of life

Evaluate Diet & Lifestyle Elements
- Stress management
- Sleep hygiene
- Diet (Eating Well With Canada's Food Guide)
- Smoking cessation
- Regular exercise (30 min 3x/week)
- Alcohol and caffeine consumption

Hot Flashes
- Lifestyle: dressing in layers, cool showers, ceiling fan, paced breathing, weight management, smoking cessation
- Hormonal therapies*: estrogens, progestins
- Non-hormonal prescription therapies: gapapentin, clonidine, Bellergal, SSRI / SNRI

Vaginal Symptoms
- Lifestyle: Kegel exercises, continued regular intercourse
- Lubricants / moisturizers
- Local hormone therapy: vaginal estrogen (if urogenital symptoms are the only complaint)
- Systemic HT if other symptoms present (such a hot flashes)

*The most commonly prescribed hormone is estrogen (ET) either alone or combined with a progestin (EPT) for women with a uterus.

Complementary and alternative medicine: Long-term safety and efficacy data are lacking for complementary and alternative medicine including herbal remedies, vitamin E and acupuncture as well as bioidentical hormone therapy / progesterone cream.

Contraindications to estrogen and progestin use

<table>
<thead>
<tr>
<th>Use estrogen with caution</th>
<th>Use progestin with caution</th>
</tr>
</thead>
<tbody>
<tr>
<td>Unexplained vaginal bleeding prior to investigation</td>
<td>History of cardiovascular disease and hypertriglyceridemia</td>
</tr>
<tr>
<td>Known or suspected breast carcinoma</td>
<td>History of thromboembolic disorders</td>
</tr>
<tr>
<td>Undiagnosed vaginal bleeding</td>
<td>Risk of recurrence of breast cancer is unknown</td>
</tr>
<tr>
<td>Acute liver disease</td>
<td>Pregnancy</td>
</tr>
<tr>
<td>Active thromboembolic disease (estrogen only)</td>
<td></td>
</tr>
</tbody>
</table>

These are general recommendations that must be modified according to individual clinical situations and desires of the woman after she has been fully assessed and informed of all the available treatment options.

References: