



Menopause and HIV: 101

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Thanks!

MAC AIDS Grant

Katy Leopard

Jennifer Marshall

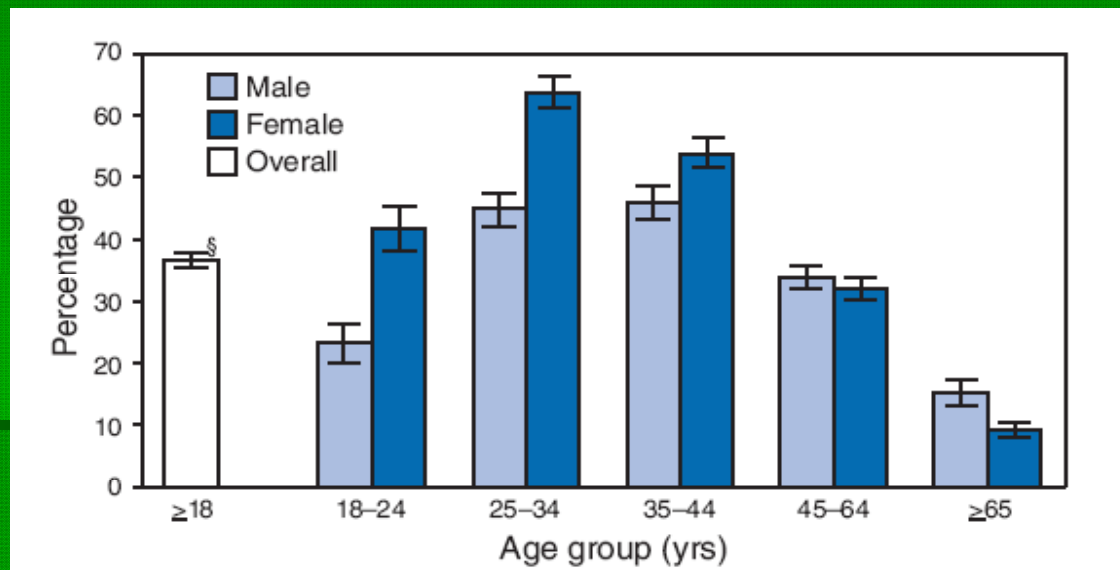
Ana Miranda

MCRH

Objectives

- Define characteristics of perimenopause, menopause and post-menopause and differentiate other causes of amenorrhea or ovarian failure
- Identify common patient reported symptoms associated with peri-menopause and management options and the ways that HIV and/or HIV management may increase these symptoms or affect management options
- Identify health risks associated with menopause and the ways that HIV and/or HIV management may increase these health risks
- Identify recommendations for HIV patients experiencing menopause

HIV Statistics (2007)



Menopause Statistics

- 40 million women in the next decade
- Women's life expectancy: 81.7
- Tripling of women over age 50 in last 100 years



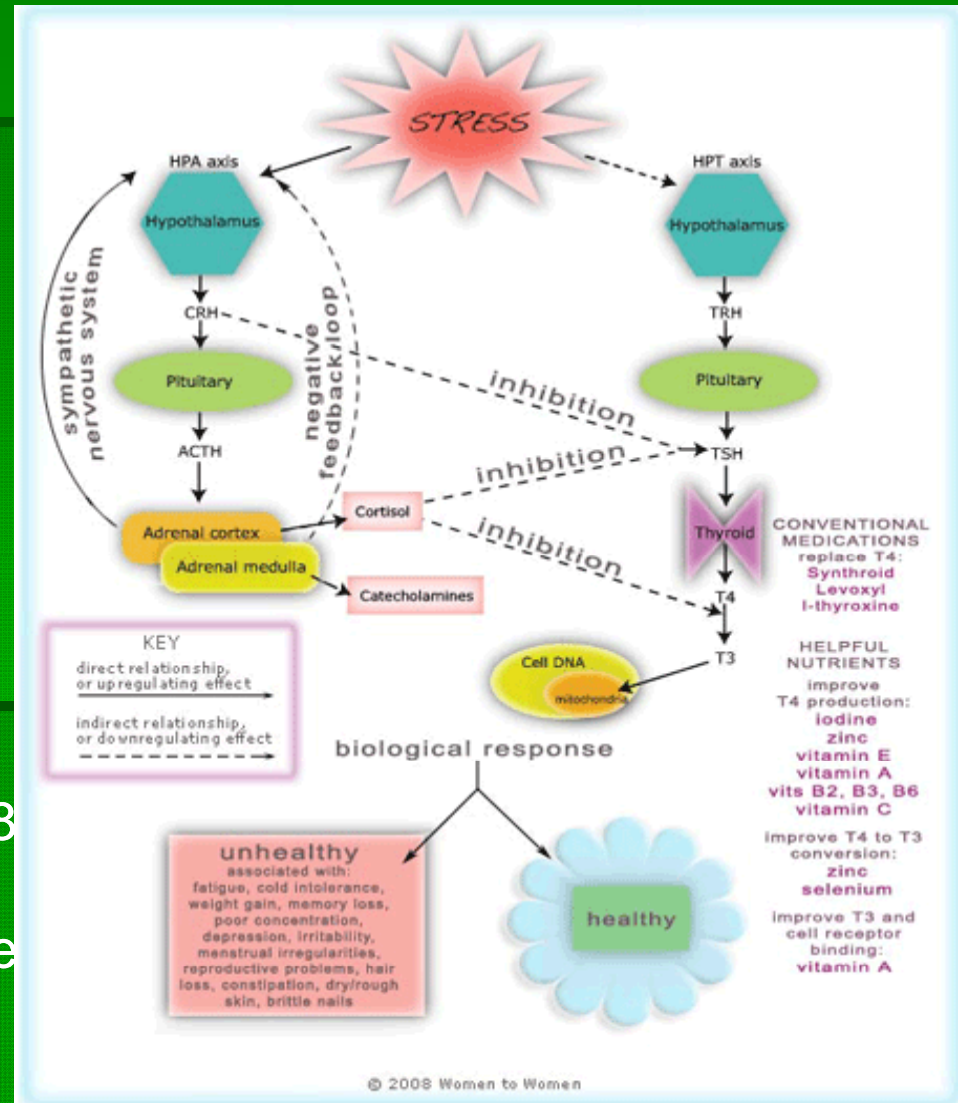
Menopause

- Retrospective: 12 consecutive months of amenorrhea, not caused by surgery
 - WHO
- correlated FSH levels >25 or 35 MIU/ML
- No longer fertile
- No longer able to release eggs



Ovarian Failure

- Follicle depletion (Permanent)
 - Chromosomal abnormality: Turner's syndrome, fragile X
 - Toxins: Chemotherapy, medications, cigarette smoke, chemicals, pesticides
- Follicle Dysfunction (Reversible)
 - Extremely low BMI (>18)
 - Thyroid disorders
 - Immune system disorders

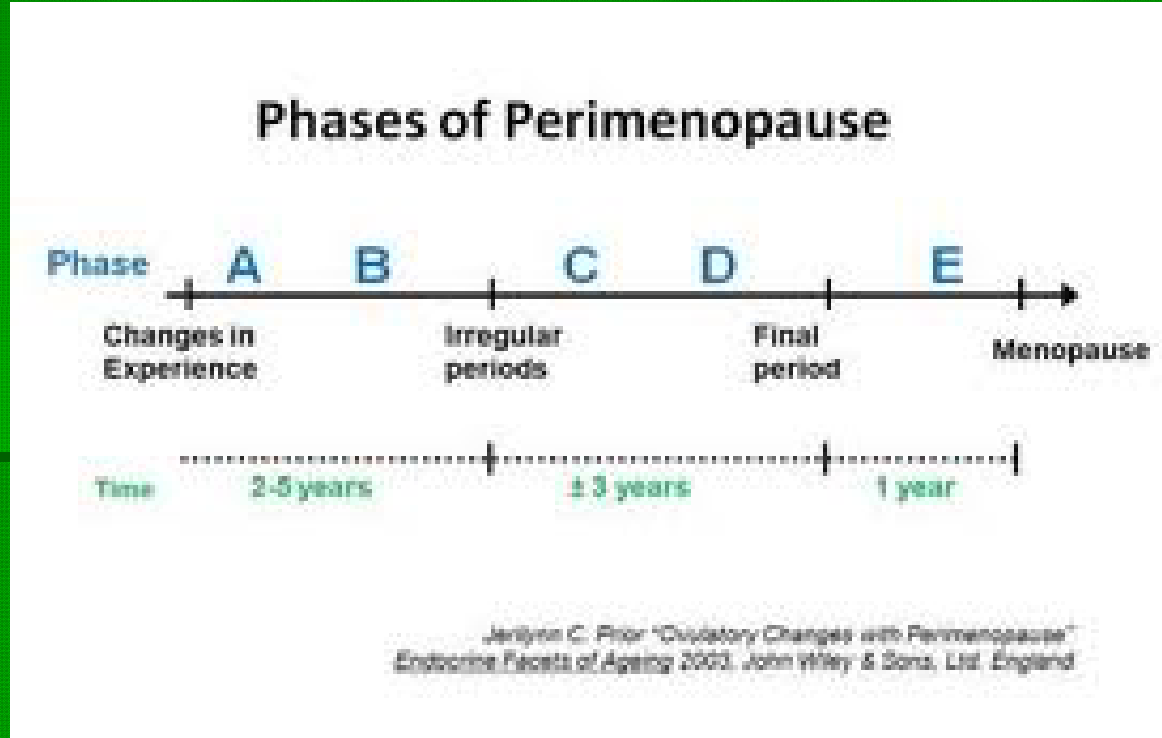


Perimenopause

- The Stages of Reproductive Aging Workshop (STRAW): variation in menstrual cycle length in a woman with elevated FSH
- 3 or more consecutive months of amenorrhea in a year, but less than 11
- Fluctuation in “reproductive hormones”



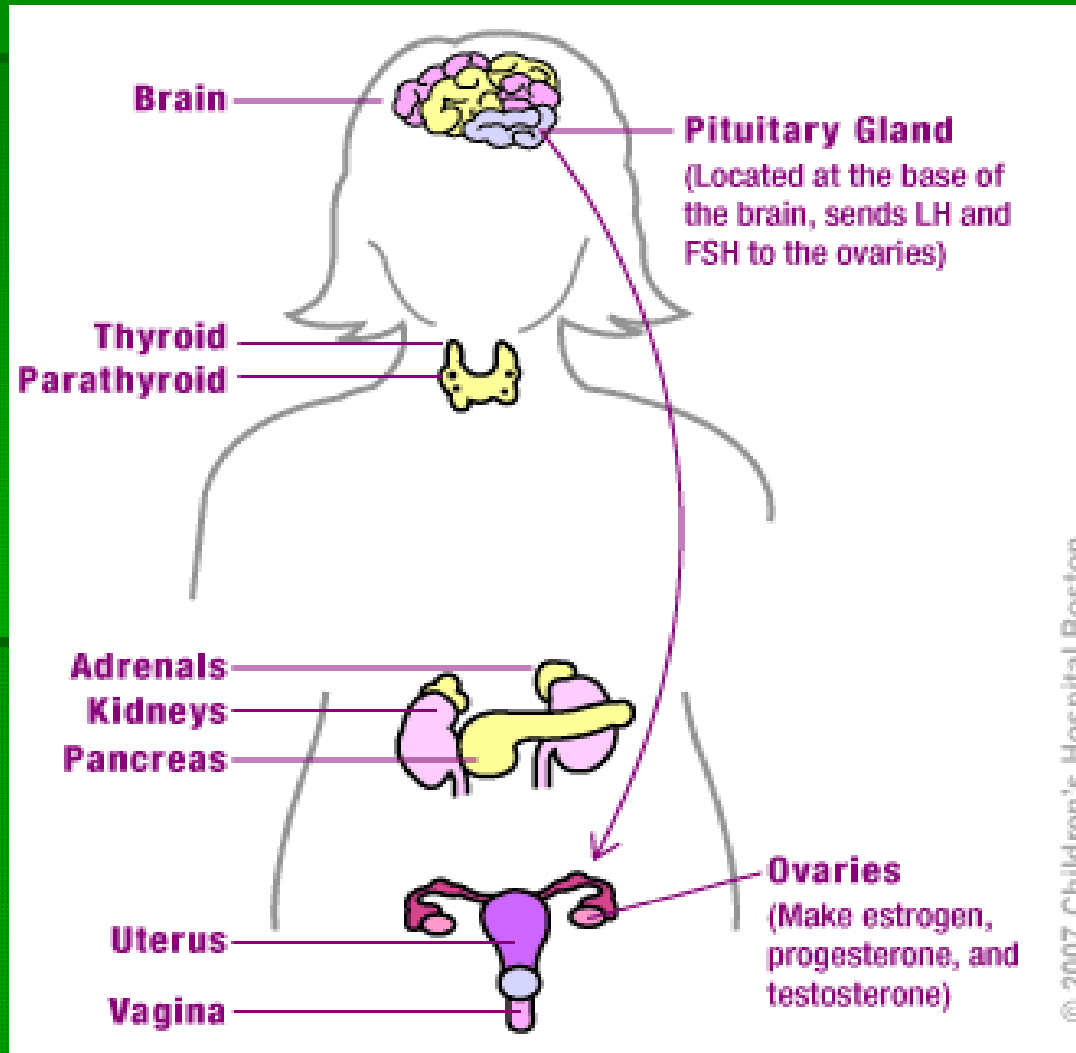
Phases of Perimenopause



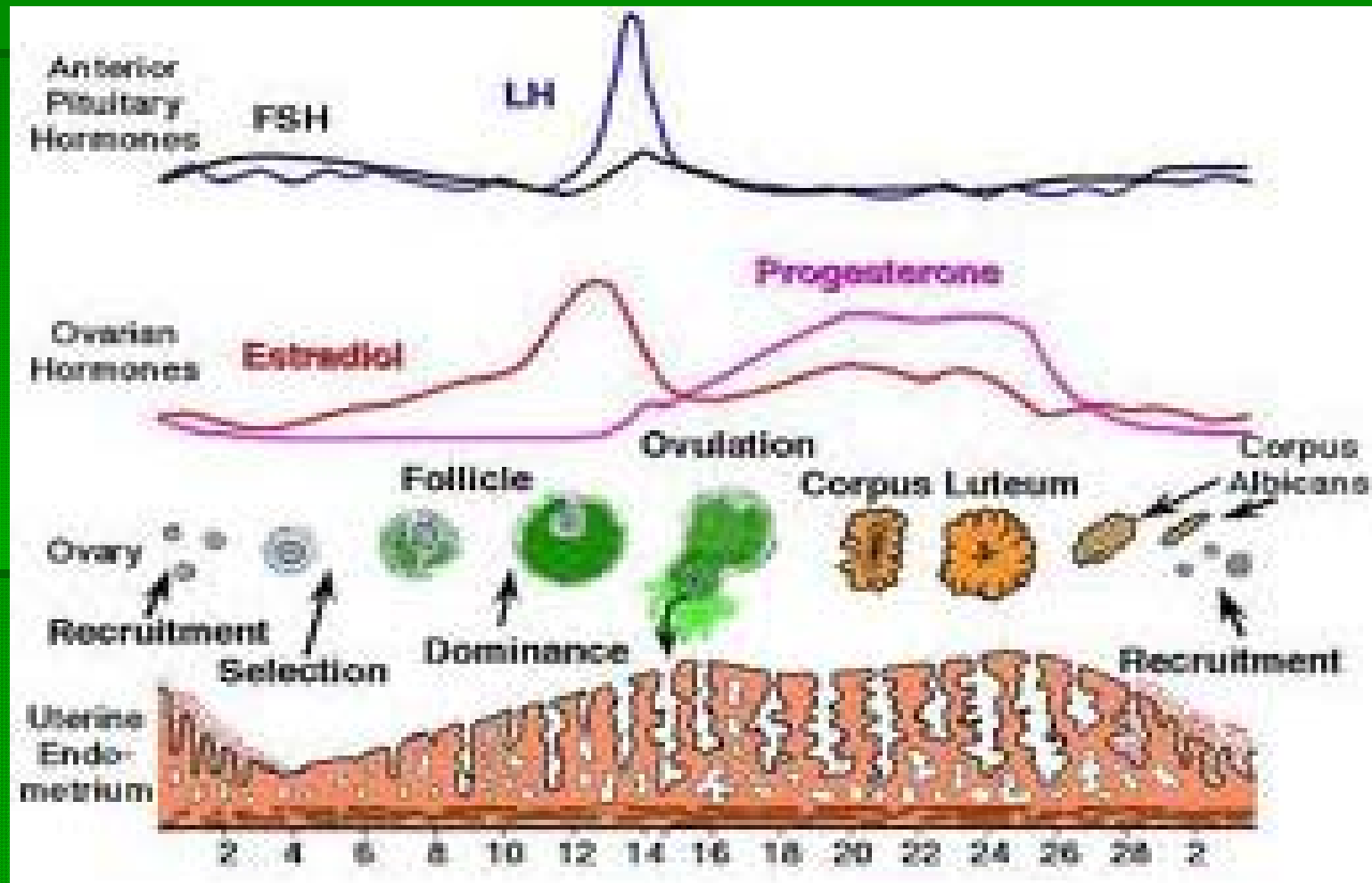


Questions

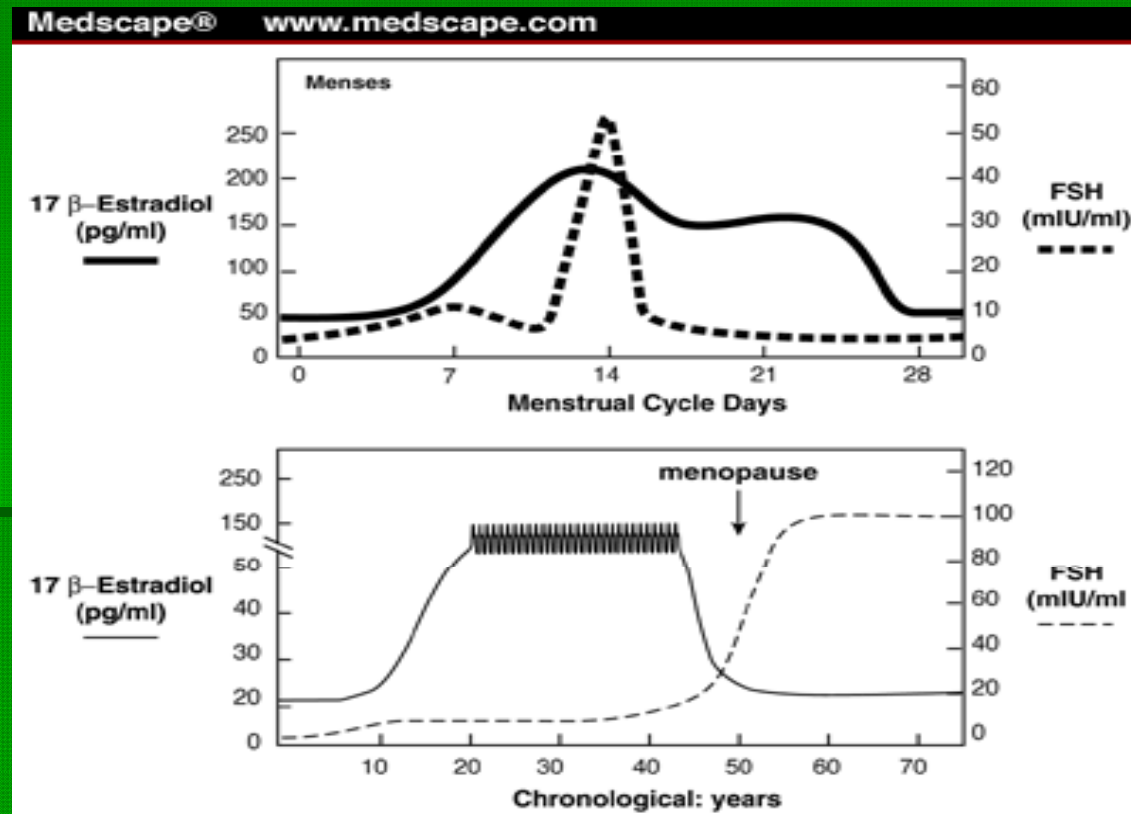
Hypothalamus-Pituitary-Brain Axis



Menstrual Cycle

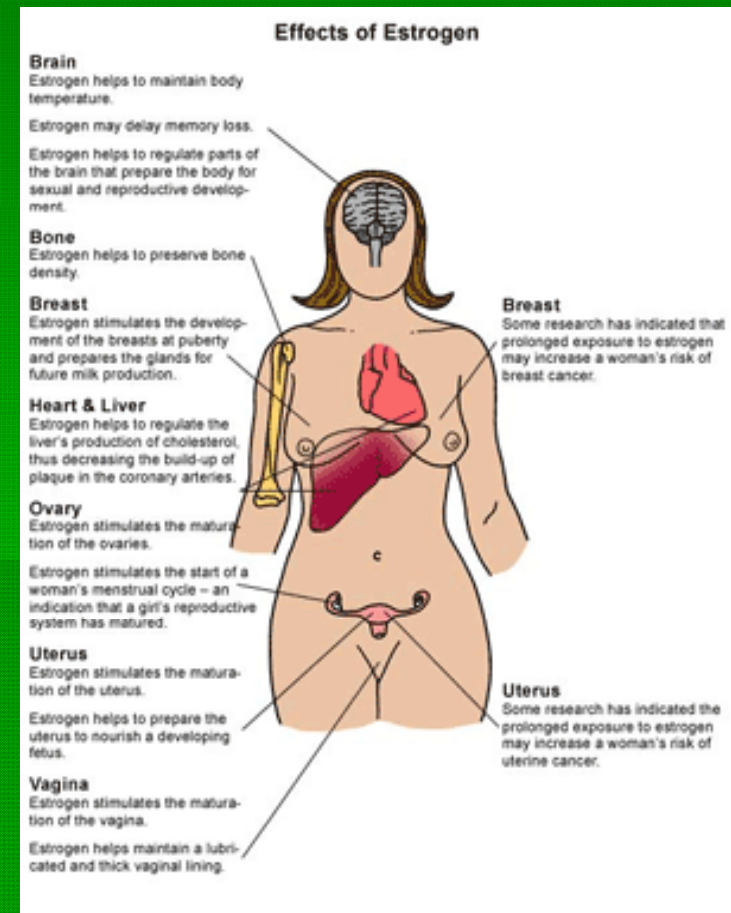


Reproductive Hormones after Menopause



Hypothalamus-Pituitary-Brain Axis

- **Brain:**
 - Body Temperature
 - Memory loss
 - Reproductive hormones
- **Bone**
 - Mineral density
- **Breast**
 - Puberty
 - Lactation
 - Cancer
- **Heart and Liver**
 - Cholesterol
 - Build up of Plaque
- **Ovary**
 - Maturation of follicles
- **Uterus**
 - Maturation
 - Endometrial thickening
 - Cancer
- **Vagina**
 - Maturation
 - Lubrication



Who Cares?





Fifty-One Year Old

I thought I was going crazy; one month I would have lots of hot flashes and no period at all, and then I'd start having periods again and my signs of menopause would go away for several months

Common Symptoms of Perimenopause

flashes/Night Sweats:

Vasomotor

Urinary incontinence

Sleeping disorders

Sexual dysfunction

Depression

Anxiety

Labile mood

Memory loss

Fatigue

Headache

Joint pains

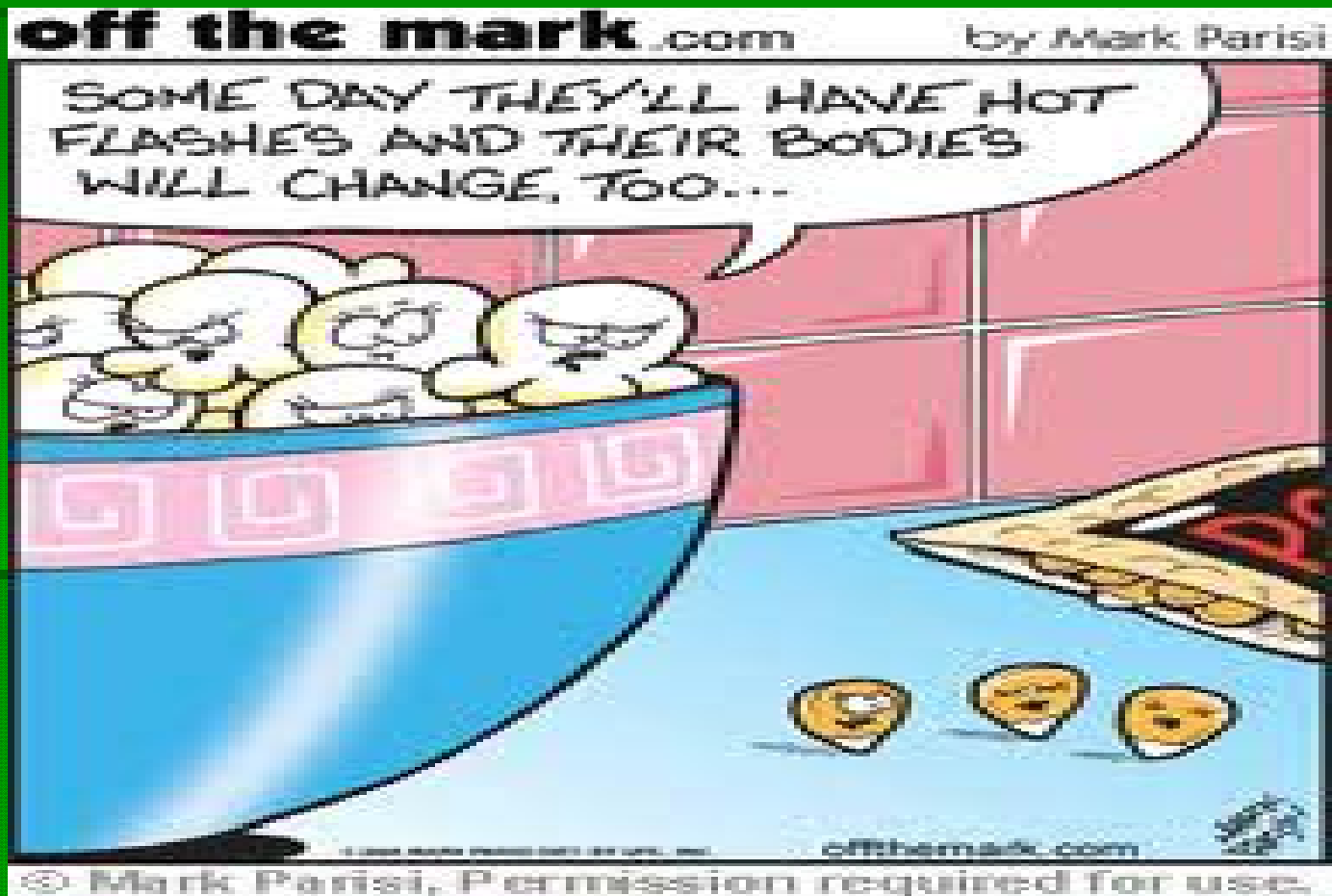
Weight gain



Postmenopausal Health Effects

- Cardiovascular disease
- Diabetes
- Osteoporosis
- Fertility

Menopause + HIV



Research Topics: HIV and Menopause

- Age at menopause
- Menopausal Symptoms
- Reproductive Hormones
- Cognitive Function
- Bone mineral density
- Lipid metabolism
- Glucose metabolism

Women who are on HIV medication are shown to have an onset of early menopause than women who are uninfected.



Age of Menopause: 46-50

Average age 2-3 years younger than historical studies on White, middle class

Early Age of Menopause

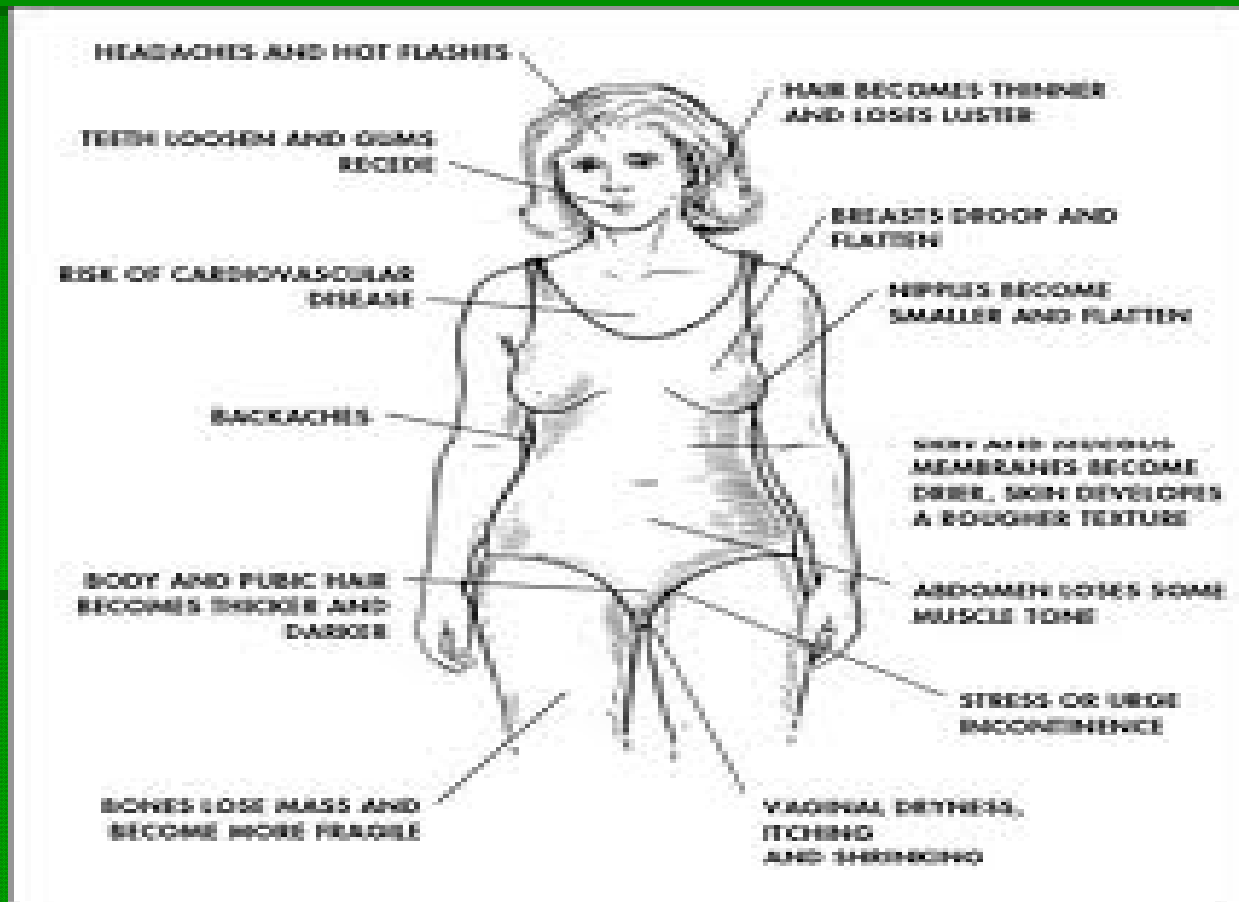
Early Menopause

- Cigarette smoking
- Low socioeconomic markers
- Low level of education
- Unemployment
- African American
- Psychological stress
- Heroin/cocaine use
- Physical inactivity

HIV +

- 70% of HIV positive women smoke cigarettes
- HIV affects lower socioeconomic people disproportionately
- Unemployment disproportionately affects HIV +
- In 2006, the rate of new HIV infection for black women was nearly 15 times as high as that of white women and nearly 4 times that of Hispanic/Latina women.
- Reports of high prevalence of drug use among HIV +

Menopause Symptoms



HIV or Menopause

Menopause

- Hot Flashes
- Night sweats
- Mood liability
- Vaginal dryness
- Sleep disturbances
- Memory loss
- depression

Signs of HIV +

- lack of energy or fatigue
- weight loss
- frequent low-grade fevers and night sweats
- frequent yeast infections (in the mouth)
- skin rashes or flaky skin that is hard to heal
- short-term memory loss

Menopausal Symptom Report in HIV +

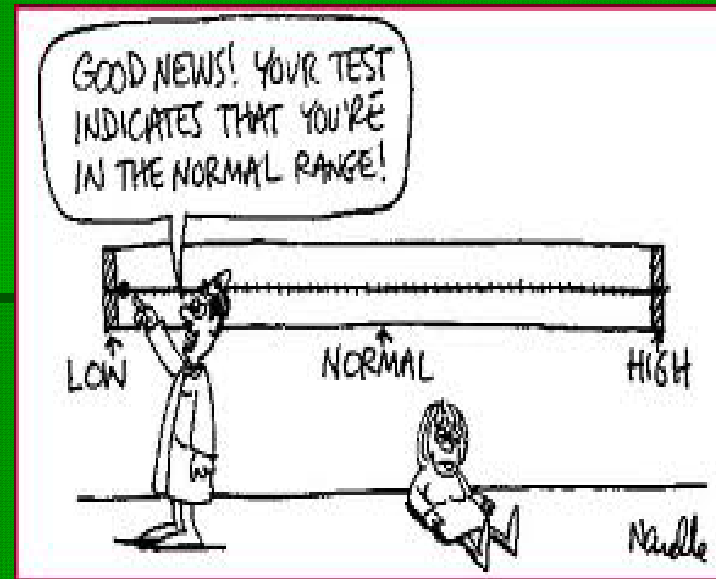
- Attitudes toward menopause
- Increased report of hot flashes
- Increased report of vaginal dryness
- Earlier report of symptoms

Most Menopause Symptoms

- Economic hardship
- Unemployment
- Low socioeconomic status
- More than 3 negative life events

Reproductive Hormones

- Race/ethnicity
- Age
- Substance abuse
- BMI
- Not HIV+
- Fertility
- Diagnosis: Ovarian failure or menopause



Cognitive Function and HIV +

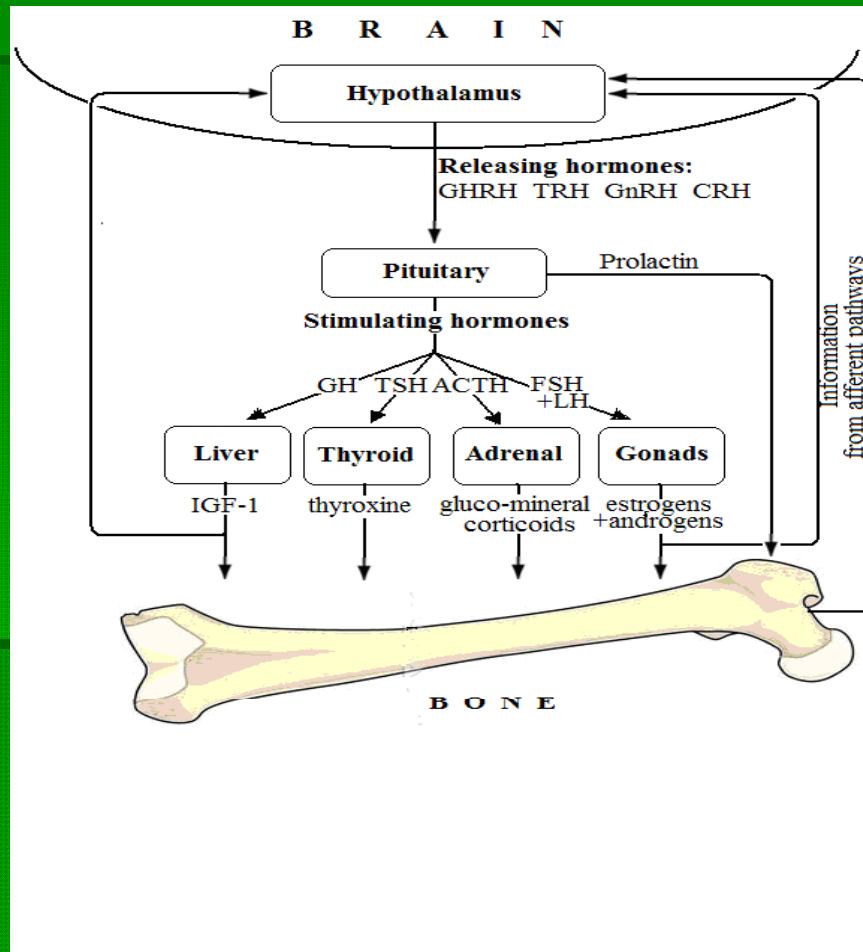
- Depression
- Anxiety
- Low education
- Baseline mental or personality abnormalities
- HIV associated Dementia: low CD4, anaemia, low BMI, age, injection drug use, female
- Access to HAART

Cognitive Function

- Consensus: Menopause is not consistently associated with memory loss, Hormone replacement therapy (HRT) does not improve

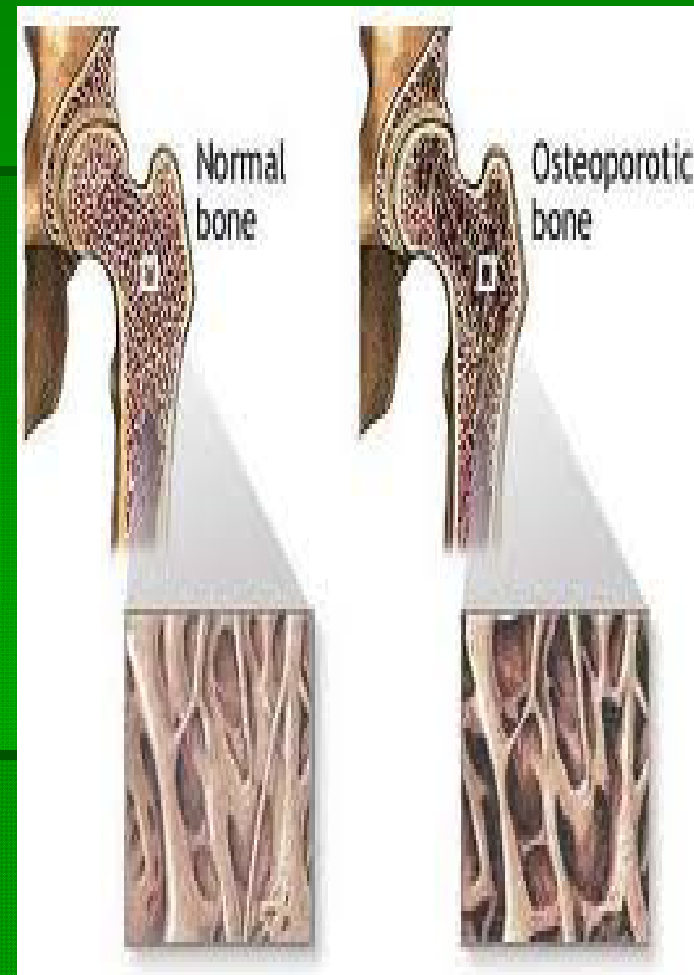


Bone Mineral Density

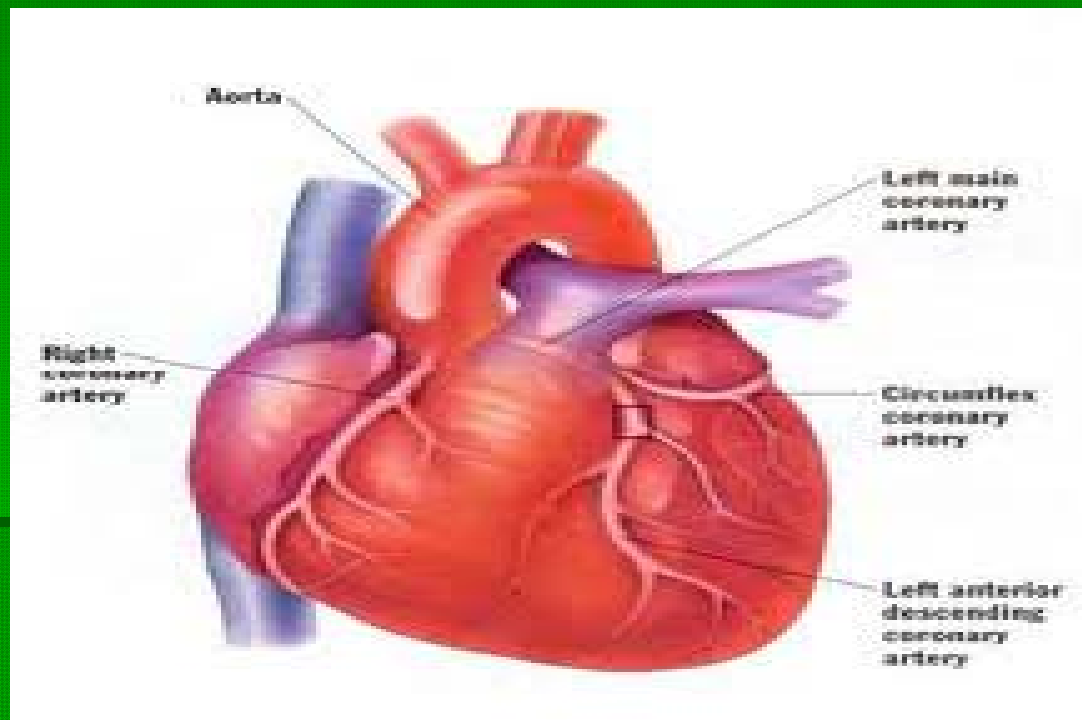


BMD and HIV +

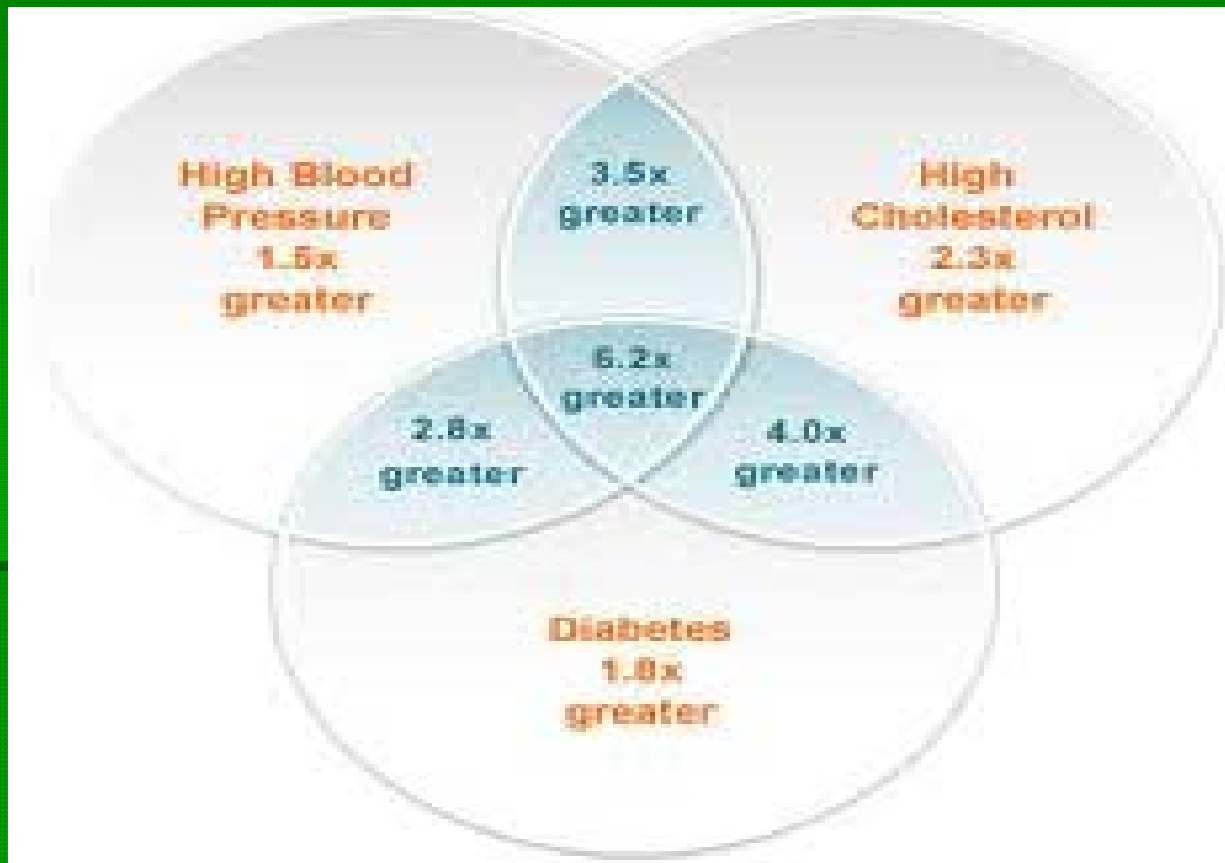
- Increased prevalence of low bone mineral density
- Increased osteopenia
- Increased incidence of Osteoporosis
- Fractures?



Lipid Metabolism/Glucose Metabolism

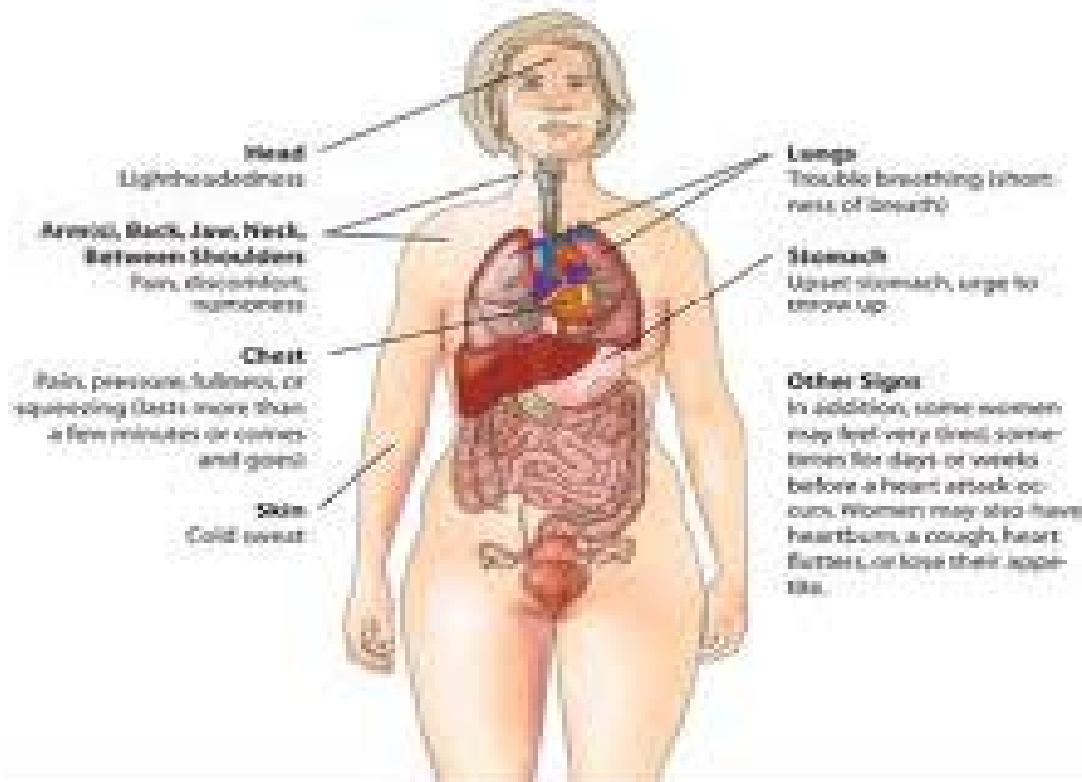


Lipid/Glucose Abnormalities



Lipid Metabolism/Glucose Metabolism

Signs of a Heart Attack



PostMenopausal Health Risks

Postmenopause	Postmenopause + HIV + HAART
<ul style="list-style-type: none">▪ Cardiovascular disease▪ Diabetes▪ osteoporosis	<ul style="list-style-type: none">▪ Dyslipidemia▪ Insulin resistance▪ osteopenia

HIV+ and Menopause



Advice: HIV + and Menopause

- Stay active
- Maintain healthy weight
- Hormone replacement therapy for short term symptom management
- Eat a balanced diet
- Routine health screenings for cervical cancer, breast cancer, cholesterol, blood pressure
- Calcium and Vit D Supplementation
- Stay engaged
- Long-term, stable partner
- No ETOH

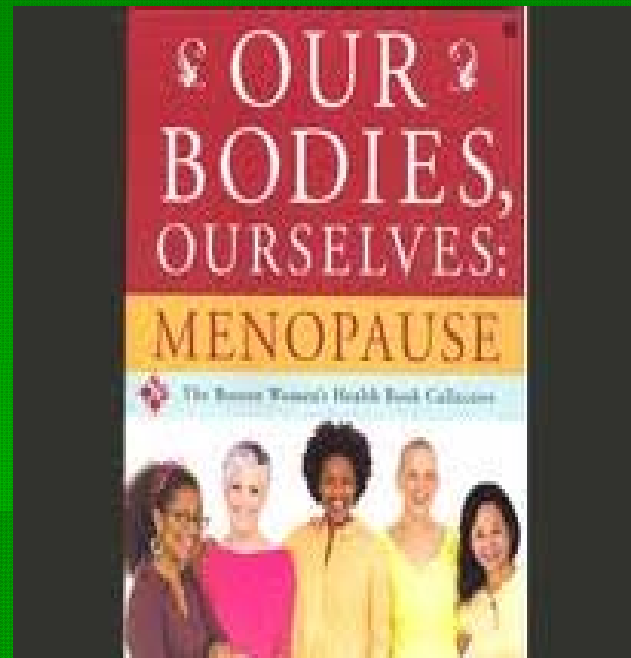


Have a Healthy Mom



Resources

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- Project Inform (2002). HIV and older age. *Wise Words*; 10:1-8. Accessed online at <http://www.thebody.com/content/art5137.html>
- The Boston Women's Health Book Collective, *Our Bodies, Ourselves*.



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