

#### Disclaimer

The information presented in this presentation on menopause is intended for educational purposes only. It is not a substitute for professional medical advice, diagnosis, or treatment. Menopause experiences can vary significantly among individuals, and what works for one person may not be suitable for another.

Before making any decisions related to your health or considering any treatments, it is essential to consult with a qualified healthcare provider. They can provide you with personalized guidance based on your specific medical history, symptoms, and needs.

We recognize that there are different diverse gender identities. In this presentation, the word, woman or pronouns she, and her, are used to describe individuals whose sex assigned at birth was female.

We respect whether they identify as female, male or nonbinary.

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#### **About Me**

- Mom
- Pharmacist
- Advocate
- Educator
- Perimenopausal



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- Which hormones typically decline during the menopause transition?
  - Estrogen
  - Progesterone
  - Testosterone
  - FSH
  - a, b, c

### Question 2

- 2. What are the potential impacts of menopause on women's health?
  - · Improved cardiovascular health
  - · Enhanced fertility
  - · Increased bone density
  - Increased risk of osteoporosis and cardiovascular issues

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### **Question 3**

- 3. Which of the following is a potential impact of menopause on cardiovascular health?
- a. Increased estrogen levels leading to improved heart function
- b. Decreased risk of cardiovascular diseases
- c. Changes in lipid profiles and increased risk of heart disease
- d. Enhanced blood vessel flexibility

#### **Question 4**

3. Which of the following are FDA approved non-hormonal agents indicated for the treatment of Vasomotor Symptoms:

- a. paroxetine mesylate
- b. dehydroepiandrosterone
- c. fezolinetant
- d. estradiol
- e. Both a and c

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### Menopause In the US

- Approximately 2 million people will enter Into menopause each year.
- Normal physiologic phase in life
- estrogen
- Permanent cessation of menstrual cycle
- Typically between the ages of 40-58. Average Is 51.



### Premenopause

- Normal reproductive years
- No symptoms of perimenopause or menopause

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### Perimenopause

- Transitional phase
- Hormone levels fluctuate
- Can start as early as your mid 30s
- 4-10 years before menopause
- Can be the most symptomatic phase

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- Natural biological process
- 12 consecutive months without a cycle
- Late 40s to early 50s is average

### Postmenopause

- stage following menopause
- increased risk of certain health issues
  - o obesity
  - o osteoporosis
  - o cardiovascular disease

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### **Common Misconceptions**

- Menopause happens suddenly.
- Menopause is the same for every woman.
- Menopause only affects women's reproductive health.

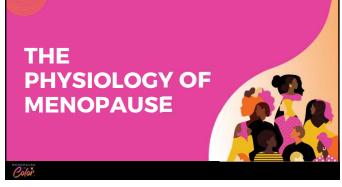


To Test or Not to Test

- Blood test are available but not required
- Symptoms, medical history
- Diagnosed retrospectively
- FSH decrease, estradiol increase
- An underactive thyroid can cause menopausal symptoms

htju://www.menopa.ua.org/for-women/menopause/fashes/menopause-nymptoms-and-treatments/focw-doi-know-when/im-in-menopause

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### Estrogen

- Starts to decline in perimenopause
- Levels decline significantly during menopause
- Prepares your body for pregnancy
- More than just reproductive

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### Other Benefits of Estrogen

- Maintain Cholesterol
- · Regulates vaginal health
- Influences calcium use In the body
  - o bone health
  - teeth health

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### Consequences of Estrogen Decline

- Estrogen is a protective hormone
- Decline may trigger:
  - Cardiovascular
  - Obesity
  - Kidney

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- Helps with egg fertilization and supporting pregnancy
- Regulates blood pressure
- Regulates mood and sleep

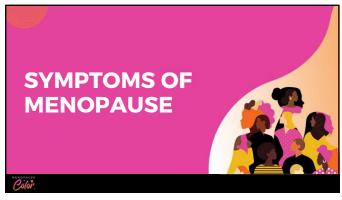
#### **Testosterone**

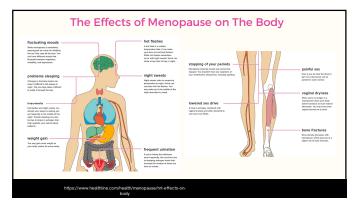
- Androgens are important for hormone health throughout our lives
- gradually decline after age 20, but production continues
- · Can cause:
  - low libido
  - Irritability
  - Fatigue
  - Hair loss

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## Follicle-Stimulating Hormone

- Stimulates ovarian follicules to produces estrogen
- Once estrogen production slows down, FSH will Increase





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### **Common Symptoms**

- Irregular periods
- Heart palpitations
- · Genitourinary Syndrome
- Vasomotor Symptoms (Hot flashes & Night sweats)
- Sleep problems
- Mood changes
- Weight gain and slowed metabolism
- Thinning hair

https://www.healthline.com/health/menopause/hrt-effects-on-bod

### **Lesser Known Symptoms**

- Metallic tasteCold flash
- Memory/problem solving Issues
- Dry Mouth/Dental Issues
- · Body Odor
- Dry hair, skin and nails
- Vertigo

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### What Influences Menopausal **Symptoms**

- · Hormonal Imbalance
- Neurotransmitters
- Lifestyle Factors

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#### **Symptom Severity** and Duration

- Can range from mild to severe
- Some women may experience symptoms for a relatively short period, while others may have them for several years.



## Vasomotor Symptoms

- Vasomotor Symptoms (Hot Flashes) are the most common symptom of menopause
- Occurs in approximately 80% of menopausal women
- Mean duration of 7-9 years
- 1/3 of women will experience It for 10 or more years

https://www.menopause.org/docs/default-source/professional/2023-nonhormone-therapy-position-statement.pd

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### Lifestyle Adjustments

- Nutrition
- Exercise
- Stress Management

#### **Nutrition**

- Increase fruit, vegetables and water
- Foods rich In:
  - Iron
  - Calcium
  - Fiber

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#### **In Moderation**

- · High Fat foods
- Alcohol
- Caffeine
- Sugar
- Salt

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## **Exercise and Menopause**

- Helps with symptoms such as:
  - Weight gain
  - Brain fog
  - Joint pain
- Recommendations:
  - Move everyday (150 mins of cardio/week)
  - Strength training

#### **Stress Management**

- Can increase cortisol levels
  - Digestion
  - Libido
  - Mood
  - Sleep
- Brain fogWays to help
  - Meditation, breathing, exercise

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### Medications and Alternative Therapies

- Hormone therapy
- Alternative Therapies: Herbal supplements, acupuncture, vitamins and minerals, phytoestrogens

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### **Hormone Therapy**

Hormone therapy is a medical treatment that involves the use of hormones to supplement or replace those that the body may no longer produce in sufficient quantities. It is primarily used to alleviate the symptoms of menopause.

	Estrogen only	Progesterone/ progestin	Estrogen and progestin combinations	Estrogen and other hormone combinations
Oral 🔠	Synthetic conjugated estrogens; esterified estrogen	Micronized progesterone; MPA	Estradiol/norethindrone acetate; estradiol/drospirenone; estradiol/norgestimate; estradiol/progesterone; CEE/MPA	Conjugated estrogen/ bazedoxifene
Transdermal	Estradiol valerate (injection)		Estradiol/ levonorgestrel	
Oral or 🖽 Transdermal	Estradiol: estradiol acetate; estropipate		Estradiol/ norethindrone acetate	

# Menopause Society Statement on Hormone Therapy

- For women aged younger than 60 years or who are within 10 years of menopause onset and have no contraindications, the benefit-risk ratio is most favorable for treatment of bothersome VMS and prevention of bone loss
- For women who initiate hormone therapy more than 10 years from menopause onset or who are aged older than 60 years, the benefit-risk ratio appears less favorable because of the great absolute risks of coronary heart disease, stroke, venous thromboembolism, and dementia

Treatment should be individualized to minimize risk and maximize benefits and be reevaluated periodically

The 2022 hormone therapy position statement of the NAMS. Menopause. 2022;29(7):767-796

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### Vitamins/Supplements

- Vitamin D & K2
- Calcium
- Iron
- Magnesium
- B Vitamins
- Omega 3 Oils
- Probiotics

## Vitamins/Supplements

- Soy Isoflavones/Phytoestrogens
- Black Cohosh
- Maca Root
- Sage
- Red Clover
- Evening Primrose Oil

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Medication	Side Effects	Medication	Sidde Effects
Neurokinin 3 receptor antagonist Fezolinetant	Abdominal pain     Diarrhea     Insomnia	Clonidine	Dizziness     Rebound     hypertension
SSRI/SNRI  • Citalopram  • Desveniafazine	Drug interactions with tamoxifen	Gabapentin Pregabalin	Hypotension     Neurologic effects     Weight gain
Escitalopram     Paroxetine*      Venlafaxine	Reduced libido     Weight gain	Oxybutynin	Dry mouth     Abdominal pain     Difficulty urinating

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## Definition and purpose of Hormone Therapy

- Hormone Therapy, or HT, is a medical treatment used to alleviate the symptoms of menopause.
- Menopause is a natural phase in a woman's life, marked by the cessation of menstruation and a decline in hormone production, primarily estrogen and progesterone.
- HT involves replacing these hormones with synthetic or bioidentical versions to address the hormonal imbalances that occur during menopause.

https://www.menopause.org/for-women/menopauseflashes/menopause symptoms and treatments/hormone-therapy-benefits-risks

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## Different types of HT (estrogen, progesterone, combination)

Estrogen-Only Therapy
Combination Therapy
Transdermal Patches
Oral Tablets
Vaginal Estrogen Products
Bioidentical Hormones
Low-Dose HT
Continuous vs. Cyclical
Local HT
Natural Hormone Therapy

Type of HT	Description and Usage
Estrogen-Only Therapy	Contains estrogen hormones and is suitable for women who have had a hysterectomy (no uterus).
Combination Therapy	Contains both estrogen and progestin; recommended for women with an intact uterus to protect against uterine cancer.
Transdermal Patches	Patches applied to the skin, releasing hormones gradually; an alternative to oral medications.
Oral Tablets	HT in pill form, available in various estrogen and progestin combinations; common and convenient.
Vaginal Estrogen Products	Available in creams, tablets, or rings; designed to alleviate vaginal dryness and discomfort associated with menopause.
Bioidentical Compounded Hormones	Custom-compounded hormones that are said to be chemically identical to those produced in the body, available in various forms.
Low-Dose HT	Uses lower hormone doses, suitable for women who want to manage menopausal symptoms white minimizing potential risks.
Continuous vs. Cyclical	HT can be administered continuously or in a cyclical manner, based on specific hormone cycling preferences.
Local HT	Local estrogen therapies like vaginal creams or tablets, designed for specific, localized symptom relief with fewer systemic side effects.
Natural Hormone Therapy	Utilizes hormones derived from plant sources, available in various forms for those who prefer natural HT options.

Different	types	of HT	(estrog	en,
progeste	rone,	combi	nation)	

#### Estrogen-only therapy:

 Used for women who have had a hysterectomy (removal of the uterus). It can alleviate symptoms like hot flashes and vaginal dryness.

#### Progesterone-only therapy:

 Primarily used in cases where a woman has an intact uterus, estrogen alone in those women can increase the risk of uterine cancer.

https://www.menopeuse.org/for-women/menopeuseflashes/menopeuse-symptoms-and-treatments/hormone-therapy-benefits-risk:

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## Different types of HT (estrogen, progesterone, combination)

#### Combination therapy:

 Involves a combination of estrogen and progesterone, suitable for women with an intact uterus to protect against uterine cancer while managing menopausal symptoms.

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## Different types of HT (estrogen, progesterone, combination)

#### **Bioidentical Hormone Therapy**

- No standardized definition exist
- The Endocrine Society has defined bioidentical hormones as "compounds that have exactly the same chemical and molecular structure as hormones that are produced in the human body.
- Definition does not manufacturing, source, etc

Files JA, Ko MG, Pruthi S. Bioidentical hormone therapy. Mayo Clin Proc. 2011 Jul;86(7):673-8



## **WHI Study**

The Women's Health Initiative (WHI) study, initiated in the early 1990s, was one of the largest and most influential long-term studies on the effects of HT in postmenopausal women.

#### Combo Study

- Study started in 1993-2002 by the NIH
- 16,000 U.S. postmenopausal women
- 50% took combo HT and 50% took a placebo

- Estrogen Alone Study
   Study started in 1993-2004 by the NIH
- 10,700 U.S. women with hysterectomy

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#### **WHI Study**

The Women's Health Initiative (WHI) study, initiated in the early 1990s, was one of the largest and most influential long-term studies on the effects of HT in postmenopausal women.

#### Initial Findings - HT and Health Risks:

- Initially raised concerns about the safety of HT by reporting an increased risk of certain health issues in some study participants.
- slightly elevated risk of heart disease, stroke, blood clots, and breast cancer in women using a combination of estrogen and progestin (a synthetic form of progesterone).

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The investigators of WHI published a further analysis of the trial which was different from the findings published in 2002. It indicated that risks for certain safety aspects were over-estimated.

#### Combo Final Analysis

"These new findings also show the additional benefits of HT use for those initiating HT in the 50-59 age group, or for those less than 10 years past the menopause – trends to a lower risk from heart disease; a lower risk of death from any cause; no clear increased risk from stroke. They also show a general increased risk for those starting HT after the age of 60"

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#### Factors that influence the decision

#### Severity of Symptoms:

 The intensity of menopausal symptoms can vary greatly among women. Those with severe symptoms that significantly affect their quality of life are potential candidates for HT.

#### Medical History:

 It's essential to consider pre-existing conditions, such as cardiovascular health, cancer history, or a history of blood clots.

## Factors that influence the decision Age and Stage of Menopause: • Typically, HT is more commonly considered during perimenopause and early menopause. Lifestyle and Preferences: • Some women may prefer non-hormonal treatments or lifestyle modifications over HT. 58 Individualized approach • The decision to use HT is highly individual and should be personalized to each woman's unique circumstances and health profile. (type, dose, and • Consultation with a healthcare provider is essential. They will assess the factors mentioned earlier and provide tailored recommendations. 59 When to Consider Hormone Therapy Menopausal symptoms are interfering significantly with daily life, impacting work, relationships, or emotional well-being. Lifestyle modifications have not provided relief · Individualization is very Important in the decision to use hormone therapy

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Ask Me (Almost) Anything

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### Question 1

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### **Question 2**

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## **RESOURCES**

Menopause.org

Everydayhealth.com

www.womenshealth.gov/menopause

