



## Lecture 81:

# **Nutritional Approach To Common Gynecologic Disorders**

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# The Three Common Disorders:

- **Candidiasis.**
- **PMS.**
- **PCOS.**

# Candidiasis:

- It is also called **yeast infection, thrush, and moniliasis**.
- Candidiasis is a leading cause of infection of the female genital system and is caused by a fungus named ***candida albicans***.

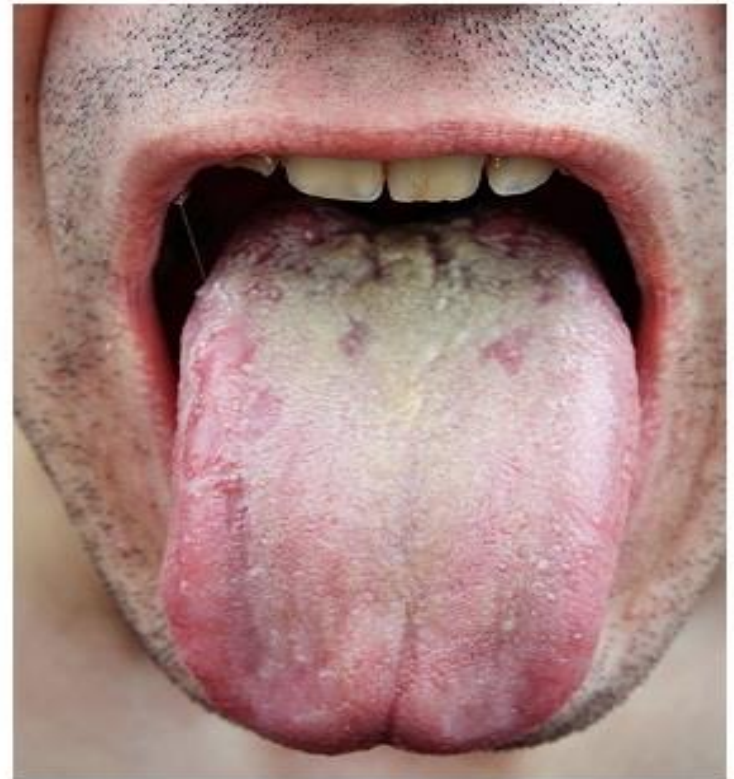


Vaginal discomfort could be a symptom of candidiasis.  
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- Candida albicans is present in **25%** of healthy women without causing any harm and symptoms.
- The gastrointestinal tract serves as a reservoir for this organism.
- The overgrowth of candida albicans leads to a complex medical condition known as *chronic candidiasis* or *yeast syndrome*.

- **The most common manifestation of candidiasis is yeast infection of the vagina, though it could cause complex symptoms.**
- **They include itching and burning in the vagina, white sticky discharge, white patches inside the mouth, dry mouth, chronic fatigue, low level of energy, bloating, constipation, frequent bladder infection, menstrual irregularities, decreased libido, dysuria (burning during urination), painful intercourse, and irritability.**

- Infection of the oral cavity with candida albicans is called “**Thrush**”, which is usually seen in infants, immunocompromised patients (especially those with AIDS), and recipients of prolonged antibiotic or corticosteroid therapy.



Thrush: infection of the oral cavity with candida.  
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## **Potential risk factors for overgrowth of candida albicans:**

- **Antibiotic therapy.**
- **Corticosteroids.**
- **Diabetes mellitus.**
- **Compromised immune system.**
- **Cancers.**
- **Chemotherapy.**
- **Food allergies.**
- **Hormonal changes.**
- **Use of birth control pills.**



- **Pregnancy.**
- **Poor digestion.**
- **Low function thyroid.**
- **Impaired liver function.**
- **Obesity.**
- **Tight-fitting clothes.**
- **AIDS.**
- **Chronic stress.**
- **Vaginal douche.**
- **A high sugar diet.**
- **Decreased secretion of stomach acid.**
- **Decreased bile production.**

## **Restricted Foods:**

- **Sugar and sweets. They weaken the immune system. Also sugar is the main nutrient for candida albicans.**
- **Foods high in yeast and mold: beers, aged cheese, dried fruits, melons, and peanuts.**
- **Dairy products: cheese, and milk.**
- **Alcoholic beverages.**
- **Carbonated beverages.**
- **Refined foods.**
- **Juices.**

## **Recommended Foods:**

- **Drink plenty of water: at least 2 liters a day.**
- **Whole grains.**
- **Legumes: lentils and beans.**
- **Lean protein: fish, turkey and chicken.**
- **Fresh vegetables.**
- **Flaxseeds.**
- **Unsweetened yogurt.**
- **Unsweetened cranberry juice.**

- **Garlic.**
- **Basil.**
- **Peppermint.**
- **Rosemary tea.**
- **Oregon grapes. They contain the alkaloids berberine, berbamine, canadine, and hydrastine, which fight against candida albicans.**
- **Cinnamon.**
- **Ginger.**

## Recommended Supplements:

- **Betaine HCL:** 600 -1200 mg a day.
- **Digestive enzymes:** A broad spectrum product.
- **Probiotics:** a product with 15 to 20 billion active organisms per serving.

- **Boric acid suppositories:** boric acid is not taken orally. It should be inserted intravaginally 600 mg in the morning and 600 mg in the evening for one week for acute infection and for up to four weeks for chronic infections.
- **Oregano oil** (containing over 50% carvacrol): as a capsule, 300 – 500 mg a day or as a liquid form, 0.5 ml twice daily. Oregano oil has a potent antifungal activity.

- **Caprylic acid:** 2000 – 3000 mg a day. It has an antifungal property.
- **Grapefruit seed extract:** 400 – 600 mg a day.
- **Echinacea:** 500 – 1000 mg a day.
- **Multivitamins – Multiminerals:** A high potency product.

# **PMS (Premenstrual Syndrome):**

- Premenstrual syndrome is a series of symptoms that a woman experience 1 – 2 weeks before menstruation.
- PMS could affect up to **90%** of women to some extended degree and the peak incidence occurs at the end of second decade and beginning of third decade of life. It is rare among teenagers.



- PMS is a **psycho-neuro-endocrinologic disorder** characterised by a wide range of symptoms, including irritability, swelling of the hands and feet, weight gain, nervousness, cry, depression, headaches, mood swings, abdominal cramps, bloating, sugar craving, breast tenderness, sleep disorder, fatigue, changes in appetite etc.



Premenstrual syndrome (PMS) is a series of symptoms such as irritability, weight gain, nervousness, cry, depression, headaches, mood swings, abdominal cramps, bloating, sugar craving, and breast tenderness that occurs 1 – 2 weeks before menstruation.

*Image: Copyright©Depositphotos.com /Theepatheep Kawinpathawee*

**To label someone with PMS, the symptoms:**

- **(a)** should occur during the second half of the menstrual cycle
- **(b)** should not be present during first 7 days of the first half of the cycle, and
- **(c)** should appear in three consecutive menstrual cycles.

## **Possible contributing factors:**

- **Estrogen – progesterone imbalances**
- **Hypoglycemia**
- **Food allergies**
- **Overproduction of the hormones aldosterone and prolactin.**
- **Underproduction of endorphins.**
- **Overactivity or abnormal function of prostaglandin.**
- **Low function thyroid.**
- **Psychological factors.**

## **Restricted Foods:**

- **Foods high in saturated and hydrogenated fats.**
- **Foods high in trans-fat: chips, cookies, muffins, pastries, and doughnuts.**
- **Fried foods.**
- **Sugars and sweets.**
- **Soft drinks.**
- **Coffee: caffeine exacerbates irritability, nervousness and sleep disorder.**
- **Alcohol.**
- **Too much salt.**

## Recommended Foods:

- **Foods high in fiber: legumes, and whole grains.**
- **Green leafy vegetables.**
- **Fruits high in bioflavonoids: berries.**
- **Vegetables high in Indole-3-carbinol: broccoli, cauliflower, cabbage, kale, and Brussels sprouts. Indole-3-carbinol affects metabolism of estrogen.**

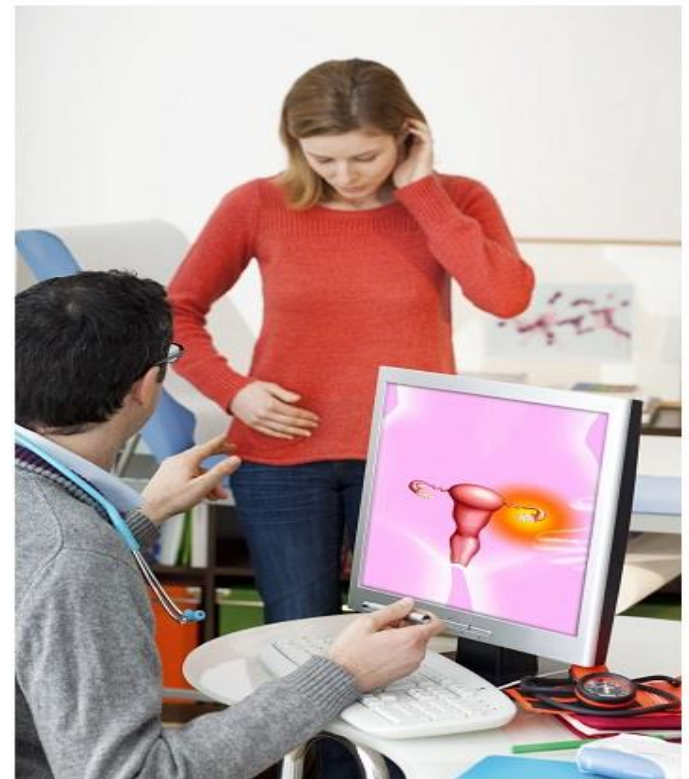
# Recommended Supplements:

- **Vitamin B6:** 50 -100 mg a day.
- **Magnesium:** 400 mg a day.
- **Calcium:** 1000 mg a day.
- **Zinc:** 50 – 100 mg a day.
- **5-HTP:** 50 -100 mg a day.
- **French Maritime Pine Bark Extract:** 50 – 100 mg a day.
- **Omega-3 fatty acids:** 1 – 3 grams a day.

- **Grape seed extract:** 50 – 100 mg a day.
- **Chasteberry (Vitex):** this is the most studied herb in PMS, showing to be effective. It comes in the forms of liquid and pills. Vitex should be taken in the morning for 4 to 6 six months in a row.
- **Prime rose oil:** 1500 mg a day.
- **Multivitamin-Multimineral:** A high potency product.

# Polycystic Ovarian Syndrome (PCOS):

- Also known as *Stein-Leventhal Syndrome*, polycystic ovarian syndrome (PCOS) is a medical condition in women characterized by
- bilateral and multiple cysts in ovaries
  - irregular menses or amenorrhea
  - mild obesity
  - infertility
  - signs of excessive androgens (such as hirsutism and acne).



Polycystic ovarian syndrome (PCOS).  
Image: Copyright©Depositphotos.com /Lydie Salaun



- PCOS occurs in **5 – 10%** of women between 15 and 40 years old.

**Though the exact cause of PCOS is unknown, the postulated etiologic factors are:**

- **Genetic**
- **Dysfunction of hypothalamus-pituitary-ovary axis**
- **Functional abnormality of cytochrome P450c17**

- The hallmark of the disease is an imbalance between male hormones (androgens) and female hormones (estrogen and progesterone) in women.
- In other words, the levels of androgens especially DHEAs (Dehydroepiandrosterone sulfate) increase in PCOS.
- Women with PCOS are at greater risk for developing **insulin resistance**, leading to diabetes and metabolic syndrome.

## **Restricted Foods:**

- **Sugars and sweets.**
- **Saturated fats.**
- **Trans-fats.**
- **Fried foods.**
- **Processed foods.**
- **Preservatives and additives.**
- **Food colorings.**
- **Carbonated drinks.**
- **Alcohol.**
- **Caffeine.**

## **Recommended Foods:**

- **Drink plenty of water: at least 2 liters a day.**
- **Whole grains.**
- **Foods high in fiber: lentils and beans.**
- **Foods high in Omega-3: fish, flaxseed, hemp seed, chia seed, and walnuts.**

- **Foods high in vanadium: shellfish, buckwheat, black pepper, cabbage, mushroom, radish, parsley, and dill. Vanadium fights insulin resistance.**
- **Foods high in phytoestrogens: flaxseeds, tofu, miso, tempeh, soy milk, soy nuts, and soy beans.**

- **Foods high in flavonoids: berries and red grapes.**
- **Avocado.**
- **Artichoke.**
- **Beets.**
- **Garlic and onions.**
- **Ginger.**
- **Citrus fruits.**
- **Green leafy vegetables.**
- **Spices: turmeric, cinnamon, and sumac.**
- **Nettle tea.**

## Recommended Supplements:

- **French Maritime Pine Bark Extract:** 100 – 200 mg a day.
- **Grape seed extract:** 50 -100 mg a day.
- **Omega – 3 fatty acids:** 2 -3 grams a day.
- **Chromium picolinate:** 500 – 1000 mcg. This mineral helps fight insulin resistance and obesity.

- **Vanadium sulfate:** 20 – 50 mg a day. It assists balancing blood sugar level.
- **Curcumin:** 1000 – 1500 mg a day. It is a powerful antioxidant that supports the liver to detoxify and eliminate excess hormones.



- **Milk thistle** (containing 70 – 80% silymarin): 200 – 250 mg a day. This herb detoxifies the liver.
- **D – Chiro Inositol**: 150 – 300 mg a day. It improves symptoms of PCOS by lowering androgen level and increasing insulin sensitivity.
- **ALA (alpha-lipoic acid)**: 100 – 200 mg a day.

- **D – Glucarate:** 500 – 1000 mg a day. This product helps the liver detoxify and excrete excess hormones by blocking the enzyme B-glucuronidase.
- **Choline (Vitamin B18):** 500 – 1000 mg a day. This lipotropic supplement supports function of the liver in removing fats and detoxifying toxins.

- **Methionine:** 1000 – 1500 mg a day. This essential amino acid helps the liver to process and eliminate fats.
- **Glucomannan:** 3 – 10 grams a day. It is a water soluble fiber that helps with insulin resistance, diabetes, colon cleansing, and obesity.

- **L – Carnitine:** 1000 – 3000 mg a day.
- **Vitamin B – Complex:** A high potency product.
- **Digestive enzymes:** A full spectrum product.
- **Probiotics:** a product that provides 15 to 20 billion active organisms per serving.

## **Miscellaneous Suggestions:**

- **Live detoxification.**
- **Colon cleansing.**

# **Homework:**

- **1) Describe your supplementation for polycystic ovary syndrome (PCOS).**
- **2) Describe your supplementation for yeast infection of the female genital system.**



