Navigating Diets, Supplements, and Women's Health in a Confusing World

We will begin at 12:10 p.m.

PRESENTERS

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Today's Guide for A Healthy Conversation

Be respectful and open to others.

Please type your questions in the Q&A box and comments into the chat box for our moderators.

Today's session will be recorded and will be posted to our Living Well Wednesday web page at www.ksre.k-state.edu/fcs/livingwellwed/
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Navigating Diets, Supplements, and Women's Health in a Confusing World

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Objectives for this session

1- Understand what makes a balanced diet for women's health, including important nutrients.

2- Understand when to use supplements, potential risks, and how to pick them.

3- Discuss the sustainability of weight loss pills or medications.
Understand what makes a balanced diet for women's health, including important nutrients

Understand women’s needs through the lifespan
  • Adolescence
  • Adulthood
  • Pregnancy-Breastfeeding
  • Menopause

Understand how to spot a diet that might be unbalanced.
Understand women’s needs through the lifespan

Adolescence

• Increased need for calcium and vitamin D to support bone growth and development (vitamin K, magnesium, zinc)

• Adequate intake of iron to prevent iron deficiency anemia, especially during menstruation.

• Sufficient protein for growth and muscle development.

Understand women’s needs through the lifespan

Adult women

The menstrual cycle

Foods to include:
- High protein: lean meats, nuts, beans
- Fiber: whole grains, vegetables, fruits (berries)
- Healthy fats: nuts, seeds, olive oil
- Iron-rich foods: lean meats, vegetables, fruits, beans (vitamin C)

Foods that can increase cramps and discomfort:
- Highly processed foods
- Alcohol (dehydration)
- Too much added sugar
- High sodium foods
Understand women’s needs through the lifespan

Foods to include:
• Pumpkin or chia seeds, almonds, lentils, beans, chickpeas, and peas help obtain magnesium to regulate mood and relaxation.

As energy levels increase, it can be a great time to focus on a more dynamic exercise routine. Magnesium is crucial for muscle cramps.

Source: University of California San Francisco Center for Reproductive Health & 2013 Encyclopedia Britannica
Understand women’s needs through the lifespan

Foods to include:
• Fiber-rich foods to help reduce estrogen levels like legumes, berries, leafy greens (spinach, kale, Brussels sprouts), whole grains (quinoa, oats)
• Good protein and healthy fat sources help build the hormones and uterine lining. Include salmon, tuna, lean meats, nuts, and seeds.

Source: University of California San Francisco Center for Reproductive Health & 2013 Encyclopedia Britannica
Understand women’s needs through the lifespan

Adult women

Foods to include:
- Plenty of fruits, vegetables, and whole grains for fiber, vitamins, and minerals to help with mood, cramps, bloating
- Healthy fats for hormone formation
- Iron-rich foods to replenish iron loss through menstruation
- Protein-rich foods to maintain muscle strength for menstruation

Source: University of California San Francisco Center for Reproductive Health & 2013 Encyclopedia Britannica
Understand women’s needs through the lifespan

Adult women

MyPlate.gov
Understand women’s needs through the lifespan

Pregnancy-Breastfeeding

A balanced diet will support the mother’s overall health and the growth of the baby.

- Increased caloric needs (300 kcal a day) in pregnancy
Understand women’s needs through the lifespan

Pregnancy-Breastfeeding

A balanced diet will support the mother’s overall health and the growth of the baby.

- Increased caloric needs (300 kcal a day) in pregnancy. 400 kcal if breastfeeding
- Most vitamins and mineral needs are increased – Supplementation is necessary
- The quality of food is very important
- Healthy fats for fetal brain development and breastmilk production

To explore more about this topic:
https://www.cdc.gov/nccdphp/dnpao/resources/maternal-infant-toddler-resources.html
Understand women’s needs through the lifespan

Menopause/postmenopause
- Usually after age 45
- Ovaries stop producing estrogen and progesterone
- Appropriate medication
- Increase risk of cardiovascular disease
- Loss of bone density, lean muscle mass
- Trouble sleeping
- Mood swings
- Trouble focusing
- Hair loss
Understand women’s needs through the lifespan

Figure 1. Potential benefits of Mediterranean diet on body composition in postmenopausal women. Redrawn and modified from [34].

Dietary antioxidants:
- Beta-carotene, vitamins C and E, selenium, polyphenols

↓ Oxidative stress and inflammation
- Inhibition of osteoblastic cell differentiation
- Protection of myocytes from reactive oxygen species
- TNF-α, IL-6 and IL-1β in visceral adipose tissue

Bone formation
- Osteocalcin synthesis by osteoblast
- Osteoblast mineralization
- Suppression of osteoclast formation

Muscle performance
- Energy metabolism
- Transmembrane transport
- Muscle contraction and relaxation

Mediterranean Diet
- Increased consumption of whole-grain cereals, nuts, fruits, pulses, olive oil, moderate consumption of fish, and a lower consumption of sweetened beverages and red meat

How to spot an unbalanced diet?

- Absence of physical activity
- Missing food group(s)
- Nutritionally inadequate
- Rapid weight loss
- Promotes short term changes
- Inconsistent scientific evidence
- Detrimental for those with chronic diseases
- Maintenance issues

Understand when to use supplements, potential risks, and how to pick them

Some key questions

Do I need them?
Do I have evidence of a deficiency?
Are the risks associated with taking supplements?
Are all supplements made the same?
How can I pick the best supplement?
Understand when to use supplements, potential risks, and how to pick them

A balanced diet will supply your body with all the necessary nutrients. Supplements are not substitutions for food. Taking a multivitamin doesn’t mean your body doesn’t need fruits and vegetables.

Supplements recommended
- Pregnancy or breastfeeding
- Postmenopausal women
- Nutrient deficiency (blood test)
- Other health conditions (sensitivity, allergy, disease)
- Vegans

Always consult with your healthcare provider.
Understand when to use supplements, potential risks, and how to pick them

- Not FDA approved.
- Always consult with your healthcare provider.
- If you decide to take an OTC supplement, do your research.
- Not all supplements are made the same. Some get absorbed better than others. Some companies are more reputable than others.

Are all supplements made the same? How can I pick the best supplement?

https://ods.od.nih.gov/factsheets/list-all/
Discuss the sustainability of weight loss pills or medications

Some things to keep in mind

It is possible to lose weight with medications.

Many of these pills are not for long-term use.

Some of these pills need a group of health professionals to assess the person.

Taking a pill is different than forming healthy lifestyle changes.
Ozempic/Wegovy – What the research says…

Known generically as semaglutide. It was created to treat diabetes, but some physicians prescribe it for weight loss (creating a shortage).

A study by Wilding et al. (2022) showed that after 1 year of stopping this medication:
• People gained 2/3 of the weight they originally lost.
• Blood sugar levels return almost back to baseline in people with diabetes.
• Risk of major cardiac event remains lower

In the end, people have the most success when they establish a healthy diet and regular exercise habits.

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Thank you
References


• *Foods to eat for each stage of your menstrual cycle*- (n.d.). London Clinic of Nutrition. Retrieved March 6, 2024, from https://londonclinicofnutrition.co.uk/nutrition-articles/foods-to-eat-for-each-stage-of-your-menstrual-cycle/


THANK YOU FOR ATTENDING!

Please take a few seconds to complete our Living Well Wednesday Survey.

Scan the QR code with your camera phone or follow this link:
https://bit.ly/3tCwpdp4

Join us for the next series as we hear from more specialists on a wide variety of topics!

Recordings of presentations and handouts will be posted on our Living Well Wednesday website.
www.ksre.k-state.edu/fcs/livingwellwed/

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Oral contraceptives (OCs) are a major class of prescription drug, used by a large proportion of women starting from early adolescence. Much research has been conducted to investigate the physiological changes that occur in women who take OCs. These include changes in general health as well as in nutritional needs. In terms of nutrition, several studies investigated whether women on OCs need different amounts of some vitamins and minerals. In particular, a report from the World Health Organization (WHO) points out that the influence of OCs on nutrient requirements is a topic of high clinical relevance and should, therefore, receive great attention. It has been shown that the key nutrient depletions concern folic acid, vitamins B2, B6, B12, vitamin C and E and the minerals magnesium, selenium and zinc. Most research has focused on the levels of these vitamins and minerals in the blood of women who take OCs compared to women who do not. Since women who take OCs not always have adequate diet, may have unhealthy life style or may suffer from pathologies of malabsorption, the possibility to prevent vitamin and mineral deficiencies by taking appropriate dietary supplements should be considered a first-line approach by clinicians.
Effects of Soy Foods in Postmenopausal Women: A Focus on Osteosarcopenia and Obesity

Chronic diseases in postmenopausal women are caused by rapid changes in hormones and are accompanied by rapid changes in body composition (muscle, bone, and fat). In an aging society, the health of postmenopausal women is a social issue, and people’s interest in ingesting high-quality protein is increasing in order to maintain a healthy body composition. This review aims to summarize the efficacy of soy foods and their impact on body composition. The soy protein and isoflavones contained in soy foods can improve muscle and bone density quality and reduce body weight. It is considered a breakthrough in preventing osteosarcopenia and obesity that may occur after menopause.

Today, soy foods may improve the BC of menopausal and premenopausal women. To make it easier for readers to understand the benefits of soy foods for postmenopausal women, we have summarized some research experiments (Table 3) and proved that it not only delays the physical disabilities of menopausal women with osteosarcopenia and obesity, but it can also improve their muscle mass and bone strength to prevent the development of osteosarcopenia. In summary, this review focuses on the soy proteins and isoflavones contained in soy foods, which have an improved effect on osteogenesis and muscle growth while having an effect on weight loss and glucose metabolism. Although some studies have questioned the mechanism of the protective effect of soybean ingredients on certain metabolic diseases, it remains unclear and requires more future research.