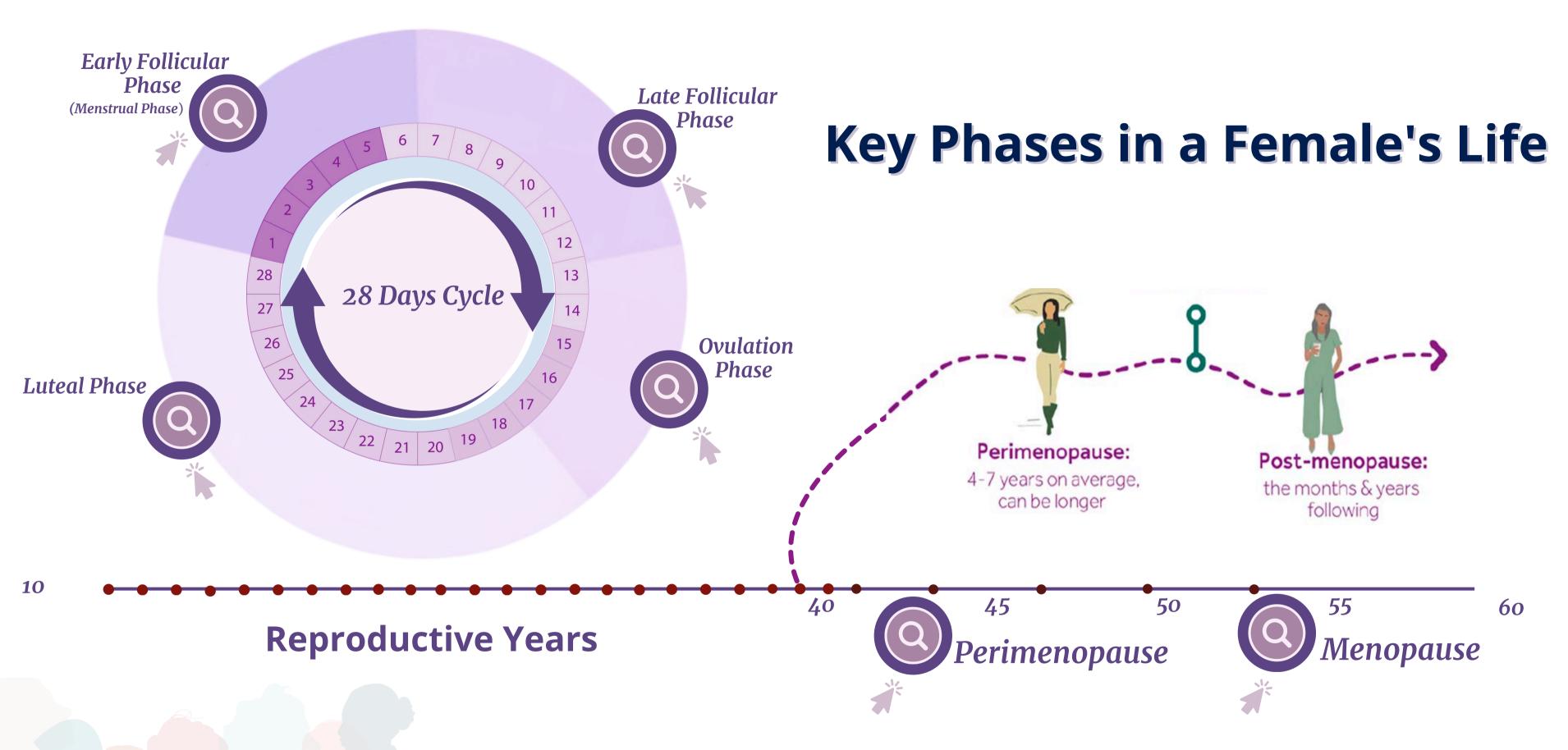


Women's Training Program

Fitness and Healthy Lifestyle Unit







Early Follicular Phase Late Follicular (Menstrual Phase) Phase 28 Days Cycle **Ovulation** Phase 25 Luteal Phase 24

Early Follicular Phase

Early Follicular phase is defined as the time during menstruation. Onset begins on the first day of your menstrual cycle.

Hormone Profile

Low estrogen and progesterone levels

Energy Levels

Low energy and fatigue



Its important to note that everyone's body is different and can experience the early follicular phase differently.

Physical Activity

High-intensity workouts may feel difficult due to low energy levels.

Fast recovery



Remaining active during this phase is beneficial despite low energy.





oga/





Reproductive Years









You can make various adjustments to your planned workouts if you aren't feeling your best.

• Shorten your workout:

- o Exercise for 20 min instead of 40 min
- Complete 3 rounds of an exercise circuit instead of 5 rounds

• Reduce loads:

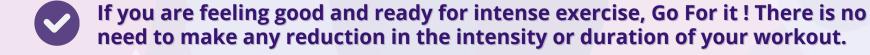
- Squat 45 lbs instead of 65 lbs
- Shoulder press 15 lbs dumbbells instead of 20 lbs dumbbells
- Consider incorporating more bodyweight exercises into your workout

• Reduce intensity:

- Run, cycle or row at a slower pace
- Consider less challenging yoga poses

Increase rest breaks

- Add an extra 15 seconds of rest between sets of lunges
- Add 30 second walk breaks throughout your run
- Take additional hydration breaks as needed



Nutrition



Some may often turn to more 'comfort foods' during this stage of the menstrual cycle due to the irritability of common symptoms that arise during menstruation.

Nutrition Recommendations:



Keep a well - balanced diet



Consuming *Iron-rich foods* can help replace lost iron from bleeding.

Green leafy vegetables, lean red meats, beans, shellfish.

Vitamin C helps increase iron absorption. Sources of Vitamin C can come from Citrus fruits, tomatoes, broccoli, berries.



Vitamin K helps reduce heavy bleeding. Sources of Vitamin K can come from blueberries and eggs and dark leafy greens.



Omega-3 Fatty Acids help reduce inflammation and cramping consuming flaxseed, chia seeds, soybeans, salmon, mackerel, herring.







Late Follicular Phase

Late Follicular Phase is defined as the time after menstruation and before ovulation.

Hormone Profile

Estrogen levels begin to increase.

Progesterone remains low.

Energy Levels

Greater capacity for both physical and psychological stress



Physical Activity

and resistance training are recommended due to high energy levels.



Fast recovery

Body is able to recover faster and increase in energy can lead to high performance.











Early Follicular

Phase

(Menstrual Phase)

Luteal Phase

10



Late Follicular

Phase

Ovulation

Phase

11

28 Days Cycle

Reproductive Years

12

13

Workout Tips and Nutrition





High-intensity workouts



If you are up for the challenge, increase the intensity or duration of your workouts by making one of the following adjustments:

• Increase intensity:

- Choose the 20 lbs dumbbells instead of the 15 lbs set
- Walk at a steeper incline on the treadmill
- o Run, cycle or row at a faster speed

• Choose challenging exercises:

Complete free-weight exercises (e.g. barbell squats)
 instead of using machines (e.g. leg press).

• Increase duration:

- Exercise for 45 min instead of 30 min
- Complete 5 rounds of an exercise circuit instead of 3

• Reduce rest breaks:

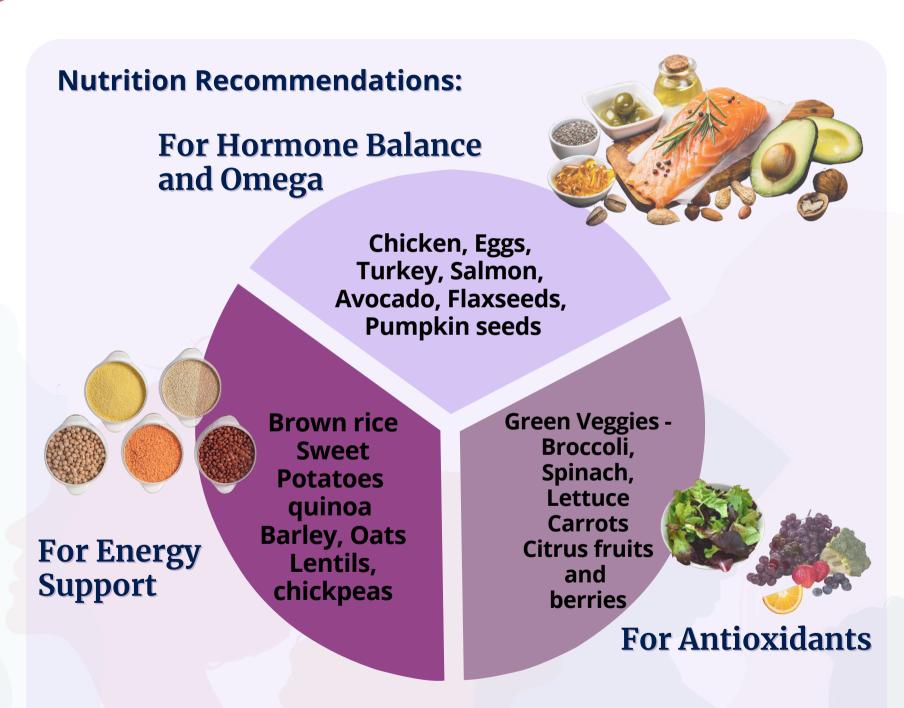
 Take 30 seconds rest between sets instead of 45 seconds



Remember, if you aren't feeling your best but still want to exercise reduce the intensity of your workout or take additional breaks.

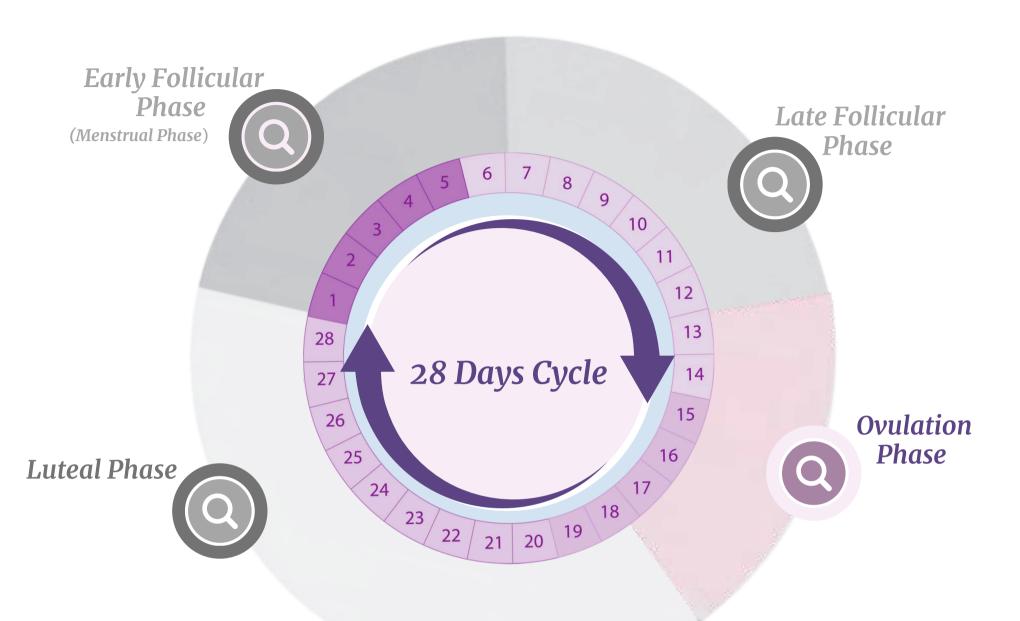
Nutrition

Incorporate foods that help with energy support and balancing hormones are beneficial during this phase of your cycle









Reproductive Years

Ovulation Phase

Ovulation is defined as the point during the menstrual cycle where a mature egg is release from one of the ovaries.

Hormone Profile

Estrogen levels peak

Progesterone remains low

Energy Levels

May feel energy levels are higher than usual



Physical Activity

Good time to incorporate higher intensity workouts, leads to better physical performance



Research shows

Internal motivation to train is slightly higher than other phases



Cardio based workouts







Core stability



Running





Workout Tips and Nutrition







If you feel like pushing yourself, increase the intensity or duration of your workouts by making one of the following adjustments

• Choose new or more complex exercises

- Exercises that use more than 1 joint require more work and core stability (e.g. squat vs. leg extension)
- Challenge your balance, coordination or agility

Increase intensity

- Increase the speed or power of running, cycling or rowing workouts
- Choose a heavier weight, even if this means you can only complete 6 reps of an exercise instead of 10 reps.

Increase duration

o Ride the spin bike for 60 min instead of 45 min

Reduce rest breaks

 Take 1 min rest between rounds of a circuit instead of 2 min



If you aren't feeling your best but still want to exercise reduce the intensity of your workout or take additional breaks.

Nutrition



Elevated estrogen levels during this phase can *suppress the appetite*.

Nutrition Recommendations:



Feel not hungry?



Then try consuming calorie dense foods like

- Nuts & Seeds
- Avocado
- Dried Fruit
- Homemade Smoothies

In addition, add following foods into diet as you move through the Ovulation phase of cycle.

- Broccoli, Asparagus, Dandelion greens
- Carrots, Beets, Okra
- Foods high in Vitamin C:
 Citrus fruits, Bell Peppers , Berries
- Grass Fed Beef, Poultry, Wild caught fish
- GF Grains: Oats, Quinoa, Millet







Early Follicular Phase Late Follicular (Menstrual Phase) Phase 28 Days Cycle **Ovulation** Phase Luteal Phase 24

Reproductive Years

Luteal Phase

The luteal phase is when the body prepares the uterus for fertilization by thickening the uterine lining.

Hormone Profile

Elevated progesterone and estrogen.

You may notice an increase in hunger and cravings at this time due to elevated progesterone.

Energy Levels

You may experience low energy levels which can impact exercise performance.



You may also be more prone to dehydration during this phase due to water retention and increases in body temperature.

Physical Activity

During this point of the cycle the body does not have the typical response to insulin. There is a decrease in production of glucose in the blood stream, which means there is less fuel for muscles during exercise.



Suggested activities at a slower pace









Running

Cycling

Rowing

Yoga









You can reduce the intensity on your planned workouts if you aren't feeling your best.

• Increase carbohydrate intake

 Consume greater amounts of simple carbohydrates in workouts > 60 min to maintain blood glucose levels (eg. Gatorade)

• Shorten your workout:

- o Exercise for 30 min instead of 45 min
- Reduce the number of high intensity intervals on spin bike, running or rowing workouts

• Reduce loads:

- Squat 45 lbs instead of 65 lbs
- Shoulder press 15 lbs dumbbells instead of 20 lbs dumbbells
- Consider incorporating more bodyweight exercises into your workout

Increase rest breaks:

- Add an extra 15 seconds of rest between sets of lunges
- Add 30 second walk breaks throughout your run
- Take additional hydration breaks as needed

Nutrition



During this phase your **body burns 10% -20%** more calories. You should aim to eat regularly through the day, and have additional healthy snacks if needed to curb cravings.

Recommendations:

Consume *complex carbohydrates* to help curb craving and balance moods and energy levels:



Sweet Potatoes , Brown rice, Oats and Quinoa Squash / Pumpkin

Cor

Consume foods *high in magnesium and calcium*to help reduce bloating and fluid retention:
Cruciferous vegetables + Dark leafy greens,
Nuts and seeds
Legumes (Chickpeas, navy beans)

Foods rich in *Omegas 3's and Vitamin B* will help to manage inflammation and maintain energy:

Wild caught salmon / White fish (cod, halibut) Eggs, Avocado, Hemp seeds, Walnuts, and Chia seeds' Quality Meat and Poultry



During this phase, digestion slows due to rising progesterone levels. Eating more cooked foods can help with constipation and bloating.



If you are feeling good and ready for intense exercise. Go For it! There is no need to make any reduction in the intensity or duration of your workout.





Perimenopause

Perimenopause is defined as the transition period before the onset of menopause. Typically lasts about 5 years and, it can begin in your 40's however some do experience it earlier or later.

Hormone Profile





Symptoms

Irregular periods



Hot flashes



Mood changes



Decreased libido



Difficulty sleeping

It's important to note that everyone's body is different and can experience the onset as well as symptoms of perimenopause differently.

Physical Activity

Research shows that better training adaptations come from higher intensity training (80% or more) with variable recovery.

As estrogen levels begin to decline, its beneficial to focus on:



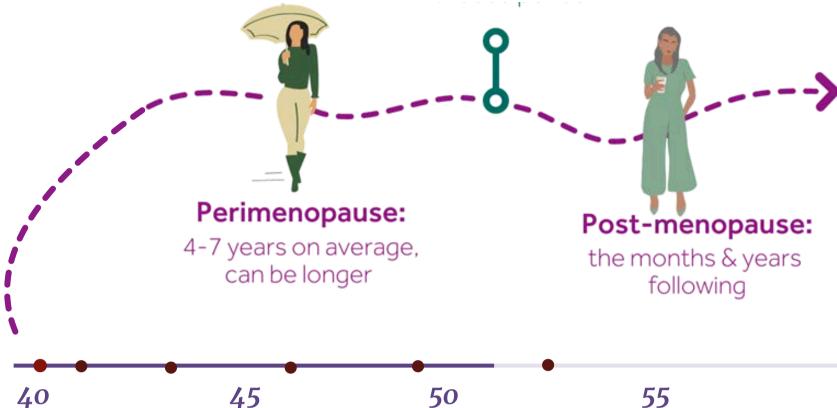




Squats

Shoulder Press

Lunges



Benefits of High Intensity Training

- High intensity training triggers anti-inflammatory response
- This training helps increase:
- Slow down cognitive decline as you age.



Workout Tips and Nutrition





Lots of changes are happening in your body so be adaptable and adjust workouts based on how you feel.

Complete strength training workouts at least twice per week to maintain muscle mass, strengthen bones, and increase strength.

- Prioritize functional movements:
 - Squats
 - Lunges
 - Pushes (e.g. push-ups, shoulder press)
 - Pulls (e.g. rows, lat pull-downs)
 - Carry (e.g. farmer's carry, suitcase carry)
 - Jump (e.g. box jump or step-ups)



Don't be afraid to lift heavy!

Nutrition



The following recommendations can help to balance hormones as you move through perimenopause:



Protein intake should be between 0.8–1.8 g/kg/day from a combination of both plant and meat sources.

Ensure an adequate intake of Calcium, vitamin D, vitamin C, vitamin B, and omega-3 fatty acids are consumed

Recommended daily intake
 of vegetables is 5 portions
 (500 g/day: 300–400 and
 recommended daily intake
 of fruit is 200–100 g of fruit)

Ex. 3-4 portions of vegetables and 1-2 portions of fruit;

Recommended foods:

- Legumes
- Low fat dairy protein sources that help cover calcium needs
- Daily amount of dietary fiber (30g 45g)
- Deep sea fish (100-120g) at least two times a week.



(Post) Menopause

Menopause is defined as the point in time when a **woman has gone 12** consecutive months since their last menstrual cycle. Indicates the end of a woman's reproductive years.

Hormone Profile

- Reduced Estrogen Production
- Estrogen deficiency accelerates the *loss of muscle* mass and strength in post-menopausal women

Symptoms

- Cessation of menstrual cycles
- Hot flashes
- Nights sweats
- Trouble sleeping
- Mood swings
- It's important to note that everyone's body is different and can experience the onset as well as symptoms of menopause differently.

45



50

Post-menopause: the months & years

following

55

60

Physical Activity

As estrogen levels begin to decline, its beneficial to focus on functional movements such as:





Shoulder Press

Lunges







Similar to perimenopause, research has also shown that better training adaptations come from higher intensity training (80% or more) with variable recovery.

Lower estrogen levels can lead to muscle loss at a faster rate. Complete strength training workouts at least **2X/ week** to maintain muscle mass, strengthen bones, and build strength.

• Prioritize functional movements:

- Squats
- Lunges
- Pushes (e.g. push-ups, shoulder press)
- Pulls (e.g. rows, lat pull-downs)
- Carry (e.g. farmer's carry, suitcase carry)
- Jump (e.g. box jump or step-ups)

Don't be afraid to lift heavy!

Fueling your body before exercise will help you to feel better both during and after exercise.

Fasted exercise can increase stress on the body and may decrease exercise performance.



If you are feeling good and ready for intense exercise- Go For it! There is no need to make any reduction in the intensity or duration of your workout.

Nutrition

- Aim to eat foods that are nutrient dense
- It is ideal to spread protein consumption throughout the day to maintain appetite and increase the feeling of fullness throughout the day.
- As metabolism slows it may be necessary to adjust total calorie intake, as weight distribution can change during menopause.

Recommendations:

Tips for managing *high levels of hunger*:

- Prioritize whole foods and limit processed foods
- Whole grains, fruits, vegetables, starchy foods, lean proteins

Consume voluminous food

- Usually high in water, fiber, nutrients, and is a solid
- More nutrients for less calories
- More fullness and hunger control (e.g. carrots, spinach, fruits)

Women are more prone to iron deficiency.

Consume iron rich foods in your diet (e.g. red meat, beans, and lentils). Speak to a Registered Dietician about supplementation.

Consume calcium rich foods to support bone health.





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