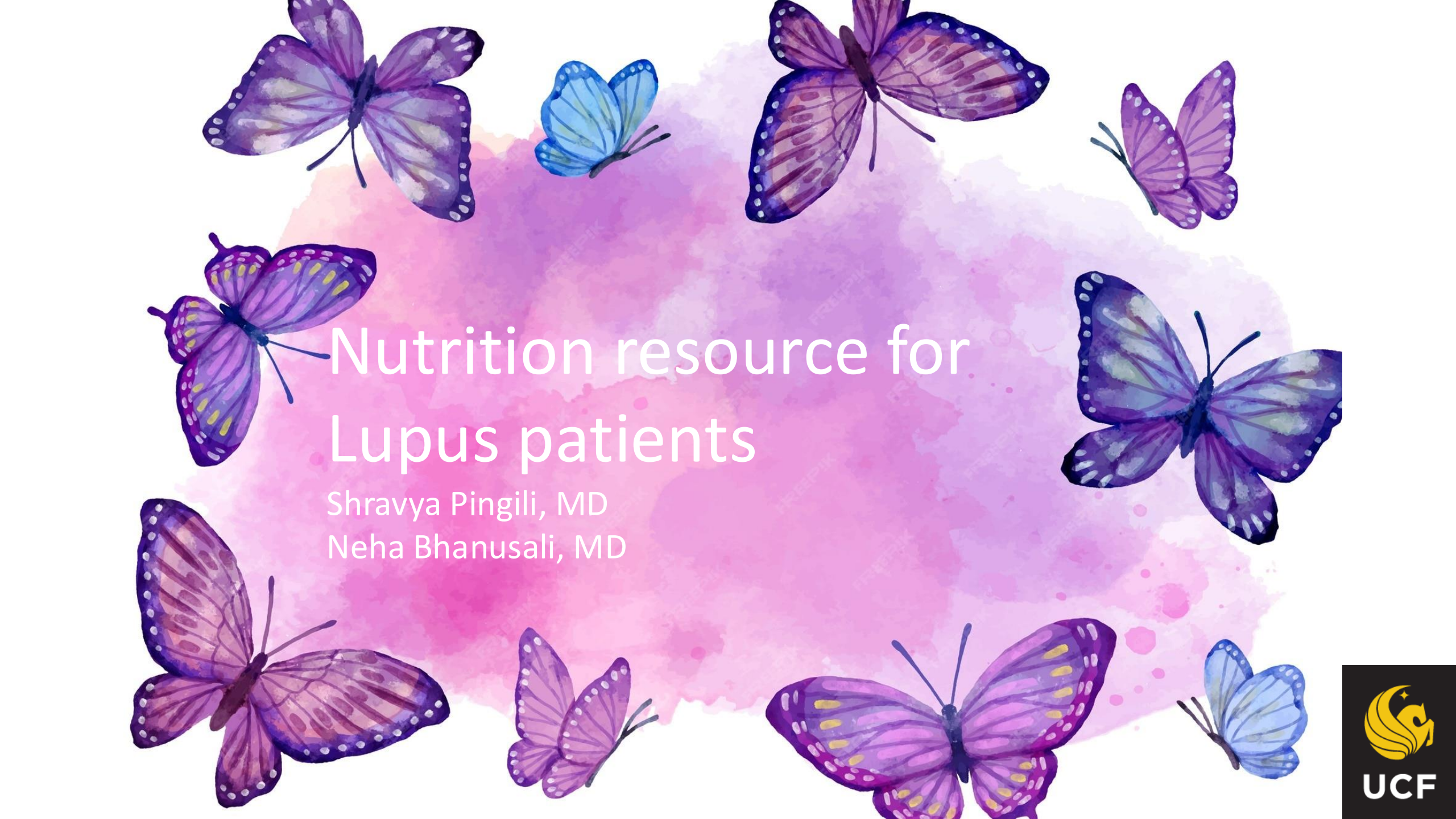


The background is a soft, watercolor-style wash in shades of pink, purple, and magenta. Scattered around this central wash are several butterflies of various sizes and colors, including purple, blue, and pink, with some having yellow or white markings on their wings.

Nutrition resource for Lupus patients

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What is Lupus?

- **Lupus** is an autoimmune disease in which the body's immune system mistakenly attacks its own tissues, leading to inflammation.

Common Symptoms

Fatigue

Joint and muscle pain

Skin rash

Mouth ulcers

Raynaud's phenomenon (fingers turning white/blue in the cold)

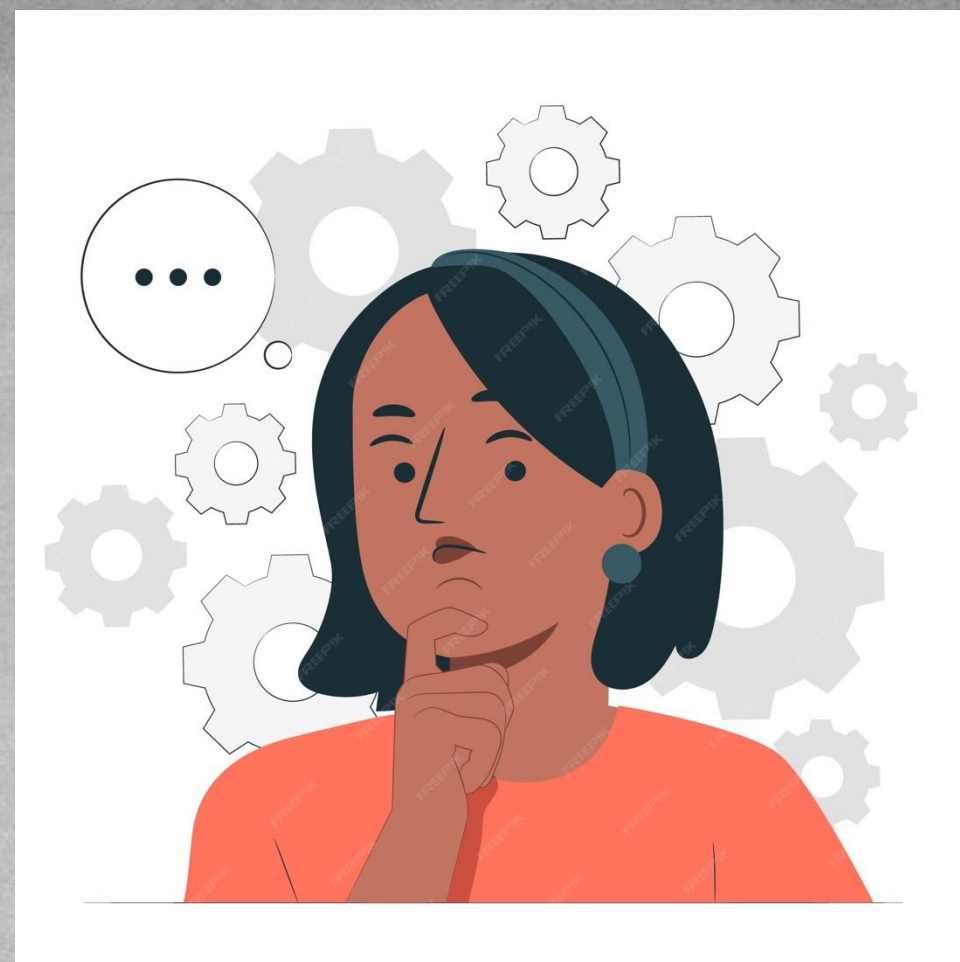
Why Control Matters

If left uncontrolled, lupus can increase the risk of organ and tissue damage.

Kidneys: Lupus nephritis (a more common complication)

Heart: Heart valve and muscle damage, heart attack, stroke

Pregnancy: Miscarriages, fertility challenges, complications



Why Nutrition is Important in Lupus:

Not a cure, but supportive: Food choices don't replace lupus medicines, but eating well can help your body cope better.

Protects the heart and bones: A heart-healthy or Mediterranean-style diet, with enough calcium and vitamin D, supports bone strength (important if you take steroids) and may lower heart risks.

Helps with weight balance: Being overweight can make lupus worse and harder to treat. On the flip side, some people lose too much muscle, so both extremes matter.

Keeps muscles strong: Getting enough protein and staying active (like with light strength exercises) can help prevent muscle loss.

Supports kidneys and energy: If the kidneys are affected, diet needs to be adjusted (like salt and protein). Some studies show omega-3 (fish oil) may help with fatigue, though research is still early.



Anti-Inflammatory Plating Techniques



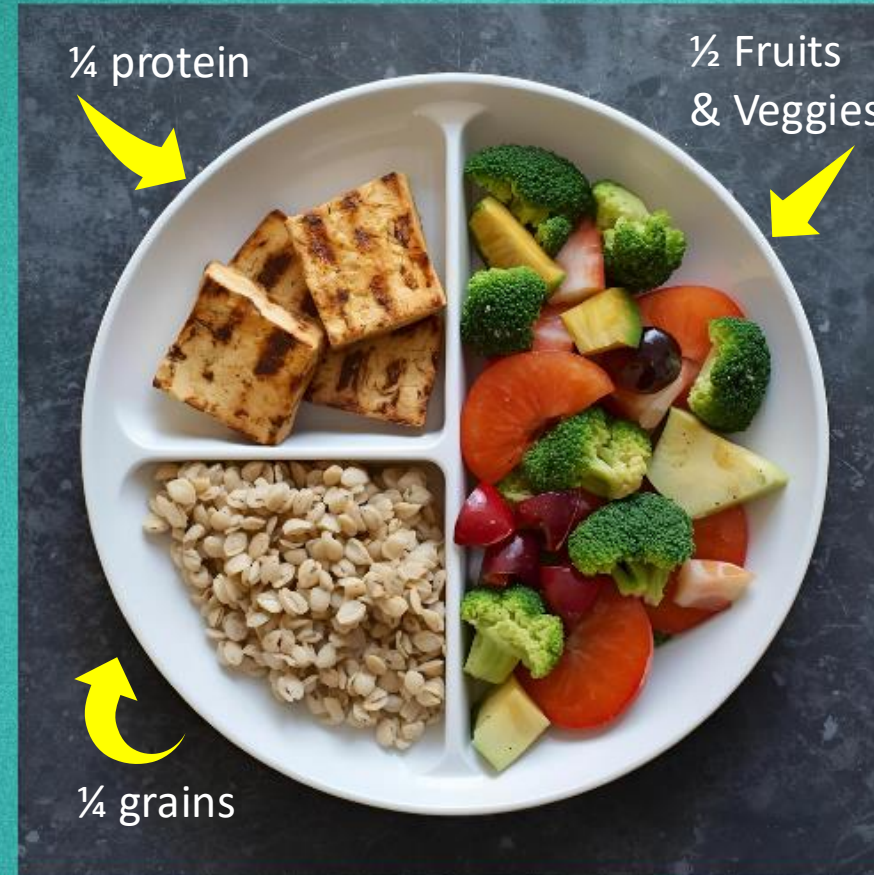
Berries

Vitamin C, antioxidants



Nuts

Omega-3s, healthy fats



$\frac{1}{4}$ protein

$\frac{1}{2}$ Fruits
& Veggies

$\frac{1}{4}$ grains



Greens

Calcium, folate



Grains

Fiber for gut health



UCF

Fats & Inflammation

- **Studies show: low-fat vs. high-fat diets → no clear difference in inflammation (4).**
- **Saturated fats: (eg. ice cream, cheese) → linked to more inflammation → best to limit**
- **Red meat: (esp. processed/mixed types) → avoid or reduce (3)**
- **Seafood → source of omega-3 fatty acids → beneficial in moderate amounts.**



• Different Diets & Lupus: What We Know so far



- Mediterranean diet → *linked to lower heart disease risk and reduced lupus activity (5)*
- Vegetarian / Vegan diet → *some patients reported up to 70–80% symptom improvement (6)*
- Keto diet → *not routinely recommended, esp. in lupus nephritis (kidney stress + ketones may worsen inflammation) (7)*
- Gluten-free diet → helpful if gluten sensitivity or celiac disease is present

! Always consult your physician before starting any new diet.



UCF

Anti inflammatory Spices:

- **Turmeric (curcumin), ginger, garlic, and cinnamon contain phytochemicals that may lower inflammation.**
- **Studies show curcumin may reduce markers such as ESR and CRP.**
- **Cinnamon may support healthy blood sugar control.**
- **Garlic & onion: anti-inflammatory + antimicrobial properties.**



Foods to Limit & Smarter Alternatives

- **Processed carbs** (ex. white bread, tortilla, pasta, pastries) → swap with oats, whole wheat, quinoa, brown rice, almond flour
- **Sugary drinks** (ex soda, energy drinks) → water, coffee, homemade smoothies
- **Processed/red meats** (ex. bacon, deli meats, hot dogs) → lean poultry, fish, plant proteins
- **Excess alcohol** → best to avoid
- **High-salt foods** (ex. chips, packaged soups, instant noodles) → fresh or home-prepared meals
- **Added sugars** (ex. cookies, brownies, donuts) → keep <25g/day; choose fruit or yogurt-based desserts



Wellness Beyond the Plate



- Improve joint function and mobility with Exercises like walking, swimming, and resistance training.
- While movement can be helpful, avoid intense physical activity during flares.
- Sleep: 7– 10 hours.
- Improve mental health and Stress management with yoga, meditation, and breathing exercises.
- Sun protection: use sunscreen & hats (many patients with lupus are often photosensitive).



References :

1. Obesity as an aggravating factor of systemic lupus erythematosus disease: What we already know and what we must explore. A rapid scoping review
<https://www.sciencedirect.com/science/article/pii/S0899900724002089>
2. Cachexia in Systemic Lupus Erythematosus: Risk Factors and Relation to Disease Activity and Damage <https://pmc.ncbi.nlm.nih.gov/articles/PMC7855238/>
3. The Effects of Red Meat Intake on Inflammation Biomarkers in Humans: A Systematic Review and Meta-Analysis of Randomized Controlled Trials
<https://pmc.ncbi.nlm.nih.gov/articles/PMC9194089/>
4. Exploring the Links between Diet and Inflammation: Dairy Foods as Case Studies
<https://pubmed.ncbi.nlm.nih.gov/34632478/>
5. Beneficial effect of Mediterranean diet on disease activity and cardiovascular risk in systemic lupus erythematosus patients: a cross-sectional study
<https://pubmed.ncbi.nlm.nih.gov/32594173/>
6. Plant-based dietary changes may improve symptoms in patients with systemic lupus erythematosus <https://pmc.ncbi.nlm.nih.gov/articles/PMC8793314/>
7. <https://summitrheumatology.com/patient-lifestyle/keto-diet-for-lupus/>