

PSC Nutrition: A Deeper Dive

Presenter: Jennifer Lai, MD, MBA, University of California San Francisco

For many living with Primary Sclerosing Cholangitis (PSC), nutritional advice can feel frustratingly vague. While there's no specific "diet for PSC," that doesn't mean nutrition is powerless. In a recent session at the PSC Partners conference, Dr. Jennifer Lai, a hepatologist and nutrition specialist at UCSF, shared an empowering message: you have control over your overall health, and a thoughtful approach to eating can significantly improve your well-being by protecting your liver from additional stress. The goal is not to treat PSC directly with food, but to reduce inflammation, avoid excess liver fat, and manage common symptoms like fatigue and nausea—all of which can be influenced by diet.

A Simple Framework for Healthier Eating

Dr. Lai introduced a simple, memorable framework called **80/30/10** to guide healthier eating habits. This isn't about achieving perfection overnight, but about making gradual, sustainable shifts. The first principle is to aim for a diet where about **80% of what you eat comes from plants**. This doesn't require becoming vegetarian or vegan, but rather shifting the balance on your plate to be more plant-forward.

To complement this, she advises consuming **30 different types of plants per week** to nourish a diverse and healthy gut microbiome. This goal is more attainable than it sounds, as "plants" include a wide array of vegetables, fruits, whole grains, nuts, seeds, herbs, spices, coffee, and even dark chocolate.

The final piece of the framework is to engage in **10 minutes of movement after meals**. This simple habit, performed within 30 to 60 minutes of eating, helps blunt the blood sugar spikes that can tax your liver.

When you eat, the glucose from your food enters the bloodstream and is first processed by the liver. A large, rapid spike in glucose forces the liver and pancreas to work overtime. By moving after a meal, your muscles immediately begin to use that circulating glucose for energy, naturally lowering the spike and reducing the metabolic load on your liver. This movement can be a brisk walk, household chores, or even a discreet exercise called the "soleus push-up," which involves vigorously raising and lowering your heels while seated to activate the calf muscles.

Key Nutritional Considerations for PSC



Maintaining muscle mass is crucial, especially for those with advanced liver disease. Dr. Lai recommends **0.8 to 1.0 gram of protein per kilogram* of body weight** for those without cirrhosis, increasing that to **1.2 to 1.5 grams** for those with cirrhosis. She advises getting protein from whole foods first and using a pure whey protein powder only as a supplement if needed.

A major threat to liver health comes from ultra-processed foods (UPFs), which are industrial formulations with five or more ingredients, many of which wouldn't be found in a home kitchen. These products, such as soft drinks, packaged snacks, and cold cuts, often contain high amounts of added sugar and lack fiber, a combination that drives liver inflammation. Focusing on fiber, found abundantly in plants, is a powerful countermeasure. A fiber-rich diet helps regulate blood sugar, fosters a healthy gut lining, and supports the immune system. Aiming for **25-35 grams of fiber per day**, increased slowly, is an excellent goal.

**In pounds: 0.35 to 0.45g per lb of body weight, or 0.55 to 0.65g per lb for those with cirrhosis. Multiply your weight by these numbers to get your target daily protein intake. E.g., if you weigh 150lb, then 0.35g/lb x 150lb = 52.5g per day*

Questions from the Community

The session concluded with a lively Q&A, addressing several popular nutrition topics.

On the subject of **intermittent fasting**, Dr. Lai explained that while it can be a useful tool for those *without* cirrhosis, it is **strongly discouraged for anyone with cirrhosis**, as it can be detrimental to muscle health.

When asked about **seed oils**, she clarified that they are not inherently bad. The issue is that their primary source in the modern diet is ultra-processed foods. When used in home cooking, they are a much healthier choice than saturated fats.

Regarding **smoothies**, she noted that while they are better than an instant breakfast shake, eating fruits and vegetables whole is always superior. Blending breaks down the fiber and can deliver a large sugar load to the liver very quickly.

Finally, a question was raised about popular **greens powders** like AG1. Dr. Lai's perspective was clear: while not harmful, they are unnecessary if you are following the 80/30 framework. "If you're eating 30 different plants a week, you don't need it," she stated, emphasizing her preference for obtaining nutrients from whole, natural foods whenever possible.