

Nutrition Guidebook for Women's Health



SoyConnection
By U.S. Soy

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General Nutrition for Women's Health

Introduction

Nutrition plays a central role in a woman's overall well-being across every stage of her life. From building strong foundations as a young adult, to supporting a healthy pregnancy and easing the transition into menopause, food can have a powerful impact on long-term health outcomes, including heart health, bone density, hormonal balance, and metabolic function.

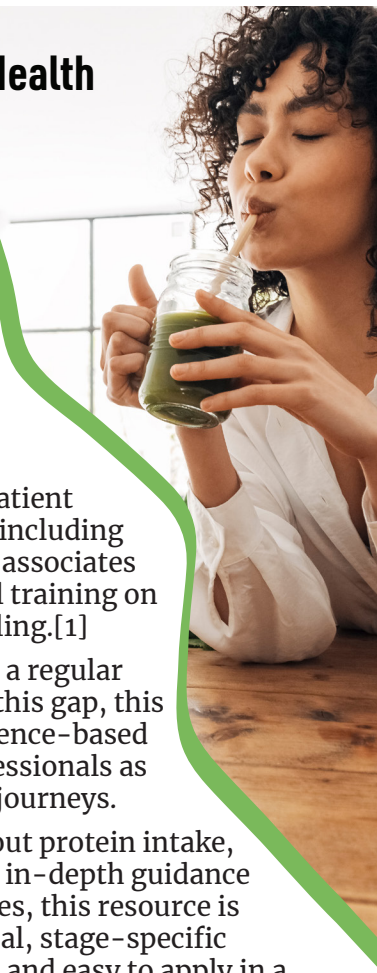
Despite the importance of nutrition in patient care, many health care professionals — including nurse practitioners (NPs) and physician associates (PAs) — report having received minimal training on the topic during throughout their schooling.[1]

Yet, nutrition-related conversations are a regular part of everyday patient care. To bridge this gap, this guidebook aims to provide concise, evidence-based information to support health care professionals as they guide women through their health journeys.

Whether answering a quick question about protein intake, the safety of soy foods, or offering more in-depth guidance for patients navigating hormonal changes, this resource is designed to equip clinicians with practical, stage-specific nutrition insights—grounded in science and easy to apply in a clinical setting.

Basic Nutrition Foundations

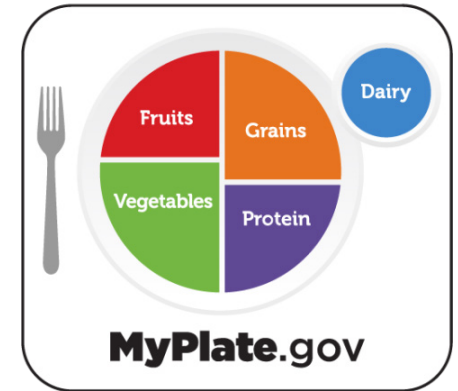
At its core, good nutrition supports nearly every aspect of a woman's health—from energy levels and immune function to hormonal balance and disease prevention. While individual needs vary, there are a few fundamental principles that apply broadly and serve as a helpful foundation for patient education and conversations.



MyPlate and Balanced Eating

The old adage that “we eat with our eyes” certainly applies when it comes to laying the groundwork with patients about how to build a healthy diet. The USDA's MyPlate offers a simple, visual guide to help patients make healthy food choices. [2] It emphasizes:

- **Fruits and vegetables:** Filling half the plate with a variety of colorful produce
- **Whole grains:** Choosing fiber-rich options like oats, brown rice, and whole wheat
- **Protein:** Including lean sources such as poultry, fish, eggs, soy products, beans, nuts, seeds, lean cuts of beef (e.g., 93% lean ground beef), and pork loin
- **Dairy:** Opting for low-fat or fat-free dairy options, or fortified soy milk, which is nutritionally comparable to cow's milk in terms of protein and calcium. Other plant-based milks (such as almond, oat, or rice) may be fortified with calcium but generally lack the protein content found in dairy and soy milk.
- **Oils:** Encouraging oils high in unsaturated fats and low in saturated fats and other sources like nuts, olives, some fish, and avocados.



Nutrient Density Matters

Once patients understand how to build a better plate, it's important to help them understand that the nutrient density — the amount of beneficial nutrients a food provides in relation to its calorie content — of what they put on their plate is also important. Encouraging the consumption of nutrient dense foods is one of the most effective ways to promote healthier

eating patterns without requiring drastic or restrictive changes.

Nutrient-dense foods provide a high concentration of essential nutrients such as vitamins, minerals, fiber, macronutrients (like protein, complex carbohydrates, and unsaturated fats), and phytonutrients. [3] They are the foundation of a healthy diet and include foods like:

- **Colorful vegetables and fruits** (e.g., leafy greens, sweet potatoes, berries, oranges)
- **Whole grains** (e.g., oats, quinoa, brown rice)
- **Lean proteins** (e.g., poultry, seafood, eggs, soy foods like tofu, tempeh, and edamame)
- **Plant-based fats** (e.g., avocados, nuts, seeds, olive oil, vegetable oil)

These foods support energy levels and disease prevention—key priorities across the female lifespan. [3]

On the other hand, energy-dense, nutrient-poor foods—such as sugar-sweetened beverages, fried foods, refined grains, and snacks high in fat and sugar—tend to be high in calories but low in nutritional value. While these foods can fit into a balanced diet in moderation, regular overconsumption is associated with increased risk of weight gain, metabolic dysfunction, and chronic diseases such as type 2 diabetes and cardiovascular disease. [4]

In practice, clinicians can guide patients toward small but meaningful shifts—such as swapping soda for sparkling water, white bread for whole grain, or processed meat for a plant-based protein.

Over time, these incremental changes can make a significant difference in overall diet quality and long-term health outcomes.



Clinical Tip: Make It Practical

Ask patients to name three of their go-to snacks. Then, suggest one simple swap that nudges them toward a more nutrient-dense option.

Examples:

- Chips → Lightly salted and roasted soy nuts or almonds
- Granola bar → Plain low-fat Greek yogurt with fruit and a tablespoon of granola
- Soda → Sparkling water with citrus slices

Portion Awareness and Mindful Choices

While MyPlate can help patients visualize the makeup of their plate, it may be helpful to provide some insights on just “how big” our plates have become. Portion sizes in the U.S. have steadily increased over the past several decades, both in restaurants and at home. This “portion distortion” often leads people to eat more calories than they realize, even when choosing relatively healthy foods. Educating patients about appropriate portion sizes—and helping them recognize visual cues (e.g., a 3 oz serving of protein should be roughly the size of a deck of cards)—can empower them to eat more mindfully.

Mindful eating is also a highly effective, often underutilized, concept in nutrition education. Encouraging patients to tune in to their hunger and fullness signals, eat slowly, and pause between bites may improve satiety and reduce overeating. Patients who feel compelled to “clean their plate” are often out of touch with their hunger and fullness cues. Health care professionals can and should explore this concept when discussing mealtimes.

Clinicians can also suggest using smaller plates or pre-portioning snacks to naturally create reasonable portion sizes without the need for strict calorie counting. These small behavioral shifts can support more balanced eating and sustainable weight management. [5]

The Role of Protein in a Woman's Diet

One macronutrient that will likely come up as a point of conversation when discussing nutrition is protein. Protein continues to be a hot topic among online influencers, food marketers, and nutrition professionals. It's no wonder, given protein's vital role as an essential macronutrient in nearly every aspect of a woman's health—from supporting muscle mass and bone strength to aiding in hormone production, immune function, and appetite regulation. Encouraging adequate protein intake is especially important as women age, when metabolic changes and hormonal shifts can contribute to muscle loss and changes in body composition. [6]

Why Protein Matters

- **Muscle Maintenance:** As early as age 30, women begin to lose muscle mass at a gradual rate—a process that speeds up around menopause. Regular intake of high-quality protein, combined with weight-bearing or resistance exercise, helps preserve lean body mass and support strength, mobility, and overall functional independence as women age. [7]
- **Hormonal Health:** Protein provides the amino acid building blocks for hormones, enzymes, and neurotransmitters that influence everything from mood to menstrual regulation.
- **Satiety and Weight Management:** Protein-rich foods promote fullness, which can help reduce overeating and support weight management efforts without deprivation. [2,3]
- **Bone Support:** Adequate protein—especially when paired with calcium and vitamin D—contributes to stronger bones and may help reduce fracture risk post-menopause. [6,8]

Daily Protein Needs and Distribution

Current dietary guidelines recommend a minimum of 0.8 grams of protein per kilogram of body weight each day. However, a growing consensus based on emerging research suggests that higher intakes—closer to 1.2–1.6 grams per kilogram—may better

support optimal health, particularly for older women and those seeking to preserve muscle mass. [2,6]

While the overall amount of protein eaten each day is important, so is how it is spaced out throughout the day. Many women tend to under-consume protein at breakfast and over-consume it at dinner. Experts agree the better approach is to distribute protein intake throughout the day. Recommending 15–30 grams of protein at each meal may improve muscle protein synthesis and overall nutrient balance.

Protein Sources

Encourage women to include a variety of protein sources in their diets to support nutritional adequacy and personal preferences:

- **Animal-based options:** Poultry, fish, eggs, lean beef and pork, low-fat dairy
- **Plant-based options:** Soy foods (tofu, tempeh, soy milk, edamame, soy nuts), beans, lentils, nuts, nut butters, seeds, quinoa

Among plant-based proteins, soy is unique because it is a high-quality protein—containing all nine essential amino acids in amounts comparable to animal proteins. Additionally, many soy-based foods provide fiber, a nutrient that is consistently under-consumed by women in the U.S. Diets higher in fiber are associated with improved digestive health, better blood sugar regulation, and reduced risk of cardiovascular disease. [27, 34]

Clinical Tip: Try the “Protein-Per-Meal” Check

Ask patients: “Where’s the protein in your breakfast, lunch, and dinner?” Use this as a simple conversation starter to uncover potential gaps.

Example guidance:

- Make your oatmeal with soymilk instead of water.
- Add edamame or black beans to salads and stir-frys.
- Use silken tofu in place of cream cheese.
- Use plain Greek yogurt instead of sour cream.



Clinical Insight: Protein and GLP-1 Medications

With the growing use of GLP-1 receptor agonists and other weight loss medications among women for weight loss and diabetes management, it's important to recognize the nutritional risks associated with reduced appetite and lower food intake—especially the risk of insufficient protein.

Why it matters:

Inadequate protein can lead to muscle loss, fatigue, slower metabolic rate, and nutritional deficiencies. This is particularly concerning in women, who already face age-related declines in lean muscle mass.

What to recommend:

Encourage patients using GLP-1 medications to:

- Prioritize protein at each meal, even in small portions
- Choose high-quality, protein-rich foods like eggs, low-fat dairy, soy foods, and fish
- Consider protein-fortified snacks or beverages when appropriate
- Work with a registered dietitian for personalized support



Nutrition Across Life Stages

Nutritional needs shift throughout a woman's life in response to changes in hormones, metabolism, and lifestyle. Understanding these evolving requirements can help clinicians offer relevant, stage-appropriate guidance that supports long-term health.

Young Adulthood (20s–30s)

This is a key time to establish lifelong nutrition habits and lay the foundation for future health.



Nutritional Focus:

- **Bone building:** Calcium, vitamin D, and protein are essential to support peak bone mass during the years when women are still building bone density. [8]
 - **Food highlights:** Fortified soy milk, Greek yogurt, salmon with bones, leafy greens, tofu
- **Iron needs:** Iron is especially important for menstruating women to prevent fatigue and support oxygen transport. [9] Encourage pairing iron-rich with vitamin C-rich foods for better iron absorption.
 - **Food highlights:** Lean beef, lentils, spinach, fortified cereals, edamame, citrus fruits (for vitamin C)
 - **Food pairings:**
 - Spinach (iron) salad with strawberries (vitamin C)
 - Tofu (iron) stir-fry with broccoli (vitamin C)
 - Grilled chicken (iron) with sautéed peppers (vitamin C)
 - Overnight oats (iron) with kiwi (vitamin C)
- **Folate and preconception health:** Even before pregnancy is planned, folate is essential for reducing the risk of neural tube defects. [10]
 - **Food highlights:** Avocados, oranges, asparagus, black beans, enriched whole grains

Pregnancy

During pregnancy, nutrition needs increase to support fetal development, maternal well-being, and future breastfeeding.

Nutritional Focus:

- **Key nutrients:** Protein, folate, iron, calcium, omega-3 fatty acids (EPA/DHA), iodine, choline, and fiber all play a role in healthy fetal growth, brain development, and maternal health. [11]
 - **Food highlights:** Eggs (choline), fortified soy milk (protein), salmon (DHA), sweet potatoes (fiber), beans (iron/fiber), leafy greens (folate/iron), oats (iron/fiber)
- **Steady weight gain:** Emphasize balanced, nutrient-dense meals to support gradual and healthy weight gain.
 - **Food highlights:** Whole grains, lean proteins, nuts/nut butters, olive oil, avocado
 - **Meal example:** “Pregnancy Power Bowl” made with brown rice (fiber + complex carbs), grilled chicken (lean protein), sliced avocado (unsaturated fat), roasted sweet potatoes (vitamin A + fiber), steamed spinach (iron + fiber) drizzle of vegetable oil (extra calories + unsaturated fat)
- **Digestive changes:** Constipation is common in pregnancy, and both fiber and adequate hydration help manage this. [12]



- **Food highlights:** Prunes, chia seeds, lentils, fruits like pears and apples, water
- **Hydration insights:** Aim for 8-12 cups of fluid per day from water, milk, decaf herbal teas, and watery fruits/vegetables. Water is best, but unsweetened sparkling water, broth-based soups, and smoothies can contribute. Sip consistently throughout the day rather than waiting until thirsty, as thirst is a late-stage sign of inadequate hydration.

Perimenopause

This transitional phase brings hormonal fluctuations that impact metabolism, mood, and body composition.

Nutritional Focus:

- **Protein and strength:** Declining estrogen levels can lead to accelerated muscle loss. Adequate protein intake—paired with resistance training—helps preserve lean mass.
 - **Food highlights:** Eggs, cottage cheese, low-fat Greek yogurt, soy foods, poultry, fish
- **Anti-inflammatory eating:** An anti-inflammatory diet may help alleviate joint pain, support mood stability, and reduce long-term disease risk.
 - **Food highlights:** Berries, flaxseed, walnuts, salmon, edamame, olive oil
- **Blood sugar and weight shifts:** Hormonal changes can lead to increased insulin resistance. Balanced meals and consistent eating patterns may help regulate blood sugar. [13]
 - **Food highlights:** Foods with higher amounts of fiber and low glycemic carbohydrates, like oats and beans, paired with proteins like, lean meats and fish, tofu or Greek yogurt



Clinical Insight: Low-Carb Diets and Thyroid Function

Many women entering midlife turn to low-carbohydrate diets in an effort to manage perimenopausal weight gain. While these approaches may offer short-term benefits, long-term adherence to very low-carb diets may contribute to suppressed thyroid activity, particularly in women.

Emerging evidence suggests that inadequate carbohydrate intake can lead to lower circulating T₃ (triiodothyronine), a key thyroid hormone that regulates metabolism and energy. This down-regulation may mimic symptoms of hypothyroidism, such as fatigue, constipation, and sluggish metabolism—even in women without a true thyroid disorder.

What to consider in practice:

Before initiating thyroid medication, ask patients about their current eating pattern, including carbohydrate intake.

If intake is chronically low, explore whether reintroducing more complex carbohydrates (e.g., whole grains, fruits, legumes) may improve energy and metabolic symptoms.

Emphasize that thyroid function is complex and multifactorial—encouraging a balanced, nutrient-dense diet can support endocrine health.

Menopause and Post-Menopause

After menopause, the risk of bone loss, heart disease, and unwanted weight gain increases.

Nutritional Focus:

- **Bone health:** Decreased estrogen leads to a decline in bone density. Calcium, vitamin D, magnesium, and protein are crucial for skeletal strength. [8]
 - **Food highlights:** low-fat milk, fortified soy milk, canned sardines, calcium-rich tofu, leafy greens
- **Heart health:** Cardiovascular risk increases after menopause. Prioritize fiber, plant-based fats, and omega-3s. [14]
 - **Food highlights:** Oats, avocado, almonds, edamame, olive oil, salmon
- **Muscle maintenance:** Sarcopenia (age-related muscle loss) becomes more pronounced. Consistent protein intake and resistance training are essential. [7]
 - **Food highlights:** Lean meats and seafood, soy foods, low-fat dairy



Soy's Benefits for Women's Health

Introduction to Soy and Its Nutrients

Soy foods offer a unique nutritional profile that makes them especially valuable for women's health. As one of the few plant-based proteins that is considered complete, soy contains all nine essential amino acids in amounts comparable to animal proteins. [15] This makes soy an ideal option for women who want to follow a plant-forward or vegetarian diet—or for anyone seeking to incorporate more plant-based foods without sacrificing protein quality.

In addition to high-quality protein, soy foods are naturally rich in isoflavones—a type of plant compound classified as a phytoestrogen due to its structural similarity to estrogen. While this similarity has historically raised concerns about soy's safety, especially in hormone-sensitive conditions, the current body of research consistently supports that soy foods are safe and may offer protective health benefits when consumed as part of a balanced diet. [16]

Common Nutrients in Soy Foods:

- **Protein:** High-quality, complete protein source
- **Fiber:** Supports digestive health, satiety, and contributes to a diverse gut microbiome [17]
- **Iron, calcium, potassium, magnesium:** Contribute to bone, heart, and overall metabolic health
- **Isoflavones (genistein and daidzein):** Naturally occurring compounds studied for their potential benefits in bone health, menopause symptom relief, and more



Types of Soy Foods:

When guiding patients on soy consumption, experts typically emphasize traditional soy foods (whole or minimally processed), which tend to be the most nutrient-dense. However, it's important to help patients understand that processing of foods is not inherently negative. In fact, many processing techniques used to make modern soy foods improve food safety, extend shelf life to reduce food waste, enhance convenience for busy or less-experienced home cooks, and can even increase nutrient availability in certain foods.

- **Traditional soy foods:** Edamame, tofu, tempeh, soy milk, soy nuts
- **Modern soy foods:** Soy-based meat alternatives, protein powders, and bars (nutritional content varies)

Clinical Insight: Soy Allergies in Practice

A true soy allergy is actually quite uncommon, affecting less than 0.5% of children and even fewer adults. Most patients who avoid soy are not clinically allergic but may have been advised to avoid it based on outdated or overly cautious guidance.

What to know:

- Soy allergies have the lowest prevalence among the Big 9, except for sesame.
- ~70% of children outgrow their soy allergy by age 10.
- Routine avoidance of soy is not necessary unless clinically diagnosed. Studies show that most individuals with a soy allergy can safely eat highly refined soybean oil and soy lecithin.

Soybean oil, including vegetable oil that is derived from soy, should be safe for most individuals with a soy allergy because it contains extremely small levels of allergenic protein. However, cold pressed, expeller pressed, or extruded soybean oil should be avoided because it is not highly refined and may contain small amounts of soy protein.

It's best to verify an allergy diagnosis before advising long-term soy exclusion. This is especially true in patients who could benefit from including soy foods in their diet. [31–33]

Soy and Breast Cancer

Few nutrition topics have generated as much confusion—and concern—as soy and its relationship to breast cancer. For many years, soy's natural content of isoflavones, which are classified as phytoestrogens, and limited animal research led to speculation that soy might stimulate estrogen-sensitive tumors. However, after decades of human clinical research, the evidence overwhelmingly supports the safety of soy consumption for women, including those with a history of breast cancer.

What the Research Shows:

- Population studies consistently associate soy consumption with reduced risk of breast cancer, particularly when soy is consumed regularly over a lifetime (as seen in Asian populations). [18]
- In breast cancer survivors, soy intake is not associated with recurrence and may even offer a modest survival benefit. [19]
- Moderate soy consumption (1–2 servings/day) is considered safe and may be beneficial across all groups of women, including those with hormone receptor-positive tumors, and may be especially beneficial for women with hormone receptor-negative breast cancer. [19, 20]
- Consuming soy during adolescence may protect against breast cancer later in life. [23]

What Clinicians Should Know:

Soy isoflavones do not act the same as human estrogen. They can have weak estrogen-like effects in some tissues but anti-estrogenic effects in others, depending

on factors such as age, hormone status, and gut microbiome.

It's best to guide patients toward food-based sources of soy (like tofu, edamame, tempeh, soy milk, and soy nuts), which have been the focus of most safety studies, rather than supplements.

Leading organizations such as the American Cancer Society, American Institute for Cancer Research (AICR), and World Cancer Research Fund all support the inclusion of soy foods in the diets of women with or without breast cancer.

Clinical Tip: Addressing Breast Cancer Fears About Soy

Patients may say, “I heard soy causes breast cancer.” Help reframe this misconception:

“In food form, soy is not only safe—it may actually be protective. Most studies show that moderate soy intake is associated with reduced risk of breast cancer and better outcomes for survivors.”

Reinforce that soy foods are not hormone therapy, and encourage women to enjoy them in the context of an overall balanced diet.

How Soy Isoflavones Differ from Estrogen

Although soy isoflavones are structurally similar to estrogen, they do not mimic its effects on breast tissue. Unlike estrogen, which can stimulate the proliferation of breast cells, soy isoflavones have been shown to counteract this effect. For instance, in both human and animal studies soy appears to blunt estradiol's ability to stimulate mammary cell growth. [21] [30]

This distinction helps explain why population studies associate soy consumption with a reduced risk of breast cancer and why clinical guidelines support soy food intake for survivors.



Soy and Endocrine Therapy in Breast Cancer

Approximately 75% of breast cancers are estrogen receptor-positive (ER+), meaning they grow in response to estrogen. To reduce recurrence risk, many women with ER+ breast cancer are prescribed endocrine therapies such as tamoxifen or aromatase inhibitors (AIs). Understandably, patients and providers have questioned whether soy foods—rich in phytoestrogens—might interfere with these medications.

Limited observational data indicates that moderate consumption of whole soy foods does not interfere with tamoxifen or AI therapy. [25] In fact, some studies suggest that soy intake may be associated with improved outcomes in this group of women.

- A review in *Current Opinion in Clinical Nutrition and Metabolic Care* concluded that soy foods consumed at levels typical in Asian diets have no detrimental effects on breast cancer recurrence and may significantly reduce risk. [23] Importantly, soy does not appear to interfere with tamoxifen or anastrozole therapy. [25]
- A meta-analysis found that among women with breast cancer using tamoxifen, those who consumed higher amounts of soy isoflavones had a reduced risk of recurrence and improved survival, suggesting soy may be particularly protective for this group. [22]

It's important to distinguish between soy foods (e.g., tofu, edamame, soy milk) and soy or isoflavone supplements. While whole soy foods are considered safe and potentially beneficial, soy supplements may contain higher concentrations of isoflavones and have not been studied as extensively in this context. Therefore, caution is advised regarding the use of soy supplements in women with breast cancer. [24]

In summary, for women with ER+ breast cancer undergoing endocrine therapy, moderate intake of whole soy foods is considered safe and may offer additional health benefits.

Soy and Menopause

Menopause brings a range of physiological changes—many of which are influenced by declining estrogen levels. These changes can impact everything from bone density and cholesterol levels to mood and quality of life. Among the most commonly reported symptoms are hot flashes, night sweats, and sleep disturbances.

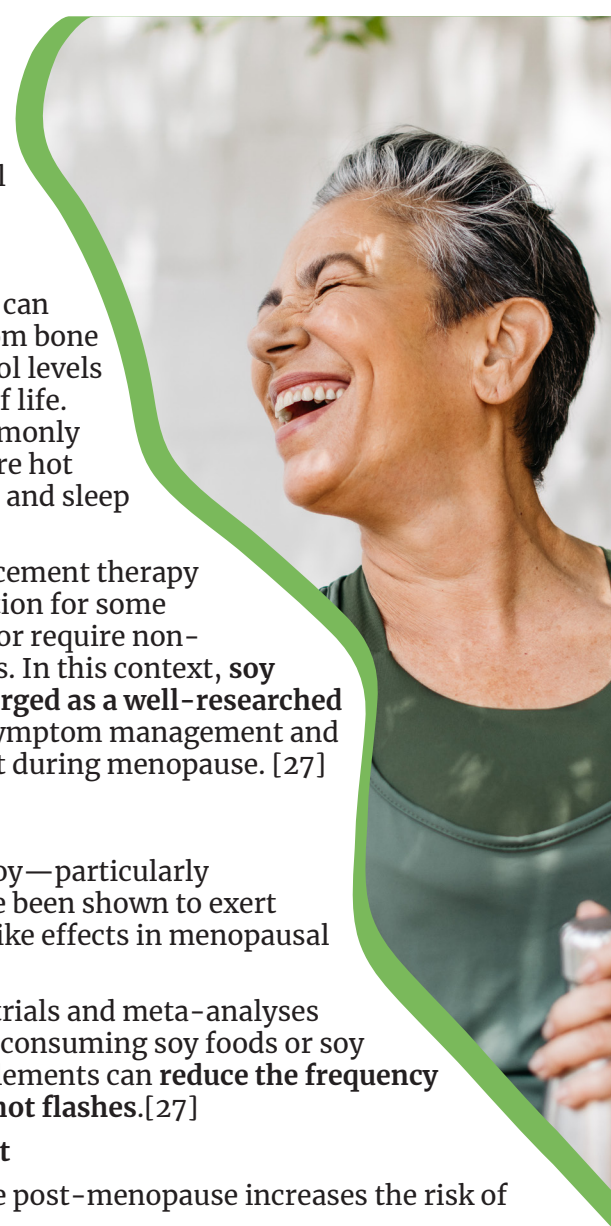
While hormone replacement therapy (HRT) remains an option for some women, many prefer or require non-hormonal alternatives. In this context, **soy isoflavones have emerged as a well-researched dietary strategy** for symptom management and overall health support during menopause. [27]

Hot flash reduction

- Isoflavones in soy—particularly **genistein**—have been shown to exert mild estrogen-like effects in menopausal women.
- Several clinical trials and meta-analyses have found that consuming soy foods or soy isoflavone supplements can **reduce the frequency and severity of hot flashes**. [27]

Bone health support

- Estrogen decline post-menopause increases the risk of bone loss.
- Soy protein and isoflavones may help support bone



metabolism, particularly when paired with adequate calcium and vitamin D. [6,26]

Heart health

- Menopause is associated with changes in lipid profiles and increased cardiovascular risk.
- Soy protein has been shown to modestly **lower LDL cholesterol** and may support vascular health when included in a heart-healthy diet. [27]

Practical Intake Guidance

- 1–2 servings of soy foods per day may offer symptom relief.
- Examples of one serving:
 - 1 cup soy milk
 - ½ cup cooked edamame
 - 3 oz. tofu or tempeh
 - ¼ cup soy nuts
- Whole and minimally processed soy foods are preferred over isoflavone supplements, which vary widely in dosage and composition.

Clinical Tip: Counsel with Confidence

If a patient asks, “Can soy help with my hot flashes?”—you can confidently say: “There’s good research to support that soy may help reduce menopausal symptoms like hot flashes. It’s a safe and nutritious food to include in your diet, and it may offer other health benefits too—like supporting heart and bone health.” Encourage patients to try simple swaps like using soy milk in lattes, adding edamame to salads, or including tofu in stir-fries.

Soy and Pregnancy

Pregnancy is a time of heightened nutritional needs—and also a time when many women experience changes in digestion, food preferences, and blood sugar regulation. For women with or at risk for gestational diabetes mellitus (GDM), managing blood glucose while still meeting energy and nutrient needs can be challenging. In this setting, **soy foods can serve as a safe, nutritious, and versatile option.**

Nutritional Benefits of Soy in Pregnancy

- **High-quality protein:** Pregnancy increases protein requirements, and soy offers a complete plant-based source that supports maternal tissue growth and fetal development.
- **Fiber and blood sugar balance:** Many soy foods—such as edamame, tempeh, and soy nuts—naturally contain fiber, which supports satiety, slows glucose absorption, and promotes digestive regularity. Constipation is a common challenge during pregnancy, and incorporating whole-food sources of soy can help contribute to overall fiber intake to ease this symptom. [12]
- **Iron and calcium:** Soy foods contribute non-heme iron and, when fortified, calcium—two critical nutrients during pregnancy. [2]
- **Plant-based versatility:** For women reducing meat intake due to nausea, food aversions, or dietary preference, soy provides an accessible high-quality, plant-based protein option.



Soy and Gestational Diabetes (GDM)

Research suggests that soy consumption may help reduce the risk of developing GDM and may help support glycemic control in women with GDM.[27,28]

Several small clinical trials have noted improvements in:

- Fasting blood glucose
- Insulin sensitivity
- Serum lipid profiles

While more research is needed to establish formal recommendations, incorporating soy as part of a balanced, lower-glycemic diet may be beneficial for women managing GDM.[28]

Is Soy Safe During Pregnancy?

Yes—**moderate soy intake (1–2 servings/day)** is considered safe during pregnancy. Concerns about soy’s estrogenic activity are not supported by current research, which shows soy isoflavones are unlikely to exert an effect on the fetus.[27]

As with all foods during pregnancy, encourage whole or minimally processed sources. There is no safety data to support the use of high-dose soy or isoflavone supplements during pregnancy.

Clinical Tip: Practical Ways to Add Soy During Pregnancy

- Add silken tofu to fruit smoothies for extra protein
- Include edamame as a snack, appetizer, or salad topping
- Use fortified soy milk with breakfast cereal or oatmeal
- Incorporate tempeh or tofu into stir-fries, soups, or wraps

These simple swaps can help meet increased nutrient needs and support steady energy levels without spiking blood sugar.

Soy Foods Tips and Tricks

Where to find soy in the supermarket

Pantry

Hot & Cold Cereals
Protein Bars
Soy Nut Butter
Soy Nuts
Packaged Noodles & Soups
Protein-Fortified Baked Goods
& Pastas
Vegetable Oil
Dry Soybeans

Frozen

Soy-Based Meat Alternatives
Non-Dairy Frozen Treats
Pre-Made Meals
Edamame

Produce

Edamame
Soy protein smoothie drinks
Tempeh
Tofu
Miso

Beverages

Protein-Fortified Beverages
Meal Replacements
Coffee Drinks

Dairy

Soy Milk
Soy-Based Cheese
Soy-Based Yogurt
Soy-Based Beverages

Keeping the Kitchen Stocked with Soy

Soy foods are exceptionally versatile, provide protein, and are a source of minerals such as iron and calcium. Some soy foods will last for months in the pantry or refrigerator. Keep these soy foods stocked for easy access and last-minute needs.

Pantry



Soy Milk: Unlike the plant milks in the refrigerator section of the grocery store, these shelf-stable varieties will keep in your pantry for as long as six months. Plain soy milk is a useful choice to have on hand for baking or to pour over cereal.



Silken Tofu: With a shelf life of a year or more, this type of tofu usually has a soft, delicate texture that makes it perfect to blend into soups and cream sauces.

Textured Vegetable (Soy) Protein (TVP): Made from dehydrated soy flour, TVP is rich in protein and, if stored properly (in airtight bags away from light), it will last in the pantry for well over a year. It's easy to use, too. Just rehydrate with hot water or broth and add to spaghetti or sloppy joe sauce.



Roasted Soy Nuts: Crunchy soy nuts are flavorful snacks that can stay on the shelf unopened for several months. Once you open the bag, storing them in the refrigerator will extend their quality.

Soy Protein Powder: Protein powders made with soy protein isolate can usually be stored in the pantry for several months. Add a scoop to smoothies for an extra dose of protein.



Defatted Soy Flour: Soy flour adds protein and tenderness to baked goods and is especially valuable in homemade bread. In yeast breads, replace up to 15% of the wheat flour with soy flour. The easiest way to do this is to put two tablespoons of soy flour into a one-cup measuring cup before filling with wheat flour. Soy flour can also be used as a substitute for eggs in baking. Use one heaping tablespoon of soy flour plus one tablespoon of water to replace one egg.



Refrigerator

Water-Packed Tofu: Scrambled, baked, or stir-fried, tofu is a delicious source of protein in all types of dishes. Check the label for a "best by" date. Many brands of unopened packages of tofu last for four to five weeks in the refrigerator. Tofu made using a calcium salt to coagulate soy milk (calcium-set tofu) can contribute calcium to the diet.



Tempeh: Depending on the packaging, this traditional fermented Indonesian food can last for months in the refrigerator. Extend its shelf life by freezing. Sauté cubes or crumbles of tempeh with vegetables in peanut or curry sauce and serve over rice.

Miso: A type of fermented soybean paste (often made with the addition of grains and other beans), miso ages well in the refrigerator and can usually be kept for more than a year. Just a tablespoon or two of miso adds a remarkable depth of umami flavor to soups and sauces.



Soy Milk: Soymilk can also be found in the dairy and beverage aisles at the grocery store. Flavored soy milk makes a good addition to smoothies. Choose brands that are fortified with calcium and vitamin D for well-rounded nutrition.

Freezer

Frozen Tofu: If you are unable to use refrigerated tofu by its expiration date, just pop it into the freezer. Once it's defrosted, tofu takes on a pleasantly spongy texture that is especially good for soaking up marinades.

Shelled Edamame: These soybeans are harvested while still green and have a sweet, nutty flavor. Boil them in salted water for 20 minutes (or grab a microwavable bag for ease) and add to salads, stir-fried dishes, or toss with cooked rice. They keep in the freezer for several months.



Recipes

Discover new soy foods recipes to cook at home or share with your clients!



Soy Connection



U.S. Soy

Additional Resources



Soy Nutrition Institute Global discovers, illuminates, and advocates for soy's role in human health and nutrition using scientific evidence to promote consumption globally. Visit [SNIGlobal.org](https://www.sniglobal.org).



The Health Effects of Soy: A Reference Guide for Health Professionals outlines the major findings from 30 years of soy research and explores how soy protein, oil, isoflavones, and other nutrients impact health outcomes at all ages and stages of life.



Soy Connection publishes a quarterly health & nutrition newsletter, which is conveniently accessible online for health care professionals.



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