Protein Powder: Considerations for Older Adults

Consuming whole foods is the preferable way to obtain nutrients, but if older adults are having difficulty consuming adequate protein, considering supplementation with powders may make sense.

Protein powder products commonly contain one or more of the following types of protein:

Whey-based protein: Whey is a milk protein. In whole milk products, it supplies texture to curds and stabilizes the foam in coffee drinks.

Soy-based protein: Soy protein comes in the form of isolate (90% protein) or concentrate (70% protein). Note that lethicin, included in many products, contains soy.

Casein-based protein: Casein is a milk protein that provides calcium and amino acids. In thickened whole milk products, such as yogurt and cheese, the clumping of casein provides thickness and texture.

- Safety – Protein powder products may not be safe without supervision for people with renal disease or other conditions requiring protein limitation, diabetes, allergies to specific ingredients, or physiological inability to handle large volumes of liquid (such as people who have recently undergone surgery on the digestive organs).

- Dosing – A maximum of 40 grams of protein per serving is a good "rule of thumb" maximum. These products are not meant to replace real food in the diet. Taking in 25-40 grams/meal of protein is plenty to receive from a supplement; excess may result in supplanting real food in the diet.

- Drug-nutrient interactions – Soy has mildly estrogenic effects; soy and lethicin should be avoided in any drug interaction with mildly estrogenic substances. Older adults are advised to ask their pharmacist about interactions between their medications and soy, whey, casein, or other ingredients on the label. <u>Label reading of all ingredients is advised.</u>

Other Considerations:

- Individuals with renal disease should be aware of the potassium, sodium, and protein content of a protein supplement product
- Individuals with gluten sensitivity should read labels for hidden sources of gluten in pre-packaged products
- Individuals with a true dairy allergy should avoid powders containing whey and casein
- Individuals with a soy allergy should not only avoid soy protein, but should avoid products containing lethicin
- If in doubt, it is always best for a client to discuss a new supplement with his or her physician or dietitian
- Advise clients that when reading labels to be aware of the nutritional differences between the product with and without added milk
- The American Dietetic Association states that there is no evidence that supplements enhance athletic performance any better than food does
- Patients should be strongly encouraged to learn to read labels for both nutrition information and ingredient information

Examples of products containing each type of soy protein:

EAS 100% Whey Protein Powder: Per serving provides 120 calories, 2 grams fat, 23 grams protein, 3 grams carbohydrate, 1 gram sugar, less than 1 gram fiber, 50 mg sodium, 140 mg potassium. Label does not specify whether this nutrition information is for product combined with milk or water. Contains soy lethicin. Product is not supplemented with vitamins and minerals.

Genisoy Natural Unflavored Soy Protein Powder: Per serving when mixed with water provides 110 calories, 1.5 grams fat, 25 grams protein, 0 grams carbohydrate, 0 grams sugar, 0 grams fiber, 280 mg sodium, 60 mg potassium. Product is supplemented with vitamins and minerals.

Chocolate Muscle Milk – Not a powder – comes in liquid form. (Contains Calcium and Sodium Caseinate): Per serving provides 240 calories, 9 grams fat, 25 grams protein, 14 grams carbohydrate, 3 grams sugar, 2 grams fiber, 430 mg sodium, 1090 mg potassium.