Complete Protein vs. Incomplete Protein

Proteins are categorized as complete and incomplete, based on the amino acids they contain. Amino acids are needed to build new proteins in the body.

- **Complete** proteins contain all the essential amino acids. Dietary sources are primarily from animal sources. The best animal protein choices are lean meats, poultry and fish. If you are partial to red meat, stick with the leanest cuts, choose moderate portion sizes, and make it only an occasional part of your diet. Research suggests that people who eat even modest amounts of red meat have a higher risk of developing colon cancer, heart disease, and diabetes. There is also substantial evidence that replacing red meat with fish, poultry, beans, and nuts, could help prevent heart disease and diabetes—and could lower the risk of early death. And skip the processed stuff—bacon, hot dogs, and deli meats—since that’s linked even more strongly to cancer, heart disease, and diabetes risk.

- **Incomplete** proteins sources lack one or more “essential” amino acids—that is, amino acids that the body can’t make or create by modifying another amino acid. Incomplete proteins, usually come from legumes, fruits, vegetables, grains, and nuts and seeds. Vegetable sources of protein, such as beans, nuts, and whole grains, are excellent choices, and they offer healthy fiber, vitamins, and minerals. Nuts seeds are also a great source of healthy fat. While many think of nuts as a high fat, in reality they are excellent sources of protein and other healthful nutrients.

**Go lean with protein:**

**Start with a lean choice:**

- The leanest cuts of beef and pork
- Choose extra lean ground beef. The label should say at least “90% lean.”
- Boneless skinless chicken breasts and turkey cutlets are the leanest poultry choices.
- Choose lean turkey, roast beef, ham, or low-fat luncheon meats for sandwiches instead of luncheon/deli meats with more fat, such as regular bologna or salami.

**Keep it lean:**

- Broil, grill, roast, poach, or boil meat, poultry, or fish instead of frying.
- Skip or limit the breading on meat, poultry, or fish. Breading adds calories and holds in fat when cooking.
- Choose seafood (non-breaded) at least twice a week as the main protein food. Look for seafood rich in omega-3 fatty acids, such as salmon, trout, and herring.
- Include meals that are exclusively plant-based proteins, examples are included on the other side.

**ATTENTION SENIOR CITIZENS:** Have a nutritional question or concern? If you are participating in a senior meal program, you are eligible to have a free consultation with a Registered Dietitian. Call Cornell Cooperative Extension, Schenectady County at 372-1622, ext. 269, for more information.
Vary Your Protein Choices: Choose non-meat protein sources like beans, peas, and soy products and compliment them with whole grains, nuts and seeds, vegetables and fruit as a main dish or part of a meal. By combining these incomplete proteins you can create a complimentary protein rich alternative to meat. Some choices are:

- Meatless chili with kidney or pinto beans.
- Split pea, lentil, minestrone, or white bean soup.
- Rice and beans
- Add corn bread as a side dish.
- Veggie burger served with baked beans.
- Add garbanzo or black beans and nuts or seeds to salads instead of cheese or meat.
- Create a stir fry with tofu, slivered almonds and vegetables with a side of rice.
- Peanut Butter and jelly on whole grain bread.
- Hummus spread on whole grain pita bread.
- Choose unsalted nuts as a snack, on salads, or in main dishes.


Avocado and White Bean Hummus with Whole Wheat Pita Chips
YIELD: Makes 1-1/2 cups dip and 24 chips

INGREDIENTS:
Hummus:
1 (15 oz.) can white beans (cannellini), drained and rinsed
1 avocado, cut into chunks
Juice from 1 lemon or 1 Tablespoon lemon juice
1 Tablespoon + 1 teaspoon olive oil
1/2 teaspoon sea salt (optional)
1/4 teaspoon cayenne pepper
Pinch of crushed red pepper flakes and fresh cilantro, optional

INGREDIENTS:
Pita Chips:
3 whole wheat pita bread pockets
2 Tablespoons olive oil
1/4 teaspoon Italian seasoning
1/4 teaspoon garlic powder
1/8 teaspoon black pepper
Salt, for sprinkling

DIRECTIONS:
Avocado hummus:
Combine all ingredients in a food processor or blender. Blend until smooth. Taste and adjust seasoning as desired. If dip is too thick for your taste, blend in a little more oil or lemon juice. Cover and refrigerate until ready to serve. Before serving, top with a pinch of crushed red pepper flakes and cilantro, if desired. Serve with pretzels, crackers or pita chips (recipe below).

Pita chips:
Preheat oven to 400 degrees F. Prepare a large baking sheet lined with foil or parchment paper. Cut each pita bread pocket into 8 triangles. Place triangles on baking sheet. In a small bowl, whisk together oil, Italian seasoning, garlic powder and pepper. Brush each triangle with oil mixture. Lightly sprinkle with salt. Bake for 6-8 minutes, or until lightly browned and crisp, careful not to burn.


Consumer-centered access for long-term care information, referrals and assessments.
For information call 382-8481, x 1234.

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