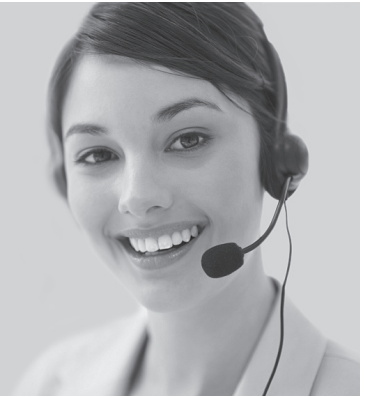


“It was great to talk with you.

Thank you for your interest in ‘The Big Three: Protein, Carbohydrate, and Fat.’ I hope you find this tip sheet helpful.

Please give me a call if you have more questions about this or other topics.

As your UPMC Health Plan health coach, I am ready to help in any way I can.”



The news is full of stories about protein, carbohydrates (carbs), and fat. No wonder — these “macronutrients” are where calories come from in food.

But beware! You cannot trust everything you read. Here are a few facts about “the big three” to help you separate truth from fiction.

About protein

What foods are rich in protein?

- Protein foods: Cooked dried beans, split peas, lentils, soy foods such as tofu, nuts, seeds, seafood, poultry (chicken and turkey), meat, eggs
- Dairy foods: milk, soy milk, yogurt, cheese

Why do I need to eat protein?

Your body uses protein to:

- Build and repair your muscles, bones, skin, hair, and blood.
- Build the cells that fight illness and disease.
- Build the enzymes and hormones that make your body systems work.

Limit unhealthy fat from protein foods.

- How can you tell which fats are unhealthy? Saturated fat is solid at room temperature and comes mainly from animal-based foods and coconut and palm oil. Trans fat is vegetable oil chemically altered in processing to make it solid.
- Protein foods containing saturated and/or trans fat include beef, pork, lamb, processed meats (such as hot dogs, bacon, and deli meats), poultry skin, many baked goods, fried and fast foods, processed foods containing hydrogenated fats, and whole or 2% dairy products (milk, yogurt, and cheese).

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The Big Three: Protein, Carbohydrate, and Fat

- The fat in poultry is found mainly in the skin and is composed almost entirely of saturated fat.
- Red meats and most processed meats are especially high in saturated fat.
- Choose skinless poultry, fish, and plant-based sources of protein more often than meat. Replacing saturated and *trans* fat with healthy types of fat lowers your risk of heart disease, stroke, and type 2 diabetes.

Choose nonfat or 1% dairy foods.

- Milk, yogurt, and cheese are rich in protein and key vitamins and minerals. But whole and 2% milk and regular yogurt and cheese are high in saturated fat. Choose nonfat or 1% milk and nonfat or low-fat yogurt and cheese instead.

Your body stores excess calories — whether from protein, carbs, or fat — as body fat. To avoid weight gain, balance the calories in the foods you eat with the calories you burn by being active.

The bottom line:

- **Choose lean (low-fat) sources of protein.** Examples include cooked dried beans, split peas, lentils, soy foods, seafood, chicken and turkey without skin, egg whites, nonfat or 1% milk or yogurt, and nonfat or low-fat cheese. When you eat meat, choose lean cuts such as loin and round. Trim the fat from the meats you eat. Remove and discard poultry skin. Limit fried and fast foods. Limit the amount of nuts or seeds that you eat per day to a small handful. They are rich in protein but very high in calories and fat (although the type of fat is healthy for you).
- **Choose plant-based protein foods instead of meat several times a week.** Try some of the following: cooked dried beans and peas in salads; bean, lentil, or split pea soup; bean dip such as hummus or refried beans; and chili with beans.
- **Eat seafood twice a week.** Choose from a variety of types, including those rich in the healthy fats called omega-3 fatty acids. These include salmon, anchovies, herring, shad, sardines, Pacific oysters, trout, and Atlantic and Pacific mackerel (not king mackerel, which is high in mercury). Avoid fried seafood.

About carbohydrates

What foods contain carbs?

Carbohydrates include starches, sugars, and fiber. Examples include:

- Starchy vegetables, such as potatoes, corn, winter squash, and peas
- Breads, cereals, rice, and other grains
- Cooked dried beans, split peas, and lentils

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These foods could contain sugars:

- Table sugar, honey, corn syrup, and molasses
- Fruit and 100% fruit juice (contain the natural sugar fructose)
- Unsweetened milk, yogurt, and cheese (contain the natural sugar lactose)
- Foods with added sugar (such as soft drinks, fruit drinks, sugar sweetened milk and yogurt, many breakfast cereals, cakes, cookies, candy, and many frozen desserts)

These foods are good sources of fiber:

- Fruits
- Vegetables
- Whole grains
- Cooked dried beans, split peas, and lentils

Why do I need to eat carbohydrates?

- Your body uses carbs as its main energy source. When you digest food, carbs are broken down into glucose (blood sugar). All of your cells need glucose for energy. If not used right away, glucose is stored in your liver or muscles.
- Breads, cereals, rice, and other grains are rich in vitamins and minerals. So are fruits, vegetables, cooked dried beans, split peas, lentils, and milk.
- Whole grains, fruits, vegetables, cooked dried beans, split peas, and lentils are rich in fiber. Fiber is a type of carbohydrate that your body cannot digest. It helps prevent heart disease, type 2 diabetes, and obesity. It helps you stay “regular” and feel full on fewer calories.

Limit added sugars.

- Many foods with added sugars are high in “empty calories.” They provide few, if any, nutrients that your body needs for health.
- Your body stores excess calories — whether from carbs, protein, or fat — as body fat. To avoid weight gain, balance the calories in the foods you eat with the calories you burn by being active.

The bottom line:

- **Choose carbs that are rich in fiber.** Examples are fruits; vegetables; whole grains; and cooked dried beans, split peas, and lentils.
- **Make at least half your grains *whole* grains.** Make a choice to include more whole-wheat bread or tortillas, oatmeal, whole-grain breakfast cereals, brown rice, bulgur, popcorn (skip the added fat and salt), and whole-grain pasta.
- **Beware! “Seven-grain” or “multigrain” doesn’t necessarily mean “whole-grain.”** Look on the ingredient label for a “whole” grain as the first ingredient.
- **Limit added sugars.** Drink water, plain nonfat or 1% milk, or calorie-free beverages. Choose no-sugar-added yogurt. Enjoy fruit for snacks and desserts. Limit candy, cake, pie, cookies, and frozen desserts with added sugar.

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About fats

What foods contain fat?

Dietary fats can be divided into two main groups, based on how “saturated” they are. Saturation refers to how much hydrogen is in the fat’s chemical structure. The more solid a fat is at room temperature, the more saturated it is.

- Fats that are **liquid at room temperature** are **unsaturated**. These “good” fats are mainly found in plant-based foods.
 - *Monounsaturated* fats are found in avocados; many nuts and seeds; and canola, peanut, and olive oils.
 - *Polyunsaturated* fats are found in many vegetable oils such as soybean, corn, and sunflower oils plus foods rich in omega-3 fats (an important type of polyunsaturated fat), such as fatty fish; walnuts; chia seeds; flaxseeds; and canola, soybean, and flaxseed oils.
- Fats that are **solid at room temperature** are **saturated** or **trans fats**. Saturated fats are found in animal-based foods and in coconut and palm oils. *Trans* fats are vegetable oils that have been chemically altered (“hydrogenated”) in processing to make them solid.
 - Foods rich in *saturated fat*: beef, pork, lamb, poultry skin, butter, whole or 2% dairy products (milk, yogurt, and cheese), and coconut and palm oils
 - Foods rich in *trans fat*: many commercially prepared baked goods, stick margarines, snack foods, processed foods that contain hydrogenated oils, and French fries and other fried foods made in restaurants and fast food chains

What about cholesterol?

- Cholesterol is a fat-like substance found in animal-based foods. Eating foods high in cholesterol can increase blood cholesterol. But the biggest effect is from eating saturated and *trans* fats.
- Most foods that are high in cholesterol are also high in saturated fat. Limit dietary cholesterol by replacing the saturated fat in your meals and snacks with oils.
- A few foods, notably egg yolks and shellfish, are high in dietary cholesterol but not saturated fat. Eggs and shellfish can be included in moderation in a healthy eating pattern.

Why do I need to eat fat? How much do I need?

- Your body needs healthy types of fat in the diet for brain development, blood clotting, and controlling inflammation. Fat also helps the body absorb certain key vitamins.
- Experts recommend that you replace solid fats with small amounts of oils. Adults need only a few teaspoons of oils per day for health (from 3 to 6 teaspoons).

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Why avoid eating too much solid fat? Why avoid eating too much total fat?

- Replacing solid fats in the diet with oils has been shown to lower the risk of heart disease, stroke, and type 2 diabetes.
- *All* types of fat are high in calories. Fat contains more than *twice* the number of calories as the same amount of protein or carbohydrate. So go easy. Your body stores excess calories — whether from carbs, protein, or fat — as body fat. To avoid weight gain, balance the calories in the foods you eat with the calories you burn by being active.

The bottom line:

- **Eat as little *trans* fat as you can.** It is the least healthy type of dietary fat. Read the Nutrition Facts labels. Choose foods with 0 grams *trans* fat. Ask restaurants about *trans* fat in their foods.
- **Instead of butter, use liquid oils or tub margarine with no *trans* fat.** Avoid palm and coconut oils.
- **Choose cooked dried beans, split peas, lentils, nuts and seeds in small amounts, poultry, and fish.** When you eat meat, choose leaner cuts such as loin or round. Trim all visible fat. Remove and discard poultry skin.
- **Switch from whole and 2% milk, cheese, or yogurt to nonfat or low-fat (1%).**
- **Eat good sources of omega-3 fats often.** These include fish (two to three times per week), walnuts, canola or soybean oil, ground flaxseeds, flaxseed oil, or chia seeds (Salvia).



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The Big Three: Protein, Carbohydrate, and Fat

*SMART goals are Specific, Measurable, Appropriate, Realistic, and Timely. For example, “On Tuesday and Thursday this week, I will buy a salad with grilled chicken for lunch instead of a fried chicken sandwich.”

SMART goals help you succeed! If you have any trouble setting your weekly SMART goals, ask your health coach for help.

The information in this tip sheet is for educational purposes only. It is not intended or implied to be a substitute for professional medical advice. Before making changes, always talk to your doctor about what is right for you.

Source:

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