

CF Health Matters



Healthy Diet, Healthy Fats

Why do People With Cystic Fibrosis Need More Fat in Their Diet?

As you know, people with CF have higher daily energy needs because of:

- inflammation and infection which burn up a lot of calories; and
- malabsorption of some of the foods eaten (even when taking enzymes);

By eating a high energy diet, you are giving your body back this vital energy. Since fat is the highest calorie source in our diet, this means eating more fat! There are four main types of fatty acids. Most fats are a combination of these:

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1. Polyunsaturated Fats

Polyunsaturated fats are an excellent source of energy. Polyunsaturated fat means that there are several ‘unsaturated’ double-bonds in the fat. Polyunsaturated fats are liquid at room temperature. Many common vegetable

oils, fish oils, flaxseed, sunflower seeds, soybeans and some nuts contain a lot of polyunsaturated fat. Polyunsaturated fats can be divided into two main types: Omega-3 and Omega-6 fatty acids. Both play an important role in inflammation in the body: the omega-3 fatty acids are ‘anti-inflammatory’ whereas omega-6 fatty acids are believed to increase



inflammation. Most of us eat too little omega-3 and a lot of omega-6 polyunsaturated fat. It is good nutritional advice that all people, not just those with CF, increase their dietary intakes of omega-3 fatty acids to improve the omega-3 fatty acid to omega-6 fatty acid balance.

Foods high in Omega-3 fatty acids include: fatty fish (such as salmon, mackerel, tuna, herring and sardines) as well

as flaxseed, canola oil, soy oil and some nuts (such as walnuts and pecans).

2. Monounsaturated Fats

Monounsaturated fats are also an excellent source of energy. Monounsaturated means that the fat contains only one unsaturated double-bond. Foods rich in monosaturated fat are generally liquid at room temperature and semi-solid when refrigerated. Olive oil, canola oil, and peanut oil are all rich in monosaturated fat as are: natural peanut butter (most other peanut butters have added vegetable shortening which is a trans fatty acid), almonds, peanuts, other nuts.

3. Saturated Fats

Saturated fats have no double-bonds. They are solid at room temperature and are found mostly in foods from animals. For most people saturated fat is considered a “bad fat” because it raises blood cholesterol levels. Because most people with CF have low cholesterol levels, saturated fats are not considered a problem and may even be a good fat for you.

Foods high in saturated fats include red meats: beef, veal, lamb, pork, lard, poultry fat (found in the chicken skin), butter, cream, 3.25% milk, cheeses and other dairy products made from whole milk. These foods also contain dietary



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cholesterol. Saturated plant fats include coconut oil, palm oil (often called tropical oils), and cocoa butter.

4. Trans Fats

Trans fats are created by food processing companies to increase the self-life of high fat processed foods. The process called 'hydrogenation' turns liquid oil into semi-solid fat. Although there is a small amount of naturally occurring trans fats in some foods (such as milk, cheese and other milk products) that are not harmful, most of the trans fats in our diet are artificial and should be eaten in moderation. "Hydrogenated" or "partially hydrogenated" oils or fats are another name for trans fats.

Where are Trans Fats?

Trans fats are found in commercial foods such as:

- bakery products, crackers, cookies, snack foods like potato chips, commer-

cially fried foods, and breaded foods.

- shortening is a trans fat (it is liquid vegetable oil 'hydrogenated' into a semi-solid fat).
- margarine sold as solid 'sticks' rather than soft margarines, especially those made with the healthiest fats.

How Can we Avoid Trans Fats?

More companies are producing trans fat free commercial foods. Look for this claim on the food label. Homemade

“ *Try to eat fish twice a week, especially salmon, herring or mackerel.* ”

bakery products made with liquid oil (i.e. canola oil) are free of trans fatty acids. Avoid using shortening (trans fat). If you use margarine, avoid the solid sticks of margarine and buy those made from healthy fats such as canola oil.

Is Butter Better Than Margarine?

Recent studies on the potential cholesterol-raising effects of trans fats have raised public concern about the use of margarine

and whether other options, including butter, might be a better choice. The softer the margarine, the less trans fats it contains. Because butter is rich in both saturated fat and cholesterol, people who do not have CF should use it sparingly. Since neither saturated fat, nor cholesterol are a problem for most people with CF, butter can be a healthy choice.

What is DHA and What is Special About DHA in Cystic Fibrosis?

DHA or docosahexaenoic acid, is a long chain omega-3 fatty acid found mostly in fatty fish (listed above) and human breastmilk. People with CF are known to have very low levels of DHA. Since DHA is important for the normal functioning of your body's cells, your diet should include this fat.

Most omega-6 fatty acids are consumed in the diet from vegetable oils such as corn oil, safflower, sunflower, etc, or in foods made from these oils such as: margarine, baked goods, cereals, etc.

Omega-6 fatty acids compete with omega-3 fatty acids for use in the body. Therefore, too much omega-6 fatty acids compared to omega-3 fatty acid, as found in the diet of most people from Canada, can be a problem. Try to choose omega-3 fats over omega-6 fats, when possible, to restore the balance of these fats in your diet.

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Should I Supplement my Diet With DHA (also known as fish oil or omega-3 supplements)?

Much research is being done to see if DHA supplements might be helpful in CF. The Canadian Cystic Fibrosis Foundation is not recommending omega-3 supplementation at present. More studies need to be done. Eating 1-2 meals per week of fatty fish high in DHA is, however, recommended for everyone!

Speak to your clinic dietitian/nutritionist or CF doctor for more information on increasing DHA content in the diet.

Can I Eat Potato Chips, French Fries and Other High Fat Foods as Much as I Want?

Although you can eat potato chips (choose trans fatty acid free chips) and

french fries, they should not become staples in your diet. They should be considered an 'extra' food eaten with a healthy, well balanced diet. There are better choices of high energy, high fat foods such as nuts, seeds, bread dipped in olive oil, etc.

Can you Give me Some Tips for Adding Healthy Fat to my Diet?

- Try to eat fish twice a week, especially salmon, herring or mackerel.
- Choose frozen breaded products made with hydrogenated fats less often.
- Use olive or canola oil in salad dressing.
- Choose cookies, chips and crackers that are not made with hydrogenated oil.
- Sprinkle walnuts, cashews, almonds or peanuts over salads, add them to baking or eat as a fast snack.

- Add an avocado to your salad. It's a great source of monounsaturated fat.
- Buy omega-3 eggs, which come from hens fed on flaxseed. They contain even to 12 times more omega-3 than regular eggs.

“ *Since fat is the highest calorie source in our diet, people with CF should be eating more fat!* ”

Remember...

- Fat is an essential nutrient – our bodies need fat.
- Choose fats in the form of monounsaturated and polyunsaturated fats from oils, spreads, avocado, nuts and seeds more often.
- Consume omega-3 fats rich foods such as fish, canola oil, flaxseed, walnuts etc.