

Non-Alcoholic Fatty Liver Disease: Recommendations for Healthy Eating

A healthy diet includes a variety of foods including fruits and vegetables, while limiting saturated fat, cholesterol, sugary foods, and sodium. Healthy food habits can help reduce excess body weight. Studies have shown that a 10% reduction in body weight leads to significant improvement in the amount of fat in the liver.

You don't need to make huge changes to eat healthier and you don't have to change your habits all at the same time. It's best to set small goals and change your habits a little bit at a time. Over time, small changes can make a big difference in your health.

Key points:

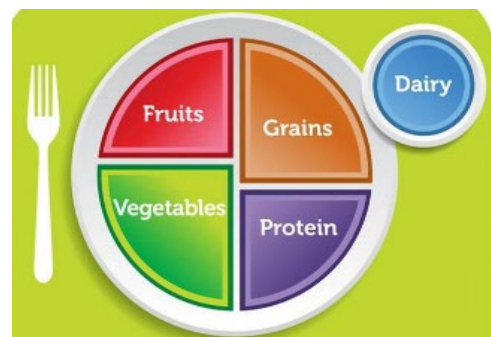
- ❖ You can reduce the amount of fat in the liver by decreasing your **total calorie intake** and **increasing your physical activity**.
- ❖ No single diet has been proven to be more effective than another. Below are overall recommendations for healthier eating habits. Focus first on identifying a few areas you might be able to improve on rather than trying to make all these changes at once.
- ❖ Limiting high fructose corn syrup and excess sugar may be a good place to start depending on your current eating habits.
- ❖ Even without losing a significant amount of weight, healthier eating has overall health benefits including decreasing the amount of fat in your liver.
- ❖ For personalized recommendations you can meet with a nutritionist or dietician, and they will provide more specific information.

How can I get started on a Healthy Diet?

1. **Watch your portions:** Did you know portion size and serving size are not the same thing? The National Institutes of Health provides helpful definitions of each: **Portion** is how much food you choose to eat at one time, whether in a restaurant, from a package, or in your own kitchen. A portion is 100 percent under our control. **Serving Size** is the amount of food listed on a product's Nutrition Facts label. All of the nutritional values you see on the label are for the serving size the manufacturer suggests on the package. If you eat more than 1 serving (a bigger portion), you get more calories and nutrients. Being aware of the serving size can help you decide how much you want to eat of that food.

Ways to watch your portions:

- Use tools! Measuring cups and spoons allow you to measure out exact portions of food at meals until you can estimate the right amount of food to serve yourself.
- You can also use a visual approach and divide your plate into sections:
 - ✓ Fill half of your plate with fruits and vegetables
 - ✓ Fill one quarter of your plate with a grain, preferably a whole grain like brown rice, whole wheat pasta
 - ✓ Fill one quarter with a protein source like lean meats, beans, tofu.
 - ✓ Incorporate low fat dairy into your meals and or snacks
- To keep your energy level up and keep you from feeling hungry, avoid skipping meals, which usually leads to overeating at the next meal. It is best to eat at regular intervals throughout the day such as 3 meals and 1 or 2 healthy snacks per day.



- Eat only the number of calories you need to stay at a healthy weight. If you need to lose weight, eat fewer calories than your body burns (through exercise and other physical activity).
- Try keeping a food log to see how many calories you are eating. The quality of calories is just as important as the quantity. A dietitian can advise you on a good calorie goal. Focus on the nutrient-dense foods listed below instead of highly processed snack foods, sugar-sweetened beverages, refined (white) grains, refined sugar, fried foods, foods high in saturated and trans fats.

2. Eat more fruits and vegetables

- Eat a variety of fruit and vegetables every day. Dark green, deep orange, red, or yellow fruits and vegetables are especially good for you. Examples include spinach, carrots, peaches, and berries.
- Aim for at least 5 (1/2 cup) servings of fruits and vegetables (combined) daily
- Keep fruits and vegetables handy for snacks. Store them where you can see it so that you will be tempted to eat it.
- Cook dishes that have a lot of veggies in them, such as stir-fries and soups.



3. Limit sugar and extra carbohydrates

- Limit or avoid drinks and foods with added sugar. These include candy, desserts, and soda pop.
- High-Fructose Corn Syrup containing foods and beverages are particularly important to limit to promote weight loss and healthy eating.
- Although 100% fruit juices may not contain *added* sugar, fruit juice gives your body a large amount of sugar to process at one time and liquid calories are not as filling as whole foods. Choose a piece of fruit over juice.



If you decide to drink juice, choose 100% juice, and limit the amount to 4 ounces per day.

- Limiting the total amount of carbohydrates may be beneficial for NAFLD. On average, the total amount of carbohydrates an adult needs ranges from 45-60 grams per meal. A standard serving size of carbohydrate food contains about 15 grams of carbohydrates.
- High carbohydrate foods include bread, cereal, rice, pasta, beans and starchy vegetables. Sweets tend to be high carbohydrate foods.

4. Significantly limit or completely avoid alcohol

For your liver health we recommend completely avoiding alcohol. If you do not feel that you can completely avoid alcohol, it is very important not to drink in excess (excess is considered more than 2 drinks a day for men, and more than 1 drink a day for women). Too much alcohol can cause many different health problems and can add excess calories that contribute to weight gain.



5. Limit saturated and trans fat

Diets high in saturated fat increase bad cholesterol (LDL) and total cholesterol levels. Trans fats also raise LDL cholesterol.

Examples of Food High in Saturated Fat:

- Animal products: fatty cuts of meat (beef, lamb, pork), poultry with skin, whole and 2% milk, butter, cheese, lard
- Plant sources: palm kernel oil, palm oil, coconut oil, cocoa butter

Examples of Foods High in Trans Fat:

- Baked goods (crackers, cookies, cakes, donuts)
- Hard margarines
- Commercially produced white breads



- French fries and other fried foods
- Trans fat is found in processed foods that use partially hydrogenated oils

Tips to Minimize Saturated and Trans Fat:

- Use olive or canola oil when you cook.
- Use Smart Balance or Earth balance spreads instead of butter or margarine
- Bake, broil, grill, or steam foods instead of frying them.
- Choose lean meats such as chicken or turkey breast, fish, eggs, and lean cuts of beef and pork like tenderloin or sirloin. When buying ground beef or turkey choose at least 90% lean/10% fat meats. Ground turkey can contain dark meat and skin so it's important to look for >90% lean turkey or ground turkey breast.
- Drain off any excess fat after cooking meats.
- Cut off all visible fat when you prepare meat and remove skin from chicken and turkey.
- Avoid high-fat meats such as hot dogs, salami, bologna, and sausages.
- Eat more plant-based proteins such as beans, lentils or soy as these have no saturated or trans fats. Soy products, such as tofu, edamame, and tempeh, may be especially good for you.
- Choose low-fat or fat-free milk and dairy products instead of whole-fat dairy or try unsweetened almond, soy, or cashew milk.

6. Limit sodium

Almost all foods naturally contain sodium (salt). Added salt in food preparation and food processing are the major sources of salt in our diet. Healthy adults require only 2400 milligrams sodium per day, yet the average American consumes 6000-8000 mg sodium daily. Limit how much



salt and sodium you eat to help lower your blood pressure and reduce water retention.

Examples of foods high in salt/sodium:

- Cured meats, sausages, luncheon meats
- Canned vegetables, soups, beans, fish
- Soy sauce, miso
- Commercially prepared main-course meals
- Box dinners (seasoning packets)
- Frozen meals
- Cheeses, especially processed cheese
- Condiments and other dressings: mayonnaise, salad dressings, ketchup, sauces (barbecue, steak, Worcestershire)

Tips to minimize sodium:

- Taste food before salting. Add only a little salt when you think you need it. With time, your taste buds will adjust to less salt.
- Eat fewer snack items, fast foods, and other high salt, processed foods.
- Check food labels for the amount of sodium in packaged foods.
- Choose low-sodium versions of canned goods (such as soups, vegetables, and beans).
- Use herbs and spices such as garlic, oregano, basil, onion, and pepper instead of salt.
- Use low sodium condiments whenever available such as ketchup, mustard, and salad dressings.

7. Eat fish

- Eat at least two servings of fish a week. Certain fish, such as salmon and tuna, contain omega-3 fatty acids which may have health benefits.



8. Eat foods high in fiber

- Fiber, in addition to lean protein, helps you feel fuller longer and may allow you to eat less calories each day.
- Choose whole-grain products. Examples include oats, whole wheat bread, quinoa, and brown rice.
- Buy whole-grain breads and cereals, instead of white bread or pastries.
- Fruits, vegetables, beans, nuts and seeds are all good sources of fiber. Add walnuts or chia seeds to oatmeal or have almonds with a piece of fruit for an afternoon snack.



What are other strategies for healthy eating?

- Keep more fruits, low-fat dairy products (low-fat milk and low-fat yogurt), vegetables, and whole-grain foods at home and at work. Focus on adding healthy food to your diet, rather than just taking unhealthy foods away.
- Buy a healthy recipe book and cook more meals at home. Chew gum when you cook so you won't be tempted to snack on the ingredients.
- Pack a healthy lunch and snacks for work. This lets you have more control over what you eat.
- Limit eating out as much as possible. When you do eat out the suggestions above and split your meal or package half to take home for another meal.
- Put your snacks on a plate instead of eating from the package. This helps you control how much you eat.
- Don't skip or delay meals and be sure to schedule your snacks. If you ignore your feelings of hunger, you may end up eating too much or choosing an unhealthy snack. If you often feel too hungry, it can cause you to focus a lot on food.
- Eat your meals with others when you can. Relax and enjoy your meals, and don't eat too fast. Try to make healthy eating a pleasure, not a chore.

- Drink water instead of high-sugar drinks (including high-sugar juice drinks). Sometimes dehydration can be confused with hunger. Aim to drink at least 6-8 cups of water daily.
- Try to substitute meatless main dishes 2-3 times per week. For example, use dried beans, split peas, lentils, soy and meat substitutes in place of meat in dishes.
- Use low fat frozen yogurt, sorbets, ice milk, etc. as a dessert in place of ice cream.
- Bake, broil, and steam foods instead of frying them.

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