

# Fatty Liver Diet Guidelines

---

## What is Non-Alcoholic Fatty Liver Disease (NAFLD)?

NAFLD is the buildup of fat in the liver in people who drink little or no alcohol. NAFLD can lead to NASH (Non-Alcoholic Steatohepatitis) where fat deposits can cause inflammation and damage to the liver. NASH can progress to cirrhosis (end-stage liver disease).

## Treatment for NAFLD

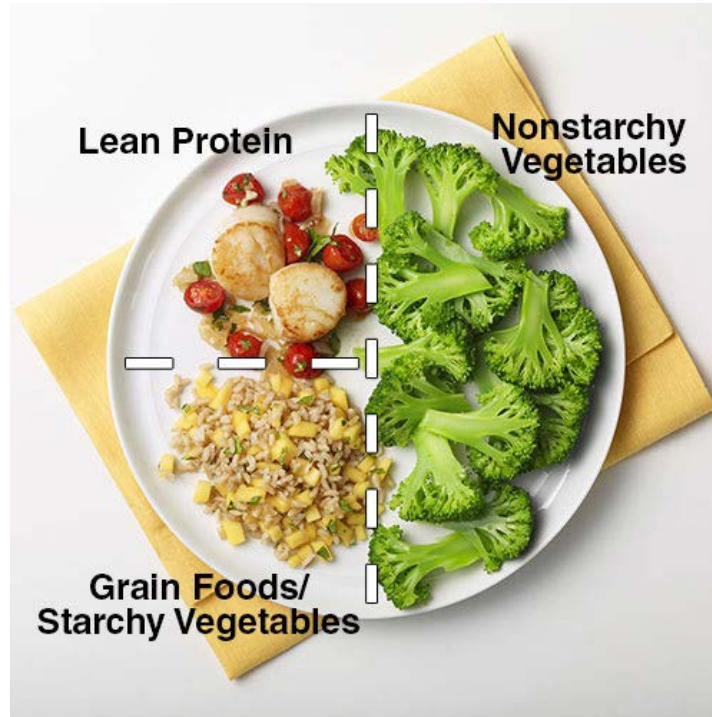
- Weight loss
  - Weight loss is the most important change you can make to reduce fat in the liver
  - A 500 calorie deficit/day is recommended or a total weight loss of 7-10% of your body weight
  - A healthy rate of weight loss is 1-2 pounds/week
- Change your eating habits
  - Avoid sugar and limit starchy foods (bread, pasta, rice, potatoes)
  - Reduce your intake of saturated and trans fats
  - Avoid high fructose corn syrup containing foods and beverages
  - Avoid alcohol
  - Increase your dietary fiber intake
- Exercise more
  - Moderate aerobic exercise for at least 20-30 minutes/day (i.e. brisk walking or stationary bike)
  - Resistance or strength training at least 2-3 days/week

## Diet Basics:

- Eat 3-4 times daily. Do not go more than 3-4 hours without eating.
- Consume whole foods: meat, vegetables, fruits, nuts, seeds, legumes, and whole grains.
- Avoid sugar-sweetened beverages, added sugars, processed meats, refined grains, hydrogenated oils, and other highly processed foods.
- Never eat carbohydrate foods alone.
- Include a balance of healthy fat, protein, and carbohydrate each time you eat.

## Healthy Eating for NAFLD

A healthy meal includes a balance of protein, healthy fat, and complex carbohydrate every time you eat.



### LEAN PROTEIN

- Protein should fill up  $\frac{1}{4}$  of your plate.
- Aim for at 5-6 servings/day.
  - 1 serving:
    - 2-3 ounces of cooked meat, poultry, or fish (3 ounces = deck of cards)
    - 1 egg
    - $\frac{1}{4}$  cup cooked beans or lentils
    - 1-2 ounces cooked tofu or tempeh

Recommended	Not Recommended
<ul style="list-style-type: none"> <li>• Skinless poultry (chicken or turkey)</li> <li>• Lean cuts of beef and pork (visible fat removed)</li> <li>• Fish and seafood</li> <li>• Eggs/egg whites</li> <li>• Beans, lentils, legumes</li> <li>• Meat alternatives such as tofu and tempeh</li> <li>• Protein powder</li> <li>• Ready-to-drink protein shakes</li> </ul>	<ul style="list-style-type: none"> <li>• Fatty cuts of beef and pork</li> <li>• Poultry with skin</li> <li>• Deep fried meats</li> <li>• Processed meats (bacon, sausage, hot dog, brats, bologna, salami, etc.)</li> </ul>

## CARBOHYDRATES

- Carbohydrates should only fill up ¼ of your plate.
- Carbohydrate intake should be from complex carbohydrate foods.
  - Complex carbohydrates include:
    - Whole grains: whole wheat bread, high fiber crackers, high fiber and unsweetened cereals, whole grain pasta, and brown and wild rice
    - Starchy vegetables: potato, peas, corn, and squash
    - Fresh and frozen fruit
    - Milk, soy milk, and yogurt
    - Beans and Legumes
  - AVOID simple carbohydrates:
    - Refined grains: white bread, white pasta, white rice, pastries, etc.
    - Sweeteners and anything with added sugar (cookies, ice cream, candy, etc.)

### **Limit carbohydrate intake to 2 servings (30 grams) per meal and 0-1 serving (<15 grams) at snacks**

- Examples of 1 carbohydrate serving (15 grams):
  - 1 slice bread
  - ¼ large bagel
  - 1 tortilla (6 inch)
  - ½ hamburger or hotdog bun
  - ½ cup cooked cereal
  - 1/3 cup cooked rice and pasta
  - ¾ cup dry cereal
  - 5-6 crackers
  - ½ cup starchy vegetable
  - ½ cup beans (also a protein source)
  - 1 cup or 1 small piece fruit
  - 2 tablespoons dried fruit
  - ½ cup fruit juice
  - 1 cup milk or soy milk
  - ½ cup unsweetened yogurt

Recommended	Not Recommended
<ul style="list-style-type: none"> <li>• Whole grains (whole wheat bread, brown rice, quinoa, etc.)</li> <li>• Fruit: fresh and frozen, unsweetened fruit juice, canned fruit in fruit juice</li> <li>• Fresh or frozen starchy vegetables</li> <li>• Beans/lentils</li> <li>• Unsweetened yogurt</li> <li>• Milk and soy milk</li> </ul>	<ul style="list-style-type: none"> <li>• Refined grains such as white bread, white rice, buns, pastries, etc.</li> <li>• Fruit: sweetened fruit juice, canned fruit in heavy syrup</li> <li>• Fried potato such as French fries</li> <li>• High fat snack foods: potato chips and crackers</li> <li>• Sweetened yogurt</li> </ul>

### FATS AND OILS

- 1 serving per meal
  - 1 tablespoon plant-based oil (olive, sunflower, avocado, etc.)
  - 1 ounce nuts or seeds
  - 1 tablespoon nut spread
  - 2 tablespoons salad dressing
  - 1 ounce cheese
  - ½ avocado
  - 1 tablespoon butter

### NON-STARCHY VEGETABLES

- Allowed in unlimited quantities
- 1 serving = 1 cup raw or ½ cup cooked
  - Artichoke
  - Broccoli
  - Cauliflower
  - Cabbage
  - Green beans
  - Bell peppers
  - Zucchini
  - Carrots
  - Celery
  - Onion
  - Garlic
  - Lettuce (all kinds)
  - Spinach
  - Mushrooms
  - Asparagus
  - Brussels sprouts

### BEVERAGES

- All beverages should be sugar free
  - Good choices: water, coffee, tea, sparkling water (i.e. LaCroix, Bubbly, etc.), Zevia (soda sweetened with Stevia)

### SWEETENERS

- Limit to 1 tsp or less daily
  - Good choices: Stevia, Monk fruit, Honey
- Limit foods and beverages with ADDED sugar, especially those with high fructose corn syrup

# Grocery Shopping List

Use this list to help you make healthy choices at the grocery store.

## Fruits & Vegetables

Choose fruits and vegetables in a variety of colors. Non-starchy vegetables are the lowest in calories and carbohydrates. Count the carbs in your fruits and starchy vegetables just as you would for any other carbohydrate food.

Fruits	Non-starchy Vegetables	Starchy vegetables
Apple	Artichoke	Corn
Apricot	Arugula	Peas
Avocado	Asparagus	Potato
<b>**Banana</b>	Bell peppers (any color)	Winter squash
Berries (blueberries, blackberries, raspberries, strawberries)	Broccoli	
Canned fruit in fruit juice only	Brussels sprouts	
Cherries	Cabbage	
Clementine	Cauliflower	
Coconut	Chili pepper	
Dried fruits without added sugar	Cucumber	
Grapefruit	Eggplant	
<b>**Grapes</b>	Frozen vegetables without added sauces	
Kiwi	Green beans	
Lemon	Kale	
Lime	Lettuce (any type)	
Mango	Low sodium canned vegetables	
Melon (cantaloupe, honeydew, watermelon)	Mushrooms	
Nectarine	Onion	
Orange	Radish	
Papaya	Spinach	
Peach	Zucchini	
Pear		
Pineapple		
Tangerine		
<b>**High Glycemic (sugar) fruit</b>		

## Meat & other protein sources

Try to plan at least two servings of fish each week. Also aim to fit three servings of lean meat into your meal plan every week.

- Skinless poultry (chicken breast, turkey breast, ground turkey breast, ground chicken)
- Lean cuts of beef and pork (pork loin or tenderloin, flank steak, sirloin, T-bone steak, 90% or higher lean ground beef)
- Low fat deli meat (chicken, ham, turkey, roast beef)
- Fresh or frozen fish (salmon, cod, tilapia)
- Canned tuna in water
- Fresh or frozen shellfish (shrimp, scallops, crab, mussels, lobster)
- Firm tofu
- Low sodium canned beans or lentils
- Dried beans/lentils
- Eggs and egg whites
- Protein powders (whey, soy, pea, etc.)
- Ready-to-drink protein shakes (Premier Protein, Pure Protein, SlimFast Advanced)

## Dairy & Dairy substitutes

Watch out for added sugars in yogurt. Choose unsweetened milk alternatives.

- Low fat milk (skim or 1%)
- Low fat cottage cheese (skim or 1%)
- Low fat sour cream
- Plain Greek yogurt (regular or low fat)
- Cheese
- Almond milk
- Coconut milk
- Soy milk

## Fats

- Plant based oils: olive oil, avocado oil, sunflower oil, etc.
- Raw nuts and seeds
- Nut butters (peanut butter, almond butter, cashew butter, etc.)
- Full fat salad dressing
- Avocado
- Olives
- Butter

## Grains

Look for “whole grain,” “whole wheat,” “sprouted grain,” and “high fiber” on package labels. Choose foods with at least three grams of dietary fiber and fewer than eight grams of sugar per serving.

- High fiber grains: brown rice, wild rice, quinoa, oats
- Low carb bread, pasta, and tortillas
  - Dreamfields Healthy Carb Living Pasta
  - Seven Grain Sprouted bread (Kowalski’s deli)
  - Marketside High Protein bread (Walmart)
  - Silver Hills Sprouted Power “Little Big Bread” (Target, Fresh Thyme, Whole Foods)
  - Joseph’s Low Carb Pita Bread (Cub Foods, Walmart)
- Hot cereal without added sugar (oatmeal, grits, cream of wheat, cream of rice)

## Sweeteners

- Honey
- Monk fruit
- Stevia