These days, people are living longer with HIV. This is because of a variety of factors, including advances in medical treatment and medicines, such as antiretroviral therapy for HIV. What also helps is having the right nutrition balance, exercising, and making healthy lifestyle choices. These can all have a beneficial effect on overall health.

Nutrition and exercise can make a big impact.

There’s no question that eating properly and exercising are good ideas. But it can be even more important for people living with HIV. The right diet and exercise plan is an important component in managing your HIV.

Managing your health is important when you have HIV.

Important: The suggestions and information in this booklet are based on published recommendations from professional health organizations. To learn more about these organizations, see page 51.

Always speak with your healthcare provider about the medicines you’re taking, any symptoms you may be experiencing, and before starting a new exercise or nutrition program.
This guide is meant to provide you with ideas to develop a diet and exercise plan. (Of course, you should always discuss exercise and nutrition options with your healthcare provider before making any changes to your lifestyle.)

On the following pages, you’ll find a variety of suggestions for healthy eating. The exercise section is full of interesting options to help you get started with an exercise program. Or even give you some ideas for new exercises.

**Your healthcare team is the best resource.**

Your healthcare team—nurses, registered dietitians, and other professionals—is there to help you make healthy decisions. Be sure to speak with your team before beginning a new exercise program or changing your diet. Remember; your healthcare provider is your best resource. So keep him or her informed about any exercise or diet changes you may be thinking about making.
HIV and many of its treatments can change the way the body processes nutrients and other substances, like fat. Some of these changes can lead to serious metabolism disorders and can affect the way you look and feel. These changes can happen slowly and over time. That’s why it’s important to pay attention to your diet and eat properly each day.

Factors that can affect eating.

When you are living with HIV, many circumstances can impact your ability to eat healthy. HIV leaves some patients too tired to prepare meals on a regular basis. Some of the HIV medicines may cause a loss of appetite or change the taste or smell of food. Nausea, vomiting, or oral sores may make eating difficult or painful. These effects can cause a person to lose essential nutrients or become dehydrated.
According to the AIDS Project Los Angeles (APLA), good nutrition has many important benefits, including:

- Keeping the immune system strong to help fight disease and infection
- Helping the body process medicines
- Managing HIV symptoms such as diarrhea, nausea, and fatigue
- Controlling conditions such as hypertension and high or abnormal cholesterol, glucose, and triglyceride levels

Always speak with your healthcare provider about the medicines you're taking, any symptoms you may be experiencing, and before starting a new exercise or nutrition program.
A person can eat plenty of food, but not eating the right foods can deny the body essential nutrients it needs to be healthy. Remember; there is no single diet that’s right for everyone. For this reason, it’s important to work closely with a nutritionist or dietitian to create a plan that best meets your health, personal, and financial needs.

Choosing a healthy diet.

Here are some general nutrition guidelines from the US Department of Agriculture (USDA):

- Choose fruits, vegetables, whole grains, and fat-free/low-fat milk and milk products. See the USDA food plate on page 9 for suggested food portions and groups.
- Include lean meats, poultry, fish, beans, eggs, and nuts in your diet.
- Check the nutrition facts label for foods that are low in saturated fats, trans fats, cholesterol, salt (sodium), and added sugars.
- Also check the nutrition label for foods that contain enough potassium, fiber, vitamins A and C, calcium, and iron.
- Use the % Daily Value (DV) column when possible. Less than 5% DV is considered low, and 20% or more is considered high.
Goodbye pyramid. Hello MyPlate.

You're probably familiar with the food guide pyramid, but things have changed. MyPlate makes it easier to see what and how much you should be eating.

How to read a nutrition label.

Start here

Check the total calories per serving

Limit these

Get enough of these nutrients

Quick guide to % Daily Value:
- 5% or less is low
- 20% or more is high

<table>
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<tr>
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<table>
<thead>
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<tr>
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<tr>
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<tr>
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</tr>
<tr>
<td>Protein 0g</td>
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</table>

*Percent Daily Values are based on a 2,000-calorie diet.
According to the USDA, here's a daily list of the food groups you should eat from:

**Protein:**
Be sure to eat beans, peas, nuts, lean meats and poultry, and baked, broiled, or grilled fish

**Fruits:**
Fresh, frozen, canned, or dried fruit rather than fruit juice. Try for 2 cups a day. For example, 2 large bananas, 2 large oranges, or 1 cup of dried apricots or peaches

**Calcium-rich foods:**
3 cups of low-fat or fat-free milk or an equivalent of low-fat yogurt and/or low-fat cheese. 1 1/2 ounces of cheese = 1 cup of milk

**Vegetables:**
Dark green vegetables: broccoli, spinach, and other dark green leafy vegetables. Orange vegetables: carrots, sweet potatoes, pumpkin, and winter squash. Beans and peas: pinto, kidney, black, garbanzo, split peas, and lentils

**Grains:**
Half your grains should be whole grains. At least 3 ounces of whole-grain cereals, breads, crackers, rice, or pasta each day. 1 ounce = 1 slice of bread, 3/4 cup of breakfast cereal, or 1/2 cup of cooked rice or pasta

To learn more and for meal planning ideas, visit and [choosemyplate.gov](http://choosemyplate.gov)
Eating for a specific goal

People with HIV have different nutritional and weight concerns. That’s why the APLA recommends following nutrition guidelines, like the ones on this page, to help you meet the health goals you and your healthcare provider have discussed.

To gain weight:

- Eat more often (5 to 6 meals a day, plus snacks)
- Eat tuna packed in oil, not water
- Add extra oil (olive oil or canola oil) to foods
- Drink 100% fruit juices
- Make a smoothie with low-fat milk or yogurt and add bananas and/or berries
- Eat a handful of trail mix a day
- Avoid tobacco and alcohol. They can make you lose your appetite

To lose weight:

- Avoid high-fat foods like burgers, French fries, pizza, and ice cream
- Avoid fried foods when possible
- Avoid high-sugar foods such as soft drinks, pastries, and candy
- Exercise regularly. Talk with your healthcare provider before beginning any exercise program
Keep up your energy.

According to the Academy of Nutrition and Dietetics, protein can go a long way in helping you keep your energy level up. Here are some guidelines to follow:

• Eat small portions many times throughout the day
• Make sure each meal is rich in nutrients
• Choose high-protein, high-calorie foods
• Be sure each meal is balanced as MyPlate recommends
People with weakened immune systems have a higher risk than others of getting sick from food that has become contaminated by bacteria. You can take steps to ensure the food you handle is safe by following these simple tips.
When buying food:
- Avoid damaged cans and packages
- Buy only pasteurized products (milk, cheese, honey, juices, etc)
- Avoid alfalfa sprouts, cracked eggs, and bruised fruits and vegetables
- Buy cold and frozen foods last before going home

When storing food:
- Keep perishable items refrigerated
- Keep meats on the bottom shelf
- Don’t reuse plastic bags for food storage
- Throw away moldy food

When preparing food:
- Keep everything clean: hands, work surfaces, utensils, and foods
- Wash your hands well with warm, soapy water
- Wash produce under running water
- Thaw frozen foods in the refrigerator, not at room temperature
- Keep raw meats, their juices, and their packaging away from other foods
- After preparing raw meat, clean the preparation surface and equipment with hot, soapy water
- Avoid leaving food out at room temperature for longer than 2 hours
Preparing a shopping list ahead of time can help you stick to your original plan. It can also help you:

- Save time and energy and make sure you’re eating healthy
- Ensure you have enough food and snacks on hand when needed
- Be less tempted to shop impulsively and buy unhealthy items
- Stay within your budget
- Be less likely to forget items and have to return to the store
- Shop less frequently

Note: The following recommendations for developing a nutrition plan are based on the general advice of a registered dietitian and should be used as a guide only. Speak with your healthcare provider about a plan that meets your specific needs and goals.
It’s important to prioritize goals and review them with your healthcare provider first. For your convenience, starting on page 25, you'll find a week of sample menus to give you a good idea of what you should be aiming for. To help maintain a healthy immune system, aim for an appropriate amount of high-quality protein each day, such as:

- Lean meats
- Fish
- Poultry
- Beans
- Low-fat dairy products
- Soy products

**Sources of lean protein include:**

- Frozen fish fillet
- Canned tuna
- Lean ground turkey breast
- Lean ground beef
- Chicken breast

According to the USDA, you should eat about 6 1/2 ounces of protein each day. For example, plan to include 3 of the following options each day to meet your protein goal:

- 1 ounce of lean meat
- 1 ounce of chicken
- 1 ounce of seafood
- 1 egg
- 1 tablespoon of peanut butter
- 1/2 ounce of nuts or seeds
Don’t forget fruits and vegetables:

• Aim for 5 cups of fruits and vegetables each day
• Fresh and frozen vegetables and fruits are the healthiest

A diet with the proper amount of fruits and vegetables helps to:

• Boost your immunity against disease
• Decrease your risk for cancer, heart disease, and diabetes
• Maintain a healthy weight

Keep in mind:

• 1 bag of frozen vegetables = 4 to 5 cups
• 1 bag of frozen fruit = about 3 cups
• Bananas, canned peaches, applesauce, and mandarin oranges are inexpensive fruit choices
• Fresh spinach, carrots, and onions are inexpensive vegetable choices. (People think of potatoes as inexpensive vegetables, but we consider these starches, so they’re not listed here)
• Fruit and vegetable prices vary throughout the year. When making a shopping list, consider writing down how many pieces of fresh fruit and cups of vegetables you plan to buy and then purchase those that are on sale
Grains are good for you

Grains are important sources of many nutrients, including dietary fiber, several B vitamins (thiamine, riboflavin, niacin, and folic acid), and minerals (iron, magnesium, and selenium).

Whole grains.

*Whole grains* contain the entire grain. These are the healthiest types of grains you should eat because they contain the most nutrients.

Some commonly eaten whole-grain products are:

- Whole-wheat cereal flakes
- Whole-wheat bread
- Whole-wheat crackers
- Whole-wheat pasta
- Whole-wheat sandwich buns and rolls
- Wild rice
Refined grains.

*Refined grains* have been processed to remove the bran and germ. Most refined grains are enriched. This means certain B vitamins and iron are added back after processing. Fiber is not added back to enriched grains. That’s why they’re not quite as healthy as whole-grain foods. Check the ingredient list to make sure it says *enriched*.

Some refined grain products are:

- Corn and flour tortillas
- Crackers
- Noodles
- Corn flakes
- White bread
- White rice
- Pasta
Tips for eating on a budget

After you've bought fruit, vegetables, and foods with lean protein, see how much is left to spend. This will determine how much variety you can afford in these food groups. Try to choose 1 bread/pita/English muffin item, 2 cans of beans, 1 rice/pasta item, a few starchy vegetables, and 1 cereal choice.
Eat canned, dried, and frozen foods. Canned foods are usually just as nutritious as fresh and frozen foods, yet often times they're cheaper. Look for low-sodium varieties

- Boil a dozen eggs and keep them refrigerated. Eat them as snacks and use them as toppings for extra protein
- Add dry milk powder to foods and drinks. It's an inexpensive way to add some protein
- Make dishes from basic ingredients. They're often less expensive than purchasing ready-made foods
- Consider store brands and generic brands. They're usually less expensive than national brands
- Clip coupons—be on the lookout for grocery store sales
- Avoid impulse shopping—plan meals ahead of time and stick to your grocery list. Avoid shopping when hungry
- Check government programs. You may be eligible for food stamps and other services

Taking medicines and supplements.

Vitamin and mineral supplements can be important additions to your diet. However, if you don't take the right amounts, they can be useless or even harmful. Some vitamins and minerals affect the immune system. And certain types of medicines are dangerous to take with other medicines and supplements. Never add supplements or medicines to your diet without first talking with your healthcare provider.
Here are some tips to keep in mind:

• So that you don’t feel too full, eat small meals 5 to 6 times a day instead of 2 or 3 big ones
• Keep healthy snacks handy. Choose high-calorie, high-protein foods
• If you can’t eat, then drink your food. While liquids can’t completely take the place of food, milkshakes, juices, smoothies, soymilk, and liquid nutritional supplements can help you maintain weight
• Avoid tobacco, alcohol, and drugs. They can lower your appetite and make existing health conditions worse
• A little exercise, like going for a walk, can often stimulate appetite

Always speak with your healthcare provider about the medicines you’re taking, any symptoms you may be experiencing, and before starting a new exercise or nutrition program.
Stock up on these ready-to-eat foods:

- Canned tuna, salmon, sardines
- Natural peanut butter
- Canned or frozen fruits and vegetables
- Low-fat yogurt and cottage cheese
- Nuts
- Dried and fresh fruit
- Whole-grain breads, cereals, and crackers

Here are some quick meals you can make from the ready-to-eat foods above:

- Eat a peanut butter sandwich with banana slices. Add a glass of milk or soymilk
- Add nuts and dried fruit to oatmeal
- Eat fresh fruits and vegetables, like apples, oranges, and carrots
- Try single-serving containers of pudding, yogurt, and crackers
A week of healthy meals, on a budget

The following pages are examples of low-cost, weekly meals. They’re based on an actual plan recommended by a registered dietitian. These food items are suggestions only and can be substituted to meet your needs and goals. Speak with your healthcare provider about a specific plan that works for you.

Day 1

**Breakfast**
- 2 slices of whole-grain wheat toast, 2 tablespoons of natural peanut butter, 4 ounces of canned pineapples

**Snack**
- 10 wheat crackers, 1 slice of Swiss cheese

**Lunch**
- 5 ounces of canned tuna and 1/2 cup of reduced-sodium canned beans on 4 cups of salad or fresh spinach. Make your own dressing: 1 tablespoon of olive oil and any amount of vinegar

**Snack**
- 6 ounces of light yogurt, 1 banana

**Dinner**
- 3 ounces of white fish or salmon, 1 serving of cooked whole-grain pasta (2/3 cup dry), 2 cups of steamed, frozen broccoli (toss the pasta and broccoli in 1 tablespoon of olive oil with 1 tablespoon of powdered parmesan cheese)

**Snack**
- 1/2 cup of cooked oatmeal sprinkled with cinnamon and 1 tablespoon of light margarine
Day 2

Breakfast
Cheese toast: 1 slice of Swiss cheese, 1 slice of whole-grain wheat bread, 4 ounces of canned pineapples

Snack
1/4 cup of raisins, 1/4 cup of almonds

Lunch
3 ounces of white fish or salmon (frozen, generic fillets), 2/3 cup of instant brown rice (1/2 cup dry), 2 cups of a steamed, vegetable stir-fry mix

Snack
3/4 cup of whole-grain cereal or 3/4 cup of enriched bran flakes, 1 cup of light soymilk

Dinner
1 small, skinless chicken breast, 1 large or 2 small potatoes, 1 cup of steamed, frozen green beans, 1 tablespoon of light margarine

Snack
6 ounces of light yogurt, 1 banana

Day 3

Breakfast
1/2 cup of oatmeal sprinkled with cinnamon, 1 tablespoon of light margarine, 1/4 cup of an egg-white substitute

Snack
10 wheat crackers, 2 tablespoons of natural peanut butter

Lunch
1 cup of lentil soup, 2/3 cup of instant brown rice (1/2 cup dry), 2 cups of steamed, frozen green beans

Snack
6 ounces of light yogurt, 1 cup of strawberries

Dinner
3 ounces of white fish or salmon, 1 serving of cooked whole-grain pasta (2/3 cup dry), 2 cups of steamed, frozen broccoli (toss the pasta and broccoli in 1 tablespoon of olive oil with 1 tablespoon of powdered parmesan cheese)

Snack
Cheese toast: 1 slice of whole-grain wheat bread and 1 slice of Swiss cheese
Day 4

**Breakfast**
1 whole-grain English muffin, 1/4 cup of an egg-white substitute, 1 slice of Swiss cheese

**Snack**
1 banana, 1/4 cup of almonds

**Lunch**
5 ounces of canned tuna, 1 serving of cooked whole-grain pasta (2/3 cup dry), 1/2 can of diced tomatoes with no salt, 1 tablespoon of olive oil, 1 tablespoon of parmesan cheese

**Snack**
1/2 of an English muffin with 1 tablespoon of light margarine, 6 ounces of light yogurt

**Dinner**
1/4 pound of ground, skinless turkey breast (white-meat patty), 1 cup of steamed, frozen green beans, 1 large or 2 small potatoes, 1 tablespoon of light margarine

**Snack**
1 cup of light soymilk, 1 orange

Day 5

**Breakfast**
3/4 cup of whole-grain cereal or 3/4 cup of enriched bran flakes, 1 cup of light soymilk

**Snack**
1/2 cup of canned peaches in light syrup, 1/2 cup of low-fat cottage cheese

**Lunch**
Mediterranean bean salad (1/2 cup of canned, reduced-sodium chickpeas, 1/2 cup of diced, canned tomatoes, 1 tablespoon each of olive oil, red wine vinegar, and black pepper), 1 toasted whole-wheat pita

**Snack**
5 ounces of canned tuna

**Dinner**
1 serving of cooked whole-wheat pasta (2/3 cup dry), 1/2 cup of spaghetti sauce, 1/2 pound of ground skinless turkey breast (white-meat patty), 1 tablespoon of powdered parmesan cheese, 2 cups of steamed, frozen broccoli

**Snack**
6 ounces of light yogurt, 1 cup of strawberries
Day 6

Breakfast
1/2 cup of oatmeal, 1 tablespoon of light margarine, 1 cup of light soymilk, 1/4 cup of an egg-white substitute

Snack
1/4 cup of almonds

Lunch
2 cups of fresh spinach, 1 cup of canned chickpeas, 1 navel orange, 1 tablespoon of olive oil, 1 tablespoon of red wine vinegar, 1 slice of toasted whole-wheat bread

Snack
1/2 cup of low-fat cottage cheese, 1/2 cup of canned peaches

Dinner
3 ounces of frozen salmon fillet, 1 large or 2 small potatoes, 1 tablespoon of light margarine, 2 cups of steamed, fresh spinach

Snack
1 slice of whole-wheat bread, 1 slice of Swiss cheese

Day 7

Breakfast
1/2 cup of cooked oatmeal with cinnamon, 2 tablespoons of raisins, 1 cup of light soymilk, 1/4 cup of an egg-white substitute

Snack
1/2 of an English muffin, 1 tablespoon of natural peanut butter

Lunch
5 ounces of canned tuna and 1/2 cup of reduced-sodium canned beans on 4 cups of salad or fresh spinach. Make your own dressing: 1 tablespoon of olive oil and any amount of vinegar

Snack
6 ounces of light yogurt, 1 banana

Dinner
2/3 cup of instant brown rice (1/2 cup dry), 1/2 cup of reduced-sodium red beans, 1/2 cup of steamed, frozen okra, 1/2 cup of diced tomatoes, 1 tablespoon of margarine

Snack
1 banana, 1 tablespoon of natural peanut butter
Before exercising.

To make sure you’ve got enough energy in your muscles, be sure to eat a small meal or snack that has a lot of carbohydrates before you begin exercising. Choose a meal or snack low in fat and fiber, 1 to 3 hours before exercising. This will help you digest your food and prevent an upset stomach.

A small amount of protein in your meal or snack may help reduce post-exercise soreness and help build muscle. Drink between 8 and 16 ounces of water. Specialized sports nutrition products, such as sports drinks, aren’t necessary unless you’re unable to eat any solid foods before exercising. Water and nutrient-rich foods can fuel your body as well as, if not better than, a sports drink or shake. But if you have not eaten for more than 4 hours and will be exercising for at least an hour, sports drinks or sports bars can be a handy fuel source.

The amount of food you eat before exercising should depend on when you’ll be exercising. If you have at least 3 to 4 hours before you start your exercise, the following examples are the types of small meals the Academy of Nutrition and Dietetics recommends to fuel up your muscles.
3 to 4 hours before you exercise:

- Peanut butter and jelly sandwich with milk (nonfat)
- Fruit and a Greek yogurt smoothie
- Oatmeal with brown sugar, dried cranberries, and almonds, with skim milk
- Low-fat cottage cheese with pineapple, crackers, and fresh grapes
- Lean hamburger (or veggie burger) on a bun with lettuce and tomato, and 100% juice
- Low-fat tuna melt sandwich, a fruit cup, and fat-free yogurt

If you’re going to be exercising and haven’t had any food in the last 4 hours, a small snack will give you the fuel you need to exercise.

30 to 60 minutes before you exercise:

- Sports drink or water
- Sports bar (low-fiber, low-fat, and about 10 grams of protein)
During exercise

If you’re going to be exercising longer than an hour, you’ll need more than simply water. Water is good for exercise lasting 1 hour or less since muscle breakdown is minimal and the main thing lost is fluid. But for anything longer, it can be helpful to do a bit of planning.
If you’re going to be exercising more than 60 minutes, you’ll need plenty of fluids, electrolytes, and carbohydrates to stay hydrated and energized. Fluids and electrolytes are lost when you sweat. It’s important to replace them because they can help prevent cramping and heat-related illnesses.

The most common electrolytes lost during exercise are sodium and potassium. These can be replaced by having a sports drink or eating foods such as bananas or salted pretzels.

**Losing both fluids and carbohydrates can affect your energy, especially if you exercise more than 60 minutes.**

To prevent fatigue and dehydration, eat 30 to 60 grams of carbohydrates for each hour you exercise. Also, be sure to drink 4 to 6 ounces of fluid every 15 to 20 minutes during exercise. Fluids taken with carbohydrate-rich foods help speed nutrients to the muscles.

Protein, fat, and fiber aren’t needed during exercise. In fact, they can slow down the absorption of other key nutrients and give you an upset stomach. If you’re diabetic, check your glucose levels before exercising and have foods or drinks with glucose close by just in case your blood sugar level drops too low.

**Options for fluids and foods during exercise:**

- Sports drinks that have carbohydrates, sodium, and potassium
- Easily digested, carbohydrate-rich foods such as bananas, pretzels, saltine crackers, low-fat granola bars, or sports bars
Through sweating, you can lose fluids and electrolytes, specifically sodium and potassium. These need to be replaced by consuming foods and fluids after exercising. A combination of carbohydrates to replace glucose and glycogen lost during exercise, and protein to help repair and grow muscles, is needed.

The best time to add water, electrolytes, carbohydrates, and protein back into your body is within 15 to 30 minutes after exercising. Muscles are most like a sponge right after exercising. Immediate fluids and fuel not only help you recover faster, they also encourage more muscle growth.

One of the best options available to replace fluids, carbohydrates, and protein is flavored milk—cow’s milk or soymilk—in chocolate, vanilla, or strawberry flavors. The mix of carbohydrates and protein is great for post-exercise recovery. Flavored milk is also easy to buy at any grocery or convenience store, less expensive than most protein shakes, and it tastes good, too. If milk doesn’t appeal to you after exercising, why not try a smoothie with yogurt and frozen fruit?

After exercise

This is called the recovery period. During this time, you should eat to replace the nutrients you lost during exercise. Eating after exercising also gives you additional nutrients to help you build new muscle.
Try these snacks after working out.

A post-exercise snack or meal that has carbohydrates, protein, and fluids can meet your nutrient needs.

- Graham crackers with natural peanut butter, 100% juice, and fruit
- String cheese, pretzels, and water
- Greek yogurt, fruit, and water, juice, or milk

It can be tough to eat a full meal within 15 to 30 minutes after exercising. But preparing it beforehand can make it a little easier. Here are some options:

- Whole-wheat pita sandwich with turkey and vegetables, pretzels, and low-fat milk
- Rice bowl with beans, cheese, salsa, avocado, plus whole-grain tortilla chips or a whole-wheat tortilla
- Stir-fry with lean steak, broccoli, bell peppers, carrots, and brown rice
- Salmon, mixed vegetables, and brown rice
Exercise for healthy living
With a proper diet and good lifestyle choices, daily exercise is important for staying healthy. Routine activities may improve your heart and circulation, strengthen muscles and bones, reduce body fat, and help you maintain a healthy weight. In addition, exercising regularly may help prevent complications, including diabetes, obesity, hypertension, and high cholesterol.

People can benefit from some alternative forms of exercise as well, such as yoga and meditation. These activities not only provide physical exercise, but they've been shown to have a positive effect on one's mental well-being.

It's always important to use caution before beginning any exercise. Unsafe length or intensity of exercise may result in injury or even lead to serious health consequences. That's why you should always talk with your healthcare provider first before starting any exercise program.

The Academy of Nutrition and Dietetics gives the following general guidelines for exercising:

- Talk with your healthcare provider before beginning any exercise program
- Learn proper exercising techniques
- As with any exercise program, always start slowly
- Stay hydrated. Drink plenty of water before, during, and after exercising
- Rest if you're tired or feel pain

Always speak with your healthcare provider about the medicines you're taking, any symptoms you may be experiencing, and before starting a new exercise or nutrition program.
What are the benefits of exercise for people living with HIV/AIDS? Here are just a few:

- Improved muscle mass and strength
- Increased stamina
- You’ll feel better

Some people with HIV/AIDS may be reluctant to start an exercise program. They may not have the money for a gym membership or equipment. Another concern may be the physical limitations due to the virus, or side effects from the medicines. For example, nerve damage can make it hard to stand for long periods of time. Osteopenia or osteoporosis may limit high-impact exercises. High-intensity workouts could be challenging if you have cardiovascular issues. The good news is, there’s an activity for almost everyone.

Before you begin a new exercise program, speak with your healthcare provider, especially if you suffer from heart disease.
The pros and cons of exercising
Exercising regularly is good for most everyone, whether someone has HIV or not. So what are some of the benefits of exercise specifically for people living with HIV/AIDS? According to AIDS InfoNet, from the New Mexico AIDS Education and Training Center, exercising can do a lot for you. Besides helping you to feel stronger, moderate and regular exercising can:

- Increase your energy level
- Help keep your CD4 cell count stable
- Strengthen your bones
- Help lower your cholesterol and triglyceride levels
- Increase your appetite and improve your sleep
- Help your body use and regulate blood glucose (sugar)
- Enhance your sense of well-being

Like everything else, there are risks to keep in mind when you put together an exercise program. While the pros far outnumber the cons, here are some things to consider:

- You could get dehydrated if you don’t drink enough
- If you exercise too much, you could lose lean muscle mass—extreme cases may lead to AIDS wasting
- You could injure yourself if you do the wrong type of exercise

Your local library may be a valuable resource for exercise videos and DVDs. Look online, too.
Aerobic and cardiovascular exercise.

In these types of exercises, large muscle groups work in a rhythmic way. Oxygen-rich blood circulates through the heart, lungs, and the muscles being used.

Examples of aerobic exercise are:

- Walking or jogging
- Bicycling
- Swimming
- Dancing
- Soccer

Getting started

There are basically 3 main types of exercise that are part of a good fitness program—aerobic, strength, and flexibility. Here’s what you need to know.
**Start small.**

Aerobic exercises are usually done for 20 to 30 minutes, but beginners may need to start with 5 to 10 minutes and slowly build up to longer.

Some people may be limited by the amount of time they can spend on their feet due to nerve damage. To help avoid additional foot, leg, knee, and hip pain, try small sessions of exercise throughout the day. Perhaps a 5-minute walk in the morning and another 5-minute walk in the evening. As your fitness level improves, go a bit longer to a 10-minute walk. After that, set a goal of 30 minutes. Increasing the frequency of your walks is another option. If you have a dog, he or she can keep you company.

*Walking after a meal can help you digest your food and feel less full.*

**One step at a time.**

To keep track of your progress, it’s a good idea to monitor your activity. You can keep a journal of how often you exercise and how long it lasts. You can even get an inexpensive pedometer that can track how many steps you take. Just put it on in the morning and it will count how far you go. Most health organizations recommend 10,000 steps (about 5 miles) of walking each day. Set a goal that works for you. If you’re at 200 steps a day, aim for a bit more each day and put your pedometer to work.
• If you can easily have a conversation while exercising, then you’re probably working out at a **low intensity**

• A conversation that’s choppy due to a little shortness of breath indicates a **moderate intensity**

• If you can only speak 2 to 3 words at a time, you’re working out at a **high intensity**

People who are fit and can handle high-intensity workouts may see great benefits by incorporating high-intensity intervals periodically into their workouts. For example, during a walk or bike ride, increase the speed at which you’re moving for 30 to 60 seconds. Then, slow down for a couple of minutes to catch your breath.

Do it again a few times during your workout. This is called **doing intervals**. It can improve your heart function and can help burn body fat. You can have fun with intervals by increasing your speed to a location that you see ahead on your exercise route—say a garbage can, or a street corner. If you make it a game and keep it fun, you’ll want to keep doing it. Consistency is one of the biggest hurdles to overcome when it comes to exercise. Make it a habit.
Dance, Dance, Dance.

If you don’t feel safe leaving home, or side effects from your medicines cause you to stay close to home, consider using exercise videos. Many are available for free online or on TV. Or, you can create your own workout with your favorite music and dance moves. Use a variety of music to vary the intensity. Have fun with it. Aim for 20 to 60 minutes a day (break it up into 5- to 15-minute segments done 2 to 3 times a day), 5 days each week as a goal for your aerobic fitness routine.

Exercise at an intensity that you feel is challenging. Remember; higher-intensity exercise burns more calories.
Strength training (or weight training) is one of the best ways to increase lean body mass that you may have lost due to HIV and aging. There are different types of strength training. One example is a pushup. Resistance can be created by pushing, squeezing, stretching, or bending an object. This type of training can help develop the size and strength of your muscles. And contrary to popular belief, you don’t always need heavy weights. People just starting an exercise program may find that just getting up and out of a chair is enough to start strengthening their muscles.

For some variety, you can use inexpensive exercise bands, tubes, or exercise balls. Use your body weight as resistance, as in pushups or pull-ups. You could even do a few pushups by leaning against your kitchen counter while you’re waiting for your coffee to brew.

Start slowly and work your way up to a higher level of intensity and duration. The intensity often comes from the amount of resistance, how heavy the weight you have is, or how stiff or resistant the exercise bands are. The duration refers to the amount of times, or repetitions, you do the exercise.
For example: If you hold a book in your arms close to your chest while sitting in a chair, and then stand up and sit down 5 times, you’ve just done 5 repetitions. If you rest, and then do another 5 repetitions, you’ve just completed 2 sets of this exercise.

Ideally, you should aim for 8 to 12 repetitions, rest for a minute or so, then do another 8 to 12 repetitions. Rest again for a minute or so and do another 8 to 12 repetitions. This means you have just done 3 sets of 8 to 12 reps. Doing this for your major muscle groups, such as your legs, back, arms, and shoulders, will give you a well-rounded resistance/weight program.

**Get stronger.**

Strength exercises cause small muscle fibers to tear. This is a good thing—these tears will rebuild after a few days of rest to become stronger and bigger muscles. Resting is key.

When exercising a muscle in this way, your body needs at least 24 to 36 hours to recover and come back ready for the next challenge. Give yourself a goal of 2 to 3 days of resistance or strength training per week. Work the large muscles of the legs, back, arms, and shoulders. Aim for 3 sets of 8 to 12 reps. Mix it up by using different types of resistance and exercises every few weeks.

**Protect yourself.** To prevent injury, hold your stomach muscles tight and move slowly. This will help you avoid muscle tears and strains.
When exercising a muscle in this way, your body needs at least 24 to 36 hours to recover and come back ready for the next challenge. Give yourself a goal of 2 to 3 days of resistance or strength training per week. Work the large muscles of the legs, back, arms, and shoulders. Aim for 3 sets of 8 to 12 reps. Mix it up by using different types of resistance and exercises every few weeks.

*Static stretching* is when the muscle is forced to stretch, and where that stretch is held for 10 to 30 seconds. It doesn't require any movement once you're in position. Think toe touches.

*Dynamic stretching* takes more coordination. It helps prepare and loosen muscles for a workout. This is stretching as you're moving. Examples are arm circles and high stepping.

Unlike other types of exercises, flexibility exercises can be done every day. Start with smaller muscle groups and then work towards larger muscle groups. Why not incorporate these exercises into your aerobic exercise warm-up or cool-down?
Gentle stretching before going to bed at night can be part of your winding-down routine. Remember; whenever you stretch a muscle, you should warm it up with a little movement first. This will get some blood flowing to the area. If you stretch a cold muscle, such as first thing in the morning before you’ve had a chance to move around, it can increase your risk for injury.

Never stretch a muscle when it’s cold or not warmed up because it may cause injury.
It’s important to stay hydrated, so be sure to drink plenty of fluids. Water can take the
place of those fluids that are lost. Try and avoid consuming the following in excess. They
are diuretics and may cause you to become dehydrated:

- Tea and coffee
- Soda
- Energy drinks
- Alcohol

You should wait to exercise at least 2 hours after having a big meal. Or at least
45 minutes after having a snack. You shouldn't eat when you're exercising unless
you're exercising for more than an hour.

After you workout, give yourself about an hour before eating again. If you're hungry
before you work out, have something small, such as half of a peanut butter sandwich
on multigrain bread, or a piece of fruit. This can help give you a bit more energy.

If you're diabetic, be sure to always carry some form of sugar with you,
whether it’s candy, a glucose tablet, or juice.
Don’t overdo it.

A moderate exercise program can help your body get stronger. See what you can do to add a bit of exercise into your everyday routine.

There’s no rush. It’s recommended that you work out at least 20 minutes, 3 times a week if you’re feeling well. Doing this regularly can lead to significant improvements in your fitness level, not to mention that you’ll feel better. Over time, see if you can work up to 45 minutes to an hour, 3 to 4 times a week.

Just because you have HIV doesn’t mean that you can’t improve your fitness level. There are certain things you need to be aware of, however. Numbness or weakness (neuropathy) in your feet may be a challenge when continuing with a training program. As always, speak with your healthcare provider.

It’s a good idea to begin exercising when you’re feeling healthy. By doing this, you may be able to reduce the HIV symptoms that don’t make you feel well. Another idea is to switch up your exercise routine so it doesn’t become “routine” and you get tired of it. Do your best to stay motivated. Keeping your exercise routine going is important. Why not find a friend to be your exercise buddy?

When you begin an exercise program, it’s important to avoid getting an injury. What’s your fitness level like? It may have changed since you last exercised regularly. So a good idea is to begin slowly. Start your fitness program by working out 10 minutes at a time. You can increase these sessions slowly. Over time, try to work up to an hour. Speak with your healthcare provider before starting any exercise program so you can determine what type is best for you.
The following organizations and their websites are good resources for additional information about nutrition and healthy living. Remember, your healthcare provider is the best place for you to begin.

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<th>Organization</th>
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<tr>
<td>Academy of Nutrition and Dietetics</td>
<td>eatright.org</td>
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<td>AIDS Education and Training Centers (AETC)</td>
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<td>AIDS.gov</td>
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<td>AIDS Project LA (APLA)</td>
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<td>Centers for Disease Control and Prevention</td>
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