

FIGURE 9.1. Classification of Blood Pressure for Adults

	Blood pressure classification			
	Normal	Elevated	Stage 1 hypertension	Stage 2 hypertension
Systolic blood pressure (mmHg)	< 120	120–129	130–139	≥ 140
Diastolic blood pressure (mmHg)	and < 80	and < 80	or 80–89	or ≥ 90

Note. Data from Whelton et al. (2018).

FIGURE 9.2. Resources for Patients With Cardiovascular Disease: Websites, Mobile Applications, and Books

Type	Location	Description
Websites	American Heart Association (https://www.heart.org/)	Provides information and resources for patients and providers about heart disease and risk factors (e.g., cholesterol, hypertension); particularly useful for patients
	Centers for Disease Control and Prevention (https://www.cdc.gov/heartdisease/)	Provides information and resources for patients and providers about heart disease and risk factors (e.g., cholesterol, hypertension)
	U.S. Food and Drug Administration (https://www.fda.gov/forconsumers/consumerupdates/ucm327369.htm)	Provides information about reducing sodium intake
	National Heart, Lung, and Blood Institute (https://www.nhlbi.nih.gov/health/educational/hearttruth/)	Provides information and resources for patients and providers about heart disease and risk factors (e.g., cholesterol, hypertension)
Mobile applications	My Life Check (https://mlc.heart.org/)	Patient-oriented app and website assists with monitoring and behavior change
	ASCVD Risk Estimator (https://tools.acc.org/ascvd-risk-estimator-plus/#!/calculate/estimate ; Apple iOS and Android)	Helps providers and patients estimate 10-year and lifetime risk for ASCVD
Books/ documents	<i>Dietary Guidelines for Americans</i> (USDA & DHHS, 2020)	Summarizes dietary recommendations for Americans
	<i>Your Guide to Lowering Blood Pressure</i> (DHHS, 2003)	Provides patient guide for lifestyle and medication management of blood pressure
	<i>Your Guide to Lowering Your Blood Pressure With DASH</i> (DHHS, 2006)	Provides patient guide for the DASH eating plan
	<i>Heart and Mind: The Practice of Cardiac Psychology</i> (Allan & Fisher, 2012)	Provides overview of biopsychosocial assessment and treatment of cardiovascular disease for behavioral health professionals

Note. ASCVD = atherosclerotic cardiovascular disease; USDA = U.S. Department of Agriculture; DHHS = U.S. Department of Health and Human Services; DASH = Dietary Approaches to Stop Hypertension.

FIGURE 9.3. Components of the DASH Eating Plan

Food group	Daily servings
Grains	6–8
Meats, poultry, fish	6 or less
Vegetables	4–5
Fruit	4–5
Low-fat or fat-free dairy	2–3
Fats and oils	2–3
Sodium	2,300 mg ^a
Food group	Weekly servings
Nuts, seeds, dry beans, and peas	4–5
Sweets	5 or less

Note. DASH = Dietary Approaches to Stop Hypertension. From *DASH Eating Plan*, by National Heart, Lung, and Blood Institute, 2021, National Institutes of Health (<https://www.nhlbi.nih.gov/education/dash-eating-plan>). In the public domain.

^a1,500 mg sodium was found to be more effective for lowering blood pressure, particularly among middle-aged and older adults, African Americans, and those diagnosed with high blood pressure.

FIGURE 9.4. Assessment Questions for Patients With Cardiovascular Disease

The following questions represent a guide for the assessment of those referred for the reduction of risk or management of cardiovascular diseases. Depending on the responses of the patient, you may want to ask questions that are more detailed.

Health Behaviors

- Do you use tobacco? How much? How often do you use it?
- What do you typically do for physical activity? How long do you do that activity? How often?
- What is your current weight? Height? [Determine BMI.]
- Describe what you typically have for breakfast, lunch, dinner, and snacks.
- How often do you eat red meat? How often do you eat out? Where do you usually eat?
- Do you monitor the amount of sodium and fat in the food you eat? How much do you typically eat in a day?
- How much alcohol do you drink each day? Each week?

Emotional Responses

- During the past 2 weeks, have you often been bothered by feeling down, depressed, or hopeless?
- During the past 2 weeks, have you often been bothered by little interest or pleasure in doing things?
- How overwhelmed would you generally rate yourself, if 0 is not overwhelmed and 10 is the most overwhelmed you could imagine?
- Have you had any recent major life changes, such as beginning or ending a relationship, moving, or changes in your financial status?
- Are the demands of your job difficult to manage? Would you describe your job as stressful?
- How do you manage stress? Whom do you lean on for support? Do you easily lose your cool? Do you get frustrated quickly?
- Some people feel afraid, worried, sad, and/or angry about their heart disease and the impact it has on their life. Others don't feel those emotions. How would you describe your reactions to your CVD diagnosis?

Note. BMI = body mass index; CVD = cardiovascular disease.

FIGURE 9.5. High Blood Pressure Handout (continues)

High Blood Pressure

Blood pressure is defined by two numbers, your systolic blood pressure and your diastolic blood pressure. Your *systolic blood pressure* is the pressure in your arteries when your heart is squeezing blood out to your body. The systolic blood pressure is represented by the top number of your blood pressure. Your *diastolic blood pressure* is the pressure in your arteries when your heart is relaxed; it is represented by the bottom number of your blood pressure reading.

What was your last blood pressure? Systolic = _____ Diastolic = _____

Often, you don't feel sick when you have high blood pressure. Except for the numbers on the blood pressure monitor, there may not be any other indication your blood pressure is high. Below is a table we can use to classify your blood pressure. How would you classify your blood pressure?

Blood pressure classification	SBP mmHg	DBP mmHg
Normal	< 120	and < 80
Elevated	120–129	and < 80
Stage 1 hypertension	130–139	or 80–89
Stage 2 hypertension	≥ 140	or ≥ 90

Making Changes

Many different factors can affect your blood pressure. Some of these factors you may be able to change; other factors you cannot change. By making changes where you can, you can lower your blood pressure. The following is a list of some of the factors that you can change.

How important is it to you to make these changes? If it doesn't apply or if it is not important, rate it a 0. If it is important, what are steps you can take to make changes?

Tobacco Use

Quitting tobacco use is one of the most important health behavior changes you can make. If you are not a tobacco user, great! If you currently use tobacco, have you considered quitting?

How important to you is it to quit tobacco use?

0 1 2 3 4 5 6 7 8 9 10

Not Important *Most Important*

If tobacco cessation is important to you, what is your plan to quit tobacco?

FIGURE 9.5. High Blood Pressure Handout (*continues*)

Weight Loss

If you are overweight or obese, even small reductions in your weight (e.g., 10 pounds) can have a significant impact on your blood pressure. Weight loss requires a reduction in the number of calories you eat or drink and an increase in your physical activity.

How important is it to you to lose weight?

0 1 2 3 4 5 6 7 8 9 10
Not Important *Most Important*

If weight loss is important to you, what can you do to start making changes in your eating, drinking, and physical activity habits?

Dietary Changes

Beyond weight loss, it is important to consider changing what you eat to reduce your blood pressure. A special diet called the DASH diet is often encouraged for individuals with high blood pressure. The DASH diet encourages you to decrease the amount of salt and fat in your diet while increasing the amount of potassium and fiber you consume. Often these changes require simple substitutions in your diet, such as replacing salt with other spices and choosing lower fat alternatives to your typical foods.

How important is it for you to change your diet?

0 1 2 3 4 5 6 7 8 9 10
Not Important *Most Important*

If dietary changes are important to you, what are some of the foods that you are willing to substitute or eliminate from your diet?

Physical Activity

To improve cardiovascular health, it is recommended that you engage in 30 minutes of moderate-intensity activity at least 5 days a week or vigorous-intensity activity for 20 minutes at least 3 days a week.

How important is it for you to meet these activity recommendations?

0 1 2 3 4 5 6 7 8 9 10
Not Important *Most Important*

If physical activity changes are important to you, how can you incorporate moderate or vigorous activities into your daily life?

Medication Adherence

If your blood pressure is in the hypertensive range, you may have been prescribed a medication to help you lower your blood pressure. However, the effectiveness of the medications depends on individuals taking them as they were prescribed.

FIGURE 9.5. High Blood Pressure Handout (*continued*)

How important is it for you to change the way you take your medications?

0 1 2 3 4 5 6 7 8 9 10

Not Important *Most Important*

If medication adherence is important to you, what are some of the techniques you can use to manage your medications more effectively?

Stress Management

The stressors that we experience can contribute to higher blood pressure levels. You can manage stressors differently by changing the way you think or what you do and by using relaxation techniques.

How important is it for you to manage your stress response?

0 1 2 3 4 5 6 7 8 9 10

Not Important *Most Important*

If stress management is important to you, what are some of the techniques you can use to manage stressors more effectively?

Note. SPB = systolic blood pressure; DBP = diastolic blood pressure; DASH = Dietary Approaches to Stop Hypertension.

FIGURE 9.6. Diet Change Handout

Diet Change

To help reduce blood pressure, it is recommended that individuals reduce their sodium content to 2,300 mg or to 1,500 mg if they have high blood pressure, diabetes, or chronic kidney disease; are African American; or are at least 51 years old. To reduce cardiovascular disease risk, it is recommended to avoid foods high in fat. Below are foods high in sodium and fat that individuals should consider avoiding or replacing with low-sodium or low-fat alternatives.

Reducing Salt Content

Top 10 foods typically consumed by Americans that are high in salt (sodium)

- Breads and rolls
- Cold cuts and cured meats (deli and packaged meats)
- Pizza
- Poultry (fresh and processed)
- Soups
- Sandwiches (hot dogs, hamburgers)
- Cheese (natural and processed)
- Mixed pasta dishes (lasagna, spaghetti)
- Mixed meat dishes (meat loaf, chili, beef stew)
- Snacks (chips, pretzels, popcorn)

Reducing Fat Content

Food category	Foods high in fat	Lower fat alternatives
Dairy	<ul style="list-style-type: none"> • whole milk • ice cream • cheese 	<ul style="list-style-type: none"> • skim, 1%, 2% milk • sorbet, sherbet, frozen yogurt • low- or reduced-fat cheese
Pasta	<ul style="list-style-type: none"> • ramen noodles • pasta with cream sauce • granola 	<ul style="list-style-type: none"> • rice • pasta with tomato sauce • reduced-fat granola
Meat, fish, poultry	<ul style="list-style-type: none"> • ground beef • chicken or turkey with skin • hot dogs • bacon, sausage • oil-packed tuna • whole eggs 	<ul style="list-style-type: none"> • low-fat, extra-lean meats • skinless chicken or turkey • low-fat hot dogs • turkey bacon • water-packed tuna • egg whites, egg substitutes
Baked goods	<ul style="list-style-type: none"> • croissants • donuts • muffins • party crackers • cake, cookies 	<ul style="list-style-type: none"> • hard rolls, English muffins • bagels • reduced-fat muffins • low-fat crackers • angel food cake
Snacks and sweets	<ul style="list-style-type: none"> • nuts • ice cream 	<ul style="list-style-type: none"> • popcorn, fruits, vegetables • frozen yogurt, pudding bars
Fats, oils, and salad dressings	<ul style="list-style-type: none"> • butter, margarine • mayonnaise • salad dressings • oils, shortening, lard 	<ul style="list-style-type: none"> • light margarine • light mayonnaise, mustard • fat-free salad dressing • nonstick cooking spray

What are the changes that you plan to make in your diet?

Reduce salt by: _____

Reduce saturated fat by: _____

Note. Reducing salt content data from U.S. Food and Drug Administration, 2022. Reducing fat content data from U.S. Department of Health and Human Services, 2000.