

YOUR GUIDE TO A HEART-HEALTHY LIFE

Tips & Delicious Recipes from
Virginia Mason Heart Institute



Virginia Mason™
Heart Institute



HELPING YOU UNDERSTAND YOUR HEART AND THE TOOLS YOU NEED TO KEEP YOUR HEART HEALTHY

It's never too late to take action to improve your cardiovascular health and reduce the risk of heart disease, diabetes and stroke. Making these changes may come from a desire to simply feel better and have more energy. Or your healthcare provider may be concerned about elevated blood pressure readings, abnormal blood work or a family history of cardiovascular disease.

Whatever the reason, developing a realistic plan that works with your lifestyle will help you reach your goal of Heart Health. Virginia Mason can give you the tools and guidance to make positive changes today for your many, many tomorrows.

Your path to Heart Health begins with regular medical checkups. Many of us are unaware of risk factors we have that can be uncovered during a medical assessment. For example, patients with elevated blood pressure and cholesterol may not necessarily have symptoms. Your doctor can easily test your blood pressure and cholesterol levels. Your doctor can also assess your family's medical history to see it puts you at a higher risk for developing cardiovascular disease. Understanding your history and working with your healthcare provider to assess your current level of health will help you make lifestyle changes that can reduce your overall risk.



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UNDERSTANDING YOUR AMAZING HEART

The heart in all of its great complexity is easily understood when broken down into three components like the three sides of a triangle.

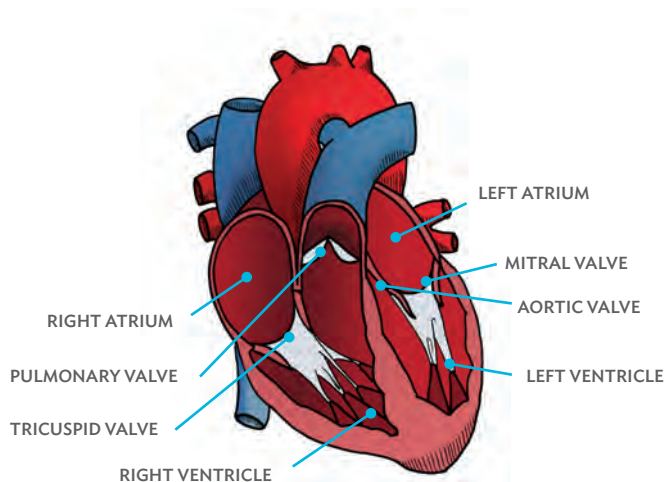
SIDE 1 IS STRUCTURE

Your heart has four chambers: two “filling” (atria) and two “pumping” (ventricles). There are also four valves (one-way doors to control blood flow between the chambers and exits from the heart). The left sided valves are the aortic and mitral valves. The right sided valves are the pulmonic and tricuspid.



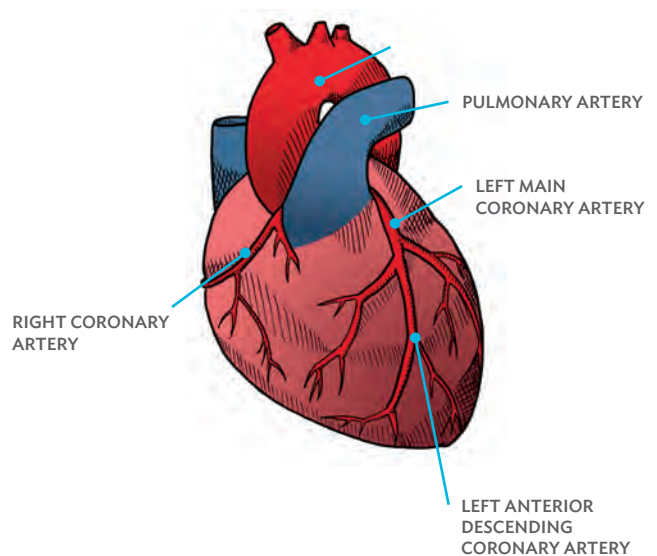
The right side of the heart has the job of storing the unoxygenated blood and pumping it to the lungs for re-oxygenation.

The job of the left side of the heart is to store the oxygenated blood and pump it to the entire body. The atriums store blood and then deliver to the pumping chambers (ventricles).



SIDE 2 IS PLUMBING

The heart is a muscle that needs its own oxygenated blood to function. There are several coronary arteries that provide oxygen-rich blood to the heart muscle. If these arteries become “partially” clogged” you may have angina (chest pain) or a heart attack if “completely” clogged.

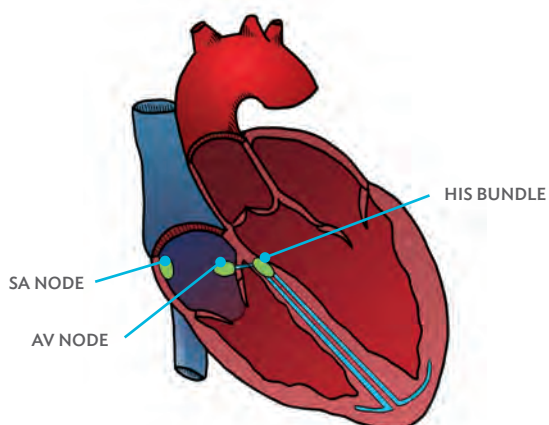


SIDE 3 IS ELECTRICAL

Your heart's rhythm and function are controlled by its electrical conduction system. The three main components of this system are the sinoatrial (SA) node, the atrioventricular (AV) node and the bundle branches.

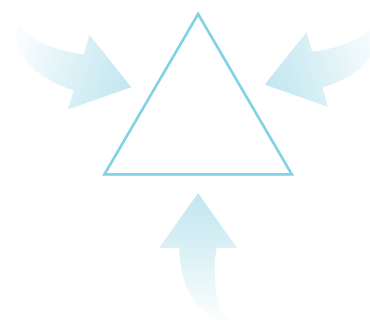
The SA node is the natural pacemaker and is responsible for the initiation of the heart beat. The AV node controls the heart rate and serves as an electrical relay station. It slows the electrical current sent by the SA node before the signal is passed down through the ventricles. A bundle branch delivers electrical impulses to the ventricles of the heart. This complex system (seen on an EKG) is vital to the heart's ability to move blood.

Two distinct parts make up a single heart beat: systole (pumping) and diastole (relaxing). The normal resting heart rate is 50-100 beats per minute.

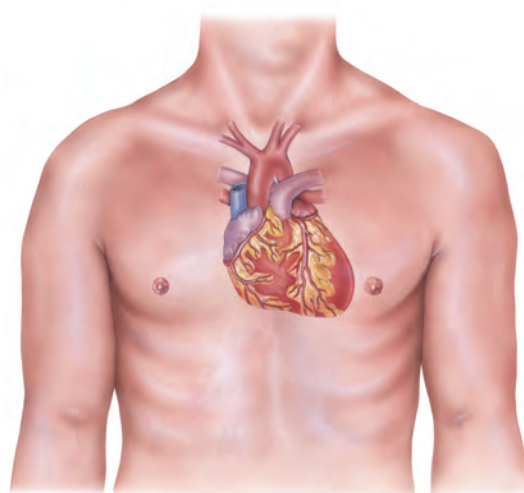


TOGETHER

These three sides work together to deliver essential life-sustaining blood to your entire body.



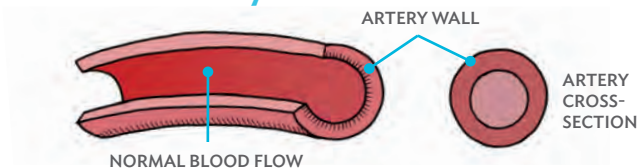
True structural, electrical and blood flow perfection.



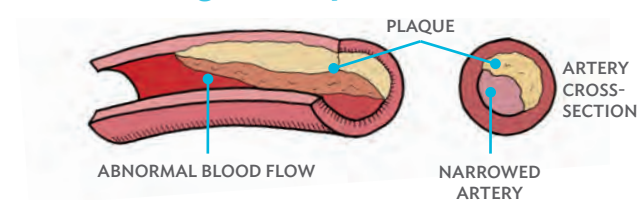
WHAT IS CORONARY ARTERY DISEASE?

The coronary arteries are the blood vessels that deliver blood to the heart. Coronary artery disease means there is a buildup of plaque (a thick wax-like coating) within the coronary arteries that decreases the flow of blood. When the coronary arteries are blocked and blood flow is reduced or stopped, the heart muscle can die.

Normal artery



Narrowing of artery



WHAT IS A “HEART ATTACK”?

When the heart muscle is deprived of blood flow from a blocked coronary artery, it becomes oxygen starved. If the artery is not opened up to re-establish blood flow to the muscle, that portion of the muscle will die.

When the blood flow is blocked, patients may have warning symptoms such as chest pain, burning, shortness of breath, fatigue, and/or neck and jaw discomfort. At times, however, the symptoms may be quite vague and difficult to characterize without the aid of a medical professional.

WHAT IS A CARDIOMYOPATHY?

Cardiomyopathy is a condition where the efficiency of the heart is compromised due to its muscle fibers being stretched and weak. This can be caused by various viral infections as well as inflammatory and “infiltrative” conditions. Infiltrative cardiomyopathies are characterized by deposits of abnormal substances that cause the ventricular walls to become progressively rigid, thereby impeding ventricular filling.

Cardiomyopathy may also be caused by coronary artery disease, untreated arrhythmias (disorders of the heart rate) or direct toxins such as excessive alcohol. In rare cases, there is no clear reason identified for the development of cardiomyopathy.

WHAT IS CONGESTIVE HEART FAILURE?

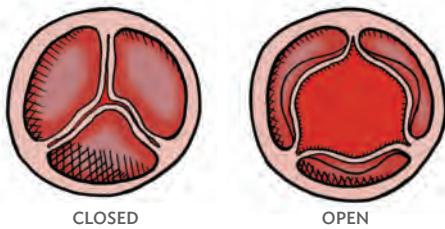
Congestive Heart Failure (CHF) is a condition in which the heart is no longer able to pump out enough oxygen-rich blood to the body and pressure builds up a ‘backstream,’ leading to congestion within the lungs. This ultimately leads to shortness of breath, fluid retention, fatigue, chest discomfort and possibly multi-organ failure.



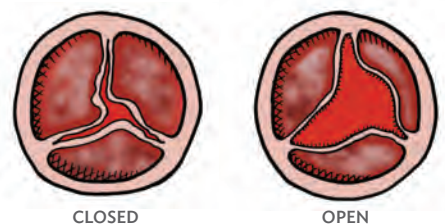
WHAT IS VALVULAR HEART DISEASE?

The heart's four valves are the aortic, mitral, pulmonary and tricuspid. Each has two or three "leaflets" that open and close efficiently to control blood flow within and out of the heart. Valvular heart disease occurs when these valves become thickened and have restricted openings making the heart work harder to push blood through. The valves can also "leak" due to a structural abnormality and/or other disease states. Forty percent of the cardiac operations at Virginia Mason are performed to correct valvular heart disease.

Health aortic valves



Diseased aortic valves



WHAT IS AN ARRHYTHMIA?

An arrhythmia is a disorder of the heart rate (pulse) or heart rhythm. The heart can beat too fast (tachycardia), too slow (bradycardia), or irregularly as in atrial fibrillation and atrial flutter. Arrhythmias may lead to congestive heart failure (see prior information) if left untreated.

WHAT IS ATRIAL FIBRILLATION?

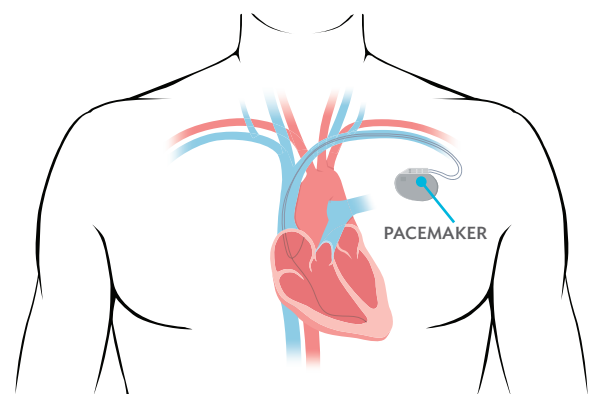
Atrial fibrillation (AF or AFib) occurs when the upper chambers of the heart (the atria) "fibrillate" or beat unusually fast. It is a common heart rhythm disorder that affects millions in the United States and across the world. There is a high risk of stroke with atrial fibrillation, but there are many treatment options available to decrease this risk.

WHAT IS A PACEMAKER AND WHEN IS IT NEEDED?

Pacemakers help support the electrical system of the heart.

When the heart beats too slow (bradycardia), the body and the brain may not get enough oxygenated blood. This may cause a light-headed feeling, fatigue, fainting, or shortness of breath.

In cases such as heart failure, where the heart pumping function is impaired, pacemakers can make the chambers function better with improved synchronized rhythms.



NOW LET'S FOCUS ON PREVENTION AND HEART HEALTHY LIVING

WHAT IS A HEART DISEASE RISK FACTOR?

Heart disease risk factors are conditions and behaviors that can increase your likelihood of acquiring the disease. Some risk factors, such as gender and age, are beyond our control.

But there are many others that we can control and manage by changes in lifestyle. These include high blood pressure, high cholesterol and diabetes. You can also lower the risk of heart disease by seeing your healthcare provider regularly and following his or her recommendations.

RISK FACTORS BEYOND OUR CONTROL

Age. As we age, we become more susceptible to cardiovascular disease.

Gender. More women than men will die of cardiovascular disease this year, although more men have heart disease earlier in life.

Family history. Having a father or brother who developed coronary heart disease before age 55 and/or a mother or sister before age 65 statistically places you at greater risk.



Discuss your risk factors with your provider today and continue reading to learn more about risk factors and your path to optimum heart health.

MANAGEABLE RISK FACTORS

Manageable risk factors include cholesterol, diabetes, blood pressure, smoking, a sedentary lifestyle, sleep habits and stress management.

CHOLESTEROL

- ✓ Know your numbers
- ✓ Make appropriate lifestyle changes
- ✓ Take medication if necessary

Cholesterol is an essential substance in the body created mostly by the liver, but also influenced by the foods that we eat. When the amount of cholesterol in our blood is too high, it can cause plaque build-up that narrows or blocks arteries, increasing the risk for a heart attack or stroke.

Genes inherited from parents or grandparents affect levels of cholesterol in the blood. Cholesterol abnormalities may also exist without major elevations in total blood cholesterol, especially if another blood fat called triglyceride is elevated.

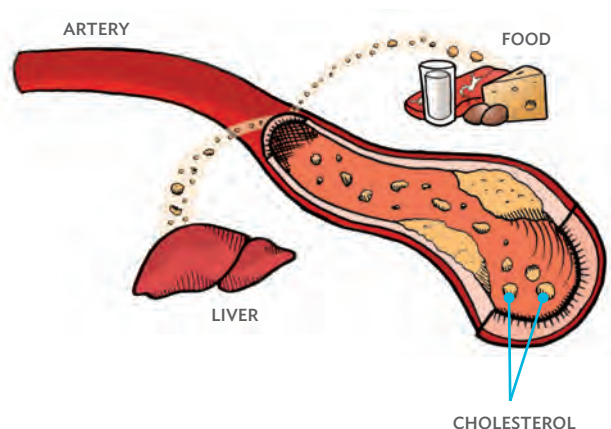
Optimum cholesterol levels

Total cholesterol	< 200
Triglycerides	< 150
HDL	40 or higher for men 50 or higher for women
LDL	< 100

Interpretation of your cholesterol numbers is a highly individualized and complex task, ideally performed in the context of your general health with practitioners that understand your overall cardiovascular risk.

There are no symptoms of high cholesterol, so it is important to have your levels checked regularly and to discuss the results with your healthcare provider. The need for medication may depend on your overall risk for heart disease as well as your body's response to healthy lifestyle habits, which is often the first step towards improving cholesterol.

Cholesterol sources



DIABETES

- ✓ Know your numbers
- ✓ Get tested
- ✓ Be aware of family history
- ✓ Take medication when necessary and make appropriate lifestyle changes

Diabetes is a disease in which the body is unable to produce or use insulin properly. When this occurs, glucose remains in the bloodstream rather than being absorbed by cells and used for energy. Glucose levels in the blood can then rise dangerously high (hyperglycemia) and, over time, cause damage to major organs and systems in the body such as the kidneys, eyes, nerves and blood vessels.

Type 1 diabetes

Type 1 diabetes is referred to as an immune mediated or auto (self) immune disease. It is also called juvenile diabetes because it affects mainly children and adolescents. However, adults can also develop it. Individuals with type 1 diabetes must take injections of insulin every day to stay alive.

Type 2 diabetes

Type 2 diabetes is referred to as adult onset diabetes. It occurs when the body does not properly use or respond to insulin. This difficulty is called insulin resistance.

Managing diabetes

Type 2 diabetes is treated with diet, exercise and, if necessary, medications. It accounts for 90-95 percent of all cases of diabetes and the incidence is rising rapidly, even in children.

A normal fasting (no food for 10-12 hours) blood-sugar level should be between 70 and 99 mg/dL. The designation of mg/dL is “milligrams per deciliter” and shows the concentration of glucose in the blood.

My doctor says I have “pre-diabetes.” What is that?

Pre-diabetes is diagnosed by any one of the following:

- A fasting blood glucose in between 100-125 mg/dL
- Any value between 140 mg/dL and 199 mg/dL during a two-hour 75g oral glucose tolerance test
- You are at high risk of developing diabetes. You can prevent or delay diabetes by increasing physical activity, eating healthful foods, and maintaining or losing weight
- Pre-diabetes is also called impaired fasting glucose (IFG)



MANAGING BLOOD PRESSURE

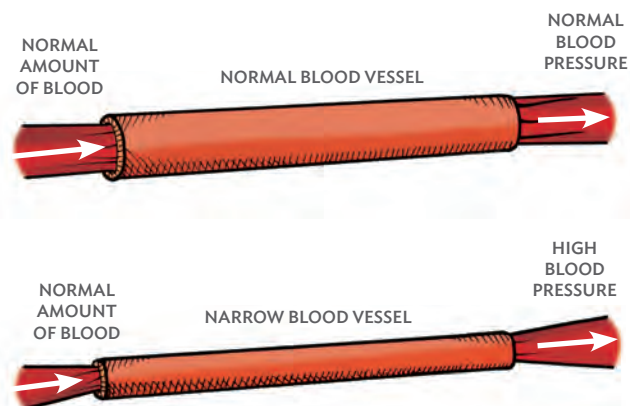
Blood pressure control is vital to our heart health. When either your top or bottom numbers are elevated, it makes the heart work harder when pumping, even when you are resting. The higher pressures inside of the blood vessels may induce microscopic damage within the walls of the vessels themselves. This may ultimately lead to further plaque buildup and instability of the vessel walls.

You may have no symptoms from high blood pressure so be sure to know your numbers and speak to your healthcare provider about lifestyle changes and/or medication to keep your blood pressure in an optimum zone:

Less than 120 on the top and less than 80 on the bottom.

Read on to better understand how lowering salt consumption, stopping smoking, exercising and losing weight can lower and prevent high blood pressure.

Blood pressure blood flow



SEDENTARY LIFESTYLE

We can all find a good reason to get up and move

The overall benefits of physical activity are endless, from a reduced risk of cardiovascular disease to enhanced mental health, better stress management, weight control and improved sleep.



Exercise, a good diet and weight management are important in the prevention and management of pre-diabetes and diabetes. Aerobic and strength training exercises in particular have a powerful effect on blood sugar levels.

SMOKING

If you smoke...STOP!

Smoking gives you a significantly higher risk of developing coronary artery disease and having a heart attack. It not only increases the risk of plaque buildup in your arteries, but also increases blood pressure, which further reduces the blood flow to your heart muscle. Just as vital is the risk of developing lung cancer. Ask your healthcare provider what treatment plan will work best for you to stop smoking today.

For tips on how to stop smoking
visit VirginiaMason.org

After the last cigarette

Thinking about quitting? It's not too late. You can help reverse the effects of smoking within just 12 hours of kicking the habit.

Within 12 hours	The carbon monoxide level in your blood drops to normal.
2 weeks to 3 months	Your risk of having a heart attack begins to drop. Your lung function begins to improve.
After 1 year	Your added risk of coronary heart disease is half that of a smoker.
5 to 15 years	Your risk of having a stroke is reduced to that of a nonsmoker's. Your risk of getting cancer of the mouth, throat or esophagus is half that of a smoker.
15 years on...	Wow, pat yourself on the back! Your risk of coronary heart disease the same as that of a nonsmoker.

Sources: American Lung Association, Benefits of Quitting Smoking lung.org/stop-smoking/how-to-quit/why-quit/benefits-of-quitting



SLEEP HABITS

Sleep... Why we need it so much

Poor sleep or not enough quality sleep can impact other medical conditions such as metabolic disorders, mood and anxiety disorders, cardiovascular disease and pain.

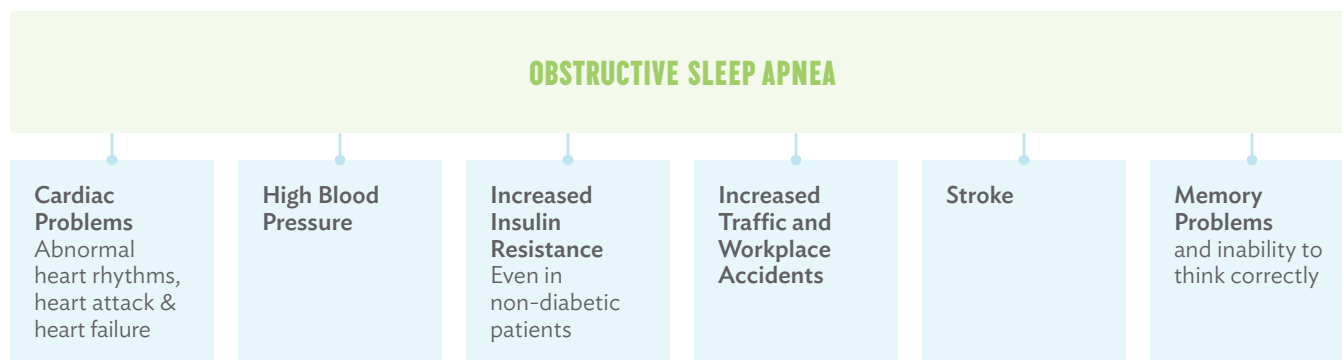
Adults need 7-9 hours of good quality sleep each night. To maintain a healthy heart, quality sleep is very important. When sleeping, both your heart rate and blood pressure go down, giving your heart a “rest.” All in all, sleep can affect several of our “controllable” risk factors such as blood pressure, blood sugar, weight and stress.

Some studies have shown that poor sleep habits can actually slow metabolism and possibly raise hormone levels that increase hunger with resulting weight gain.

Sleep disorders

Sleep disorders include obstructive sleep apnea, insomnia, snoring, restless legs, narcolepsy, fatigue, excessive daytime sleepiness, nocturnal seizures, sleep walking and simply not getting enough sleep. They can all impact how we feel and perform during the day, how we deal with stress and even affect our weight.

Obstructive sleep apnea (*see chart below*) can also have a bad effect on your heart and your blood vessels, causing your blood pressure to rise and your heart to work harder. It can even cause heart arrhythmias such as atrial fibrillation.



Contact the Virginia Mason Sleep Disorder Center with your sleep questions (206) 625-7180

STRESS

We cannot completely eliminate stress from our lives, but we can learn to reduce and deal with stress in a healthy manner.

When you have chronic stress, your body stays alert, even though there is no danger. Over time, this puts you at risk for health problems, including:

- ✓ High blood pressure
- ✓ Heart disease
- ✓ Diabetes
- ✓ Obesity
- ✓ Depression or anxiety

When you feel stressed, you may fall back on unhealthy behaviors to help you relax. These may include:

- ✓ Eating too much
- ✓ Smoking cigarettes
- ✓ Drinking alcohol or using drugs
- ✓ Sleeping too much or not sleeping enough

These behaviors may help you feel better at first, but they may hurt you more than they help over time. Instead, use the tips below to find healthy ways to reduce your stress.

If you already have a health condition, chronic stress can make it worse.



Develop a stress reduction plan

Recognize the things you can't change.

Accepting that you can't change certain things allows you to let go and not get upset. If your uncontrollable morning commute is stressful, listen to a book on tape or a podcast to reduce stress.

Avoid stressful situations. When you can, remove yourself from the source of stress. If people begin to argue at a family function, remove yourself and go for a walk.

Exercise. Getting physical activity every day is one of the easiest — and best — ways to cope with stress. When you exercise, your brain releases chemicals that make you feel good. It can also help you release built-up energy or frustration. Find something you enjoy — walking, cycling, softball, swimming, dancing, etc. — and do it for at least 30 minutes on most days.

Change your outlook. Try to develop a more positive attitude toward challenges. Replace negative thoughts with positive ones. Simply talking to yourself about situations in a positive manner will calm you down.

Do something you enjoy. When you're feeling stressed or down, do something you enjoy to help pick you up. It could be as simple as reading a book, listening to music, watching a favorite movie, or having dinner with a friend. Try learning a new hobby or taking a class. Whatever you choose, try to do at least one thing a day that's just for you.

If your stress continues despite efforts to reduce it, see your healthcare provider.

Learn new ways to relax. Practicing relaxation techniques is a great way to handle daily stress. Relaxation techniques help slow your heart rate and lower your blood pressure. There are many types, from deep breathing and meditation to yoga and tai chi.

Connect with loved ones. Don't let stress get in the way of being social. Spending time with family and friends can help you feel better and forget about your stress. Confiding in a friend may also help you work out your problems.

Get enough sleep. Getting a good night's sleep can help you think more clearly and have more energy. This will make it easier to handle any problems that crop up. Aim for 7 to 9 hours each night.

Eat a healthy diet. Eating healthy foods helps fuel your body and mind. Skip the high-sugar snack foods and load up on vegetables, fruits, whole grains, low-fat or nonfat dairy items, and lean proteins.

Learn to say no. If your stress comes from taking on too much at home or work, learn to set limits. Ask others for help when you need it.



START YOUR PLAN TODAY!

There are many ways you can combat your manageable risk factors.

SIMPLE “STEPS”

If you have been sedentary, get started with 10-15 minutes of walking a day and increase the time as you feel stronger. It is recommended that you get 150 minutes per week of moderate exercise or 75 minutes per week of vigorous exercise. Take your kids/grandkids to the park. Walk your dog. They need exercise too.

- ✓ **Take the stairs.**
- ✓ **Park your car at the back of the parking lot to get a few more steps in on the way to the store.**
- ✓ **If you are early for an appointment, don't wait in your car. Get out and walk around the block.**
- ✓ **Get off the bus before your usual stop, enjoy some fresh air and a good walk.**

Always check with your healthcare provider before starting any exercise program.

Small changes in your lifestyle can make big health changes!

YOUR WEIGHT

Obesity is a medical condition in which a high amount of body fat makes it hard for a person's internal organs to work well. This can cause poor health. People with obesity have a higher chance of developing these health problems:

- Diabetes
- High blood pressure
- High blood cholesterol and triglycerides
- Heart attacks due to coronary heart disease
- Heart failure, and stroke
- Bone and joint problems. More weight puts pressure on the bones and joints. This can lead to osteoarthritis, a disease that causes joint pain and stiffness and may limit your mobility.
- Stopping breathing during sleep (sleep apnea) that can cause daytime fatigue, sleepiness or poor concentration
- Gallstones and liver problems

Making lifestyle changes to reduce your overall weight, promote healthy eating and exercise can all help to get you on the right track of total health. While losing weight you may even see improvements in your blood sugar, blood pressure or stamina. Read on for tips to get you started!





In cases where managing your weight has been a lifelong struggle, Virginia Mason can help to guide you with options from medical management of weight loss to bariatric surgery.

We can work with you the entire way with:

**Endocrinology
medical management
of weight loss**
(206) 223-6624

**Clinical Nutrition
Services**
(206) 223-6729

Bariatric surgery
(206) 341-1997

**Gastroenterology,
gastric balloon
procedure**
(206) 223-2319

CHANGING THE WAY YOU THINK ABOUT YOUR “DIET”

A heart healthy diet and healthy weight will not only make you feel better, but will also help control many of your risk factors for heart disease. And eating right and keeping your weight at a healthy level benefits more than just your heart. Make it a lifestyle not a diet.

Easy ways to eat better and attain better health

Reducing high sodium (table) salt in our diet helps to keep blood pressure down. Salt intake per meal should be between 300–600mg and less than 2,400mg per day. Keep in mind, 1 teaspoon of table salt is roughly equivalent to 2000mg of sodium itself, so eliminating this alone is a great start. For congestive heart failure patients in particular, salt restriction is especially important, so please check with your doctor.

Reducing our intake of simple sugars (especially the non-vitamin rich ones, such as candy, syrups, sugared soda and table sugar) can keep our weight under control, manage diabetes or even reverse pre-diabetes numbers. Fruits, vegetables and milk products are good simple sugar choices.

Eating more fruits, vegetables and grains benefits our hearts and our digestive system as well as providing much needed nutrients and fiber to our diet.

Diets like the “Mediterranean” offer a delicious way to eat better. Research has shown this diet can reduce the risk of heart disease and many other diseases such as cancer and Alzheimer’s.

Adopting a healthy “lifestyle” of eating suggests that most of your meal is made up of fresh fruits, vegetables, beans, nuts and grains. Eating fish twice a week and using smaller amounts of poultry and beef should also be part of the plan.

Also, incorporating a variety of spices and limiting salt when cooking helps reduce sodium levels without compromising flavor. Using olive oil instead of unhealthy fats for cooking is also recommended. For more information about the Mediterranean diet, visit americanheartassociation.org.





Healthy recipe ingredient substitutions

Original Ingredient	Healthy Substitution
Beef, 70-85% lean ground or chuck	92% or leaner ground beef 92% or leaner ground turkey or chicken
Egg, whole	Two egg whites or ¼ cup egg substitute
Cream cheese	Light cream cheese Neufchatel cheese
Cream, heavy	Whole milk Evaporated skim milk
Sour cream	Lowfat or nonfat sour cream Fat-free plain or Greek yogurt
Mayonnaise or salad dressing	Light or nonfat mayonnaise or salad dressing Ratio of ¼ cup light mayonnaise to ¾ cup nonfat or lowfat yogurt
Oil, in baking	½ oil and ½ unsweetened applesauce
Pie crust for savory dishes	Shredded potatoes mixed with 1 egg (or substitute)
Pie crust for sweet dishes	Graham cracker crust
Whipping cream	Chilled evaporated skim milk
Chocolate chips	Dried fruit
Sugar	Reduce by ¼ to ⅓ Substitute 1 teaspoon mashed banana per 1 tablespoon sugar being replaced
Syrup	Pureed fruit (applesauce) Low-calorie, sugar-free syrup
Table salt, garlic or onion salt	Minced garlic Garlic or onion powder Mrs. Dash products MarketSpice™ products Herbs (basil, oregano, thyme) Spices (allspice, nutmeg, cinnamon)

CHANGING THE WAY YOU THINK ABOUT YOUR “DIET”, CONTINUED

Making healthy changes

You can lower your need for high sodium salts by using a variety of spices to add zip to your recipes. One easy substitute for salt is a splash of lemon juice to bring out the flavor of your foods. Using herbs and spices and other flavorings are also a great way to season food. Experiment with garlic, pepper, parsley, oregano, sage, rosemary, or tarragon. Bolder seasonings include curry, cinnamon, nutmeg, saffron, or smoked paprika.

Try tangy marinades, such as lemon juice, lime juice, or flavored vinegars. Also, add some fragrant oils, such as sesame, walnut, pumpkin seed or extra virgin olive oil.

- ✔ Choose unsweetened applesauce instead of oil for baking.
- ✔ Cook with low sodium chicken broth instead of butter and oils.
- ✔ Choose breads with at least 2 grams of fiber and cereals with at least 5 grams of fiber per serving.

Making healthy choices

Read labels carefully. A good protein source such as peanut butter can contain an excess of unneeded sugar and additional “bad” fats. Stick with natural peanut butter selections.

Heart healthy meals on a budget

You don’t have to have a large budget to shop and eat healthy. Below are some tips to help you save money and eat “heart healthy.”

Meal planning. Select your menu for one week and make a list of ingredients for all the dishes. This not only saves money but will also save time, making healthy meal planning seamless.

Purchasing heart healthy foods on a budget.

Purchase the store’s own label products since they are usually less expensive. Stay away from convenience foods, such as prepared frozen meals and boxed meal products. They are usually loaded with salt and fat.



Great salt-free options available at MarketSpice.com

Ways to save at the supermarket

- ✔ Always buy fruit that is “in season” as it is less expensive. Also try canned fruit without added sugar and/or frozen fruit options.

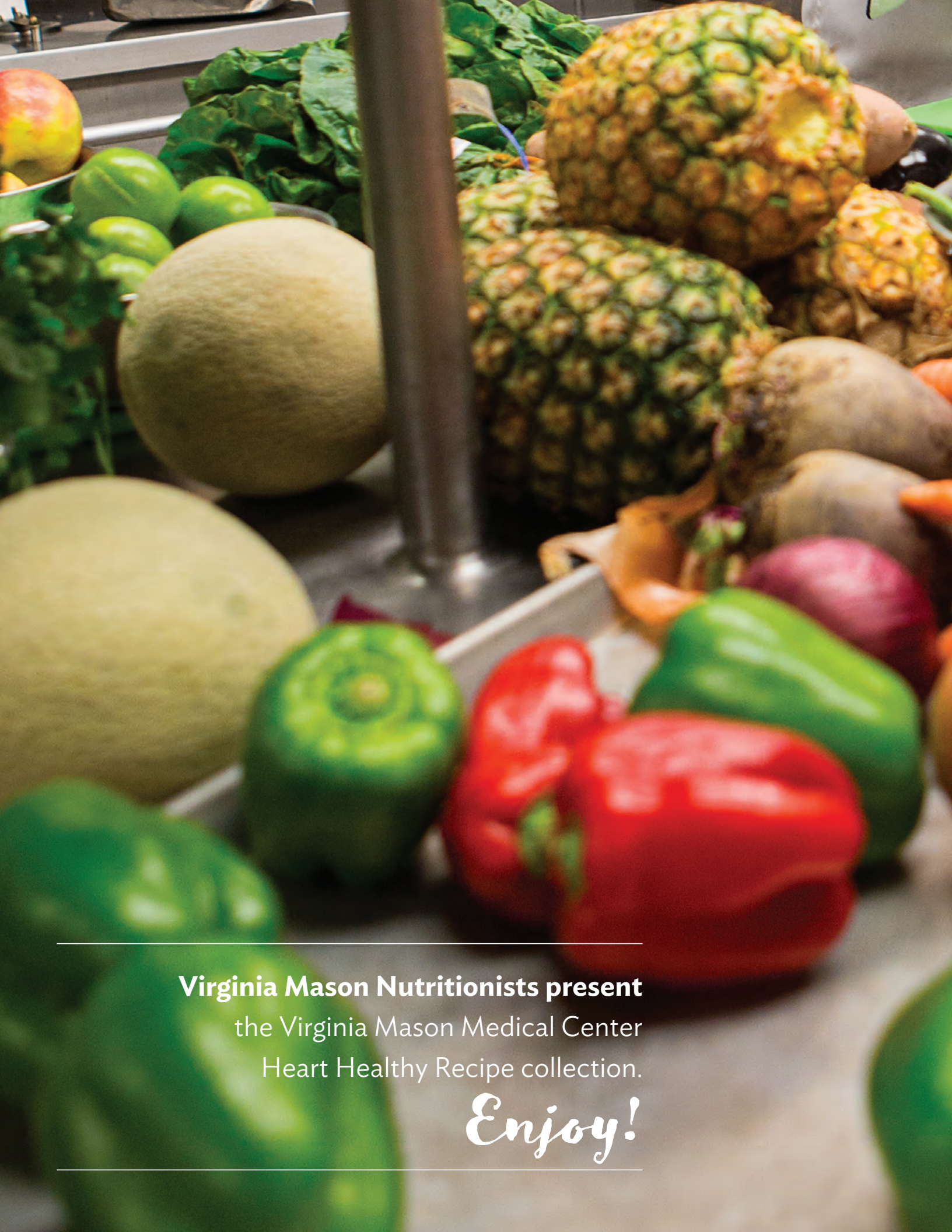
- ✔ Frozen vegetables can save you a lot of money. Purchase larger bags and use what you need and place the remainder back in the freezer. Canned vegetables are good as well, make sure you choose the low sodium or no sodium added options.

- ✔ Substitute beans, peas and lentils in place of meat a few nights a week. They are high in protein and fiber, low in fat and cost much less.

- ✔ Plan your meals so whole grains, brown rice and vegetables fill about 70% of your plate. Then complete the meal with healthy protein sources, such as chicken breast, lean meats, fish or tofu. Eating this way will cost less, lower fat, reduce calories and add fiber to your meals.

- ✔ Buy low sodium nuts, raisins and dried fruit in bulk and package your own healthy single servings of a healthy trail mix.





Virginia Mason Nutritionists present
the Virginia Mason Medical Center
Heart Healthy Recipe collection.

Enjoy!



RECIPES

VIRGINIA MASON SIGNATURE TURKEY BURGER

INGREDIENTS

- 1 pound lean ground turkey
- ½ cup panko and 1 teaspoon MarketSpice™ Honey Lemon Salt-Free Rub (mixed together)
- 2 large egg whites, beaten
- ¼ cup finely chopped green and red bell pepper
- 1 tablespoon minced dried onion
- 1 tablespoon MarketSpice™ Honey Lemon Salt-Free Rub
- ½ teaspoon freshly ground pepper
- 2 tablespoons chopped fresh basil
- ½ teaspoon garlic
- 1 cup arugula



SERVED ON A LIGHT WHEAT BRIOCHE BUN WITH ARUGULA AND CRANBERRY CHUTNEY

4 SERVINGS

1. Combine above ingredients. Shape mixture into 4 equal-size patties.
2. Grill, covered with grill lid, over medium-high heat (350° to 400°) 5 to 6 minutes on each side or until no longer pink in center.
3. Grill buns, cut sides down, 2 minutes or until toasted. Serve burgers on buns with arugula, tomato, onion and cranberry chutney (recipe on facing page).

Low Carbohydrate option:

*Nutritionals do not include your choice of whole wheat bun.
Serve over a fresh bed of greens for a low carbohydrate alternative.*

Calories	210
Total Fat	8g
Saturated Fat	1g
Trans Fat	0g
Cholesterol	60mg
Sodium	135mg
Carbohydrates.....	10g
Fiber.....	1g
Protein.....	27g

CRANBERRY CHUTNEY

4 SERVINGS

1. Cook shallots in oil in a 3-quart heavy saucepan over moderate heat, stirring occasionally, until softened.
2. Stir in remaining ingredients.
3. Simmer, stirring occasionally, until berries just pop, 10 to 12 minutes, then cool.



INGREDIENTS

- 4 cups fresh cranberries*
- 2 tablespoons brown sugar*
- 1 tablespoon shallots*
- 1 tablespoon cider vinegar*
- 1 teaspoon olive oil*
- 1 teaspoon pepper*
- 1 teaspoon garlic*
- 1 teaspoon ginger*
- 1 teaspoon lime juice*

Calories	80
Total Fat	1.5g
Saturated Fat.....	0g
Trans Fat	0g
Cholesterol	0mg
Sodium	135mg
Carbohydrates.....	19g
Fiber.....	5g
Protein.....	1g

HALIBUT VEGETABLE CHOWDER

INGREDIENTS

- 1.5 pound halibut steak, cubed
- 1 red pepper, chopped
- 1 onion, chopped
- 2 sticks celery, chopped
- 2 cloves garlic, finely chopped
- 4 tablespoons olive oil
- 1 28-ounce can reduced sodium diced tomatoes
- 3 medium potatoes, small diced
- 1 28-ounce package reduced sodium chicken broth
- 2 teaspoons chopped parsley
- ½ teaspoon salt
- ½ teaspoon pepper
- 1 teaspoon thyme
- 1 cup shredded carrots

Calories230
Total Fat 8g
Saturated Fat1g
Trans Fat0g
Cholesterol 40mg
Sodium 430mg
Carbohydrates.....20g
Fiber..... 3g
Protein.....18g



6 SERVINGS

1. Heat oil in a large pot over medium heat. Add the garlic, onion, and celery and cook until the onion and celery have softened and turned translucent, about 5 minutes.
2. Add the diced tomato and chicken broth and continue cooking, about 10 minutes.
3. Pour in the potatoes. Bring to the boil, then reduce heat to medium-low, then add shredded carrots, parsley, thyme, and red pepper. Cover and simmer for 10 minutes.
4. Season to taste with salt and pepper, then stir in the halibut. Continue simmering uncovered until the halibut is flaky and no longer translucent in the center, about 10 minutes.

QUINOA SESAME CHICKEN SALAD



4 SERVINGS

1. In a large bowl toss the quinoa with olive oil, ginger, sesame oil and soy sauce.
2. Stir in the snow peas, asparagus, chicken, sesame seeds and toss to combine.
3. Add MarketSpice™ All Purpose Seasoning Salt-Free to taste.
4. Sprinkle with the scallions. Add optional garnish if desired.

Low Carbohydrate option:

Decrease quinoa to 2 cups and add 2 cups shredded zucchini.

INGREDIENTS

2 (4-ounce) chicken breasts, grilled and sliced thin

1 teaspoon minced ginger (or ½ teaspoon dried ginger)

2 teaspoons sesame oil

2 teaspoons light soy sauce

½ pound snow peas, trimmed and cooked, sliced thin

½ lb. fresh asparagus, trimmed and cooked, sliced thin

2 teaspoons sesame seeds, toasted (MarketSpice™)

3 scallions, sliced

4 cups cooked quinoa (no salt added to cooking)

2 teaspoons olive oil

No salt seasoning to taste such as MarketSpice™ All Purpose Seasoning Salt-Free

Calories	380
Total Fat	10g
Saturated Fat	1.5g
Trans Fat	0g
Cholesterol	40mg
Sodium	110mg
Carbohydrates.....	48g
Fiber.....	8g
Protein.....	24g

PACIFIC BREEZE SALMON

INGREDIENTS: SALMON

4 (4 ounce) salmon fillets,
skin removed

1 teaspoon olive oil

2 nori sheets (dried seaweed
sheets), toasted

INGREDIENTS: MARINADE

1 teaspoon paprika

1½ tablespoons sesame seeds

1 teaspoon pepper

2 teaspoons olive oil

1 shallot, minced

1 teaspoon garlic, minced



NORI CRUSTED SALMON WITH SOBA NOODLES AND STEAMED BOK CHOY

4 SERVINGS

Marinade

1. Break up nori sheets. Add paprika, sesame seeds and pepper.
2. In a small sauté pan, heat olive oil (1 teaspoon) over medium heat. Add shallots and garlic. Sauté over medium heat for 1 minute until shallots and garlic soften and turn slightly brown. Remove from heat.
3. Marinade the four salmon fillets for 2 hours.

Salmon

1. Preheat oven to 325 degrees.
2. Heat olive oil (1 teaspoon) in a sauté pan. Sear salmon skin side up for 2 minutes. Turn and sear on other side, approximately 2 minutes.
3. Transfer salmon fillets to baking dish, skin side down and pat nori crust on top of fillets. Bake in oven for 5–7 minutes until cooked.

Calories 440
Total Fat 12g
Saturated Fat 1.5g
Trans Fat 0g
Cholesterol 35mg
Sodium 125mg
Carbohydrates 61g
Fiber 9g
Protein 25g

SOBA NOODLES

4 SERVINGS

1. Sauté mushrooms, carrots, bok choy, snow peas, garlic and ginger.
2. Add low sodium soy sauce, heat for few minutes and add soba noodles.
3. Cook for 3 minutes on medium heat.

Low Carbohydrate option:

Reduce Soba Noodles to ½ cup and add 1 and ½ cup shredded zucchini.



INGREDIENTS

olive oil spray

*2 cups shiitake mushrooms,
sliced*

2 cups chopped bok choy

1 tablespoon fresh minced ginger

1 carrot, julienned

*2 cups sugar snap peas,
blanched and thinly sliced
on a bias*

1 teaspoon minced garlic

1 teaspoon chives

*1 pound cooked soba noodles
(cook to package directions),
no salt added*

*1 teaspoon low-sodium
soy sauce*

EAST MEETS WEST

BAKED SALMON

INGREDIENTS

2 tablespoons thai basil, minced

2 (4–6 ounce) sockeye salmon fillets

1 tablespoon olive oil

1 teaspoon garlic, minced

1 teaspoon fresh ginger, minced

1 teaspoon MarketSpice™ Honey Lemon Salt-Free rub

1 cup brown basmati rice, (cooked according to package), no salt added to cooking

8–10 asparagus spears, cooked



MARINATED SALMON WITH THAI BASIL SERVED WITH BASMATI RICE, ASPARAGUS AND MANGO SALSA

2 SERVINGS

1. Preheat oven to 350 degrees.
2. Gently rub each salmon fillet with oil and season with basil, garlic, ginger, pepper and Honey Lemon Salt-Free rub.
3. Bake salmon fillets, skin side down. Cook for 10–12 minutes, until salmon is cooked and flakes with gentle pressure from a fork.
4. Arrange salmon fillets over rice and asparagus. Top with mango salsa.

Low Carbohydrate option:

Replace the Basmati rice with 2 cups lightly cooked tri colored shredded slaw.

Calories420
Total Fat 16g
Saturated Fat 2g
Trans Fat0g
Cholesterol 75mg
Sodium 70mg
Carbohydrates.....44g
Fiber..... 4 g
Protein..... 28g

MANGO SALSA

2 SERVINGS

Mix the mango, cilantro, red onion, ginger, lime juice, basil, mint, bell peppers, and pepper in a bowl, let stand for 5 minutes.



INGREDIENTS

½ of a large mango, peeled and finely chopped (or ½ cup frozen mango)

1 tablespoon minced fresh cilantro leaves

1 tablespoon minced red onion

1 teaspoon minced ginger

1 tablespoon fresh lime juice

½ teaspoon thai basil, julienne

½ teaspoon mint, chopped

1 tablespoon minced red and green bell pepper

⅛ teaspoon pepper

BOMBAY CHICKPEA CAKES WITH YOGURT SAUCE

INGREDIENTS

- 1 English cucumber, peeled, halved lengthwise, seeded and shredded
- 1 cup nonfat plain yogurt
- 6 scallions, sliced thin
- ¼ cup minced fresh cilantro
- 1 teaspoon lemon juice
- 1 pound dried chickpeas, (soak overnight), or 1½ 12-ounce cans no sodium chickpeas, drained
- 2 large egg whites
- ¼ cup finely chopped green and red bell pepper
- MarketSpice™ Bombay Masala
- ⅛ teaspoon cayenne pepper
- ½ cup panko bread crumbs
- 1 teaspoon minced garlic
- 1 teaspoon fresh ginger, minced, or 1½ teaspoons dried ginger
- 3 shallots, minced
- olive oil cooking spray

Calories520
Total Fat 7g
Saturated Fat0g
Trans Fat0g
Cholesterol 0mg
Sodium 110mg
Carbohydrates.....89g
Fiber..... 23g
Protein.....30g



MAKES 4 CAKES

1. Combine shredded cucumber, ½ cup yogurt, 2 tablespoons scallions, lemon juice and 1 tablespoon cilantro in bowl. Season with MarketSpice™ Bombay Masala.
2. Pulse chickpeas in food processor to coarse puree with few large pieces remaining, about 8 pulses.
3. Whisk egg whites, Bombay Masala, cayenne, and 1 teaspoon salt together in medium bowl. Gently stir in processed chickpeas, panko, bell peppers, remaining ½ cup yogurt, scallions and cilantro until just combined.
4. Divide chickpea mixture into four equal portions and lightly pack into 1-inch thick patties.
5. Heat olive oil spray in large nonstick skillet over medium heat until shimmering. Carefully lay two patties in hot skillet. Cook until set up and well browned on first side, 3 minutes. Gently flip patties. Cook until golden on second side, 3 minutes. Top with yogurt sauce.

To reduce carbohydrates even more, make 8 smaller cakes and serve over a bed of spinach, arugula and red peppers. Take into account the high fiber per serving.

JEWELLED COUSCOUS



6 SERVINGS

1. Combine peppers, eggplant and tofu, mix with olive oil and roast it in the oven for 6 minutes or until medium cooked, then cool.
2. Combine couscous, cucumber, onion, cooked vegetables, apricot, pomegranate seeds, spinach, basil, lemon juice, pepper, olive oil and MarketSpice™ Heart Healthy seasoning to taste.
3. Toss the salad gently, add any optional garnish.
4. Cover and refrigerate before serving.

Low Carbohydrate option:
Reduce couscous to 2 cups (use whole grain option) and add 1½ cups chopped raw cauliflower.

INGREDIENTS

- 4 cups cooked couscous
Follow directions on package
(no salt added to cooking)
- 1 English cucumber, small diced
- 1 red onion, small diced
- 2 tablespoons dried apricot,
julienne sliced
- 2 tablespoons pomegranate seeds
- 1 of each: green pepper, red
pepper, yellow pepper and
eggplant (peeled), small diced
- 1 pound extra-firm tofu,
small diced
- 2 tablespoons extra virgin
olive oil
- 1 tablespoon lemon juice
- 1 cup baby spinach leaves,
julienne sliced
- 1 tablespoon fresh basil,
thin sliced
- 2 teaspoons pepper
- MarketSpice™ Heart Healthy
Salt-Free seasoning to taste

Calories 460
Total Fat 15g
Saturated Fat 2g
Trans Fat 0g
Cholesterol 0mg
Sodium 35mg
Carbohydrates 60g
Fiber 10g
Protein 23g

FIRST HILL FALL SALAD

INGREDIENTS

1 pound sweet potatoes,
peeled and cubed

1 large granny smith apple,
peeled, cored and cubed

3 large celery stalks, small diced

1 tablespoon extra-virgin
olive oil

1 tablespoon apple cider vinegar

1 cup dried cranberries

1 red onion, small diced

1 red pepper, small diced

2 teaspoons pepper

1 teaspoon MarketSpice™
All Purpose Seasoning Salt-Free

1 tablespoon fresh basil,
thinly sliced (or 2 tablespoons
dried basil)

1 tablespoon fresh orange juice

1 teaspoon sugar substitute



6 SERVINGS

1. Place the sweet potatoes in a large pan and cover with water. Bring to a boil over medium heat and cook for 8-10 minutes or until “al dente” (still firm, not mushy). Drain and cool.
2. Combine the apple, celery, onion, pepper, sweet potato and toss well.
3. In a small bowl, whisk together the orange juice, oil, cider vinegar, sugar substitute, pepper and salt-free seasoning.
4. Combine the salad with basil, cranberries and the mixed dressing and toss.
5. Cover and refrigerate until ready to serve. Garnish optional, such as celery heart.

Low Carbohydrate option:

Reduce sweet potatoes to ½ pound and add 1 cup diced cucumber and 1 cup arugula.

Calories	300
Total Fat	4g
Saturated Fat	0.5g
Trans Fat	0g
Cholesterol	0mg
Sodium	75mg
Carbohydrates.....	63g
Fiber.....	8g
Protein.....	4g

SPRING KALE SALAD



4 SERVINGS

Salad

1. Place the shiitake mushrooms and green beans on a baking sheet, sprinkle with olive oil, pepper and mix well.
2. Bake at 350 degrees for 5 minutes, then cool.
3. Place the kale in a large bowl toss well with carrots, green beans, mushroom and scallions. Add the dressing.

Dressing

Combine all ingredients and mix well in a shaker.

Low Carbohydrate option:

Reduce shredded carrots to 1 cup and add 1 cup shredded zucchini.

INGREDIENTS: SALAD

- 1 pound fresh shiitake mushrooms, sliced ¼ inch thick
- 6 scallions, thinly sliced
- 2 pounds fresh green beans, rinsed and trimmed
- 2 cups shredded carrots
- 2 tablespoons olive oil
- 8-ounce bag of kale
- 1 teaspoon pepper

INGREDIENTS: DRESSING

- 3 tablespoons Dijon mustard
- 1 tablespoon shallots
- 1 tablespoon balsamic vinegar
- 1 teaspoon low-sodium soy sauce
- 2 tablespoons olive oil
- 1 teaspoon lemon juice

Calories	300
Total Fat	15g
Saturated Fat	2g
Trans Fat	0g
Cholesterol	0mg
Sodium	390mg
Carbohydrates.....	39g
Fiber.....	12g
Protein.....	6g

VIRGINIA MASON DESSERT POACHED PEARS

INGREDIENTS: POACHED PEARS

2 cups white wine (alcohol cooks off in cooking process), or substitute 2 cups of apple juice

1/8 teaspoon ground cloves

1/8 teaspoon cinnamon

1 teaspoon MarketSpice™
Juniper Berry

4 peeled pears

INGREDIENTS: BALSAMIC REDUCTION

1 cup balsamic vinegar

1 teaspoon sugar substitute



POACHED PEARS & CANDIED NUTS WITH BALSAMIC REDUCTION

4 SERVINGS

Poached pears

Place wine or apple juice, cloves, cinnamon, juniper berry and pears in a large pot, bring to a boil, turn down to simmer for about 45 minutes.

Balsamic reduction

1. In a small saucepan, combine balsamic vinegar and sugar substitute. Bring to a boil.
2. Reduce heat to medium-low, stirring occasionally and simmer 20–30 minutes.
3. Remove from heat and let sauce thicken as it cools.

Calories380
Total Fat 19g
Saturated Fat 2g
Trans Fat0g
Cholesterol 0mg
Sodium 110mg
Carbohydrates.....44g
Fiber..... 8g
Protein.....13g

Candied nuts

1. Preheat oven to 300 degrees.
2. Mix sugar, cinnamon and cloves together in a bowl.
3. Whisk egg white in a separate bowl until frothy. Toss all the nuts and the cinnamon, sugar and cloves in with the egg whites until all are coated.
4. Spread coated nuts onto a baking sheet, and bake until crisp (10–15 minutes).

Assembly

Arrange pears on plate, drizzle with the reduction and sprinkle with candied nuts.

Carbohydrate Fact:

Balsamic vinegar has more carbohydrates than other vinegars. For a lower carbohydrate option, substitute the 1 cup balsamic for $\frac{3}{4}$ cup red wine vinegar and 5 tablespoons sugar substitute.

**INGREDIENTS:
CANDIED NUTS**

1 teaspoon ground cinnamon

$\frac{1}{8}$ teaspoon ground cloves

1 tablespoon brown sugar

1 cup egg whites

*1 cup almonds/walnuts,
finely chopped*

GAME DAY JUICE

INGREDIENTS

½ cup kale

½ cup broccoli

1 pear

1 apple

½ cup arugula

1 cup green grapes



3, 8-OUNCE SERVINGS

Process all ingredients in a juicer, processor or blender. Shake or stir and serve.

*Need protein for your game day?
Add 1 scoop of your favorite protein powder to strengthen your
Game Day Juice. Start your day with a power punch!*

Calories 110
Total Fat 0g
Saturated Fat 0g
Trans Fat 0g
Cholesterol 0mg
Sodium 10mg
Carbohydrates 27g
Fiber 4g
Protein 1g

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Our heart specialists are recognized nationally in the treatment for heart failure and heart attack, and have cardiac surgery outcomes that are in the top 10 percent in the nation. At the same time we are national leaders in providing appropriate care — which means you get the tests and treatments you need, and are not put through the ones you don't.

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Arrhythmia / Heart Rhythm Disorders
Coronary Artery Disease
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Heart Valve Conditions
High Cholesterol
Peripheral Vascular Disease

We also assess cardiovascular risk and help people make changes to avoid these conditions.

We will be with you every step of the way, helping you select the treatment options that give you the best quality-of-life with the lowest possible risk. Because we're committed to keeping your heart beating strong for all those moments that make life worth living.

For more information, visit [VirginiaMason.org/Heart](https://www.virginiamason.org/Heart). You can schedule an appointment at the Heart Institute by calling **(206) 341-1111**.



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Healthgrades™ named Virginia Mason as one of the top 100 organizations in the country for Cardiac Care, which included a Five-Star rating for Excellence for Coronary Interventional Procedures, Treatment of Heart Attack and Treatment of Heart Failure. In addition, the Society of Thoracic Surgeons has given the Virginia Mason Heart Institute its highest rating, placing it in the top 10% in the nation for cardiac surgery.



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