



Sodexo Distance Education Dietetic Internship

Cardiac Case Study

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(From: Clinical Nutrition Case Studies by Wayne Billon--2nd Ed.)

Mr. F is a 54 YOWM who is a pharmacist with a successful business in Ohio. His weight is 235 lbs. and he is 6' tall. He has been gradually gaining weight, about a pound a year ever since he was 31 years old. He is an intelligent man and knows a lot about medicine, but he has not been watching his diet. He takes pride in the fact that he can eat anything he wants. He has no family history of cardiovascular disease or diabetes and none of his family has been overweight. He is married and has 3 children. He has a good job in a large drug store and is not under any particular kind of stress. He has been healthy all his life with only 3 hospitalizations for minor reasons. He had an appendectomy when he was a teenager, had a hernia repair 10 years ago, and broke 2 ribs in an automobile accident several years ago. Mr. F's job requires him to be on his feet all day, but he does little by way of exercise. A few weeks ago, after a heavy snow, Mr. F was clearing the sidewalk in front of his house with a snow shovel. After about 15-20 minutes of shoveling, he felt some sharp pains toward the center of his chest below the sternum. He got very light-headed and weak. His respiration increased, and his wife reported he became very pale. He lay down for a while and it passed. He thought he had over worked himself and did nothing about it.

The next week he was visiting a friend on the 4th floor of the hospital. Because of the large crowd waiting for the elevator, he decided to take the stairs. He was going up the stairs at a brisk pace, partly to see if he would have chest pains again, which he did. He knew that this could be serious, so he made an appointment with his family physician.

The physician ran the usual tests, EKG, blood work, and chest x-ray. All tests were WNL except that Mr. F's cholesterol and triglycerides were elevated. Mr. F's physician agreed with him that it still could be serious, so he sent him to see a cardiologist. The cardiologist completed a treadmill stress test. Mr. F was not able to get halfway through the test. He was then admitted to the hospital for further evaluation. A cardiac cath revealed that Mr. F had 50% blockage in 2 arteries and 80% blockage in a third artery. The cardiologist believed that this could be corrected with angioplasty. This procedure was attempted and was successful in opening the 80% blocked vessel significantly. The physician recommended that Mr. F go on a weight reduction diet, low in saturated fat, low in cholesterol, and high in fiber with no more than 2 grams of sodium and an energy level as recommended by the RD.



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Mr. F's lab values were as follows:

Test	Result	Normal Range
Sodium (Na)	140 mmol/L	135-145 mmol/L
Potassium (K)	4.1 mmol/L	3.5-5.0 mmol/L
Blood Urea Nitrogen (BUN)	14 mg/dL	8-25 mg/dL
Creatinine (Creat)	0.9 mg/dL	0.6-1.4 mg/dL
Blood Glucose (GLU)	105 mg/dL	70-110 mg/dL
Cholesterol (Chol)	323 mg/dL	140-200 mg/dL
Triglycerides (TG)	180 mg/dL	40-150 mg/dL
Albumin (Alb)	4.0 g/dL	3.5-4.8 g/dL

Questions:

1. Calculate Mr. F's IBW (or desirable body weight DBW)
 $106 \text{ lbs} + (12 \text{ inches} \times 6 \text{ lbs}) = 178 \text{ lb. (81 kg)}$
2. Calculate Mr. F's percent IBW (or DBW) and adjusted body weight
 $\text{IBW} = 235 \text{ lb} / 178 \text{ lb} \times 100\% = 132\%$
 $\text{Adjusted BW} = [(\text{actual BW} - \text{IBW}) \times 0.38] + \text{IBW} = 200 \text{ lb. (91 kg)}$
3. Define the following terms:

Balloon dilatation: (Also called angioplasty) This is a procedure to widen narrowed coronary arteries where plaque has built up. A wire with a deflated balloon is passed through the narrowed portion of the artery and is inflated to expand the artery and increase blood flow. The balloon is threaded out and withdrawn.¹

Cardiac cath: (cardiac catheterization) is the passage of a thin, flexible tube (catheter) into the right or left side of the heart through an IV line in the arm, neck or groin. This procedure collects blood samples from the heart, collects pressure and blood flow to the heart, measures oxygen in the parts of the heart, examine arteries or may be done to perform a biopsy of the heart muscle. This procedure helps to evaluate if future cardiac procedures need to be done.²

EKG: (electrocardiogram) is a test that records the electrical activity of the heart by placing electrodes on several area of the body. A machine records the cardiac rhythm and helps diagnose heart disease.

Treadmill Stress Test: is an exercise test used to measure the stress put on the heart during exercise. Electrodes placed on the chest are connected to an ECG.



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The test may be done on an individual that has had chest pain or a heart attack, or is used to discover heart rhythm changes during exercise.

4. Calculate Mr. F's total energy needs.
Using Mifflin-St. Joer, current BW and AF of 1.5:
 $(9.99 \times 107 \text{ kg}) + (6.25 \times 177.8 \text{ cm}) - (4.92 \times 54 \text{ yo}) + 5 = 1759 \text{ kcal}$
 $1759 \text{ kcal} \times 1.5 = 2639 \text{ kcal}$
5. What goals would you set for weight reduction for Mr. F?
To lose 1 lb. per week, his estimated kcal per day would be decreased by 500 kcal per day, making his estimated daily kcals of 2139 kcals.
6. Plan a day's menu for Mr. F that will include all the appropriate diet recommendations.
Breakfast: $\frac{1}{2}$ c. egg beaters, cooked
 1 slice whole-wheat toast with lite margarine spread
 1 banana
 1 c. 1% milk
 1 c. black coffee
Snack: $\frac{1}{4}$ c. cottage cheese 1% fat
 1 cup fresh tomato + cucumber salad
Lunch: 2 c. garden salad with tomato, carrots
 $\frac{1}{4}$ c. kidney beans
 $\frac{1}{4}$ c. diced avocado
 2 T. Italian oil & vinegar dressing
 1 apple
Snack: 1 c. fresh strawberries
 1 oz. almonds, roasted, unsalted
Dinner: 3 oz. baked chicken breast, skinless, boneless
 1 c. green beans, cooked, no salt added
 1 c. brown rice, no salt added
 1 med. Dinner roll with lite margarine spread
Snack: 1 container vanilla, low fat yogurt
 (Approx. 2000 kcal, 10 g saturated fat (6%), 1950 mg Na, 150 mg cholesterol, 35 g fiber)
7. What are the symptoms of a myocardial infarction (MI)?
The most common symptom of a MI includes chest pain (angina) usually in the center or left side of the chest, upper body pain or discomfort in the shoulder, arms, back, neck, jaw or upper stomach, and shortness of breath, either during rest or physical activity. Also, breaking out in cold sweats, nausea, dizziness and sudden fatigue.
8. How is an MI diagnosed? List specific tests and enzymes.
 - a. Electrocardiogram (EKG): this test records the electrical signals of the heart, its rhythm, the speed of the heartbeats, and strength and timing of the electrical signals. An EKG can show heart damage based on the heart's strength.



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- b. Blood tests: higher amounts of protein in the blood indicate a heart attack because when necrosis of a portion of the heart muscle occurs, proteins are released into the blood. Other parts of the blood test include: troponin, CK, and serum myoglobin.
- c. Coronary angiography: special dyes are put in the arteries by a catheter and a special x-ray machine is used to find blockages of the coronary arteries. The dye helps the cardiologist see how blood flows through the heart and blood vessels.
9. What is the pathophysiology of atherosclerosis? How do HDL's and LDL's impact atherosclerosis?
- Atherosclerosis (AS) begins with a response to injury of the endothelial lining of the arterial wall. The injury can be caused by many reasons. One reason being HTN, which creates an ongoing pressure exerted on the wall of the artery, which causes endothelial damage. The damage attracts platelets to the area that attach to the endothelium and form a thrombus (small clot). As more and more platelets adhere to the wall, ADP (adenosine diphosphate) and PDGF (platelet-derived growth factor) are released which attracts monocytes. Monocytes adhere to the damaged section and convert to macrophages, which express receptors for oxidized LDL. Smooth muscle cells take up the LDL that is attracted to the site, and they form foam cells. Foam cells are filled with cholesterol, and they secrete cholesterol into the extracellular space, which creates fatty streaks. The plaque can continue to grow as the platelets secrete collagen, creating a fibrous complex and decreasing the size of the lumen.
- LDL levels are the single strongest indicator of CVD risk and are heavily involved in the AS process. Once LDL is oxidized, it can start causing damage, and is likely to be taken up into the atherosclerotic plaque. Thus, the higher the LDL levels, the greater the risk for AS initiation. HDL naturally removes chol from tissues and returns it back to the liver. It helps in the prevention of AS by reducing the chol in plaque.⁵
10. What are the risk factors for developing atherosclerosis?
- Family history, advanced age, sex, obesity, dyslipidemia (↑ LDL, ↓ HDL, ↑ TAGs), HTN, DM, physical inactivity, cigarette smoking, and atherogenic diet (high sodium, fat, chol, alcohol and low in fiber).³
11. What are the recent ATP III classifications for LDL and HDL cholesterol?
- Treatment for AS and its prevention are guided by ATP III guidelines (Adult Treatment Panel III) developed by the National Cholesterol Education Program.⁶
- | <u>The classification for LDL:</u> | <u>Classification for HDL:</u> |
|------------------------------------|--------------------------------|
| <100 mg/dL → optimal | <40 mg/dL → Low |
| 100-129 mg/dL → near optimal | ≥ 60 mg/dL → High |
| 130-159 mg/dL → borderline high | |
| 160-189 mg/dL → high | |
| ≥190 mg/dL → very high | |



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12. What is homocysteine and how does it impact heart disease?

Homocysteine (Hsy) is a common amino acid found in blood and it becomes elevated when there is a deficiency in folate, vitamin B6 and B12. Hsy becomes elevated when eating a lot of red meat. There is found to be a positive correlation between elevated Hsy levels and increased likelihood of damaged arteries and formation of blood clots. Thus, increasing the risk of AS and CVD.

13. What is "Metabolic Syndrome" and what are the clinical identifiers for this syndrome?

Metabolic syndrome is a constellation of metabolic risk factors, including abdominal obesity (waste circumference), insulin resistance, dyslipidemia, hypertension and a prothrombotic state, a state at which blood clots are facilitated. Having at least three of the five risks classifies a person as having metabolic syndrome.

Mr. F followed his diet for about a year after he left the hospital and lost 20 pounds. He also started an exercise program at the recommendation of his cardiologist. He started walking at a slow pace for 15 minutes a day. He gradually increased his pace and his length of exercise. Several weeks after his discharge from the hospital, he was feeling a lot better and losing weight, and his exercise was improving. He increased walking to 45 minutes per day at a faster pace than he started. He felt confident that he was well. His exercise program continued almost as long as he was following his diet. Things got very busy at work as winter approached and the cold weather kept Mr. F inside. His walking decreased, and his diet changed with the start of the Christmas holidays. His weight slowly increased, but he felt fine, so he didn't pay attention to it. All winter and into the spring he avoided exercise and did not stay on his diet. He gained 10 pounds but was glad that he did not gain more than that. He still felt good and was pleased with his weight and conditioning. He did not restart his exercise and diet program that spring.

The fall came and Mr. F was still feeling fine but was also still slowly gaining weight and continued to gain weight at a very slow rate during the next year and a half. By that summer, he weighed 235 lbs. He was not doing any exercise and was back to his old routine. He had some checkups with his physician during the past couple of years and they were negative for abnormalities, but his physician cautioned him about his diet and weight. Since he felt well, Mr. F did not worry about it.

One summer day he was cutting his grass in mid-afternoon. It was very hot and he was perspiring profusely but was not drinking fluids. He started to get tired and to breathe very fast. He also started having some slight chest pain again. This scared Mr. F and he began to panic. As he panicked, he started to hyperventilate; as he hyperventilated, his anxiety grew worse. With increased anxiety, his chest pain increased. He slowly made his way back into the house and lay down on the couch. His wife found him there and called his cardiologist. As Mr. F cooled off, his perspiring stopped, his chest pain



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stopped, and his anxiety eased. He refused to go to the doctor then but promised he would see a doctor the following week.

That next week, he went to the doctor and extended tests were run, including EKG and blood tests. His lab values were normal, except for cholesterol and triglycerides, which were still elevated. Cholesterol was 340 mg/dl and triglycerides were 170 mg/dl. The cardiologist suggested that Mr. F be admitted to the hospital and have another cardiac cath done. Mr. F reluctantly agreed. The results showed the blood vessel that was 80% blocked previously was now 90% blocked. The 2 blood vessels that were 50% blocked were now 70% blocked. The cardiologist told Mr. F that in his opinion, he should have open heart surgery for a CABG X3. Again Mr. F reluctantly agreed.

Mr. F's surgery was a complete success. He spent 3 days in the open heart surgery unit and was then admitted to the surgical floor. While in the recovery unit, he was started on clear liquids and tolerated them well. Within a few days, he was on a 2g Na diet. His first tray of solid food was breakfast and it shocked him. On his tray were scrambled eggs, toast, 2 pats of margarine, whole milk, hash browns, and orange juice. There was no salt on the tray.

Mr. F called the nurse and requested to see the dietitian. Later, the RD came to talk to Mr. F. He explained to her his concern. He just had open heart surgery for a CABG x 3 because of elevated cholesterol levels and received eggs, whole milk, fried potatoes, and margarine for breakfast. Mr. F also complained of not being hungry and said that "things just didn't taste right."

The RD who went to see Mr. F had just finished school and was being oriented to the cardiovascular surgical unit. Since Mr. F asked to see a dietitian for a complaint, she went to see him to determine the problem. She would later confer with the RD in charge of that floor. She could calm some of Mr. F's fears but did not know the answers to all his questions. She told him that the lack of taste was a usual occurrence after open heart surgery. Frequently patients do not have much of an appetite and experience a loss of taste after open heart surgery. She also explained that the sodium restriction was for the prevention of the accumulation of fluid and gave a good explanation of how that works. The RD stated that she had not yet been oriented to the hospital's policy on post-CABG diets. Thus, she was not sure why Mr. F had so much cholesterol and saturated fat on his tray, and did not attempt to say anything about that. She told him she would check to see if his meals should be different.

The RD returned the same day with an answer to Mr. F's question about the saturated fat and cholesterol on his tray. She explained that the hospital had a policy that allowed open heart surgical patients to receive eggs on the breakfast tray with a liberal fat intake for the purpose of encouraging intake. She further explained that right after surgery, as she previously mentioned, patients usually do not feel like eating, especially



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a restricted diet. Therefore, to encourage intake and promote healing, the eggs and saturated fat were allowed for 5 days after surgery. During that time, patients were taught the diet they would be expected to follow at home. The RD said that 5 days of moderate cholesterol and saturated fat intake would not cause harm. Mr. F said he understood, but since a poor diet may have caused his surgery, he would prefer to start his diet right away. The RD agreed and said that he would receive the same diet he would be expected to follow at home.

Questions:

14. Calculate Mr. F's energy and protein needs right after surgery and 6 weeks later.
Right after surgery (higher kcal & higher protein)

Using Mifflin-St. Joer, current BW, AF of 1.2 and IF of 1.2:

$$(9.99 \times 107 \text{ kg}) + (6.25 \times 177.8 \text{ cm}) - (4.92 \times 54 \text{ yo}) + 5 = \\ 1919 \text{ kcal} \times 1.2 \times 1.2 = 2765 \text{ kcal}$$

or using 30-35 kcal/kg and ABW of 91 kg puts him in the range of 2730 to 3180 kcal:

$$91 \text{ kg} \times 30 \text{ kcal/kg} = 2730 \text{ kcal} \quad 91 \text{ kg} \times 35 \text{ kcal/kg} = 3180 \text{ kcal}$$

Using the protein range of 1.3 to 1.5 g/kg and his IBW of 81 kg, it is recommended Mr. F consume between 105 to 122 grams of protein.

Six weeks after surgery (less kcal & less protein)

Using Mifflin-St. Joer, current BW, AF of 1.4 and IF of 1.0:

$$(9.99 \times 107 \text{ kg}) + (6.25 \times 177.8 \text{ cm}) - (4.92 \times 54 \text{ yo}) + 5 = \\ 1919 \text{ kcal} \times 1.4 \times 1.0 = 2680 \text{ kcal}$$

or using 25-28 kcal/kg and ABW of 91 kg puts him in the range of 2275 to 2548 kcal:

$$91 \text{ kg} \times 25 \text{ kcal/kg} = 2275 \text{ kcal} \quad 91 \text{ kg} \times 28 \text{ kcal/kg} = 2548 \text{ kcal}$$

Using the protein range of 0.8 to 1.0 g/kg and his IBW of 81 kg, it is recommended Mr. F consume between 65 to 81 grams of protein.

15. Mr. F received scrambled eggs, hash browns, whole milk, and margarine for breakfast his first day on a 2 g Na diet. The RD was not sure why this was so but found the answer for Mr. F the same day. Did the RD handle this encounter appropriately? The outcome was that the RD changed his diet to low-cholesterol, low-saturated fat diet. Do you agree with this or should the RD have insisted on following hospital policy? Explain your answer.

The RD did not handle the situation appropriately. First, it seems that there was no explanation given to the patient for what diet he will be on once advanced to a solid diet. If the patient was complaining and was asking questions she didn't know the answer to, she should immediately get the head RD to answer his questions. She should not have stated that she wasn't familiar



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with the unit or didn't know the protocol for a post-CABG surgery diet. This shows lack of knowledge and is unprofessional.

The RD should follow the hospital's protocol for following diet advancement for post-CABG surgery. The RD or RN should have given more diet education or explanation to the patient. Lastly, his diet should not have been changed per patient request. However, his personal requests and preferences should have been gathered and used on future dietary trays. The whole conversation between the RD and patient seemed very uncomfortable for the patient and not ideal.

16. In school, the RD was not taught the concept of allowing open heart surgery patients to eat what they want the first few days after surgery. Some hospitals allow this but most probably do not. Discuss the pros and cons of this, and present your feelings about this concept.

PRO: The only pro I can see when a patient can eat whatever they want after surgery is that they increase their food intake and are more like to meet their nutritional needs, if they have the appetite for it.

CON: The patient doesn't learn to follow the correct diet immediately after advancement to solid food. This could possibly start them off with the wrong mindset. The lifestyle change should be initiated as soon as possible after surgery. Therefore eating whatever they want to increase caloric intake after surgery may show the patient that diet and exercise aren't all that important if they're allowed to eat whatever they want for up to 5 days after surgery. Also, the body is still in recovery mode after surgery and can't handle solid food until many days after clear and full liquid diet is tolerated. Immediately starting on solid foods may cause detrimental effects and discomfort due to the bowels and stomach not working properly after surgery.

I believe the cons outweigh the pros in this situation and a regular diet shouldn't be started at all. Once a patient can tolerate solid food, their therapeutic diet should immediately be started.

17. What are the principles Mr. F should be on after he fully recovers from surgery? Mr F should follow a Cardiac/Heart Healthy diet, which consists of a low fat, low cholesterol and low Na diet. This involves following a TLC (therapeutic lifestyle changes) diet, consisting of 25-35% total fat intake, <7% saturated fat, <2400 mg sodium and <200 mg dietary cholesterol. It includes a diet high in fruits and vegetables, allowing 20-30 g of fiber/day. Dairy products should be fat free or low fat, in addition to whole grain products, minimal animal proteins with more legumes and vegetable protein sources, foods high in omega-3 and omega-6, including nuts, seeds, and fish, and consumption of plant stanol and sterol containing foods (margarine, breads, OJ, cereal, low-fat yogurt). Also, he should incorporate physical activity at least 30 minutes per day, 5 days per week.^{3,5} This should lower the amount of fatty acids in the blood, help restore his lipid profile, and decrease the changes of AS initiation.



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In addition, a DASH (dietary approaches to stop hypertension) diet would be beneficial to limit his sodium intake to <2300 mg of Na per day and includes foods high in folic acid, potassium, magnesium and calcium.

18. Briefly describe the procedure for open heart surgery. In your description, explain how the blocked arteries are bypassed, where the bypass veins come from, and the extent of the surgery, (i.e. minor, moderate, major, etc.)

A CABG is a very invasive surgery where the chest is opened and the sternum is cut in half to reach the heart muscle. Tubes are inserted into the heart and a machine is used to pump blood throughout the entire body during the surgery while the heart is temporarily stopped. The individual has many catheters and IVs placed in them, and hooked up to many machines for monitoring. Once prepped and the heart is stopped, a vein is either taken from the leg, wrist, or another area of the chest. If a leg or arm vein is used, one end is connected to the coronary artery and the other to the aorta, just past the blockage. If a chest artery is used, one end is connected to the coronary artery while the other remains attached to the aorta. The graft is sewn into a created opening, redirecting the blood flow around this blockage. Once the bypass has been completed, the blood is allowed back into the heart and the heart-pumping machine is turned off, the sternum is sewn up using a wire, and some tubes and monitoring machines are disconnected or removed. Other tubes are inserted into the chest to remove fluid and blood build up, and also into the stomach to remove stomach fluids during the initial recovery process. Once the patient can breath on their own, they're removed from the ventilator.⁷

Congestive Heart Failure (CHF) has become a major public health problem in the U.S.

19. What is CHF? What are the symptoms, risk factors and medical nutrition therapy for CHF?

CHF is congestive heart failure, where the heart's pumping power is weaker than it should be. Risk factors for the onset of HF include coronary heart disease (CHD), previous MI, history of cardiomyopathy (thickening of the heart muscle), lung disease such as COPD, severe anemia, excessive alcohol consumption, and low thyroid function; in addition to, physical inactivity, cigarette smoking, overweight, diabetes, hypertension, valvular heart disease, and ischemic heart disease (IHD), also known as coronary artery disease (CAD) or atherosclerosis.

Left ventricular failure will cause shortness of breath (SOB), fatigue, weakness, and exercise intolerance. Right ventricular failure causes peripheral and abnormal fluid accumulation, and eventually hepatomegaly, splenomegaly and ascites. Also, patients with HF will have low plasma levels of CoQ10, elevated blood and tissues levels of norepinephrine, angiotensin II, aldosterone, endothelin, vasopressin and cytokines. A decrease in cardiac output causes a decrease in renal flow and GFR, which causes an increase in BUN. To compensate, the body tries to retain fluid to increase cardiac output, but also causes the heart to work harder and beat faster (tachycardia).



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MNT for CHF includes nutrition counseling for a diet that involves a strict sodium and fluid restriction. Sodium should be restricted to less than 2 grams per day and fluid to about 1500 mL per day, with an upper limit of 2000 mL/day. Following the DASH diet is essential to provide adequate amounts of K, Ca, and Mg. However, people with CHF have difficulty eating and therefore are likely to be malnourished and have a wasting appearance (cardiac cachexia). In this case, it's important for them to consume nutritionally dense foods and higher protein foods. Lastly, due to their use of multiple diuretics, it's important to talk about food-drug interactions and the importance of getting micronutrients from food to compensate for their loss through the diuretics.^{3,5}

20. What are the 4 stages of Heart Failure?

Stage A: patients who are at high risk for developing HF but don't have structural abnormalities

Stage B: Patient that have structural heart disease but do not demonstrate symptoms of HF

Stage C: patients with past or current symptoms of HF who have underlying structural heart disease

Stage D: patients with end stage disease requiring specialized treatment, such as mechanical circulatory support or a procedure to facilitate fluid removal

21. What is the DASH Diet? For what type of patient would it be appropriate?

The DASH diet is dietary approaches to stop hypertension. It includes following a diet reduced in sodium, and increased in potassium, magnesium, calcium and fiber. It consists of whole grain products, high consumption of fruits and vegetables, low-fat or fat-free dairy products, lean meats, nuts, seeds, beans, and fats/oils with minimal intake of sweets. Depending on the caloric needs, each food group has specific serving amounts per day or per week. The DASH diet has been clinically proven to decrease blood pressure. Therefore, the DASH diet is appropriate for patients with high BP, people of all ages, especially elderly over the age of 60, people with other comorbidities, and African Americans and Hispanic of Caribbean descent have higher prevalence of HTN.⁵

22. What is the TLC Diet?

The TLC (therapeutic lifestyle changes) is a way to reduce fat intake, increase fruits, vegetables, fiber, and physical activity. The TLC diet aims to lower LDL and increase HDL by providing macronutrient percent ranges of total calories consumed. Recommended intake of fat should be 25-35% of total kcals, carbohydrate should be 50-60% of total kcal, protein ~ 15% of kcal, <7% saturated fat, <200 mg dietary cholesterol, , sodium <2400 mg/day, fiber 20-30 g/day, stanol esters 3-4 g/day, PUFAs up to 10% of total kcal, and MUFAs up to 20% of total kcals. Individuals with CVD, CHD, CHF, IHD, atherosclerosis, are overweight, have metabolic syndrome, or



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have had an MI, CVA or CABG should follow the TLC plan to lower serum lipid levels and to lose weight.

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