



Nutrition

Special points of interest:

- There is no one food that supplies every nutrient the human body needs
- A balanced diet consisting of healthy proteins, fats, and carbohydrates are our best defense against disease.
- Good quality fats are essential to a healthy diet; trans fats should be avoided.

Introduction

“Nutrition” is a word derived from a Latin word, *nutrire*, which means, “to suckle,” since the first nutrients an infant receives come through breastfeeding. A more complete definition would be that nutrition is the study of nutrients (sources of nourishment: proteins, fats, carbohydrates, vitamins, minerals), how the body utilizes them, and the role diet plays in health and disease. In this training we will discuss the importance of nutrition as it relates to wellness, malnutrition and disease as related to diet, the benefits of eating fruits and vegetables, portion control and calories, reading and understanding food labels, the importance of exercise, and becoming aware of some foods we may want to avoid.

Diet

A person’s diet consists of the foods he or she habitually eats. Unfortunately, there is no one food that supplies all the nutrients that the human body requires. An orange may be high in vitamin C and Folic Acid, but does not contain vitamin B-12; a slice of Swiss cheese contains calcium and vitamin B-12, but has no vitamin C. We must consume a variety of foods in order to give the body what it needs. This is where the term *balanced* diet comes in. We need to eat enough of several different food groups to satisfy our body’s requirements.

The United States Department of Agriculture has established a website, myplate.gov, in order to provide a set of guidelines for healthy eating. Unless a person has a specific reason for avoiding certain foods (an illness or medical condition, allergies, food intolerances), the eating tips focus on eating more fruits and vegetables, including more whole grains and fewer refined grains, reducing saturated fats in favor of unsaturated fats, eating *lean* protein, consuming enough calcium-rich foods, and monitoring one’s intake of salt and sugar.

There are specific recommendations regarding the different food groups. It is recommended that we consume three cups per day of fat-free or low fat dairy products (milk, cottage cheese, yogurt, natural cheese). Dairy products come from animal sources, so they typically contain a fair amount of fat, hence the advice to choose low-fat dairy. We will discuss fats later in this training. Dairy products are usually high in calcium (important for strong bones and teeth), vitamin D (for proper calcium

absorption and a variety of other benefits), potassium (proper muscle function, particularly the heart, and optimizing blood pressure), and protein (for tissue repair).

Grains are rich in carbohydrates (energy), fiber (which aids in digestion and helps eliminate waste more efficiently), B-vitamins (niacin, thiamine, riboflavin and folate), and minerals (iron, magnesium, and selenium). The USDA suggests we consume six ounces of grains per day. An ounce would be the same as one slice of bread, a cup of cereal, or half a cup of pasta. Please be aware that at least half the grains we eat should be *whole* grains, as opposed to *refined* grains. Whole grains are milled as they occur in nature; with refined grains, the bran and the germ (sources of fiber and nutrients) are removed (stripped) in order to give the products a different texture and improve their shelf life. They are enriched by adding back B-vitamins later. If you see the words “enriched, bleached flour” on the ingredient list, then that product has been refined. White bread, crackers, pasta, pastries, white rice and doughnuts are refined grains. If you squeeze a loaf of white bread, you will notice that it is like a marshmallow with regard to its texture. Stone-ground wheat bread will not “give” as much when squeezed; it is more likely to crumble. Looking at the ingredient list is the best way to tell what type of grain is in the bag or box. Sometimes the product will be refined but brown in color because dye, caramel, or molasses has been added.



Again, please read the ingredient list; if it doesn’t say “whole” wheat, rye, etc., then it isn’t!

There are a couple of problems with consuming refined grains. First, our digestive tract doesn’t have to work as hard in order to digest them. With whole grains, the digestive tract has to work in order to break them down before the nutrients can be absorbed into the blood stream (keep in mind that it is *designed* to break them down), resulting in a more gradual increase in blood sugar, something for which your pancreas is grateful, since it only has to release a little insulin at a time. Eating refined products changes the picture. There is little work necessary to break them down, so whatever sugar they contain ends up being absorbed into the bloodstream immediately, resulting in a spike in blood sugar. The pancreas then has to work more quickly to dispense enough insulin in order to move the sugar into the cells. Foods that tend to provide more concentrated sugar when they are digested are called high-glycemic foods; most, if not all, refined grains are of this nature. The implication for people with Diabetes is clear enough: refined grains are not the best choice. And remember, refined products have had the fiber removed from them also (the second drawback with refined grains). The USDA recommends that at least half of the grains we consume be whole (or un-refined) grains.

Protein is absolutely necessary for our bodies to repair and regenerate. It is a building block. People with pressure sores are

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Diet

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encouraged to take in more protein because it promotes wound healing. You may notice that bodybuilders are often obsessed with how much protein they need. This is because protein is essential for muscle growth. The USDA recommends that we ingest at least 5 ½-to-6 ounces of protein per day to satisfy our body's needs (based on a 2,000-calorie diet). Meat, poultry, fish, eggs, nuts, seeds and legumes are all good sources of protein (as is dairy).



Some people may require a protein-restricted diet (those with kidney problems); please check the physician's orders. Protein sources should be as lean as possible.

Nuts and seeds are not only excellent sources of protein. They are rich in essential fatty acids. Fat is also an essential nutrient, although, at least in America, we tend to consume too much of the wrong kind. Knowing what type of fat/cholesterol we are eating is important. Fats are classified according to their chemical structure as either saturated or unsaturated.

Saturated fats have single bonds between carbon atoms, and that chain of carbon atoms is filled up with bonds to hydrogen atoms in a way that there is no room for any more hydrogen to fit there. That is why it is called saturated—there is no room for any more hydrogen. They are solid at room temperature (if you have ever had prime rib, think of the visible ring of fat around the outside of the meat). Saturated fats come primarily from animal sources and are considered low density lipoproteins (LDL's). Think L=Lousy. These tend to form the arterial plaque that eventually blocks blood flow and can lead to heart attacks and strokes. When the lab draws your blood to check your LDL level, it should be below 100 mg/dl. The lower the LDL levels, the better; we want to decrease the amount of LDL cholesterol.

Saturated fats are also in Trans-fats that are used in many fast foods and processed foods (French fries, doughnuts, crackers, pastries, etc.). If on a food label you see "partially hydrogenated vegetable oil," be aware that this is a trans-fat and builds up arterial plaque. Saturated fats are foods to be avoided or eaten sparingly. Most saturated fats are from animal sources, but there are some plant oils, like palm kernel oil and coconut oil, which are saturated and appear solid at room temperature. Recently there have been articles suggesting that coconut oil may actually be beneficial, but this is still open for debate and more research needs to be done. Now let us look at unsaturated fat.

Monounsaturated fats have at least one link in the carbon chain that is made of a double bond and the chain of carbon atoms is not filled up with hydrogen. These are considered high density lipoproteins (HDL's). Think H=Happy! Monounsaturated fats are liquid at room temperature. They have the opposite effect of the arterial-clogging saturated fats; they remove plaque from blood vessel walls and improve circulation! Probably the most notable example is olive oil, but there are others: canola oil, hazel nuts, cashews, peanut oil, almonds, avocados, sesame seeds and pumpkin seeds. Lab values for HDL's should be above 60 mg/dl. We want to increase the amount of HDL cholesterol.

Polyunsaturated fats have more than one link between carbon atoms that is a double bond and the chain of carbon atoms is not filled up with hydrogen. As with monounsaturated fats, polyunsaturated fats

help remove plaque and are beneficial. Safflower oil, sunflower oil, corn oil, and soybean oil are good sources of polyunsaturated fats.

It is a fact that the western diet does not typically include enough fruits and vegetables. That is why the myplate.gov and mypyramid.gov websites of the USDA are pushing us to increase our intake of these food sources and decrease the amount of refined sugar and saturated fat in our diet.

The recommendation from the USDA is that we consume 2 cups of fresh, frozen or canned fruits per day. Fruits are high in fiber, vitamins, minerals, and antioxidants (all of which our bodies need), and are usually low in calories and almost always contain no fat. Citrus fruits are rich in vitamin C (If you are on medications, please talk with your doctor about grapefruit, because it can neutralize the effect of many different meds). Bananas are abundant in potassium. Apples are rich in B-vitamins. A word of caution about canned fruits in heavy syrup and concentrated fruit juices: they contain high amounts of sugar, and consequently will raise your blood sugar levels, so ingest them in moderation.



We should eat at least 2 ½ cups of vegetables per day. Vegetables are also high in fiber, vitamins, minerals, and antioxidants and low in fat. Broccoli is rich in many vitamins (particularly vitamin K) and minerals. Carrots are an excellent source of vitamin A. Many of the dark green vegetables provide calcium (an important thing to consider for people who cannot tolerate dairy products). Canned vegetables and vegetable juices (even though tomatoes are technically considered a fruit, most of us place them in the veggie category) are low in sugar, but tend to be high in sodium, so please be aware of this, as too much sodium can be detrimental also.



Sodium is an essential mineral, yet consuming too much can aggravate problems such as Congestive Heart Failure and High Blood Pressure. Salt draws water to itself, and can cause fluid retention. This is why physicians often limit sodium intake in persons who have certain circulatory ailments. If you have ever gone swimming in the ocean, you may have noticed that after you were done swimming, you were very thirsty. This is because there is so much salt in the ocean water that it literally pulled the fluid out of the pores in your body. The current maximum daily salt intake recommendation is 2,300 mg. Some foods, such as bread, TV dinners and canned soup, contain a lot of sodium. This is because salt is a great preservative of food and gives it a long shelf life. Check the expiration date on a can of chicken noodle soup. You will notice that you can store it for several months. Please look at the food labels to know how much sodium you are getting per serving, especially if your doctor is limiting your salt intake.

Nutritional Excesses and Lifestyle

Food is hugely influential regarding our physical well-being. To make an analogy, if you want your car to run properly, you need the right fuel: gasoline. Without it, the car won't do what it is supposed to do. And the higher grade of gasoline you put into the tank, the more efficiently the car runs. You wouldn't think of pouring sugar into the gas tank, would you? Or wine? Or soda? Of course not. Yet think of what we put in our bodies when it comes to the fuel they need. We eat way too much sugar, way too much salt, and way too much fat. In short, we eat way too much. Period. Ours is a society of excess and convenience, and we pay for it with health problems. We treat our automobiles better than we treat our bodies!

Of the six leading causes of death in the United States, four are directly related to diet: Heart Disease, Cancer, Cerebrovascular Disease (stroke), and Diabetes Mellitus. Will following a healthy, balanced diet as per the USDA recommendations guarantee that we won't suffer from any of the above diseases? No. But it will certainly reduce our risk of developing them.



One hundred years ago, life in our country was much different. Most people had physically demanding jobs, there were fewer processed or refined foods available, and even fewer (if any) "fast food" restaurants. People ate foods that were grown on a farm or in a garden, and there were not as many chemical preservatives in their food, either. Hardly anyone had a car; unless you were taking a train to the next town, walking was the main way to get around. Portion sizes at meal time were smaller. The expression, "Super-size me!" hadn't been invented yet. Obesity was rare. Now, most jobs involve sitting at a desk and working on a computer.

People would rather drive two blocks than walk. We sit on the couch, watch television for hours, and eat. And eat. And eat. Obesity is becoming an epidemic.



Calories

Calories are simply a way to measure the amount of energy that food provides. Our bodies need a certain amount of energy (calories) to function every day and to maintain weight. Age, gender, and activity level are factors that affect how many calories we need. For example, a moderately active male in his twenties needs 2,600-2,800 calories a day to maintain his weight; a moderately active female of the same age needs 2,000-2,200. Energy that is not used is stored as fat. If you take in more energy than you expend, then you will begin to gain weight. If you expend more energy than you take in, you will lose it. The body has to store 3,500 calories to gain a pound of fat. If you consume 500 calories more per day than you burn, after one week you will have gained one pound. If you consume 500 fewer calories a day than you burn, after one week you will have lost one pound.

Losing 1-2 pounds a week is generally considered a safe and realistic way to approach weight loss. Crash diets usually do not work in the long run because at some point, the body's metabolism begins to slow down in an effort to conserve energy, because it thinks it is starving. Losing a little at a time is easier and safer. Talk to your physician if you want to lose weight. It is not a good idea to deprive yourself of essential nutrients in order to achieve your goal. By the way, a person can be overweight and still be malnourished. Soda, potato chips, pastries, cookies, and ice cream all have plenty of calories but lack many of the essential vitamins and minerals that we require. It takes your brain about 20 minutes to realize you are full. Slow down when you eat. You'll eat less!

"...a person can be overweight and still be malnourished. Soda, potato chips, pastries, cookies, and ice cream all have plenty of calories but lack many of the essential vitamins and minerals that we require."

Nutritional Deficits

Malnutrition is a problem more common in underdeveloped nations than it is in America, yet there are people in the United States who suffer from nutritional deficits. Here is a look at some of the more well-known deficiencies:

The most common nutritional deficiency in the world is Iron Deficiency Anemia. This results from a lack of iron, which is used by the blood to carry oxygen to the trillions of

cells in the body. Red meat, egg yolks, dark green leafy vegetables, and grains are good sources of iron.

Protein Deficiency, or Kwashiorkor, is a lack of protein in the diet. Protein contains the building blocks for tissue growth, repair, and regeneration and is essential for survival. "Kwashiorkor" is a word originating from Ghana in Africa which means, "The disease

that the first child gets after the second child is born." This is because the primary source of nutrition for the child in poor nations is the mother's breast milk, and when the new child is born, he/she gets breast-fed, and the older child no longer does.

Vitamin C deficiency, otherwise known as Scurvy, was common on ships that sailed from Europe to America when this country

was being colonized. Scurvy resulted because there was no fresh citrus fruit available. The British began stocking their ships with limes and lime juice to prevent this disease and hence became known as "Limeys." Vitamin C is essential for collagen formation. Collagen is a connective tissue which holds together many structures in the human body, particularly the walls of blood vessels. Consequently, people suffering from Scurvy often bruise easily, bleed from their gums, and lose teeth.

Magnesium is necessary for over 300 different chemical reactions in the body. It helps to keep the heart rhythm steady, supports the immune system, promotes normal muscle and nerve function, and helps strengthen bones and maintain normal blood pressure. Magnesium is plentiful in spinach, wheat bran and nuts. Deficiency is rare; signs and symptoms include nausea, vomiting, and weakness early, and, later on, cramps, arrhythmias and seizures.

Vitamin D assists in the absorption and metabolism of calcium and phosphorus, and thus helps build strong bones. It is thought

that vitamin D also helps to protect against Cancer and Hypertension. Fish, fortified cereals and dairy products, eggs, mushrooms and salami are rich in vitamin D. Exposure to the sun also causes the body to produce vitamin D; 15 minutes per day is sufficient. Please note that while vitamin D helps to deposit calcium into the bones, many soft drinks contain large amounts of phosphoric acid, which literally leeches calcium from the bones and can undo that particular benefit of vitamin D!

Vitamin A helps improve night vision and strengthens mucous membranes. Vitamin A deficiency is the chief cause of blindness in developing nations. Good sources include liver, sweet potatoes, paprika, red pepper, dark green leafy vegetables, dried apricots, carrots and cantaloupe.

Iodine is essential for proper thyroid function and pre-natal brain development. It is found in dairy products, eggs, seafood, potatoes, and brewer's yeast. Most table salt contains iodine, but read the label to be sure (please note that the salt used to preserve many processed foods does not contain iodine).

Iodine deficiencies are the single most important cause of preventable intellectual disability and brain damage world-wide. Even mild deficiency in a mother may cause slightly decreased intelligence in her child. The recommended daily amount of iodine for a pregnant woman is 220 micrograms; for a breast-feeding mom it is 290 micrograms. (Source: http://www.babycenter.com/0_iodine-in-your-pregnancy-diet_667.bc)

Thiamine (vitamin B-1) deficiency results in a disease called Beriberi. Thiamine is necessary for the production of certain neurotransmitters and healthy function of the peripheral nerves. A person who does not receive an adequate amount of this vitamin will experience weakness and burning/tingling in the extremities, fatigue, confusion, and swelling. Important sources of thiamine include organ meats, pork, whole-grain cereals, wheat germ and unrefined rice. The word "Beriberi" comes from the Sinhalese language of Sri Lanka and means "I cannot, I cannot." This evolved from the resultant weakness which rendered the afflicted person quite weak and virtually helpless. The condition is rare in industrialized nations.

Food Labels

It is required by law in this country that retail sellers of food and drinks have labels on their products that carry information about their nutritive value. These labels indicate what the serving size of a particular product is, the number of servings per container, the number of calories per serving, and information about protein, fat, carbohydrate, fiber, vitamins and minerals. Knowledge is power, and getting in the habit of reading food labels can help us to make wiser choices at the supermarket. In addition to the nutritional specifics on the label, the foods and drinks we purchase must also list their ingredients, in order of volume from most abundant to least

abundant, on the package. Therefore, the first item we see would be the most plentiful, followed by the second, and so on down to the scarcest. Persons with food or dye allergies, chemical allergies, or sensitivities to substances like gluten, need to check the ingredient list to make sure that they are not ingesting something that could cause an adverse reaction.

Nutrition Facts			
Serving Size 1 cup (228g)			
Servings Per Container 2			
Amount Per Serving			
Calories 250	Calories from Fat 110		
% Daily Value *			
Total Fat 12g	18%		
Saturated Fat 3g	15%		
Trans Fat 1.5g			
Cholesterol 30mg	10%		
Sodium 470mg	20%		
Total Carbohydrate 31g	10%		
Dietary Fiber 0g	0%		
Sugars 5g			
Protein 5g			
Vitamin A	4%		
Vitamin C	2%		
Calcium	20%		
Iron	4%		
* Percent Daily Values are based on a diet of 2,000 calories a day. Your daily values may be higher or lower depending on your calorie needs:			
	Calories	2,000	2,500
Total Fat	Less than	65g	80g
Sat Fat	Less than	20g	25g
Cholesterol	Less than	300mg	300mg
Sodium	Less than	2,400mg	2,400mg
Total Carbohydrate		300g	375g
Dietary Fiber		25g	30g

Special Diets

You may be caring for an individual who has a specially prescribed diet. The diet may indicate modifications in certain areas. Commonly prescribed diets include Low Fat/ Low Cholesterol, often for persons with cardiovascular problems; No Added Salt/ 2-gram Sodium (or 2-gm Na)/Low Salt or Low Sodium, usually for persons with Hypertension or Congestive Heart Failure (there may also be a daily fluid restriction of, for example, 1,500 cc or 2,000 cc); and No

Concentrated Sweets (NCS) or American Diabetic Association (ADA) Diet with or without calorie restrictions (1,800 calories or whatever). People with swallowing trouble (dysphagia) may have specific instructions regarding the consistency of their food (pureed, mechanical soft, etc.) and/or the thickness of the liquid (thin, nectar, honey, or pudding). It is important to follow the physician's orders. If the individual will not follow the diet, the doctor needs to be

notified. It may be that the person does not understand the potential consequences of not complying with the order. There are persons who require increased calories and protein (often, the elderly, those with poor appetite, or people who have wounds/pressure ulcers that are not yet healed). Often they will have supplemental drinks such as Boost, Ensure, or Glucerna prescribed by their physician.

Exercise

An important part of any nutritional program is exercise. The human body was designed to move. Immobility brings about muscle atrophy and weakness, stiffness, and joint pain; increases the risk for skin breakdown; and can predispose persons (especially elderly) to cardiorespiratory problems (such as pneumonia). Exercise burns calories and boosts metabolism, improves muscle tone and range of motion, and improves cardiovascular functioning. Remember that most of today's occupations are sedentary in comparison with those of previous generations, so we need to do something else in order to maintain fitness and ideal bodyweight. Neither dieting by itself nor exercise alone will provide as much benefit as both of them together

for persons seeking wellness. It is recommended by the USDA that children under 17 engage in at least 60 minutes of moderate-to-vigorous activity per day, and adults 18-64 participate in at least 2 hours and 30 minutes of moderate aerobic activity per week or at least 1 hour and 15 minutes of vigorous aerobic activity per week. Walking, running, swimming, biking, Tai-Chi, and Yoga are excellent ways to improve fitness. An outstanding way to do this is weight training. According to studies at Tufts University, weight training produces muscle mass increases, which, in turn, increase a person's metabolic rate. The more muscle mass one has, the more calories he burns *even at rest*.

Water

The best beverage to drink is water. The human body is approximately 70% water. Water helps regulate temperature, improves digestion and elimination, lubricates joints, cushions organs and intervertebral discs, and forms the base of every fluid in the body. Drinking water is better than drinking soda or other "flavored" drinks. It has no calories. Drinking a full glass of water approximately 15 minutes before a meal can help a person feel full and thus aid in weight loss. Ideally, a person should drink at least half his bodyweight in ounces each day. A person can survive about 2-3 weeks without food, but only a few days without water.



Food Ingredients You May Want To Avoid

High Fructose Corn Syrup

Until about 1980, soft drinks and other sweetened products used cane sugar, or sucrose, to give them their sweet flavor. When one monosaccharide (single sugar molecule), glucose, combines with another monosaccharide, fructose, they bond together to form cane sugar. Cane sugar, which occurs naturally, has *equal amounts* of glucose and fructose. But cane sugar is expensive, and the soda industry wanted to see if they could produce a more "cost

effective" product. Corn was (and still is) less expensive than cane sugar, and scientists had discovered a way to make a sweetener using cornstarch, in which there is more fructose than glucose (55% to 45%—hence the name "high fructose" corn syrup). This is something concocted in a laboratory and it doesn't occur in nature! Contrary to what some advertisements say, sugar isn't always sugar, and your body *does* know the difference. High fructose corn syrup breaks down

differently in the body than cane sugar. All that extra fructose goes to the liver and results in an increase in triglycerides and cholesterol, leading to liver damage, obesity, and an increased risk for heart disease and cancer. It also damages the lining of the intestines, resulting in a "leaky gut" and widespread inflammation. You may wish to do a web search of this product for more information.

Artificial Sweeteners

You may also want to learn more about these products which are used to flavor diet sodas and other diet foods. Studies at Purdue University and the University of Texas both indicate that there appears to be a correlation between the long-term ingestion of artificial sweeteners and weight gain. It may

be that consuming these products causes an increase in cravings for carbohydrates. Aspartame has been blamed for a variety of health problems, including symptoms of Multiple Sclerosis (headaches, visual problems, numbness and tingling, weakness of the extremities). Many alternative health

practitioners have warned us that it is not safe, while most of the mainstream medical organizations, the makers of diet soda, and the Food and Drug Administration states that there are no health hazards associated with it. This controversy may continue for years.

Monosodium Glutamate (MSG)

This is a flavoring used to enhance the taste of Chinese food as well as several commercial products available in the super market. Like the above flavoring additives, it is man-made. It has a salty, meaty taste. It also has been accused of causing headaches, burning sensations in the mouth, head and neck, weakness of the arms or legs, upset stomach, and allergic reactions. Glutamate is a

neurotransmitter which is excitatory in nature. Studies are being conducted regarding any potential long-term damage that could result from repeated ingestion of this substance. In one experiment, MSG was shown to cause the destruction of retinal cells and brain cells in rats. There is concern regarding how it affects humans, and in particular, how it may affect the brain

development of a fetus if the mother consumes foods with MSG. MSG is in many foods; if you are concerned about any potential dangers, please read food labels, and pay attention to phrases like "spices," "other flavorings," or "hydrolyzed soy protein." The item may contain monosodium glutamate. Again, please research this topic on your own.

NUTRITION TEST

Name: _____

Role/Title: _____

Agency: _____

Date: _____

Please provide contact information (email address, fax number, or mailing address) where you would like your certificate to be sent:

You must submit your completed test, with at least a score of 80%, to receive **1 hour** of training credit for this course.

- * To submit via fax, please fax the test and evaluation to 814-728-8887. Please fax only the test and evaluation, not the entire training packet.
 - * To submit via email, please send an email to training@northwesthc.org. Please put "Nutrition" in the subject line, and the numbers 1—5, along with your answers, in the body of the email, OR scan the test and evaluations pages and email as attachments.
 - * To submit via mail, send the test and evaluation pages to Milestone HCQU NW, 247 Hospital Drive, Warren PA 16365.
1. Refined grains
 - A) Are absorbed into the bloodstream more rapidly than whole grains
 - B) Tend to lack fiber
 - C) Often have a different texture than whole grains
 - D) All of the above
 2. Beriberi results from drinking diet soda. True False
 3. Saturated fat reduces the risk of cardiovascular disease. True False
 4. Which of the following is not a good source of vitamin D?
 - A) Salami
 - B) Eggs
 - C) Soda
 - D) Dairy products
 5. Weight training helps to burn more calories at rest. True False
 6. Which of the following diseases is related to diet?
 - A) Diabetes
 - B) Amyotrophic Lateral Sclerosis
 - C) Mononucleosis
 - D) Schizophrenia
 7. The single most preventable cause of brain damage and intellectual disability in the world is
 - A) Alcoholism
 - B) Smoking
 - C) Iron deficiency
 - D) Iodine deficiency
 8. The USDA recommends
 - A) Eating more fruits and vegetables
 - B) Eating lean protein
 - C) Making at least half your grains whole grains
 - D) All of the above
 - E) None of the above
 9. Monosodium glutamate, high fructose corn syrup, and artificial sweeteners Are naturally occurring substances. True False
 10. Kwashiorkor is
 - A) Malnutrition from protein deficiency
 - B) An excess of vitamin C
 - C) A word in Ghana that means "The washer is broken."
 - D) A man-made flavor enhancer

MILESTONE HCQU NORTHWEST EVALUATION OF TRAINING

Training Title: Nutrition

Date: _____

- | | |
|--|--|
| <input type="checkbox"/> Direct Support Professional | <input type="checkbox"/> Provider Administrator/Supervisor |
| <input type="checkbox"/> Program Specialist | <input type="checkbox"/> Provider Clinical Staff |
| <input type="checkbox"/> Consumer/Self-Advocate | <input type="checkbox"/> Family Member |
| <input type="checkbox"/> Support Coordinator | <input type="checkbox"/> Support Coordinator Supervisor |
| <input type="checkbox"/> PCH Staff/Administrator | <input type="checkbox"/> County MH/MR/IDD |
| <input type="checkbox"/> FLP/LSP | <input type="checkbox"/> Other (please list): _____ |

Please circle your PRIMARY reason for completing this home-study training:

- It's mandatory
 interested in subject matter
 need training hours
 convenience

Please circle the best response to each question.

5 = Strongly Agree
 4 = Agree
 3 = Undecided
 2 = Disagree
 1 = Strongly Disagree

- | | | | | | | |
|----|--|---|---|---|---|---|
| 1. | As a result of this training, I have increased my knowledge. | 5 | 4 | 3 | 2 | 1 |
| 2. | I learned something I can use in my own situation. | 5 | 4 | 3 | 2 | 1 |
| 3. | This training provided needed information. | 5 | 4 | 3 | 2 | 1 |
| 4. | The training material was helpful and effective. | 5 | 4 | 3 | 2 | 1 |
| 5. | Overall, I am satisfied with this training. | 5 | 4 | 3 | 2 | 1 |
| 6. | I am glad I completed this training. | 5 | 4 | 3 | 2 | 1 |

Suggestions for improvement: _____

Additional information I feel should have been included in this training: _____

I would like to see these topics/conditions developed into home-study trainings: _____