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VEGETARIANISM FOR HEALTH AND WELLBEING

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Lecturer, Department of Home Science, J.M.J. College for women (Autonomous): Tenali, Guntur (District), AP. "A vegetarian is someone who eats mainly plant foods, such as grains, beans, nuts, fruits and vegetables". Pythagoras, father of vegetarianism, encouraged meatless eating in 6th century B.C. In 19th century. Western world invented Vegetarian term in mid 1800s. Bible Christians in 1800, Seventh-day Adventist Church in 1840s decline in mid 20th century due to vitamins, government promoting meat/ dairy1944 term vegan was coined.. Later the vegetarianism term was much popularized in 1960s and 1970s. Fruits and vegetables are a necessary part of your daily diet. They provide many necessary vitamins and nutrients that control your overall health and wellness. They can help boost your immune system, regulate your weight, and protect you from diseases later in life such as heart disease and diabetes.



Some of healthiest vegetables: Tomatoes: Though technically a fruit, tomatoes are most often served like a vegetable. Full of lycopene, these beautiful red orbs (and all tomato-based products) are renowned for their cancer-fighting capabilities. Not only are they chock full of vitamin goodness (from vitamins A to K), they also keep our blood pressure in check and help to reduce the number of free radicals in our bodies.

Carrots: These orange-wonders are loaded with eye, skin and hair-enriching nutrients. They're also the richest vegetable source of some important antioxidants, like vitamin A. And because they're rich in vitamin C, carrots protect your cardiovascular system from damage.

Sweet potato: This root vegetable has dozens of anti-cancer nutrients like vitamin A, C and manganese. They're also a good source of fiber and iron, so not only do they give you energy, they can also help regulate your digestive system.

Bell Peppers: Whether you prefer red, orange or yellow, bell peppers are packed with dozens of heart-healthy nutrients like lycopene and folic acid. And recent research suggests digging into a pepper every day may lower your risk of developing lung, colon, bladder and pancreatic cancers.

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Spinach: This chlorophyll-packed type of produce is an excellent source of almost every vitamin and nutrient you need. Scientists believe a diet heavy in spinach may be able to prevent everything from heart disease to colon cancer, and arthritis to osteoporosis

Onions: These pungent smelling veggies are particularly good for people suffering from (or at risk of developing) osteoporosis. That's because onions are loaded with a peptide called GPCS which scientists believe slows your body's loss of calcium. Onions may also be useful in the fight against heart disease and diabetes because they're loaded with vitamin C and foliate.

There are several ways of eating vegetarian:

Semi-vegetarians: exclude some but not all foods of animal origin e.g. meat, fish, poultry, eggs, milk, honey, bouillon etc. They may not eat red meat beef and pork, for example, but will sometimes eat seafood or poultry.

Lacto-ovovegetarians: include milk or milk products and eggs in their diets, but omit meat, fish and poultry. Lacto vegetarians: include milk products, but don't eat eggs, meat, poultry, or seafood.

Vegans: don't eat any animal products.

ADVANTAGES OF NUTRIENTS

Most of the basic nutrients you need in your diet can be found in fruits and vegetables. Different fruits and vegetables provide various vitamins and nutrients. By incorporating a variety of produce into your diet, you can ensure your body is getting the vitamins it needs to help you function properly.

- Vitamin A: promotes a healthy immune system, maintains eye health, keeps your skin healthy, and is essential for growth and development of cells.
- Vitamin B: necessary for normal brain, nerve, heart, and muscle function and makes red blood cells.
- Vitamin C: promotes a healthy immune system, helps your blood absorb iron, and maintains the health of your bones, teeth, gums, and blood vessels.
- Vitamin E: protects your cells from damage, keeps your skin looking young and healthy.
- Antioxidants: protect your cells against damage from free radicals, which can cause degenerative diseases and cancers, and slow the effects of aging.

WEIGHT MANAGEMENT

Fruits and vegetables are naturally low in fat and calories. They are a healthy alternative to many snack foods we consume on a regular basis. By making them a significant portion of your diet, you will likely reduce the number of calories you eat per day, helping you maintain a healthy weight.

DISEASE PREVENTION

The vitamins and minerals found in fruits and vegetables are essential to regulating your body's health. Eating produce can drastically cut your risk of cardiovascular disease, stroke, type 2 diabetes, coronary heart disease, and fight against various forms of cancer. They can lower blood pressure and prevent kidney stones from forming. The fiber in fruits and vegetables can help regulate your digestive system relieving constipation and irritable bowel syndrome. Consuming fruits and vegetables reduces your risk of contracting many of the diseases that are the leading cause of death among Americans today.

Advantages of Being a Vegetarian

Generally speaking, vegetarians have a lowered intake of fat and higher intakes of fiber. Fiber plays
important roles in regularity and discourages overeating. Scientific evidence also indicates that eating
plant foods may prevent certain diseases such as cardiovascular disease, less likelihood of high blood
pressure and coronary artery disease, lower rates of some types of cancer, and possible lower rate of
adult-onset Type II diabetes.

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- **2.** It takes much more land to 'grow' animals than it does to grow plants for food consumption. Environmentally, vegetarian can be a wise choice.
- Vegetable foods have MORE Fe/calories of food than meat (Ex: 340 calories of sirloin steak = 100 calories of spinach)
- 4. Vitamin C increases non-heme absorption by 6-fold = absorption of non-heme iron is as good if not better than heme iron
- People eating vegetarian diets are no more likely to be iron deficient than people who eat meat.
- 5. Most vegetables that are high in Fe are also high in Vitamin C; meat and dairy= no Vitamin C
- 6. Vitamin B-12 (cobalamin): Decreases risk for heart disease, aids in fat metabolism, important of nerve function
- 7. Lack of B-12 can result in fatigue, anemia, impaired nervous system functioning, and can increase the risk of infection



Some health benefits from vegetarian foods:

Plant-based diets—with lots of vegetables, legumes (beans, lentils, and peas), fruits, whole grains, nut, and seeds—are linked to a lower risk of heart disease, diabetes, hypertension and some cancers, notably colorectal cancer. Vegetarians tend to weigh less and have lower cholesterol levels and fewer digestive problems, such as constipation. Vegetarian diets are high in fiber, unsaturated fats, vitamins, minerals and antioxidants—and low in saturated fat and cholesterol—all of which may contribute to the health benefits. Vegetarians also benefit, no doubt, from the fact that they tend to lead healthier lives in general.

Avoidable foods in vegetarian diet:

In fact, to eat an unhealthy vegetarian diet. Lots of junk foods—chips, cookies, candy and soda—are vegetarian. A vegetarian who eats mostly refined grains, fried foods and sweets, for example, will have a less healthy diet than someone who eats lean meat and dairy in moderation and consumes lots of vegetables, fruits, and whole grains.

Reasons to be Vegetarian:

- Religious
- Ethical
- Health
- Environmental
- Animal Welfare
- Economical

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More cool veg. facts

- Vegetarians live, on average, six to ten years longer than meat-eaters
- Only animal-derived foods have cholesterol, so a pure vegetarian diet= cholesterol free!
- The American Dietetic Association (ADA) that appropriately planned vegetarian diets are healthful, are nutritionally adequate, and provide health benefits in the prevention and treatment of certain diseases.
- The American Cancer Society, the American Heart Association, the Heart and Stroke Foundation of Canada, the National Institutes of Health, and the American Academy of Pediatrics all recommend choosing a diet based on a variety of plant foods—grains, vegetables, fruits, and legumes.

The New Four Food Groups

Nutrients that available in vegetables:

Calories: Calories made of: carbohydrates, protein, and fat

Need of calories per day: Total calories= BMR + energy for activity

BMR (basal metabolic rate): BW x 10

Energy for activity:

Not very active: BMR x 20%, Lightly active: BMR x 30%, Moderately active: BMR x 40%, Very active: BMR x 50%, Weight = 1400 + 420 = 1820 calories, to lose weight/gain weight: +/- 500 calories a day. (1 lb. = 3500 calories): **Example:** a 140-lb., lightly active woman.

Total calories needed to maintain current

Carbohydrates:

- Main source of calories in a healthy diet
- Primary fuel source for brain and muscles; helps maintain functioning of nervous system
- Approximately 55-75% of daily calories should come from carbohydrates

Complex carbs:

Rich in fiber, high in vitamins and minerals, important for digestion and elimination

Examples: vegetables, fruits, grains, potatoes, beans

Simple carbs: (sweets): quickest source of energy (lack fiber)

Ex: Table sugar, brown sugar, honey, maple syrup, molasses, jams/jellies, fruit juices.

Complex carbs: Rich in fiber, high in vitamins and minerals, important for digestion and elimination. Examples: vegetables, fruits, grains, potatoes, beans

Key to a healthy diet: Focus on COMPLEX CARBS!!!

Fiber: "plant roughage" (the part of beans, grains, vegetables, and fruits that resists digestion).Only found in plant food. Helps rid the body chemicals (including hormones); lowers cholesterol .One of the reason vegetarians have significantly lower rates of cancer, heart disease, diabetes, and are usually slimmer than

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other people. Studies show that every 14 grams of fiber in your daily diet reduces your calorie intake by about ten percent.

But, research has shown that: the lower your fat intake, the better your chances of warding of heart disease, cancer, and keeping a slim waistline.

- Essential Fatty Acids: There are two PUFAs that are EFAs. Linolenic acid (omega-3) Linoleic acid (omega-6).
- Important for vascular health: blood vessel dilation/constriction, blood clots, inflammation
- Lack of EFAs associated with: depression, poor immune function scaly skin, reduced growth, kidney and liver problems
- Omega-6 sources: seeds, nuts, vegetable oils
- Omega-3 sources: soybean oil, canola oil, flaxseed oil, walnuts
 **best source: flaxseeds:

Protein:

Approximately 10-15% of calories should come from protein.

- Eating excess junk food/ filling diet with "empty" calories (fatty, highly refined, and processed foods, excess alcohol). Trying to live on fruit alone. Not taking in enough calories
 - Problems with too much protein:
 - Osteoporosis
 - Kidney Disease
 - Cancer
 - CVD

CALCIUM: Necessary for bone health, muscle contraction, nerve impulse transmission, blood clotting, cell metabolism

Iron (Fe): Oxygen transportation, enzyme component, immune function, brain function

- RDA: for men: 15 mg /day
 - for women: 32mg/ day
- UL: 40 mg/day (>40= increased cancer risk)

**RDA value for vegetarians is 1.8 times for non-vegetarian



Conclusion:

A **vegetarian** is a person who does not eat meat, poultry, and fish. **Vegetarians** eat mainly fruit, vegetables, legumes, grains, seeds, and nuts. Many **vegetarians** eat eggs and/or dairy products but avoid hidden animal products such as beef and chicken stocks, lard, and gelatin.

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People are vegetarians for many reasons, including concern for personal health and the environment, economic and world hunger concerns, compassion for animals, belief in nonviolence, food preferences, or spiritual reasons. People may become vegetarians for one reason, and then later on adopt some of the other reasons as well.

This is because a healthy vegetarian diet is typically low in fat and high in fiber. However, even a vegetarian diet can be high in fat if it includes excessive amounts of fatty snack foods, fried foods, whole milk dairy products, and eggs. Therefore, a vegetarian diet, like any healthy diet, must be well planned in order to help prevent and treat certain diseases.

Protein is found in both plant foods and animal foods. Vegetarians should be aware that while there are plenty of plant-based protein options, many of these foods contain less protein per serving compared to animal foods.

Vegetarians can meet their calcium needs if they consume adequate amounts of low-fat and fat-free dairy products such as milk, yogurt, and cheese. Calcium is also found in many plant foods including dark, leafy greens (e.g. spinach, kale, mustard, collard and turnip greens), beans and sunflower seeds, as well as in calcium-fortified cereals, cereal bars and some fortified juices.

Vitamin D helps your body absorb and use calcium. There are few foods that are naturally high in vitamin D, though. Therefore, dairy products in the US are fortified with vitamin D. Many soy milk products are also fortified with vitamin D.

Iron-fortified breads and cereals, dark green vegetables (e.g. spinach and broccoli), dried fruits, prune juice, blackstrap molasses, pumpkin seeds, sesame seeds, and soybean nuts are good plant sources of iron.

Vitamin B-12 is produced in animals and by bacteria in the soil. Vegetarians who consume dairy products and/or eggs usually get enough B-12 since it is found in these foods.

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