

## **Diabetes**

### **COPING WITH THE SIDE EFFECTS OF MODERN MEDICINE TREATMENT - Vomiting**

Vomiting may follow nausea and may be brought on by treatment, food odors, gas in the stomach or bowels, or motion. In some people, certain surroundings, such as the hospital, may cause vomiting. If vomiting is severe or lasts for more than a few days, contact a doctor. Very often, if nausea is controlled, vomiting will be prevented, but at times, neither can be prevented. Relaxation exercises, quiet concentration, deep breathing, and rest may be able to help alleviate the symptoms. If vomiting occurs, try these hints to prevent further episodes:

- 1) Do not drink or eat until the vomiting is under control.
- 2) Once you have controlled vomiting, try small amounts of clear liquids. Begin with 1 teaspoonful every 10 minutes, gradually increase the amount to 1 tablespoonful every 20 minutes, and finally try 2 tablespoonfuls every 30 minutes.
- 3) When able to keep down clear liquids, try a full-liquid diet. Continue taking small amounts as often as the body is able to keep them down. If a full-liquid diet is fine then gradually work up to a regular diet. If the patient has a hard time digesting milk, try a soft diet instead of a full-liquid diet. When the body accepts a soft diet, gradually add more foods to facilitate the return to a regular diet.
- 4) Take Daily Essentials for proper vitamin and mineral balance.

### **COPING WITH THE SIDE EFFECTS OF MODERN MEDICINE TREATMENT - Diarrhea**

Diarrhea may have several causes, including chemotherapy, radiation therapy to the abdomen, infection, food sensitivity, and emotional upset. Long-term or severe diarrhea may cause other problems. During diarrhea, food passes quickly through the bowel before the body absorbs enough vitamins, minerals, and water. This may cause dehydration and increase the risk of infection. Contact a doctor if the diarrhea is severe or lasts for more than a couple of days. Here are some ideas for coping with diarrhea:

- 1) Drink plenty of liquids during the day. Drinking fluids is important because the body may not get enough water when there is diarrhea.
- 2) Eat small amounts of food throughout the day instead of three large meals.

- 3) Eat plenty of foods and liquids that contain sodium and potassium. These minerals are often lost during diarrhea. Foods that are high in potassium and do not cause diarrhea include peach, apricot nectar, and boiled or mashed potatoes.
- 4) Eliminate greasy, fatty, or fried foods, raw vegetables and fruits and strong spices, such as hot pepper, curry and Cajun spice mix.
- 5) Drink liquids that are at room temperature.
- 6) Avoid very hot or very cold foods and beverages.
- 7) Avoid foods and beverages that contain caffeine, including coffee, strong tea, sodas, and chocolate.
- 8) Be careful when using milk and milk products because diarrhea may be caused by lactose intolerance.
- 9) Take Daily Essentials to ensure proper vitamin and mineral balance.
- 10) After sudden, short-term attacks of diarrhea (acute diarrhea), try a clear-liquid diet during the first 12 to 14 hours. This lets the bowel rest while replacing the important body fluids lost during diarrhea.

### **COPING WITH THE SIDE EFFECTS OF MODERN MEDICINE TREATMENT - Constipation**

Some anticancer drugs and other drugs, such as pain medicines, may cause constipation. This problem also may occur if the diet lacks enough fluid or bulk or if the patient is bedridden. Here are some helpful suggestions to prevent and treat constipation:

- 1) Drink plenty of liquids, eight 8-ounce glasses every day. This will help keep the stools soft.
- 2) Take a hot drink about half an hour before the usual time for a bowel movement.
- 3) Eat high-fiber foods, such as whole-grain breads, cereals, and pastas; fresh fruits and vegetables dried beans and peas; and whole-grain products such as barley or brown rice.
- 4) Get exercise, such as walking, every day. Talk to a doctor or a physical therapist about the amount and type of exercise.
- 5) Add wheat bran to foods such as cereals, casseroles, and homemade breads.

## **COPING WITH THE SIDE EFFECTS OF MODERN MEDICINE TREATMENT - Weight Gain**

Sometimes patients gain excess weight during treatment without eating extra calories. For example, certain anticancer drugs, such as prednisone, can cause the body to hold on to fluid, causing weight gain; a condition is known as edema. The extra weight is in the form of water and does not mean over consumption of foods. Therefore, it is important not to go on a diet. If anticancer drugs are causing the body to retain water, it is important to seek proper medical help. The doctor can teach you how to limit the amount of salt, which is important because salt causes the body to hold extra water

## **COPING WITH THE SIDE EFFECTS OF MODERN MEDICINE TREATMENT - Lactose Intolerance**

Lactose intolerance means that the body can't digest or absorb the milk sugar called lactose. Cow's milk, dairy products, and foods to which milk has been added contain lactose. Lactose intolerance may occur after treatment with antibiotics, radiation to the stomach, or any treatment that affects the digestive tract. The part of the intestines that breaks down lactose may not work properly during treatment. For some people, symptoms of lactose intolerance, such as gas, cramping and diarrhea may disappear a few weeks or months after the treatment ends or when the intestine heals. For others a permanent change in eating habits may be needed. Consult our clinic to advise a diet plan low in foods containing lactose. If cow's milk had been a main source of protein in the patient's diet, it will be important to get enough protein from other foods. Products, such as soybeans and spirulina, are excellent sources of protein and other nutrients

## **SPECIAL DIETS**

A doctor or nutritionist may prescribe a special diet based upon the patient's illness or treatment. They may suggest dietary supplements to help meet nutritional needs. Special diets are an important tool for correcting nutritional problems that occur during cancer treatment. For example, a soft diet may be best for the mouth, throat, esophagus, or stomach if sores are present. Or, if the treatment makes it difficult to digest dairy products, a soy protein diet may be best.

Some diets are well balanced and can be followed for long periods of time. However, some special diets should be followed for only a few days because they may not provide enough nutrients for the long term. Only a doctor or nutritionist should decide whether a special diet is needed and for how long. Common special diets include clear-liquid diet, full-liquid diet, soft diet, fiber-restricted diet and low-lactose diet.

### **SPECIAL DIETS - Clear-Liquid Diet**

Clear-liquid diets are useful if the body cannot handle the softest foods, heavy liquids, or thick liquids. Patients usually follow this type of diet after surgery or before stomach or bowel surgery. Patients with severe nausea and vomiting may also have this diet. A clear-liquid diet lasts 1 to 2 days or until the body is ready to drink or eat other beverages and foods. It cannot meet the daily servings, but it helps ensure that the body does not lose too much fluid during recovery and before being ready for a regular diet.

### **SPECIAL DIETS - Full-Liquid Diet**

A full-liquid diet is recommended when the body is able to digest all liquids but cannot handle solid foods. The doctor may prescribe this diet after surgery or when the patient experiences difficulty chewing and swallow food. All liquids served at room or body temperature are part of this diet. Soybean milk is included to ensure adequate protein. When planned properly, this diet can be used for long periods of time. In these instances, the doctor may prescribe a dietary supplement and/or certain vitamins. If a full-liquid diet is used over a long period of time, it is important to increase the protein and calorie content of the diet.

### **SPECIAL DIETS - Soft Diet**

A soft diet is useful when the body is ready for more than liquids but still unable to handle a regular solid diet. Soft foods are easier to eat than regular foods when the mouth, throat, esophagus, and/or stomach are sore. This soreness usually occurs to these parts of the body during and after radiation therapy or during chemotherapy. A soft diet can be used for long periods because it contains all needed nutrients. The diet consists of bland, lower fat foods that are softened through cooking, mashing, pureeing, or blending

### **SPECIAL DIETS - Fiber Restricted Diet**

The doctor may recommend a fiber-restricted diet if the patient's gastrointestinal (GI) tract cannot digest fiber in foods. This type of diet is often used after GI surgery before patients return to their regular diet. A fiber-restricted diet also may be needed when treatment, such as radiation, damages the bowel or when the GI tract becomes irritated. A fiber-restricted diet limits the amount of vegetables, fruits, cereals, and grains that are consumed. It also limits the amount of cow's milk and cow's milk products, such as cream, yogurt and cheese. Cow's milk does not contain fiber, but it leaves a residue in the gastrointestinal tract that can irritate the bowel and cause diarrhea and cramping. The diet also is helpful for the many cancer patients who have a hard time digesting the milk sugar, lactose. A fiber-restricted diet can be changed easily, depending on how the patient feels after eating certain foods. There may be

times when a low-residue diet, which is more limited than a fiber-restricted diet, is needed. On the low-residue diet, the patient may be able to eat most strained vegetables and fruit juices, such as white potatoes without skin. All other forms of vegetables and fruits may be excluded from the diet. The low-residue diet also limits the amount of fat and dairy products. A doctor or nutritionist will let the patient know if a low residue diet should be utilized.

### **SPECIAL DIETS - Low-Lactose Diet**

The doctor may recommend a low-lactose diet to the patient after radiation therapy to the intestines, which often makes lactose hard to digest for a time. All milk products contain lactose or milk sugar therefore soy products are easier to handle than dairy products. Lactose is often used as fillers in many products such as instant coffee and certain medicines. It is important to carefully read labels on commercial foods to see if they contain lactose or any milk products or milk solids. Lactose intolerance varies from person to person.

### **SUPPLEMENTS**

If not enough calories and protein are derived from the patient's diet, nutrition supplements, such as formulas and instant breakfast powders, may help. Some examples are 30-Ingredients Health Cereal, Immune Strengthening Cereal, and Kinako Plus Female Health Cereal. These products may be added to boost calorie content. These meal supplements are high in protein and calories and have extra vitamins and minerals. They are convenient and inexpensive additions to homemade preparations. Our nutritional supplements contain no lactose - making it easy on the digestive system.

Vitamins, minerals and trace elements may also be supplemented into the daily diet. They are needed for normal functioning of the body and to achieve homeostasis. The best way to ensure intake of these substances is by eating a wide variety of foods, or to supplement with a liquid multi-vitamin and mineral complex, such as Daily Essentials.

- 1) Vitamin A (Beta Carotene) - Vitamin A enhances immunity and protects against cancer formation, especially lung cancer. It helps reduce the risks of tumor formation and acts as an antioxidant.
  
- 2) Vitamin B Complex - B Vitamins, such as thiamin and niacin, help the digestive system work properly. Some B Vitamins, such as folic acid and B12 are essential for blood cell production (often a problem during cancer treatment). In addition, B Vitamins, such as thiamin, riboflavin and niacin are key factors in the production of energy from carbohydrates and fats.

- 3) Vitamin C (Ascorbic Acid) - It enhances immunity and prevents cancer.
- 4) Vitamin E - It helps prevent against cancer, tumor formation, cardiovascular disease, and cell damage. It enhances circulation, aids in tissue repair and in normal clotting and healing.
- 5) Vitamin K - It is useful in the prevention and treatment of cancer.
- 6) Chromium - Chromium helps transport amino acids to where the body needs them, control the appetite, and medical research has shown that persons with low levels of Chromium in their bodies are more susceptible to cancer, heart problems and diabetes.
- 7) Copper is necessary for the absorption and utilization of iron. Copper aids in the formation of red blood cells and helps proper bone formation.
- 8) Iron combines with protein and copper to make hemoglobin, which is its major function. Hemoglobin transports oxygen in the blood from the lungs to the tissues, which need oxygen to maintain basic life functions. Iron builds up the quality of the blood and increases resistance to stress and disease.
- 9) Magnesium - Magnesium maintains normal heart rhythm necessary for proper calcium and vitamin C metabolism and converts blood sugar into energy. It is essential for lymphocyte growth.
- 10) Molybdenum is needed in extremely small amounts for nitrogen metabolism, which enables the body to use nitrogen. It promotes normal cell function.
- 11) Selenium is a major antioxidant that protects cell membranes and prevents free radical generation thereby decreasing the risk of cancer and disease of the heart and blood vessels. Also, increased selenium intake can decrease the risk of breast, colon, lung and prostate cancer. Selenium also preserves tissue elasticity, slows down the aging and hardening of tissues through oxidation.
- 12) Zinc is an antioxidant that is necessary for protein synthesis and wound healing. It is important for blood stability and maintains the body's alkaline balance.

Thinking about cancer is something most people would usually rather avoid, but today people are encouraged to paying more attention to preventing cancer and decreasing its risks. With almost 1.4 million new cancer cases in the United States each year and more than 500,000 deaths from this disease, programs which can produce even a small reduction in cancer rates offer enormous savings in lives, suffering and medical expense.

Researchers tell us that the majority of cancers we face in this country are preventable - not through new drugs or medical breakthroughs, but through what we choose to and not to do. As scientific knowledge about the role dietary and lifestyle choices play in both promoting and preventing cancer, it has become increasingly evident that simple changes will have significant impacts on reducing cancer rates. This is hopeful information for everyone to hear and pay attention to.

After learning more about cancer and the role exercise, weight management, smoking, nutrition and food play, it has proven to be promising. If 60-70% of the risks can be diminished simply by obeying the above directions, that leaves only 30-40% risk of getting cancer. This number will have to be closer to 0% to put our minds completely at ease, but there are other factors to consider in order to further diminish cancer risks:

- Avoid sun damage by wearing sun block and not getting sun burnt
- Decrease pollution from smog, dust mites and bacteria by getting an air filter.
- Avoid x-rays, MRI, and harsh diagnostic procedures when possible.
- Avoid radiation from computer monitors, cell phones, microwave ovens and television sets.
- Avoid radiated foods and buy organic fruits and vegetables that are free from pesticides and chemical fertilizers.
- Avoid drug medications and synthetic chemicals whenever possible.
- Avoid hormone, steroid and antibiotic raised meats.
- Avoid charcoal and burnt foods.
- Avoid tap water with heavy metals and toxic chemicals.
- Do not let symptoms go untreated. They are a way the body hints of imbalances, possible diseases, and areas we need to pay attention to.
- Make sure the bowels move 2-3 times each day.
- Get plenty of sleep and go to bed early.
- Learn to rest, relax and manage stress.
- Learn proper ways to prepare and store foods.

In addition, be knowledgeable and gather many sources to compare data, research and tips before concluding on which ones to follow. Don't be afraid to ask questions to doctors, nurses, pharmacists, nutritionists, and all people who work in the healthcare industry, and don't be afraid to challenge sources. We are all in this together and the more people that take on an active role, the quicker solutions and possible cures will arise. Staying on top of the latest findings and reports will prove beneficial to health and healing.

## **CAUSES OF MALNUTRITION - Physiological Causes of Malnutrition**

**1) Taste and Smell Decreases** - Diminished senses of smell and taste may decrease the pleasure of eating. Changes in taste are variable and may be associated with lifelong cigarette smoking, poor dental hygiene, and disease. The production of saliva is reduced, and taste buds decrease in size and number. The anterior taste buds, which are for sweet and salt, are affected first, whereas the posterior taste buds, for bitter and sour, are affected later. Therefore, older adults become more sensitive to bitter or sour flavors and less sensitive to sweet and salty flavors. These changes in the taste buds start at about age 70 on the average. The ability to smell also decreases with age.

**2) GI Motility Decreases** - This decrease contributes to constipation and GI distress. Because gastric emptying times are slower, the patient may eat less due to a feeling of fullness. Nutrient absorption is decreased and the stomach produces less hydrochloric acid to aid in digestion. Decreased hydrochloric acid secretion reduces the absorption of iron and calcium. Decreased intrinsic factor limits vitamin B12 absorption. Decreased gastric and pancreatic secretion inhibits fat and protein digestion. There is a decrease in glucose tolerance. Aging is associated with a decrease in the opioid (dynorphin) feeding drive and an increase in the satiety effect of cholecystokinin. Recent studies suggest that the early satiety in older persons may be caused by a nitric oxide deficiency, which decreases the adaptive relaxation of the fundus of the stomach in response to food.

**3) Esophageal Pain** - This reduces food intake and causes malnutrition.

**4) Lean Body Mass Decreases** - Lean body mass, such as muscles, organs, and skeletal tissue decrease with age. As body protein decreases, body fat increases. This results in a lower basal energy expenditure. Body mass increases between ages 20 and 50, then remains stable until about age 65, when weight loss occurs as a result of both lean and adipose tissue loss. The percentage of body fat increases around age 40 and then decreases after age 70. Both intra-abdominal and intra-muscular fat increase with age.

**5) Ability to Concentrate Urine Decreases** - With this decrease comes decreased thirst.

**6) Bone Mass Decreases** - Approximately 3%-5% bone mass decrease for each decade beginning at the age of 40. With this decrease, there is an increase in bone fractures.

**7) Metabolic Rate Decreases** - Compared with younger men, older men experience a 20% decrease in total energy expenditure. Older women, however, experience only a minimal change in total energy expenditure. The explanation for this is that men tend to reduce their physical activity with retirement, while women continue doing the bulk of the housework throughout their life. Resting metabolic rate decreases approximately 20% in men and 13% in women. These age-related reductions in resting metabolic rate result from a small decrease in triiodothyronine levels, reduced responsiveness to norepinephrine, reduced muscle tone and strength of muscle contraction, and reduced Na<sup>+</sup>K<sup>+</sup>ATPase activity. However, the major factor affecting resting metabolic rate is decreased food intake with aging. Nonsmoking women ages 55-74 consume 300 kcal/day less than women ages 19-29; for men, the decrease is 950 kcal/day.

**8) Dental Problems** - This may decrease food intake by up to 100 kcal/day.

**9) Medical Causes** - Conditions, such as hyperthyroidism, hypercalcemia, pheochromocytoma, and chronic infections (eg, tuberculosis, cancers) may cause geriatric malnutrition.

**10) Neurological Disorder** - Dysphagia from a stroke or another neurological disorder may result in decreased food intake.

**11) Tremors and Physical Problems** - Tremors and other physical limitations, such as the inability to cut food after a stroke can hinder the ability to eat efficiently and therefore, cause malnutrition.