

NUTRITION

QUICK RESOURCE GUIDE

FOR OSTOMATES

2024

The content is for informational purposes only. This information is not a substitute for medical advice, diagnosis and or treatment by a medical professional. You are unique and what you eat, or drink will vary depending on your medical history and your body's condition.

Your dietary tolerances and enjoyment will also vary. Remember there is no one ostomy diet – these are informational guidelines.

Joyce Moss ADN, BSN, MNM, MSc Wound Healing & Tissue Repair, RN, CWS, CWCN, COCN, DAPWCA

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Common Nutritional Goals

Calories: 1600-3000 calories/day

The key is a balanced diet based on age, sex, activity level, medical condition, current weight, height, and muscle mass. The body needs macronutrients, usually in large quantities: 45-65% carbohydrates; 20-35% fat; and 10-35% protein. Additionally, the body needs micronutrients, usually in small quantities: vitamins and minerals. Focus on the quality of the diet and not so much on calories: 100 calories from chips, chocolates and cakes are very different than 100 calories from vegetables and fruit. Healthy diets are high in nutrient-dense foods, low in processed foods and high in filling foods (protein and fiber). Nutrient-dense foods are those that have high amounts of nutrients/calories. It is important to know which nutrients you are eating; therefore, you must read food labels.

Protein: 0.8 grams/kg body weight (46-84 g/day)

Protein is available from many sources including plant-based sources: legumes, nuts & nut butters, chickpeas & hummus, chia seeds, quinoa, oats; and meat, fish, poultry, dairy, and eggs. The body uses 20 amino acids to make proteins and 9 essential amino acids are not produced by the body and must come from food. Animal products, soy and quinoa hold all the essential amino acids while plant-based proteins lack a full range of essential amino acids

Carbohydrates: Starches, Sugars and Fiber

Carbohydrates (CHO) give the body energy, especially the brain. CHOs are metabolized into starches, sugars or fiber.

Starches (Complex CHO)

- Long chain of glucose found in grains, potatoes with a higher in fiber (resistant CHO) and digest more slowly – more filling foods
- Whole wheat bread, potatoes, grains, cereal, corn, oats, peas, rice

Sugars (Simple CHO)

- Occur naturally in milk (galactose)
- Most are added to foods: raw sugar, brown sugar, fructose, glucose, sucrose, fruit juice concentrate

Fiber (Complex CHO): 14 grams/1000 calories (25-38 g/day)

- There are 2 types
 - Soluble – draws water into the gut to soften stool and dissolves in water
 - Insoluble - bulks up the stool and will not dissolve in water
- Fiber is essential in helping to support gut health. Fiber foods are found naturally in plant-based foods such as fruits, vegetables, grains, nuts, seeds and legumes.

Fats: The Good, the Bad, and the In-between

Fats are necessary for energy production, absorption of vitamins and minerals, building cell membranes, blood clotting and muscle movement. Good fats come mainly from vegetables, nuts, seeds & fish and remain liquid at room temperature

The Good Fats

Monounsaturated

- Olive oil, Peanut oil, Canola oil, Avocados, Safflower oil, Sunflower oil, most nuts

Polysaturated

- Essential fat – the body cannot make this fat so it must come from foods we eat
- Omega-3 Fatty Acids: salmon, mackerel, sardines, flaxseeds, walnuts, canola oil
- Omega-6 Fatty Acids: safflower oil, soybean, walnut oil, walnut

The Bad Fats

Trans Fats

- **Hydrogenation turns liquid oils into solids such as margarine and vegetable shortening**
 - **Manufactured trans fats (industrial process of adding hydrogen to oils to make it a solid): donuts, biscuits, frozen pizza, pie crusts, stick margarine**
 - **Natural-occurring trans fats (animal products, milk, butter)**
- **No known health benefit; no safe level of consumption**
- **Early in the 20th century food makers found new ways to use partially hydrogenated fats and these then started appearing in pastries, cookies and the good ole fast food French fries**
- **2015: trans fats and partially hydrogenated oils (PHOs) banned in the US but was extended to 2019**
- **Watch for trans-fat-free on the label: have less than 0.5grams of trans fat/serving**

The In-between Fats

Saturated Fats are solid at room temperature

- **Bacon grease**
- **Fat from red meat, whole milk, cheese, coconut oil, commercially prepared baked items**
- **Limit to less than 10% of daily calories**

Common Nutritional Goals

Fluid: 12-15 cups/day (water plus food intake)

Water makes up 75-80% of our body. About 20% of water intake comes from food intake, the rest from fluids. The amount of water needed depends on age, gender, activity level, health condition and climate. The U.S. National Academies of Sciences, Engineering, and Medicine recommend: 15.5 cups (3.7 liters) of fluids a day for men; and 11.5 cups (2.7 liters) of fluids a day for women. Drink water before, during and after exercise; with and between meals; and if feeling thirsty. The best sign of dehydration is the color of urine – strive for colorless or light yellow

Eat 3 balanced meals/day or 4-6 small meals/day

Avoid using straws as this may increase gas production

Skipping meals or long gaps between meals may increase gas production

Chew foods slowly and thoroughly to prevent blockage

Sip fluids rather than chugging to prevent dehydration

Include foods with high water content

Eat proteins before carbohydrates

Prioritize plant-based food in every meal/snack

Decrease foods with added sugars, salt, trans/saturated fats & alcohol

Choose filling foods: protein and fiber rich meals & snacks

Eat whole foods like meats, fruits, vegetables, grains, and nuts/seeds

Hydrate with water

Add diversity in the diet – try new foods

Honor your dislikes – don't eat something because it is healthy; like it

Develop a healthy relationship with food in your life

Consume nutrient-dense foods within caloric limits

Food Labels

The front of the label sells the product but does NOT supply exact information on ingredients. Read the back label which lists nutrients in order of proportion (high to low); list of allergens; and daily value % (5% or less is low value; 20% or more is high value). The serving size is the amount that most people eat NOT the recommended amount to eat

Fiber

Soluble Fiber – slows GI transit, dissolves in water, control blood sugar/decrease cholesterol

Oatmeal, oat bran

Cooked beans, lentils, peas, legumes

Almonds, peanuts, chia, flax seeds

Fruits without skin- apples, bananas, pears strawberries

Cooked vegetables – broccoli, potatoes, carrots, Brussel sprouts

Insoluble Fiber - speed GI transit – does not dissolve in water, promote bowel movements

Wheat and corn bran

Flaxseed

Whole grains

Vegetables with skin

Granola. Nuts, seeds

Soluble & Insoluble Fiber – a good mix of both

Cooked beans, Peanuts, Sweet potatoes, Oat bran

Broccoli, Zucchini

Figs, Prunes, Plums. Citrus fruits

TIPS TO INCREASE FIBER

Add oats, bran/wheat germ to meatloaf, cookies, mashed potatoes

Add beans, peas or lentils to soups and salads

Add vegetables to sandwiches, pasta, stir-fry and wraps

Make smoothies with fruits and vegetables

Add fruit to cereals and pancakes or waffles

Use whole grain flour instead of white flour when baking

Eat whole grain cereals – bran flakes rather than corn flakes

Eat whole fruits instead of drinking fruit juices

Replace deserts with whole fruits

Add artichokes to salads

Replace white rice, refined breads/pasta with brown rice, wild rice, whole wheat pasta or bulgur

Many foods have soluble and insoluble fiber. The more natural and unprocessed the food, the higher the fiber content. There is no fiber in meat, dairy, or sugar. Refined or “white” foods, such as white bread, white rice, and pastries, have had all or most of the fiber removed.

Fluids

The amount and type of fluid is important. Also, it is important to know the signs/symptoms of dehydration

RECOMMEND

Water/Lactose free milk/coconut water

Low sugar sports drinks or diluted drinks

Electrolyte replacements

Vegetable juice/broths

AVOID/LIMIT

Added sugars/sweetener

Caffeine

Energy drinks

Alcohol

Signs of Dehydration

EARLY (mild)- Rehydrate with electrolyte solution orally & you will feel better in 5-10 minutes

Symptoms: Dark urine (best indicator), Thirst, Reduced urine output, Muscle cramps, Irritability, Sugar craving

Late (moderate) -Will require IV rehydration – go to ER or urgent care

Symptoms: Constipation, Fatigue, Headache, Dry mouth/skin, Poor concentration, severe muscle cramps

Severe – CALL 911 (Life Threatening)

Symptoms: Confusion, No urine output, Dizziness/Fainting, Heart Palpitations

Tips to Prevent Dehydration

- **The U.S. National Academies of Sciences, Engineering, and Medicine recommend: 3.7 liters (125 ounces) of fluids a day for men; and 2.7 liters (91 ounces) of fluids a day for women – this includes water plus food intake.**
- **Drink when you feel thirsty**
- **opt for water instead of sodas or energy drinks**
- **Eat foods high in water content like melons, cucumbers, strawberries, lettuce, celery, cooked squash, Jello, yogurt, pears**
- **Add flavor enhancers to water like lemons, limes, fruits. Basil**
- **Keep water handy**
- **Drink throughout the day**
- **If you have concerns about the amount of water intake – consult your physician**
- **Track your water intake – consume majority before 6PM**

Supplements

Vitamins & Minerals

A nutrient based diet is the best source of vitamins and minerals

Liquid, chewable or soft gels better than gummies, pills or capsules

Common deficiencies are Vitamin B12, Folic Acid and Potassium

- **Some individuals may have a need for B12 replacements (water soluble vitamin)**
 - **Persons with ileostomy, Ileal Conduit, Fecal or Urinary Continent Diversions**
 - **Elderly, persons taking Metformin or long-term antacid agents**
 - **B12 supplements are poorly absorbed orally – nasal or injections are the best routes**
 - **Symptoms of deficiency: numbness/tingling in hands & feet, fatigue, pale skin, sore mouth, irritability**
- **Some individuals may have a need for Folic Acid replacement**
 - **Persons with an Ileostomy**
 - **Folic Acid supplements are well absorbed orally**
 - **Symptoms of deficiency: pale skin, lack of energy, smooth/tender tongue, irritability**
- **Some individuals may have a need for potassium, sodium and water replacements**
 - **Persons with an Ileostomy or urinary diversions**
 - **Symptoms of deficiency: dehydration, fatigue, leg cramps, weakness, nausea & vomiting, headaches, palpitations**
 - **Seek immediate care if symptomatic**

Check lab tests to confirm deficiency and consult your physician before adding a supplement

Nutrition Supplements

Supplements compliment your diet, it is NOT meant to replace it

Many are rich (high osmolarity) and may trigger increased liquid output

Can be expensive, read the label & start with small dose –short-term or long-term

Consult physician or Ostomy Nurse before supplementing

Prebiotics

Prebiotics are a food source for friendly bacteria in the intestinal tract. The digestive system cannot break down prebiotics which allows them to travel to the colon where colon bacteria break the prebiotic into short chain fatty acids that have multiple functions in the body. Many prebiotics are carbohydrates.

Functions

Regulate bowel movements/moods Improve bone density

Aid in appetite and appetite suppression Increase immune system functions

Enhance inflammatory responses Increase good bacteria production

Decrease bad bacteria production

Source of Prebiotics

Fiber rich foods such as fruits, vegetables and whole grains

Boiled/cooled potato, Jerusalem Artichokes, Asparagus, Green Beans, Carrots

Green bananas. Apples, Apricots, Peaches, Raspberries, Peaches, Tomatoes

Probiotics

Probiotics are live microorganisms and certain types of yeast that keep the bad bacteria from overgrowing in the gut. FDA doesn't regulate the quality of probiotics since they're sold as dietary supplements, fermented foods or food additives.

Probiotics don't work for everyone because you have a unique gene makeup, age, differences, health status, bacteria already in your body and the type of diet all affect how probiotics work. There are many strains that produce different results.

Functions

Reduce gas/diarrhea/bloating/constipation, Support Immune System

Fight Candida, improve mood/anxiety, Improve Digestive Disorders, Decrease inflammation

Source of Probiotics

Yogurt, Kefir, Sauerkraut, Tempeh, Kimchi

Supplements: minimum of 45 billion CFUs/dose; in a dark glass bottle

High Output Triggers

Concentrated foods/drinks can cause high output and dehydration

Sweets/Artificial Sweeteners

Lactose rich foods and drinks

Nutritional Supplements/Insoluble Fiber

Caffeine/Alcohol/ Carbonated Drinks

BRATT Diet (treatment)

Bananas

Rice

Applesauce (unsweetened)

Tea (Decaffeinated)

Toast (not whole grain)

Consider: creamy peanut butter, cheese, boiled milk (lactose free), Marshmallows, Pasta, Potatoes without skin

Ways to avoid High Output Triggers

Avoid your dietary triggers

Decrease portion sizes and frequency of trigger intakes

Switch from regular to lactose-free dairy products

Dilute nutritional supplements and fruit juices

Mix nutritional supplements with decaf coffee (50/50)

Remove skins from fruits & vegetables

Hydration & UTI Prevention

- ❖ **Drink 64-80 ounces of water/day to keep urine diluted; helps to control odor**
- ❖ **Sip fluids – don't chug; keep water accessible**
- ❖ **Increase foods high in water content**
- ❖ **Limit the following foods/drinks to avoid dehydration**
 - **Alcohol**
 - **Caffeinated teas**
 - **Drinks high in sugar: fruit juices, fructose, sodas, some sports drinks**
 - **Fried/spicy foods**
 - **Chocolate**
- ❖ **Include fluids/foods with electrolytes during exercises or very hot/humid weather or during bouts of diarrhea/heavy sweating**
 - **Read the electrolyte solution labels – important to be low in sugars**
 - **Pedialyte, Drip Drop, LMNT, Liquid IV**
 - **Homemade solution**
 - **1 quart water**
 - **¾ teaspoon table salt**
 - **2 tablespoons sugar**
 - **Crystal Lite to taste**
 - **Mix and refrigerate**
 - **Eat foods that naturally replenish electrolyte**
 - **Avocados, Spinach (Mg, K)**
 - **Butternut Squash (K, Mg, Mn)**
 - **Beet Greens, Beets, Raisins (Ca, Mg, K)**
 - **Wild Salmon (PO³)**
 - **Bananas (K, Mg, P)**
 - **Unsweetened Coconut Water (a natural solution, K, Na)**
 - **Swiss Chard (K)**

Hydration & UTI Prevention

(cont'd)

❖ Keep the urine acid or alkaline which helps to control crystal/stone formation, decrease odor and decrease risk of UTI

- **Alkaline urine: Eat more citrus fruits and juices, leafy green vegetables, broccoli, lentils, almonds, pumpkin seeds as these foods make the urine more alkaline**
 - **Eating these foods will be helpful in preventing calcium oxalate, uric acid and cystine crystals/stones**
- **Acid urine: Eat more protein, cranberries, plums, prunes, corn, lentils**
 - **Supplement with Vitamin C (1000mg)**
 - **Eating these foods will be helpful in preventing calcium phosphate and struvite crystals/stones**

❖ Most important: consult with MD before making dietary changes

❖ Empty pouch when 1/3-1/2 full

❖ Make sure night drainage bags and any adapters are thoroughly cleansed and replaced on a regular basis – DO NOT wait until a leak develops

❖ Maintain drainage bags below level of bladder and off floor

❖ Keep peristomal skin clean and intact

❖ Respond to signs of UIT

- **Dark, cloudy urine**
- **Strong-smelling urine**
- **Blood in urine**
- **Back pain (where your kidneys are found)**
- **Fever**
- **Loss of appetite**
- **Nausea, Vomiting**

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