Nutrition for Heart Health

Nutritional Strategies

Summer is here, and with the warmer weather and the summer holidays approaching, it is important to focus again on eating for a healthy heart, especially as we tend to socialize more, and to enjoy the bounty of the season *(see tips on how to make healthy choices when eating out)*!

Nutritionally, comprehensive diet approaches with individualized flexibility may meet the needs of persons living with heart failure (HF) better when compared to only fluid and sodium restrictions. We therefore continue with our simulated dinner party, with the healthcare provider as the host providing guests/patients with the appropriate nutrition intervention to achieve their heart failure management goals and an opportunity of reinforcing these messages and strategies at regular intervals.

Meet the guests:
Ernest is home after experiencing a bout of pneumonia that left him physically weak and tired. He is immune compromised, with a poor appetite.

A history of cigarette smoking and numerous episodes of chronic bronchitis have caused him to have chronic respiratory problems. Although once physically active, he had to move into an assistive living environment where he can receive assistance with daily activities.

Ernest G. Exchange

She has always prided herself on her social activities and being very active in church.

After previous cardiac surgery for complications of coronary artery disease, she was recently diagnosed with heart failure after experiencing shortness of breath and a 4.5 kg weight increase. Conveying to her healthcare provider that she lacks knowledge about her medication needs (a diuretic, a lipid-lowering drug, and an antiarrhythmic drug) and her nutritional modifications (low-saturated fat, energy-controlled, and low-salt diet), she knows that she’s at increased risk for hospitalization or decreased socialization should she not comply with her healthcare provider’s recommendations.

Doris D. Knowledge

She has been stuck at home with little energy or motivation to do anything outside of her house.

Although once social, her chronic leg pain caused by diabetic neuropathy has caused her to rely on others for assistance with housekeeping and grocery shopping. She’s also dealing with diabetic complications, medication adverse reactions, and a recent change in living accommodations, which have taken a toll on her emotionally. Once a great cook with a flair for hosting dinner parties, she now exhibits decreased interest in socialization.

Angela A. Intolerance
Nutritional Approach

To support, encourage and educate your guests and to celebrate summer, you are planning an authentic culture inclusive, economical and heart healthy menu.

1. **Plenty of colourful and fresh seasonal fruits and vegetables to support a healthy immune system and heart health**: Each stage of the body’s immune response relies on the presence of many micronutrients. Examples of nutrients that have been identified as critical for the growth and function of immune cells include vitamin C, vitamin D, zinc, selenium, iron, and high-quality protein. They are found in a variety of plant and animal foods. Diets that are limited in variety and lower in nutrients, such as consisting primarily of ultra-processed foods and lacking in minimally processed foods, can negatively affect a healthy immune system. It is also believed that a Western diet high in refined sugar and red meat and low in fruits and vegetables can promote disturbances in healthy intestinal microorganisms, resulting in chronic inflammation of the gut, and associated suppressed immunity.

2. **Replacing bad fats (saturated and trans) with healthier fats (monounsaturated and polyunsaturated), which is good for your heart (see information sheet)**. In general, choose oils with less than 4 grams of saturated fat per tablespoon, and no partially hydrogenated oils or trans fats. You may find that some oils have distinctive flavours, so try different types to discover which ones you like. Also, some oils are better for certain types of cooking than others, so you may want to have more than one type in your pantry.

3. **Eating foods high in salt (sodium) less often, preparing food/meals from scratch and limiting your intake of processed or convenience foods**, as it can help reduce your sodium intake, lower your blood pressure and/or prevent high blood pressure (HBP or hypertension) from developing in the first place.

4. **Include more whole grains in your diet**, as whole-grain kernels have three parts — the bran, endosperm, and germ — that give you phytonutrients, vitamins, and antioxidants, which protect against chronic disease. Also try **and include ancient grains**, which unlike modern grains such as wheat, corn, and rice, ancient grains have never been processed through hybridization or genetic modification; they’re grown just as they were a thousand years ago. They have exotic-
sounding names like teff, einkorn, emmer, amaranth, millet, quinoa, black rice, black barley, and spelt. And they pack a nutritional wallop, sometimes offering more protein, fibre, and vitamins than modern grains.

Ancient grain sorghum bread
Grilled herb and lemon chicken skewers
Home-made chakalaka salad
Roasted young beetroot and goat’s cheese salad
Roasted chickpea dip
Garden salad with young spinach leaves, lettuce, sliced mushrooms, red onion and a low-fat yogurt dressing

Also included in this newsletter as we approach the festive season is a guide with hints and tips on how to make healthy choices when eating out.
Soft Spongy Sorghum Pancakes

Ingredients

- 1 and 1/2 cups sorghum flour
- 1/2 cup rice flour
- 1 teaspoon sugar
- 1 and 1/2 teaspoons salt
- 1 and 1/2 teaspoons rapid rise yeast
- 1 and 1/2 cups of warm water
- 2 tablespoons lemon juice (optional, but gives it a nice tang)

Instructions

1. In a mixing bowl or the insert of the instant pot, mix together the sorghum flour, rice flour, sugar, salt, and rapid rise yeast. Add the warm water and mix well.
2. Place in the instant pot and set on yogurt mode for 1 and 1/2 hours. If possible give the mixture a stir in between.
3. If you do not have or do not want to use an instant pot, stir the mixture, cover and set aside in a warm place (about 18 degrees celsius) for 3 hours.
4. The mixture should be frothy and bubbly when ready. Stir in the lemon juice if using.
5. Heat a cast iron or other heavy skillet. Grease lightly. Turn the heat on low. Pour a ladleful of the batter. Cover and cook for 3 minutes, remove the cover, your mixture should set and the pancake/crepe should come of easily from the pan. If it does not give it a little more time. Turn and cook on the other side for about 20 to 30 seconds. Set aside.
6. Continue this way until all the batter is used up. Enjoy with your favorite stew or serve warm with jam or any other topping.
Grilled Herb and Lemon Chicken Skewers

Easy lemon chicken skewers with garlic and herbs are delicious, healthy and fast making them perfect for summer dinners served with simple side dishes.

Ingredients:

For the marinade:

- ¼ cup olive oil
- ¼ cup lemon juice
- Zest of 1 lemon
- 2-3 garlic clove crushed
- 2 tsp fresh thyme
- 2 tsp rosemary
- 1 tsp dried oregano
- 1 tsp salt
- 1 tsp pepper

For the skewers:

- 4 large chicken breasts skinless, boneless
- Wooden skewers soaked in boiling water for 30 minutes

Method:

1. Combine all the ingredients for the marinade.
2. Slice the chicken into bite-sized chunks and place in a bowl. Pour over the marinade, cover and allow to marinade for at least 30 minutes but up to 24 hours, covered in the fridge.
3. Thread the marinated chicken onto soaked wooden skewers or metal skewers.
4. Heat an outdoor grill or stovetop grill pan then cook the skewers, turning every 3-5 minutes, until the chicken is cooked through and golden brown on all sides.
Home-made Chakalaka Salad

Ingredients:

- 1 tbsp oil
- 1 large onion, sliced
- 2 red peppers, chopped
- 1 head cauliflower, broken into florets
- 1 tbsp garam masala
- 1 tbsp soft brown sugar
- 5 large tomatoes, roughly chopped
- 400g tin cannellini beans, drained and rinsed
- 4 tbsp chopped fresh coriander

Method:

1. Heat the oil in a large frying pan then cook the onion and peppers until soft, around 15 minutes. Meanwhile, steam the cauliflower until just tender but still retaining some bite. Refresh under cold running water and leave to drain.
2. Now add the garam masala and sugar to the peppers and cook through for a few minutes. Add the tomatoes, turn down the heat and let it cook for 15 minutes. The tomatoes will make the sauce for the salad. If they are under-ripe, add a little water.
3. Once it's cooked, transfer to a large bowl and add the beans and cauliflower. Season. You may need a squeeze of lemon juice. Once cold, add the coriander and serve.
Roasted Young Beetroot and Goat’s Cheese Salad

Ingredients:

- 5 medium beets
- 1 drizzle olive oil
- salt and ground black pepper to taste
- 2 eggs, beaten
- ½ cup all-purpose flour
- ½ cup dry breadcrumbs
- 1 (4 ounce) log goat cheese, cut into small medallions
- 1 cup canola oil
- 1 (8 ounce) package mixed salad greens
- 2 tablespoons roasted sunflower seeds, or to taste (Optional)
- 2 tablespoons balsamic vinaigrette dressing, or to taste

Method:

1. Preheat the oven to 250 degrees F (120 degrees C).
2. Drizzle beets with olive oil and season with salt and pepper. Wrap beets in aluminum foil and place in a large baking dish.
3. Roast in the preheated oven until beets are easily pierced with a knife, 45 minutes to 2 hours, depending on size.
4. Remove beets from the oven and let cool slightly. Unwrap, reserving any juice that is in the aluminum foil. Peel beets under warm water, cut into cubes, and place in a bowl.
5. Place egg, flour, and bread crumbs into 3 separate dishes. Season all 3 with salt and pepper.
6. Toss each goat cheese medallion in egg to coat, move to flour and coat then toss in bread crumbs, coating both sides evenly. Transfer medallions to a plate and place in the refrigerator to firm up, about 5 minutes.
7. Heat canola oil over medium heat in a frying pan until it sizzles. Place goat cheese medallions in hot oil and fry until golden, about 1 minute per side. Remove from oil and transfer to a plate lined with paper towels.

8. Place a bed of mixed greens on a serving platter and top with beets and goat cheese medallions. Sprinkle with sunflower seeds. Drizzle with balsamic dressing and reserved beet juice.

**Roasted Chickpea Dip**

A chickpea dip, also known as hummus, is traditionally made with tahini which is a sesame seed paste. Tahini, however, can be expensive or difficult to find. By roasting half of the chickpeas with cumin seeds before blending them, the hummus still has a nutty flavour.

**Ingredients:**

- 820 g tinned chickpeas, drained, but keep the liquid
- 2 large cloves of garlic, crushed
- 75 ml sunflower or olive oil
- 5 ml cumin seeds
- 5 ml ground cumin
- 100 ml lemon juice
- ¼ tsp salt
- black pepper to taste

**Method:**

1. Preheat the oven to 180 °c and line a small baking tray with foil. Pat chickpeas dry with a paper towel. Place 1 of the tins of chickpeas with the garlic, 30 ml (2 tbsp) of the oil and cumin seeds in a large bowl and mix to coat the chickpeas.
2. Place the oil-coated chickpeas with the seasonings on the baking tray and roast for 15-20 minutes or until lightly golden brown.
3. Place roasted chickpeas with the oil and seasonings from the tray, in a large bowl. Add the remaining chickpeas, oil, ground cumin and lemon juice. Add 50 ml of the reserved liquid from the tin. Blend to form a chunky mixture and season to taste. Add more water, if you prefer a smoother dip.
4. Serve as part of a lunch with fresh veggies like carrots, celery, cucumber and green beans. It is also delicious spread onto bread, any sandwich or as a dip for whole-wheat pita wedges.
Tip:

1. Refrigerate dip in an airtight container for 4-5 days.
2. If preferred, stir in a little plain low-fat yoghurt for a creamier dip.

Serve with a

Garden Salad with young spinach leaves, lettuce, sliced mushrooms, red onion and a low-fat yogurt dressing.
Eating Out

The people we are dining with and the choices they make can affect what and how much we eat.

Anticipate the social pressure you may feel with your dining companions

- Suggest restaurants that have healthier options everyone will enjoy
- Excuse yourself from the table while people are sharing foods you are trying to avoid
- Politely refuse or take a small portion of an item you are trying to avoid or limit. Take small bites and eat slowly.
- Start a conversation – opening up to friends or family about your healthy eating goals and the challenge you face when eating out might help you enlist allies in your healthy eating quest.

GAME PLAN

- Plan ahead
- Avoid showing up hungry
- Order first and lead by example
- Start off the meal right
- Eat slowly and pause between each bite

Social Pressure
Hit the Road: Eating Out

info@heffsa.org
The following words often describe dishes that are higher in calories and saturated fat:

Fried
Sautéed
Buttery
Pan-fried
Au gratin
Creamy
Scalloped
A la mode
Breaded
Crispy
Rich
Al fredo
Battered
Stuffed

The following words often describe dishes that are lower in calories and saturated fat:

Braised
Roasted
Steamed
Grilled
Broiled
Pan-seared
Broth

Simply being aware of the implication of these words to recipe preparation can help guide you to decisions about whether or not you order, if you order in a modified amount or share, or if you ask for dish to be prepared differently.
Restaurants tend to be very accommodating when it comes to modifying dishes for patrons, so don't be shy about asking. Two simple strategies are to control portion sizes of more calorie-dense foods and to request substitutions.

**Portion control:** Questions to ask server...

- How large is the portion for this dish/item?
- Are there smaller size options?
- Can I have half-packed in a to-go box?
- Please put the dressing/sauce side.
- We’ll be sharing. Could you split the dish for us?

**Substitutions:** Questions to ask server...

- Do you have whole wheat bread, brown rice or other whole grain options?
- May I have a side of salad or vegetables instead or in addition to X?
- May I have fruit instead of X?
- May I have extra chicken instead of bacon on the salad?

Be creative, and don’t restrict yourself to one section of the menu. If you don’t see a main dish that fits your plan or taste, you can build a meal from sides or small plates.
Dietary fat is critical to support metabolism, brain and nervous system health, cell signaling, immunity, hormone production, and the absorption of fat-soluble vitamins - but all fats are not created equal. Food contains a mix of different kinds of fat, but some foods contain a more healthful mix than others. Choosing foods that emphasize healthy fats and minimize unhealthy fats as part of a plant-focused eating pattern can promote optimal health.

<table>
<thead>
<tr>
<th>SATURATED FATS</th>
<th>MONOUNSATURATED FATS</th>
</tr>
</thead>
<tbody>
<tr>
<td>(solid at room temperature)</td>
<td>(liquid at room temperature)</td>
</tr>
<tr>
<td>Effect on the Body: May increase LDL cholesterol levels and risk for heart disease.</td>
<td>Effect on the Body: May lower LDL cholesterol and reduce risk of heart disease when used in place of saturated fat and trans fat.</td>
</tr>
<tr>
<td>When to choose: Eat in moderation</td>
<td>When to choose: Choose more often in place of foods with saturated fats or trans fats.</td>
</tr>
<tr>
<td>Food Sources: ground meat, processed meats (sausage, bacon, hot dogs, deli meats like salami), full-fat milk and cheese, butter, ghee, palm oil, palm kernel oil, coconut oil</td>
<td>Food Sources: Olive oil, avocado oil, sesame oil, peanut oil, canola oil, high-oleic varieties of safflower and sunflower oil, olives, avocados, peanuts, tree nuts (almonds, cashews, hazelnuts, pistachios, pecans), seeds (pumpkin and sesame)</td>
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</table>

<table>
<thead>
<tr>
<th>TRANS FATS</th>
<th>POLY-UNSATURATED FATS</th>
</tr>
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<tbody>
<tr>
<td>(solid at room temperature)</td>
<td>(liquid at room temperature)</td>
</tr>
<tr>
<td>Effect on the Body: May raise LDL cholesterol levels and lower HDL cholesterol levels. Eating trans fats is associated with an increased risk of heart disease.</td>
<td>Effect on the Body: May lower LDL cholesterol and reduce risk of heart disease when used in place of saturated fat and trans fats. Polyunsaturated fats include omega-3 fats and omega-6 fats, both of which are essential because they must be taken in through the diet.</td>
</tr>
<tr>
<td>When to choose: Trans fats should be completely avoided.</td>
<td>When to choose: Choose more often in place of foods with saturated fats or trans fats.</td>
</tr>
<tr>
<td>Food Sources: Processed foods with “partially hydrogenated oils”, shortening, shelf-stable baked goods (cookies, muffins, cakes, crackers), commercial frostings, dry cake/pastry mixes, some fried foods</td>
<td>Food Sources: Fatty fish (salmon, trout, herring, mackerel, sardines), walnuts, ground axseed, chia seeds, canola oil, peanut oil, axseed oil, original high-linoleic varieties of saower and sunower oil, corn oil, soybean oil</td>
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</table>
Whole grains are an excellent source of nutrients such as minerals, vitamins B and E, and fiber. They are also rich in disease-fighting antioxidants and phytochemicals. Research notes that whole grains contribute to reduced risk of cancers [particularly colorectal cancers], heart disease, stroke, diabetes, and obesity.

<table>
<thead>
<tr>
<th>Whole Grain</th>
<th>Calories</th>
<th>Carbohydrate</th>
<th>Fiber</th>
<th>Protein</th>
<th>Magnesium</th>
<th>Phosphorus</th>
<th>Selenium</th>
<th>Manganese</th>
<th>Niacin</th>
<th>Copper</th>
<th>Magnesium</th>
<th>Manganese</th>
<th>Zinc</th>
<th>Iron</th>
<th>Potassium</th>
<th>Phosphorus</th>
<th>Riboflavin</th>
<th>Niacin</th>
<th>Manganese</th>
<th>Selenium</th>
<th>Copper</th>
<th>Magnesium</th>
<th>Niacin</th>
<th>Phosphorus</th>
<th>Manganese</th>
<th>Niacin</th>
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<tbody>
<tr>
<td>Brown Rice</td>
<td>200</td>
<td>43 g</td>
<td>3 g</td>
<td>5 g</td>
<td>magnesium</td>
<td>phosphorus</td>
<td>selenium</td>
<td>manganese</td>
<td>vitamin B6</td>
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<tr>
<td>Quinoa*</td>
<td>222</td>
<td>39.4 g</td>
<td>5.2 g</td>
<td>8.1 g</td>
<td>protein</td>
<td>fiber</td>
<td>copper</td>
<td>magnesium</td>
<td>manganese</td>
<td>zinc</td>
<td>copper</td>
<td>magnesium</td>
<td>manganese</td>
<td>niacin</td>
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<tr>
<td>Oats</td>
<td>166</td>
<td>28 g</td>
<td>4 g</td>
<td>6 g</td>
<td>protein</td>
<td>fiber</td>
<td>phosphorus</td>
<td>magnesium</td>
<td>manganese</td>
<td>vitamin B6</td>
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<tr>
<td>Buckwheat*</td>
<td>155</td>
<td>34 g</td>
<td>4.5 g</td>
<td>5.7 g</td>
<td>protein</td>
<td>fiber</td>
<td>copper</td>
<td>magnesium</td>
<td>manganese</td>
<td>niacin</td>
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<tr>
<td>Sorghum*</td>
<td>228</td>
<td>56 g</td>
<td>1 g</td>
<td>7 g</td>
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<td>fiber</td>
<td>phosphorus</td>
<td>selenium</td>
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<td>Barley</td>
<td>193</td>
<td>44 g</td>
<td>6 g</td>
<td>3.5 g</td>
<td>protein</td>
<td>fiber</td>
<td>magnesium</td>
<td>niacin</td>
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<tr>
<td>Bulgur [wheat]</td>
<td>151</td>
<td>34 g</td>
<td>8.2 g</td>
<td>5.6 g</td>
<td>protein</td>
<td>fiber</td>
<td>magnesium</td>
<td>niacin</td>
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<tr>
<td>Farro [wheat]</td>
<td>220</td>
<td>46 g</td>
<td>10 g</td>
<td>12 g</td>
<td>protein</td>
<td>fiber</td>
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<td>manganese</td>
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* pseudo-grains
**How to Cook Whole Grains and psuedo-grains**

The information noted here was retrieved from the Oldways Whole Grains Council website. The Whole Grains Council is a non-profit consumer advocacy group working to increase consumption of whole grains for better health. [wholegrainscouncil.org]

<table>
<thead>
<tr>
<th>GRAIN</th>
<th>LIQUID</th>
<th>COOKING TIME</th>
<th>YIELD</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 c. Rice, brown</td>
<td>2 ½ cups</td>
<td>25-45 minutes (varies)</td>
<td>3 cups</td>
</tr>
<tr>
<td>1 c. Quinoa</td>
<td>2 cups</td>
<td>12-15 minutes</td>
<td>3 cups</td>
</tr>
<tr>
<td>1 c. Oats, steel cut</td>
<td>4 cups</td>
<td>30 minutes</td>
<td>3 cups</td>
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<tr>
<td>1 c. Buckwheat</td>
<td>2 cups</td>
<td>20 minutes</td>
<td>4 cups</td>
</tr>
<tr>
<td>1 c. Sorghum</td>
<td>4 cups</td>
<td>25-40 minutes</td>
<td>3 cups</td>
</tr>
<tr>
<td>1 c. Barley, hulled</td>
<td>3 cups</td>
<td>45-60 minutes</td>
<td>3 1/2 cups</td>
</tr>
<tr>
<td>1 c. Bulgur</td>
<td>2 cups</td>
<td>10-12 minutes</td>
<td>3 cups</td>
</tr>
<tr>
<td>1 c. Farro</td>
<td>2 ½ cups</td>
<td>25-40 minutes</td>
<td>3 cups</td>
</tr>
</tbody>
</table>

Cooking time may vary depending on the type of liquid used.