### DIETARY RECOMMENDATIONS FOR RENAL DISORDER

#### 24 hour food intake

<table>
<thead>
<tr>
<th>Foods</th>
<th>Weight (g)</th>
<th>Calories</th>
<th>Proteins</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cereals-whole wheat atta/rice/porridge/wheat bread/oats/wheat flakes/cornflakes</td>
<td>270</td>
<td>884</td>
<td>25</td>
</tr>
<tr>
<td>Milk low fat-3%</td>
<td>300</td>
<td>180</td>
<td>10</td>
</tr>
<tr>
<td>Curd* (low fat milk)</td>
<td>240</td>
<td>145</td>
<td>8</td>
</tr>
<tr>
<td>Paneer (low fat milk)</td>
<td>25</td>
<td>72</td>
<td>4</td>
</tr>
<tr>
<td>Egg (white)</td>
<td>2</td>
<td>32</td>
<td>8</td>
</tr>
<tr>
<td>Chicken/Fish</td>
<td>30-40</td>
<td>75</td>
<td>7</td>
</tr>
<tr>
<td>Dal*</td>
<td>25</td>
<td>80</td>
<td>5</td>
</tr>
<tr>
<td>Fruit (Apple/papaya/guava/pear/jamun)</td>
<td>200</td>
<td>80</td>
<td></td>
</tr>
<tr>
<td>Vegetable (tori, lauki, capsicum, brinjal, cauliflower, tinda, cucumber, parwal, cabbage)</td>
<td>400</td>
<td>124</td>
<td>4</td>
</tr>
<tr>
<td>Green peas, beans, carrot, pumpkin, ladies finger, onion,)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Cooking oil</td>
<td>20ml</td>
<td>180</td>
<td></td>
</tr>
</tbody>
</table>

**Total calories (approximately)-Veg Diet**: 1745

**Total Proteins (approximately)-Veg Diet**: 55
### Dietary tips for Renal patients (if Potassium levels are high):

1. Choose low potassium fruits and vegetables.
2. Potassium can also be reduced by leaching process-soak and boil vegetables-discard water.
3. The highest amount of potassium is found in nuts, potatoes, oranges, kiwi, peaches, apricots, and anything dried-fruits. Avoid fruit juices.
4. Low potassium foods, safest to include frequently in a renal patient’s diet, include papaya, stewed apple, grapes, stewed pears and plums, green beans, corn, cauliflower, tinda, tori, lauki, cucumber and pumpkin.
5. Avoid adding salt substitutes containing potassium. Watch for sauces-Soy sauce, Worcestershire sauce and tomato sauce as they are rich in sodium.
6. Collect a good selection of no-sodium seasonings, vinegar, mint and coriander to flavor low salt food.
7. Avoid extra milk or milk products.
8. Avoid dry fruits: almonds, peanuts, cashew nuts, walnuts, etc.
9. No sugar, no jaggery, no honey (If Diabetic).
10. Count water content of foods if any fluid restriction
11. Avoid extra salt
12. Remain physically active.

### A day’s Menu

#### Bed Tea:
- ½ cup Tea + 2 Marie Biscuit

#### Breakfast:
- Milk (low fat) 1 cup (100ml)
- Whole wheat bread slices 2/wheat porridge or oats-50g (one bowl)

#### Mid Morning:
- 1 fruit only-100g (Apple/papaya/guava/pear/jamun)

#### Lunch:
- Salad- cucumber
- Chappati (wheat and bengal gram 4: 1) 80g (4 medium sized)
- Curd (low-fat milk) 120g (1 bowl)
- Dal-25g (1 bowl-cooked)
- Paneer-25g/Egg white (2)/Chicken and fish-30g
- Green vegetables-200g (2 servings)

#### Tea:
- ½ cup of tea + Upma/poha/cheela/50g
- Evening-Fruit 100g (1 medium)

#### Dinner:
- Salad: Cucumber
- Rice with whole pulse/bengal gram or Chappati 4 medium sized (80g)
- Dal*-25g (1 bowl-cooked)
- Curd*-120g (1 bowl)
- Green vegetables-200g (2 servings)

#### Bed time:
- Milk (low fat) 1 cup (100 ml)
# Food Exchange

## 1. Cereal Exchanges: Each Exchange contains 15g carbohydrates, 70 calories and 2g protein
- Chappati (20g atta): 1 in no
- Cooked Rice (75g): ½ bowl
- Idli: 1 medium size
- Bread (30g): 1 large slice
- Potato (75g): 1 medium size
- Cornflakes (20g): 1 ½ tablespoon
- Noodles cooked (75g): ½ bowl
- Biscuits: 2 in nos

## 2. Meat Exchange: Each Exchange contains 7g proteins, 75 calories and 5g fat
- Chicken: 25g
- Fish: 30-40g
- Egg whole: 1 medium
- Sausage: 20g
- Mutton: 40g
- Ham: 20g

## 3. Milk Exchange (240 ml.): Each Exchange contains 12g carbohydrates, 145 calories, 8g proteins and 7g fat
- Milk *(240 ml): 1 glass
- Curd* (240g): 2 bowls
- Cottage Cheese *(Paneer): 50g
- Skimmed Milk powder (45g): 3 tablespoons
- Khoa (30g): 2 tablespoon
* Milk/Curd/Paneer: 3% fat milk

## 4. Pulses and Legumes Exchanges: Each Exchange contains 15g carbohydrates, 80 calories and 5g proteins
- Moong (25g raw): 1 bowl cooked
- Arhar (25g raw): 1 bowl cooked
- Rajmah (25g raw): 1 bowl cooked
- Lobia (25g raw): 1 bowl cooked
- Soya Nuggets: 20g
* 1 Bowl: 125-150g

## 5. Fruit Exchange: Each Exchange contains 10g carbohydrates and 40 calories
- Orange (100g): 1 medium
- Apple (90g): 1 small
- Pear (90g): 1 small
- Banana (40g): ½ medium
- Mango (60g): 1 slice
- Water-melon (300g): 1 large slice
- Papaya (120g): 1-2” slice
- Guava (100g): 1 medium

## 6. Fat/Oil Exchange: Each Exchange contains 5g fat, 45 calories
- Oil (vegetable) 5g: 1 tsp
- Ghee, Vanaspati 5g: 1 tsp
- Butter 5g: 1 tsp
- Cream 10g: 2 tsp
- Nuts: Almonds (5), walnut (2), Peanuts (10)
6. **Vegetable Exchange:** Vegetables are broken into 3 groups as follows:

<table>
<thead>
<tr>
<th>Group</th>
<th>Carbohydrate</th>
<th>Calories</th>
<th>Protein</th>
</tr>
</thead>
<tbody>
<tr>
<td>A Group (100g-1 bowl)</td>
<td>3g</td>
<td>16</td>
<td>1g</td>
</tr>
<tr>
<td>B Group (100g-1 bowl)</td>
<td>6g</td>
<td>32</td>
<td>2g</td>
</tr>
<tr>
<td>C Group (Roots &amp; Tubers-25g)</td>
<td>5g</td>
<td>20</td>
<td></td>
</tr>
</tbody>
</table>

- A Group: Cabbage, Spinach, Mustard greens, cauliflower, Brinjal, Capsicum, Lauki, Tori
- B Group: Peas, Green beans, Carrots, Pumpkin, Bhindi, Onions, Radish
- C Group: Sweet potato, Colocassia, Beet root, Yam

8. **Sugar Exchange:** 20 calories

- Sugar 5g: 1 tsp
- Jaggery (Gur) 25g

*Adapted from: Gopalan C. Nutritive Value of Indian Foods, NIN, ICMR 2011*