Maria Winebrenner, Mini Case Study – 09/12

**Patient:** 73 y.o. AAM adm

**Dx:** Pt admitted with swelling of the legs and abdominal pain. Pt diagnosed with congestive heart failure exacerbation, renal insufficiency and hyponatremia.

**PMH:**
- Congestive Heart Failure
- Myocardial Infarction (20yrs ago)
- Diabetes Mellitus Type 2
- Edema in Lower Extremities
- Acute Renal Failure
- Anemia
- Anasarca
- CAD
- HTN
- hyperlipidemia

**PSH:** N/A

**MEDS:**
- Asprin 81 mg 1xday
- Celexa 20 mg/daily
- Coreg 3.1 mg/ 2xday
- Crestor 20 mg 1xday
- Heparin 5000uts subcut q8h
- hydrAlazine 10mg 3xday
- Lasix 40mtg IV push q12h
- Neurontin 100 mg 2xday
- Revatio 20 3xday
- sodium ferric gluconate complex sodium chloride 0.9% intravenous 100 ml daily
- DOBUTamine in D5W 500 mg IV

**Anthropometrics:**
- Ht: 6’1” (185cm)
- Wt: 175.11lbs (79.7kg)
- IBW: 181.9 lbs (82.7kg)
- %IBW: 96%
- BMI: 23 (WNL)

**Nutritional Requirements:**
- Calories = 25-30 kcal/kg body weight

<table>
<thead>
<tr>
<th>Source</th>
<th>Kcal requirements</th>
<th>Pro requirements</th>
<th>Fluid Requirements</th>
</tr>
</thead>
<tbody>
<tr>
<td>Facility standards</td>
<td>1993-2391 kcals</td>
<td>64g (0.8g/kg)</td>
<td>1000ml (fluid restricted)</td>
</tr>
<tr>
<td>EAL</td>
<td>NA</td>
<td>NA</td>
<td>NA</td>
</tr>
<tr>
<td>Online nutrition care manual</td>
<td>1593 kcals</td>
<td>64g-79.7g</td>
<td>500cc + urine output</td>
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</tbody>
</table>

**Labs**

<table>
<thead>
<tr>
<th>Labs</th>
<th>Day 1</th>
<th>Day 2</th>
<th>Day 3</th>
<th>Day 4</th>
<th>Day 5</th>
<th>Normal Range</th>
</tr>
</thead>
<tbody>
<tr>
<td>glucose</td>
<td>300</td>
<td>110</td>
<td>128</td>
<td>109</td>
<td>199</td>
<td>65-115mg/dl</td>
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<tr>
<td>albumin</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>2.6</td>
<td>3.5-5.0g/dl</td>
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<tr>
<td>K</td>
<td>4.7</td>
<td>4.6</td>
<td>4.7</td>
<td>4.3</td>
<td>4.3</td>
<td>3.5-5.0mEq/l</td>
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<tr>
<td>Na</td>
<td>134</td>
<td>130</td>
<td>129</td>
<td>130</td>
<td>132</td>
<td>137-145mEq/l</td>
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<tr>
<td>RBC</td>
<td>4.74</td>
<td>4.43</td>
<td>4.50</td>
<td>4.37</td>
<td>4.71</td>
<td>3.8-5.2T/l</td>
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<tr>
<td>HGB</td>
<td>11.3</td>
<td>10.7</td>
<td>10.6</td>
<td>10.5</td>
<td>11.2</td>
<td>12-16 g/dl</td>
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<tr>
<td>HCT</td>
<td>33.8</td>
<td>32.5</td>
<td>33.5</td>
<td>31.3</td>
<td>33.6</td>
<td>35-47%</td>
</tr>
<tr>
<td>total bili</td>
<td>1.0</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>0.3-1.3mg/dl</td>
</tr>
<tr>
<td>Date</td>
<td>Diet</td>
<td>Plan</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>------</td>
<td>------</td>
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<tr>
<td>Day 1</td>
<td>Medium Carb/1800 kcals</td>
<td>Pt admitted with swelling of legs and abdominal pain. Diet ordered medium carbohydrate.</td>
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**Initial PES statement:** Altered lab values related to type 2 diabetes mellitus as evidenced by an A1c of 8.1%. Nutrition knowledge deficit related to need for a carbohydrate controlled diet, as evidenced by an HgbA1c of 8.1.

**Nutrition Interventions:** Continue to monitor finger sticks and adjust insulin as needed. Recommend changing diet to cardiac medium carbohydrate diet and discontinue renal restrictions. Educate patient on diabetes management with home diet and appropriate food choices.

**Nutrition Goals:** Maintain blood glucose levels of <160 mg/dL. Eat >50% of meals and supplements. Understand diabetic diet education prior to discharge.

**Day 2** | Renal/Cardiac | Diet ordered: 1200 cc fluid restriction, 2g Na Low Chol, Low Fat, 2g Na 75g prot 50meq K. Hold Lasix and Aldactone – as pt is hypotensive 90/67 mmHg. |

**Day 3** | Renal/Cardiac | RN report of meal consumption of 50%. Pt reports just not interested in eating and not feeling hungry. |

**Day 4** | Renal/Cardiac | Ordered 1000ml fluid restriction. Low urine output. |

**Day 5** | Renal/Cardiac | Pt received adult nutrition assessment for LOS x 7 days. Intake assessed due to RN reports of decreased appetite and consumption of <50% of meals. Pt reports decreased appetite and decreased intake of <50% x 1 month. Will continue to monitor pt intake. Discussed with pt what diabetes is and how to manage blood sugars with an appropriate home diet. |

**PES Statement:** Inadequate oral intake related to decreased appetite as evidenced by patient reports of consuming <50% of meals for >1 month. Food and nutrition knowledge deficit related to patient report of no prior type 2 diabetes mellitus education as evidenced by patient inability to verbalize appropriate food choices for diabetic diet.

**Nutrition Interventions:** Encourage pt to continue on diabetic and renal diet home. Provided pt with handouts and an explanation of diabetes, appropriate food choices for diabetes and general tips on a healthy lifestyle.

**References:**
Online Nutrition Care Manual: Renal Insufficiency and Heart Failure
Evidence Analysis Library
Kraus 13th Edition: Renal and CHF