

## **Dietary Interventions**

Goal is to reduce caloric intake

- Low calorie diet defined as consumption of 800-1500 Kcal per day.
- Very low-calorie diet defined as consumption of <800 kcal/day.

### **Low carbohydrate diet:**

50 grams or less to 150 grams of carbs per day.

May result in more weight loss during the first 6 months compared to low fat diet

No difference overall weight loss between low carbohydrate and low fat after 6 months

Benefits of low carb diet (These may occur with or without weight loss)

- Increase in HDL cholesterol (good cholesterol)
- Decrease in triglycerides
- No effect or slight increase in LDL- cholesterol (bad cholesterol)
- Decrease in fasting blood glucose levels
- Decrease in fasting insulin levels
- May result in improvement in blood pressure (hypertension)
- Will result in ketosis which may
  - o Reduce seizures in patients with epilepsy or seizure disorder
  - o Improve some complications of diabetes (such as kidney function)

### **Risk of low carb diet:**

- May result in increased craving

### **Low Fat Diet:**

(20-30% of total calories from fat)

Similar weight loss with low carb diet after 6 months

### **Benefits of low fat diet:**

- May decrease blood pressure
- May decrease LDL-cholesterol (bad cholesterol) levels

### **Risk of low fat diet:**

- May cause a slight decrease in HDL-cholesterol (the good cholesterol)
- May lead to over consumption of carbohydrates, resulting in elevated blood sugar, elevated blood insulin, elevated triglycerides.

## **Very Low Calorie Diet (VLCD):**

400-800 total kcal/day.

Next most effective way of losing weight after surgical weight loss

### **Benefits of VLCD:**

- May increase HDL-cholesterol (good cholesterol) levels
- Effectively reduces triglyceride levels
- May reduce LDL-cholesterol levels
- Results in reduction of fasting glucose levels (thereby resulting in improvement in diabetic control)
- Result in improvement in glycosylated hemoglobin (HgA1C)
- Reduction in fasting insulin levels

### **Risk of very low calorie diet (VLCD)**

- Fatigue
- Hair loss
- Diarrhea
- Brittle nails
- Gall stones
- Kidney stones
- Intolerance to cold
- Gout
- Dysmenorrhea
- Decreased intake of minerals and vitamins resulting in:
  - o Dental carries
  - o Muscle cramps
  - o Palpitations
  - o Increased risk of osteoporosis