

Total Parenteral Nutrition

Student Worksheet

Purpose:

Indications for use:

Disadvantages:

Components & Types of Solutions:

Water

Dextrose: Carbohydrates provided in this form.
RDA: 50-100 grams/day to prevent ketosis
Provides 50-60% of total daily caloric needs
*Concentration of Dextrose in solution determines whether it is isotonic and can be given through a peripheral vein, or hypertonic and must be given through a central vein.

Protein: Provides essential & nonessential amino acids
RDA: 0.8 grams/kg. of desirable body weight for adults or about 44 grams for women & 56 grams for men
Provides 10-20% of total daily caloric needs
*Negative nitrogen balance occurs when excretion of protein is greater than intake.
Undesirable state that occurs in starvation or with surgery, illness etc.
Commonly used solutions are Freamine or Aminosol 10%

Vitamins: SEE ATTACHMENT

Trace Elements: SEE ATTACHMENT

Medications: sometimes Heparin (prevents fibrin buildup on catheter tip) or Insulin (metabolizes glucose in solution) are added to solution.