**ASICS Trial Nutrition SOP**

To be used in conjunction with the ASICS Trial Calculation spreadsheet.

**STEP 2:**

Calculate protein target:

* Use 0.83 g/kg/day for patients with a BMI up to 29 kg/m2
* Use 75% of 0.87-1.06g/kg actual BW for patients with a BMI above 29 kg/m2

**STEP 1:**

1. Calculate 100% energy target: use for days 4-10
* Use 25 kcal/kg/day for patients with a BMI up to 29 kg/m2
* Use 11-14 kcal/kg actual body weight for patients with a BMI 30-50 kg/m2
* Use 25 kcal/kg IBW for patients with a BMI >50 kg/m2
1. Calculate 70% of full energy targets for days 1-3 (only for pts with BMI < 29kg/ m2)

\*NB: Use 100% energy target for those with BMI > 29kg/ m2 for all days 1-10

\*\*NB: IBW is considered a BMI of 25 kg/m2

**STEP 3:**

This step will provide you with the enteral feeding recipe for the next 24 hours. This should be put into a large feed bag up to 1500mls. Once made up, the bag should be labelled (ASICS,  patient study number and day 1-10, NO DATE) and stored in the fridge until required.

1. Estimate total volume of propofol / glucose (mL) for the following 24 hours and enter) into spreadsheet
2. Enter Renapro dose (ml) until the 0.83 g/kg target is reached. This can be increased as required at step ‘d’ below
3. Enter betquik dose (ml) until 40-80% of MCT is achieved. This can be adjusted at step ‘d’ below.
4. Enter Maxijul dose (g)/Fresubin 5kcal (ml) to make up until full daily kcal is achieved

As a guide, total kcal from fat should not exceed 80% of target, total kcal from protein should be between 10-20% of total energy and total kcal from carbohydrates 5%. Protein can be increased above 0.83 g/kg/day. Allo c 10% extra requirements and hence volume to allow for loss in the giving set.

NB: Total kcal/day can be +/- 100 kcal, but protein should not fall below the target (but can be higher).

**Managing intolerance**

Intolerance to the feeding regimen includes the following:

* GI symptoms such as diarrhoea, bloating or abdominal cramping
* Hypoglycaemia (< 4 mmol/L)
* Metabolic acidosis (Discuss with treating consultant if serum HCO3- is low and pH <7.30 from Arterial Blood Gases)

**GI Symptoms:** Reduce MCT percentage by 10% each day, increase LCT to make up the kcal difference.

**Hypoglycaemia:** Treat as per local guidance and increase CHO contribution in the feeding recipe (e.g. maxijul) by 5 g/day until blood sugar levels are manageable.

**Daily targets:**

**Day 1:** 70% total energy target for normal BMI; 100% obese BMI; full protein; 30-40% MCT.

**Day 2:** 70% total energy target for normal BMI; 100% obese BMI; full protein; 40-50% MCT (If the patient is not tolerating\* this recipe, the MCT % should be reduced and LCT contribution increased).

**Day 3:** 70% total energy target for normal BMI; 100% obese BMI; full protein; 50-60% MCT (If the patient is not tolerating\* this recipe, the MCT % should be reduced and LCT contribution increased).

**Day 4:** aim for 100% energy target for all pts; full protein and 60% MCT.

**Day 5 onwards:** aim for 100% energy target for all pts; full protein and 70-80% MCT, provided adequate feed tolerance.

A daily multivitamin supplement must be prescribed from the first until the last study day.

**NB:** Plasma / urinary ketones should be tested daily PRIOR to developing the feeding recipe. Urinary ketones should be between 2-5 mmol/L. If lower than this, the percentage of total fat contribution can be increased by 10% until a maximum of 80% is reached. CHO can be reduced in this instance also.

\*Tolerance includes GI symptoms such as diarrhoea, bloating and abdominal cramping AND hypoglycaemia (e.g. below 4 mmol/L). See below for management.

**How to start and manage ketogenic enteral feed:**

* Commence at 30 ml/hr and increased by 30 ml/hr until target rate is achieved.
* Check total fluid contribution from feed as additional water may be required for hydration. This should be run separately as per usual practice.
* If GI intolerance is noted, continue at previously tolerated rate until the recipe can be adjusted.
* Ask Clinical team to prescribe Sanatogen vitamins from Day 1