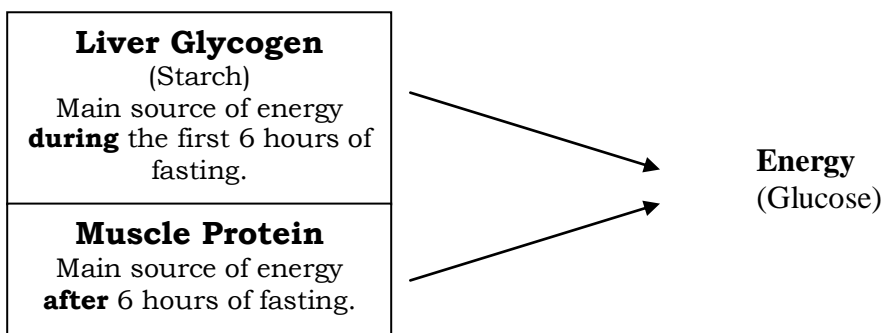




## Cornstarch

During fasting, the body initially uses mostly stored glycogen (starch) from the liver to meet energy needs. After the glycogen stored in the liver is used up, muscle proteins then become the main source of energy. A longer fast will mean that more muscle protein will be needed to provide energy.

In Barth syndrome, the boys tend to use a larger percentage of their muscle mass during an overnight fast. This can make it difficult to maintain or gain muscle mass.



Uncooked cornstarch is the most slowly absorbed carbohydrate. It takes between 4-6 hours for the cornstarch to be completely digested. Because the cornstarch is slowly digested, the amount of time spent fasting is decreased after eating cornstarch. This helps to prevent hypoglycemia and minimize muscle protein losses overnight.

### When Should I use Cornstarch?

- ✓ Cornstarch should be given before bed.
- ✓ Infants can be given cornstarch once they are sleeping more than 8-9 hours on a regular basis.

### How Much Cornstarch is Needed?

The goal is to provide the amount of calories needed during the first 4-6 hours of sleeping. The amount of calories needed is based on the weight of the child. The following table provides a general guideline for dosing\*.

**Cornstarch Fact Sheet**  
The Barth Syndrome Foundation  
[www.barthsyndrome.org](http://www.barthsyndrome.org)  
Rhonda Avery RD, LD/N, CDE (Watson Clinic LLP)  
June 2006

## Cornstarch Dosing

Age	Mean Weight	Cornstarch
12-18 mos	10 kg (22 lbs)	2 teaspoons
18-36 mos	12.5 kg (27.5 lbs)	3 teaspoons
3-5 yrs	15 kg (33 lbs)	3.5 teaspoons
5-8 yrs	17 kg (37.5 lbs)	4 teaspoons
8-12 yrs	22 kg (48.5 lbs)	5 teaspoons
12-15 yrs	30 kg (66 lbs)	2 Tablespoons
Older Adolescents	----	1-2 Tablespoons**

\* Dr. Richard Kelley – Corn Starch Dosage; February 13, 2005. Archives

\*\* Calculations based on Adult Basal calorie needs per hour of sleep. Assuming basal needs of 50kcal for the first 2-3 hours of sleep. The exact dose will vary based on the boy's weight.

### How to Give the Cornstarch:

- ✓ Can be mixed in . . .
  - pudding, yogurt, milk, milk drink or shake
  - cold juice (Do not use with Orange juice) – drink immediately
- ✓ Do not use in Formula – it makes the formula too thick

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*DISCLAIMER: This fact sheet is designed for educational purposes only and is not intended to serve as medical advice. The information provided here should not be used for diagnosing or treating a health problem or disease. It is not a substitute for professional care.*