American Diabetes Association: Hypoglycemia Protocol

- Glucose is the Primary Sugar Energy Source The body directly uses glucose exclusively for energy, not complex carbs, other sugars - fructose or sucrose.
- Hypoglycemia Impact (U.S. Annually):
 - 1 billion events, 240,000 ER visits, \$4 billion spent on sweets for rescue.
- Inefficiency of Sweets & Sodas and Juices
 - Sweets and juices often contain minimal or no glucose, relying on slower digestion / metabolism to convert other sugars and complex carbs into uncertain amounts of usable glucose.
 - These can delay blood sugar recovery, prolonging symptoms and increasing risks.
- Glucose vs. Sweets: Absorption and Recovery Speed
 - Glucose absorbs twice as fast as sweets / sodas, beginning in seconds through the membranes of the mouth.
 - Sweets cause prolonged glucose spikes for **30+ minutes**, requiring insulin to counteract.

American Diabetes Association (ADA) <u>15/15 Rule</u>

- **1**. Check blood sugar. Below 70mg/dl is hypoglycemic
- 2. Consume 15g of fast acting carbs (glucose is best)
- 3. Wait 15 minutes
- 4. Recheck blood sugar
- Repeat or continue to meal or snack protocol if blood glucose level is normal.

Comparison of Glucose Products

- **Tablets** 4g each, require up to 5 (for 15g glucose), chalky, slow to chew and dissolve.
- **Gels & Liquids** –40g tubes or 2oz bottles, \$2 \$4/serving), bulky, messy.
- Glucose Bulk Powder Fastest, dissolves instantly, most portable, and cost-effective vs single-serving disposable powders, gels, and liquids.
- Conclusion
 - Direct glucose powder intake is the fastest and most controlled way to elevate blood sugar safely and efficiently in a hypoglycemia event. It eliminates the unpredictability and spiking of sweets and sodas.
 - Bulk glucose powder is most economical and provides flexible serving size and aligns with ADA and other sophisticated protocols.