Ready, Set, Go, College!

T1D, College, and Alcohol

Tariq Ahmad, M.D., F.A.A.P.
Disclosures

- I have no financial relationships pertinent to this presentation to disclose.

- Drinking **below the age of 21** is illegal in most states.
Quick recap of your rights

- American with Disabilities Act (ADA)
- Section 504
Americans with Disabilities Act (ADA) of 1990

- Prohibits private and public post-secondary schools from treating individuals with a “disability” unfairly
  - Disability – a “physical or mental impairment that substantially limits one or more major life activities.”

- Unless there is a religious affiliation
Section 504 of the Rehabilitation Act of 1973

- Protects students from any institution receiving federal funding
- Applicable whether public or private as well as those institutions run by a religious organization so long as they receive federal funding
Differences from Pre-college days

- Colleges have no requirement to identify those with a “disability”

- While elementary and secondary schools have to provide “a free and appropriate education” if they receive federal funding, colleges cannot discriminate once a student has “qualified” academically for admission to the school

- Colleges are not required to provide modifications that would impose an undue burden or fundamentally alter a program

- Colleges don’t have to help assist in providing health services

- A formally written 504 plan is not typical, but a documentation of modifications can be provided
Can submit a formal request

- Purpose of the request
- Limitations caused by the disability
- How the condition will affect the skills and abilities expected of the student – including both life and academic skills and abilities
- The types of accommodations requested
- Provide medical documentation of the disability
- Offer to participate in any needed evaluation or meeting to discuss accommodations
Once you are in...

- Apply through the disability services office
- Consider informing roommate, professors, RA
- Consider a plan to take breaks for snacks or checking one’s BG’s
- Consider priority housing and early registration
- Know where the health clinic is or the local ER’s
Test Taking

- Consider giving yourself enough time before the test to get BG’s in range
- Consider a CGM
- Have a copy of the accommodations to be provided that is on file with the disability office
- Document your BG’s
- Have the disability office phone number readily available.
Classes

- If your professor bases part of the grade on attendance, make sure absences related to abnormal BG’s are recorded or filed with the disability office.
Standardized Tests

- Start several months in advance (like 6 months)
- Documentation
  - Diagnosis of your diabetes along with symptoms
  - An explanation of how your diabetes is a disability
  - A request for specific modifications along with a clear rationale for why these modifications are appropriate
- Access to blood testing kit
- Access to snacks and drinks
- Access to pump or sensors
Standardized Tests

- College Board Services for Students with Disabilities (PSAT, SAT, and AP)
  - 609 771-7137
  - Professionals.collegeboard.com/testing/ssd/accomodations/breaks (guidance on breaks)

- ACT services for Students with Disabilities
  - 319 337-1000
  - [http://www.act.org/aap/disab](http://www.act.org/aap/disab)
Legal Recourses

- Complaints in re Section 504 and ADA
  - Dept. of Education - Office of Civil Rights (180 day statute aside from waiver) for Section 504
    - Mail, fax, on-line, in person (800-421-3481)
    - [www2.ed.gov/about/offices/list/ocr/complaintprocess.html](http://www2.ed.gov/about/offices/list/ocr/complaintprocess.html)
  - Dept. of Justice for ADA - 800-514-0301 (though for public schools through OCR)
    - [http://www.usdoj.gov/crt/ada/t3compfm.htm](http://www.usdoj.gov/crt/ada/t3compfm.htm)

- Impartial hearing at district or state level
  - Applies to IDEA as well
  - For IDEA call 202-205-5507

- Private lawsuit through state or federal court
Legal Resources

- Disability Rights Education and Defense Fund, Inc. (DREDF)
  - A national law and policy center dedicated to protecting and advocating for the civil rights of people with disabilities
  - Info: 510-644-2555
  - Web: www.dredf.org/diabetes

- www.diabetes.org (under advocacy)
More Resources...

- Council of Parent Attorneys and Advocates
  - [http://www.copaa.net](http://www.copaa.net)

- National Disability Rights Network -(202) 408-9514
  - [http://www.ndrm.org](http://www.ndrm.org)

- National Dissemination Center for Children & Youth With Disabilities - 800-695-0285
  - [http://www.nichcy.org](http://www.nichcy.org)
What can parents do...

- Help with prescriptions and supplies
- Help with setting up follow up appointments
  - Book out for summer and winter breaks
- Consider getting HbA1c checks locally
- Insurance
  - Out-of-state check ups
  - Consider student health insurance plans
- Care packages with carb snacks 😊
Scholarships!

- [https://collegediabetesnetwork.org/content/scholarships](https://collegediabetesnetwork.org/content/scholarships)
- Diabetes Scholars Foundation Scholarships
- Novo Nordisk Donnelly Awards
- Scott and Kim Verplank Foundation
- Frederick J. Krause Scholarship on Health and Disability
- Team Type 1 Scholarships
- Diabetes Incorporated
Alcohol 101
Our defense against hypoglycemia

- Pancreas Response:
  - ↓ Insulin
  - ↑ Glucagon

- Autonomic Response:
  - Shaky
  - Palpitations
  - Anxious
  - Sweating
  - Hunger
  - Numbness

- Brain Alert:
  - Warmth
  - Weakness
  - Fatigue
  - Confusion

- Blood glucose levels:
  - ~ 72-108 mg/dL
  - ~ 65-70 mg/dL
  - ~ 50-55 mg/dL
Our defense against hypoglycemia

- Release of sugar stores from the liver and muscles
- Formation of glucose from non-carbohydrate carbon precursors
- Ingesting glucose
Alcohol and glucose metabolism

- Low BG vs “feeling tipsy”
- Alcohol prevents gluconeogenesis
- Alcohol doesn’t effect glycogenolysis, so make sure the liver is “all carbed up”
  - Eat before, during, and after
  - Bolus with less insulin 25-50% less for food and corrections
- Exercise also makes insulin more sensitive
Into the Night...

- Effects of alcohol on glucose metabolism can last up to 16 hours
- Decrease overnight basals by 20%, more if there was a lot of exercise
- Take a carb snack without insulin if BG < 120 mg/dL at bedtime
How much is too much?

- Cocktails, mixers, lagers, ciders, and beer tend to have higher carb loads
  - May need to take insulin for these but at a lower dose
    - 25% less (this may include for food one is eating)
    - 50% or more if dancing is going on etc...
  - Don’t bolus for more than 2 bottles of beer
  - If you give insulin for corrections would give 3 hours apart and correct by only 50%
Don’t take insulin for all drinks

- Dry white wines, liquors, and spirits have a small amount of carbs
  - Low calorie mixers
  - Remember no carbs, but still high in calories
    - 7 calories per gram
Other tips

- Have a designated buddy
- Keep one’s glass half full
- Mix one’s drink with a diet soda
- Make sure to hydrate with water
- Drink slow
- Try to set an alarm for the morning
- May still need less insulin in the morning
The End...

Good Luck with all Your Future Endeavors!