Diabetes and Developmental Disabilities

Presented by

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What is diabetes?

• Diabetes is a group of diseases characterized by high levels of blood glucose (blood sugar).
• Diabetes can lead to serious health problems and premature death.
• [http://www.youtube.com/watch?v=jHRfDTqPzj4](http://www.youtube.com/watch?v=jHRfDTqPzj4)
What is diabetes?
What is diabetes?
Types of diabetes

• Type 1-insulin dependent, formerly juvenile diabetes
• Type 2-adult onset, formerly non-insulin dependent diabetes
• Gestational diabetes, occurs during pregnancy
U.S. Diabetes Prevalence

• 25.8 million people have diabetes

  • **Diagnosed:** 18.8 million people
    • Type 1 diabetes accounts for 5% – 10%
    • Type 2 diabetes accounts for 90% – 95%
  
  • **Undiagnosed:** 7 million people

NIDDK, National Diabetes Statistics 2010

Diabetes Incidence

A total of 1,600,000 new cases of diabetes were diagnosed in 2007 in the United States among people aged 20 years and older.

NIDDK, National Diabetes Statistics 2007
What is pre-diabetes?

• Pre-diabetes is a medical condition where blood glucose levels are higher than normal, but not high enough to be called diabetes.

• Studies have shown that the onset of type 2 diabetes can be delayed or prevented by:
  – losing weight, and
  – increasing physical activity

NIDDK, National Diabetes Statistics 2007
Causes

• All types of diabetes have a genetic predisposition.
• There is a significant environmental influence.
• Type 1-child is at increased risk if one or both parents is diabetic.
• Certain cultures are at a higher risk—African Americans, Hispanics and Native Americans.
• Older and overweight mothers more at risk for gestational diabetes.
Monitoring Diabetes

- Medical
- Self-monitoring glucose
- Physical monitoring/problem solving
Medical Monitoring

• Endocrinologist
• Education
• Labwork
• Documentation
Self-Monitoring
Diabetes Complications

• Diabetes is the leading cause of:
  – kidney failure
  – new cases of adult blindness
  – nontraumatic lower-limb amputations

• In adults with diabetes:
  – the risk of periodontal (gum) disease is two to three times higher
  – 60 to 70 % have mild to severe nervous system damage

NIDDK, National Diabetes Statistics 2007
Diabetes Complications

- 7th leading cause of death
- Contributed to 231,404 deaths in 2007
- Expensive—$174 billion in 2007
Treatment
Treatment

• Diet
• Oral medications
• Insulin (syringe, pen, pump)
Treatment

KwikPen – Free Offer

Humalog™ KwikPen™
insulin lispro injection (rDNA origin)

Humalog™ KwikPen™
75% insulin lispro protamine suspension
25% insulin lispro injection (rDNA origin)

Humalog™ KwikPen™
50% insulin lispro protamine suspension
50% insulin lispro injection (rDNA origin)
Treatment
Developmental Disabilities

- Increased incidence in Down syndrome
- Some medications lead to weight gain
- Food as a reward
- Lack of exercise
Problems with compliance

• Discomfort from needle-sticks
• Unable to understand consequences
• Can perform task, but not problem solve/troubleshoot
Special concerns

• Must assess living situation (caregiver support is imperative)

• Must assess individuals’ ability to manage their diabetes
  – Assess ability to monitor
  – Assess ability to self-administer oral medications as well as insulin
If the individual cannot manage his/her diabetes:

• If they live with family, family may delegate to an independent provider (but not agency provider).

• If they live in community, provider must be certified by state to administer medications and monitor blood sugar, plus there must be an RN to oversee this (delegate).

• May necessitate change in living situation
Preventing Diabetes

• Maintain healthy weight
  – Diet
  – Exercise
Anatomy of MyPyramid

One size doesn’t fit all
USDA’s new MyPyramid symbolizes a personalized approach to healthy eating and physical activity. The symbol has been designed to be simple. It has been developed to remind consumers to make healthy food choices and to be active every day. The different parts of the symbol are described below.

Activity
Activity is represented by the steps and the person climbing them, as a reminder of the importance of daily physical activity.

Moderation
Moderation is represented by the narrowing of each food group from bottom to top. The wider base stands for foods with little or no solid fats or added sugars. These should be selected more often. The narrower top area stands for foods containing more added sugars and solid fats. The more active you are, the more of these foods can fit into your diet.

Personalization
Personalization is shown by the person on the steps, the slogan, and the URL. Find the kinds and amounts of food to eat each day at MyPyramid.gov.

Proportionality
Proportionality is shown by the different widths of the food group bands. The widths suggest how much food a person should choose from each group. The widths are just a general guide, not exact proportions. Check the Web site for how much is right for you.

Variety
Variety is symbolized by the 6 color bands representing the 5 food groups of the Pyramid and oils. This illustrates that foods from all groups are needed each day for good health.

Gradual Improvement
Gradual improvement is encouraged by the slogan. It suggests that individuals can benefit from taking small steps to improve their diet and lifestyle each day.
Resources

- [www.YourDiabetesinfo.org](http://www.YourDiabetesinfo.org) (National Diabetes Education Program)
- [www.dagc.org](http://www.dagc.org) 216-591-0800
- [www.diabetes.org](http://www.diabetes.org) (American Diabetes Association)
- [www.diabetes.webmd.com](http://www.diabetes.webmd.com)
- [www.dodd.ohio.gov](http://www.dodd.ohio.gov)
- [www.stopdiabetes.com](http://www.stopdiabetes.com)