



DIABETES AND CHILD OBESITY AND NUTRITIONAL INTERVENTION – THE MOST CURRENT GUIDELINES

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Obesity and diabetes are increasing in both developed and developing countries

PREVALENCE OF OVERWEIGHT AMONG CHILDREN AND ADOLESCENTS AGES 6-19 YEARS

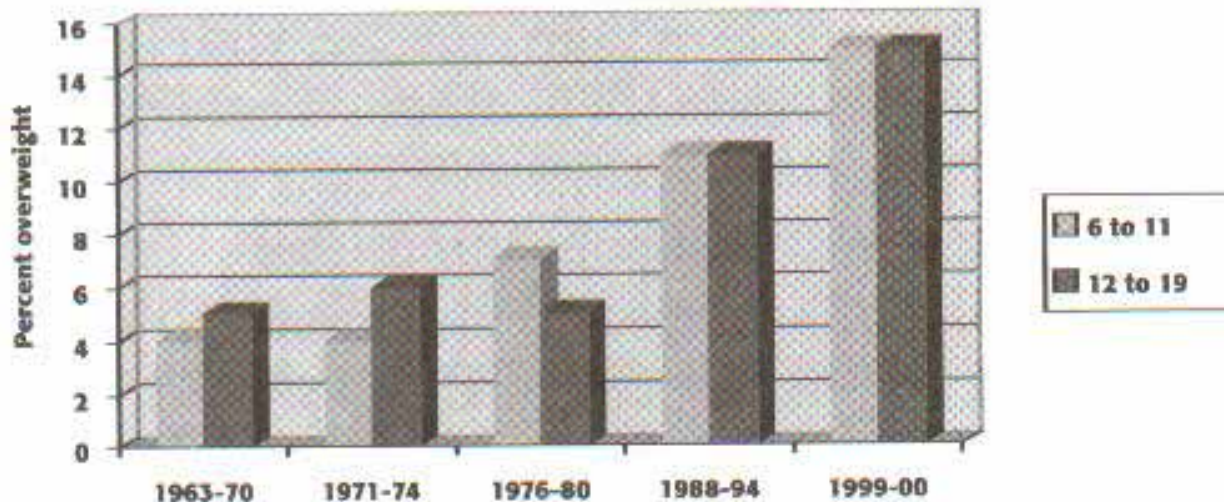


Figure 2. Adapted from CDC/NCHS, NHES, and NHANES data



Global Strategy – main objectives

- To reduce the risk factors – unhealthy diets and physical activity
- To increase the awareness and understanding of diet and physical activity
- To encourage the development and implementation of action plans, to engage all sector
- To monitor scientific data and support research



Global Strategy – diet recommendation

- Achieve energy balance and healthy weight
- Limit energy intake from total fats and shift fat consumption away from sat. fat to unsat. fats and towards the elimination of trans FA
- Increase consumption of fruits and vegetables, and legumes, whole grains and nuts
- Limit the intake of free sugars
- Limit salt consumption from all sources and ensure that salt is iodized



National strategies, policies and action plans need broad support

- National strategies on diet and physical activity
- National dietary guidelines
- National physical activity guidelines





Government should provide accurate and balanced information

- Education, communication and public awareness
- Adult literacy and education programmes
- Marketing, advertising, sponsorship and promotion
- Labelling
- Health claims





National food and agricultural policies should be consistent with the protection and promotion of public health

- Promotion of food products consistent with healthy diet
- Fiscal policies
- Food programmes
- Agricultural policies





Diabetes Action Now Booklet

four key messages

- Diabetes is a life-threatening condition
- Diabetes is a common condition and its frequency is dramatically rising all over the world
- A full and healthy life is possible with diabetes
- In many cases, diabetes can be prevented





Diabetes Action – next 3 years

- Achieve a major increase in awareness about diabetes, its complications, and its prevention – policy makers in low- and middle-income countries
- Support projects to generate new knowledge on awareness about diabetes and its economic impact
- Produce a new scientifically-based review of the prevention and complications of diabetes
- Produce practical guidance for policy makers for national diabetes programmes
- Web-based resource



How can the burden of diabetes be reduced?

Without urgent action, diabetes-related deaths will increase by more than 50 % in the next 10 years.

- Prevent diabetes
 - Achieve and maintain healthy body weight
 - Be physically active
- Early diagnosis
 - Relatively inexpensive blood testing





How can the burden of diabetes be reduced?

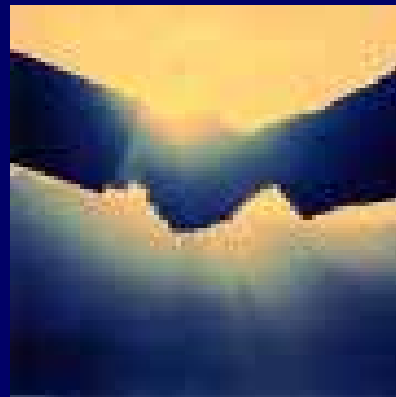
- Interventions
 - Moderate blood glucose control
 - Blood pressure control
 - Foot care
- Screening for retinopathy
- Blood lipid control
- Screening for early signs of diabetes-related kidney disease.





Recommendation for future

- National Standards should be reviewed every 5 years
- Participating organizations would share responsibility
- Collecting data
- More outcomes research is needed
- Behavioral research funding must be given greater attention





European Heart Network

„Children, obesity and associated avoidable chronic diseases”

32-months project, March 2004-October, 2006

- Food and health education: include food and health in the school curriculum
- Controlling sales of foods in public institutions
- Controls on food and drink advertising
- Subsidies on healthy foods
- Change planning and transport policies – more physical activity



European Heart Network „Children, obesity and associated avoidable chronic diseases”

32-months project, March 2004-October, 2006

- Improve communal sport facilities
- Improve training for health professionals
- Improved health education
- Common agricultural policy reform
- Mandatory nutritional information labelling





ADA Position

Individual-, Family-, School- and Community-based interventions for pediatric overweight

Recommendations for individual- and family-based tertiary prevention of overweight in five- to 12-year-old children 1.

Intervention type or component	Intervention recommendation
Individual-based interv.	Limited evidence
Family-based interv.	Multicomponent interv. – routinely recommended
Parent training	Recomm – multicomp. prog.
Individual psychotherapy	Lack of evidence

Individual-, Family-, School- and Community-based interventions for pediatric overweight, VOL. 106, Issue 6, pages 925-45 (June 2006)



ADA Position

Individual-, Family-, School- and Community-based interventions for pediatric overweight

Recommendations for individual- and family-based tertiary prevention of overweight in five- to 12-year-old children 2.

Diet. counse./, nutr. edu.	Recomm – multicom. prog.
Altered macronutr. approaches	Limited evidence
Physical activity	Recomm – multicom. prog.
Sedentary behaviors	Recomm – multicom. prog., - increase physical activity
Behavioral counseling	Recomm – multicom. prog.

Individual-, Family-, School- and Community-based interventions for pediatric overweight, VOL. 106, Issue 6, pages 925-45 (June 2006)



ADA Position

Individual-, Family-, School- and Community-based interventions for pediatric overweight

Recommendations for school-based primary and secondary prevention of child and adolescent overweight 1.

Intervention type or component	Intervention recommendation
Sec. Prev. Interv.	Limited evidence
Prim. Prev. Interv.	multicomp. Interv. recomm.
Behavioral counseling	Recomm – multicomp. prog.,
Nutr. Educ.	Recomm – multicomp. prog.

Individual-, Family-, School- and Community-based interventions for pediatric overweight, VOL. 106, Issue 6, pages 925-45 (June 2006)



ADA Position

Individual-, Family-, School- and Community-based interventions for pediatric overweight

Recommendations for school-based primary and secondary prevention of child and adolescent overweight 2.

Phys. Activity edu.	Recomm – multicom. prog.,
Phys. Activity envir. changes	Recomm – multicom. prog.,
Parental/family invol	Recomm – multicom. prog.,
Media influences	Limited evidence - future
Food environ changes	Limited evidence - future

Individual-, Family-, School- and Community-based interventions for pediatric overweight, VOL. 106, Issue 6, pages 925-45 (June 2006)



ADA Position

Individual-, Family-, School- and Community-based interventions for pediatric overweight

Recommendations for school-based primary and secondary prevention of child and adolescent overweight 3.

Sedentary behaviors	Recomm ↓ TV, video–multicomp. prog.,
Homework, reading, comp.	Lack of evidence
Delivery of program	Lack of evidence
length of program	Lack of evidence
Food environ changes	Limited evidence - future

Individual-, Family-, School- and Community-based interventions for pediatric overweight, VOL. 106, Issue 6, pages 925-45 (June 2006)



OBESITY PREVENTION CHECKLIST

This form can be used as a guide for identifying a child or adolescent at risk for the development of obesity and age appropriate interventions for the child and family.

I. Identification of Risk

A. Anthropometric Risk Factors:

- parents heights
- parents weights
- parents BMIs (>28=overweight)
 $BMI = (Wgt \text{ in lbs}/2.2) / (hgt \text{ in inches} \times 0.0254)^2$

B. Feeding Practice Risk Factors:

1. Infants:

- overfeeding
- introduction of juice less than 6 months of age
- drinking juice from bottles or lidded transportable cups throughout the day
- limited fruit/vegetable preferences
- none

2. Toddler:

- poor fruit and vegetable intake
- limited fruit and vegetable preferences
- increased juice or sweetened beverage consumption(>6oz/day)
- very fast eater
- excessive fast food intake
- controlling feeding practices by caretaker
- none

3. School-Age Child:

- poor fruit and vegetable intake
- increased juice or sweetened beverage consumption(>12oz/day)
- very fast eater
- controlling feeding practices by caretaker
- excessive fast food intake
- none

4. Adolescent:

- increased juice or sweetened beverage consumption (>12oz/day)
- poor fruit and vegetable intake
- very fast eater
- parents are chronic dieters
- excessive fast food intake
- none

C. Activity Pattern Risk Factors:

- excessive television viewing (>2hr)
- sedentary activities
- limited exercise opportunities
- none

D. Child's Anthropometric Risk:

Anthropometrics:

- weight/height plotted on growth charts >85%
- BMI percentile >85%
- none

II. Age Appropriate interventions

Infant:

- promote breastfeeding
- counsel to avoid juice prior to 6 months of age
- encourage water as a between feeding beverage

School-Age Child:

- healthy snack suggestions
- slow down when eating (wait 30 min before 2nd portions)
- Increase water/seltzer
- decrease TV viewing
- family activity suggestions

Adolescent:

- healthy snack suggestions
- slow down when eating (wait 30 min before 2nd portions)
- increase water/seltzer
- decrease TV viewing
- family activity suggestions

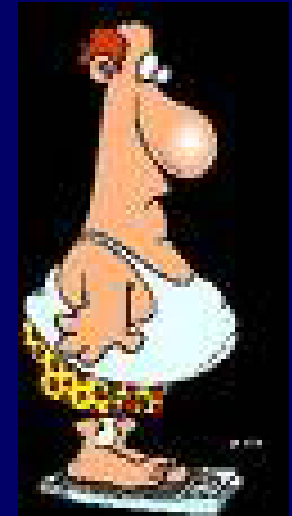


Figure 1.

Feld LG and
Hyams JS:
Childhood Obesity,
Consensus in
Pediatrics, Vol. 1,
NO. 4 2004



WHO European Ministerial Conference on Counteracting Obesity

Istanbul, Turkey, 15-17 November 2006

Principles 1.

- High-level political will and leadership
- Overall strategies to address noncommunicable diseases
- Responsibilities of individuals, government and society
- Cultural context
- partnership



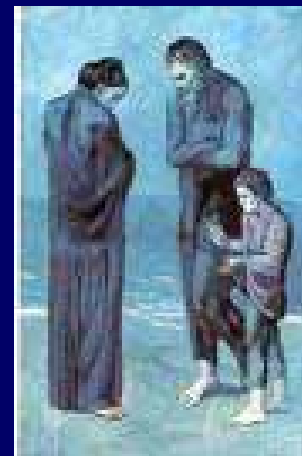


WHO European Ministerial Conference on Counteracting Obesity

Istanbul, Turkey, 15-17 November 2006

Principles 2.

- Policy – energy-dense food and beverages
- Vulnerable groups – children, adolescents
- Lower socioeconomic population
- Economic policy





Patience!!!

The change of inveterate dietary habits will take considerable time and efforts. International experiences suggest that sustained actions over a 10-15 year period are required to induce secular changes in eating behaviours.



Not so easy





**Knowing is not enough;
we must apply.**

**Willing is not enough;
we must do.**

J.W. Goethe

BMI CHANGES THROUGHOUT CHILDHOOD (ADIPOSIITY REBOUND)

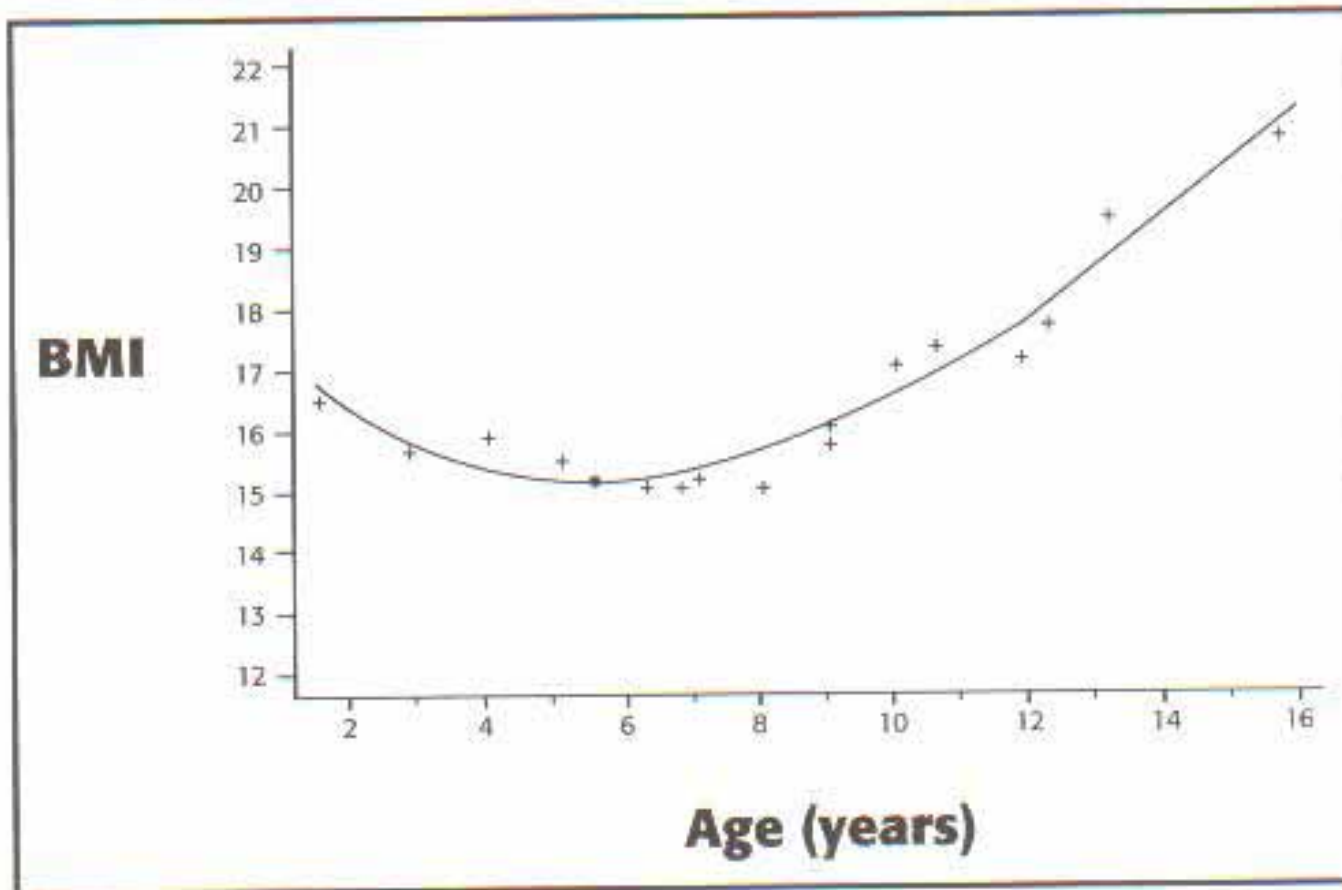


Figure 3. From Whitaker RC, Pepe MS, Wright JA, Seidel KD, Dietz WH.