Nutrition in the Well & Sick Child

Geoffrey Axiak

M.Sc. Nursing (Manchester), B.Sc.(Nursing),

Dip. R. & C. Hypnotherapy (T.O.R.C.H.),

P.G. Dip. (Nutrition & Dietetics)

Clinical Nutrition Practice Nurse

&

Registered Nutritionist

Topics of interest

- Dietary Guidelines for Healthy Children
- Overweight in Children
- Childhood obesity
- Dehydration in Children

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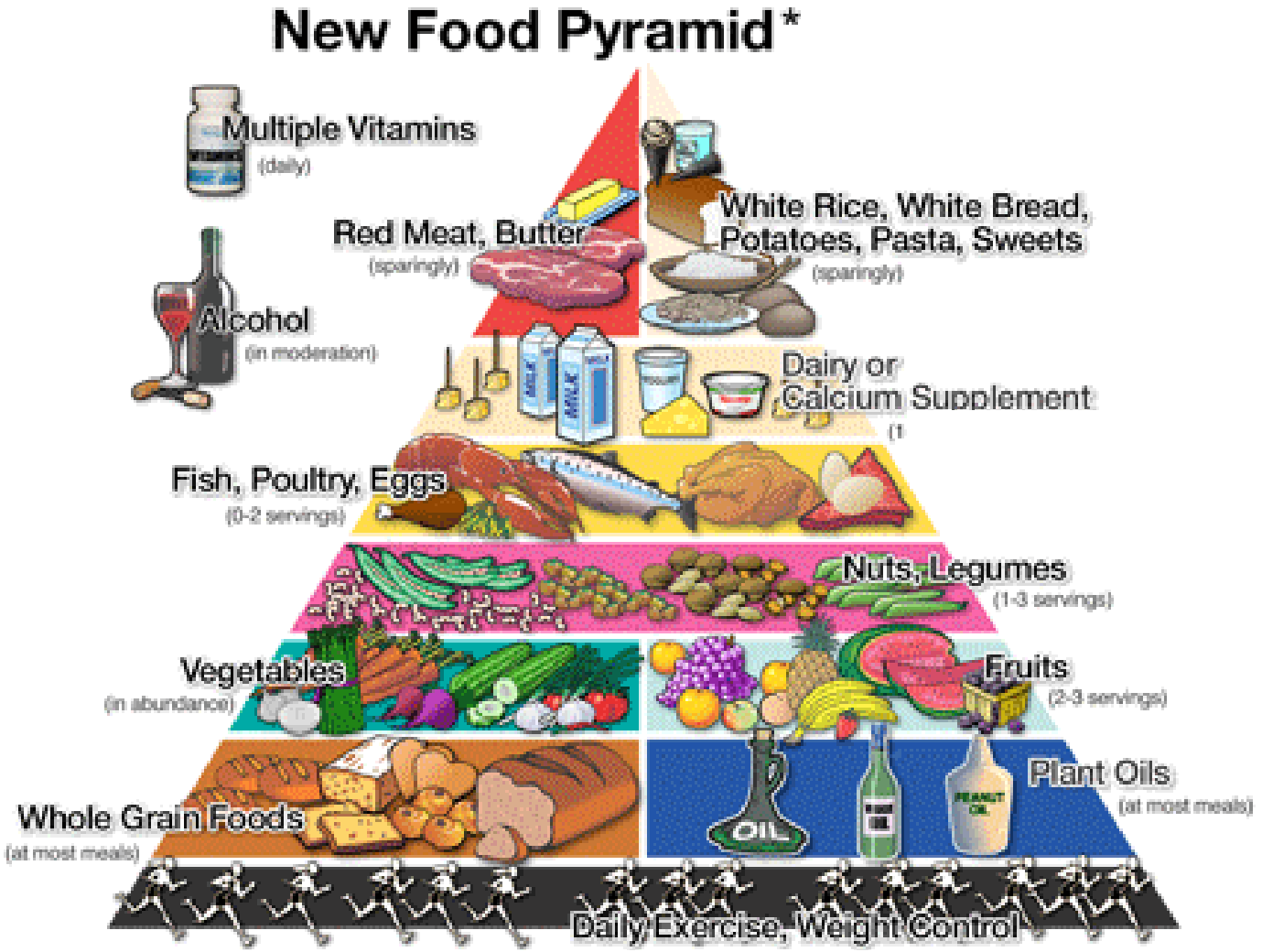
Dietary Guidelines for Healthy Children



C.I.N.D.I. Dietary Guidelines

1. Eat a nutritious diet based on a variety of foods originating mainly from plants, rather than animals.

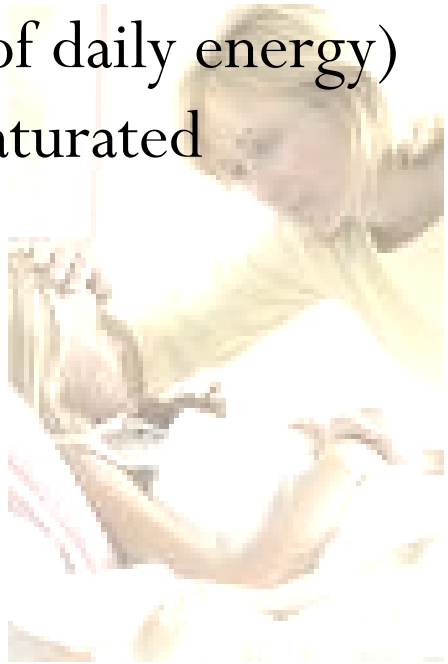
2. Eat bread, grains, pasta, rice or potatoes several times a day.

3. Eat a variety of vegetables and fruits, preferably fresh and local, several times per day (at least 400g per day).

C.I.N.D.I. Dietary Guidelines

4. Maintain body weight between the recommended limits (BMI according to charts) by taking moderate levels of physical activity, preferably daily.

5. Control fat intake (not more than 30% of daily energy) and replace most saturated fats with unsaturated vegetable oils or soft margarines.

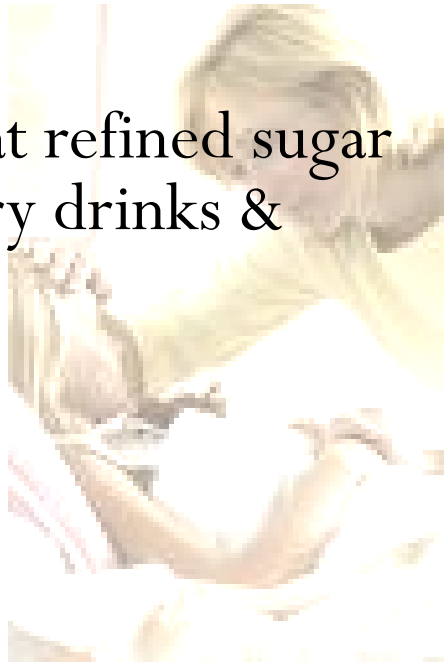


C.I.N.D.I. Dietary Guidelines

6. Replace fatty meat and meat products with beans, legumes, lentils, fish, poultry or lean meat.

7. Use milk and dairy products (sour milk, yoghurt and cheese) that are low in both fat and salt.

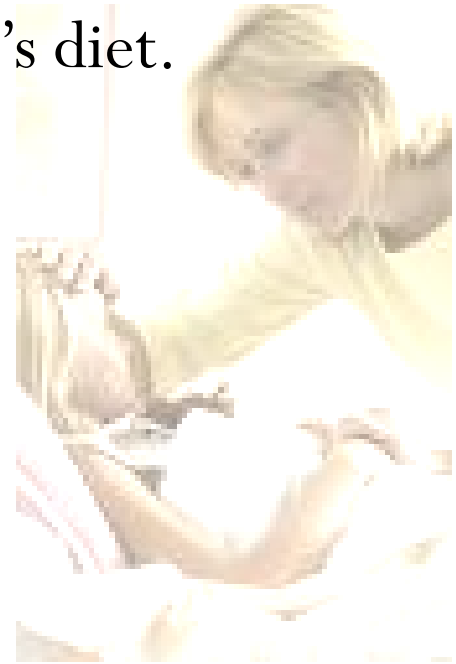
8. Select foods that are low in sugar, and eat refined sugar sparingly, limiting the frequency of sugary drinks & sweets.



C.I.N.D.I. Dietary Guidelines

9. Choose a low-salt diet - no more than 1 teaspoon (6g) per day, including in bread & processed, cured, preserved food.

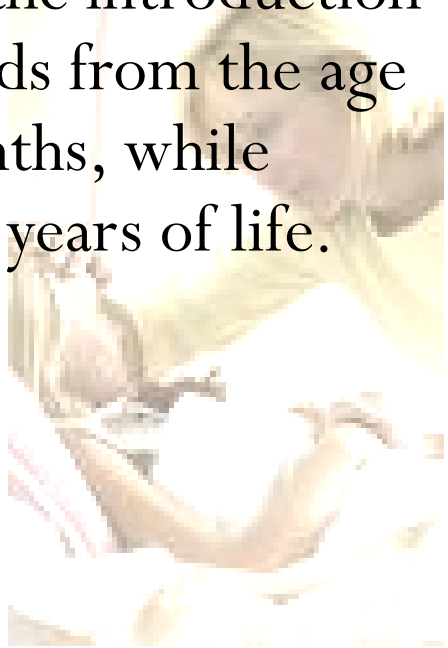
10. Omit alcohol totally from the children's diet.



C.I.N.D.I. Dietary Guidelines

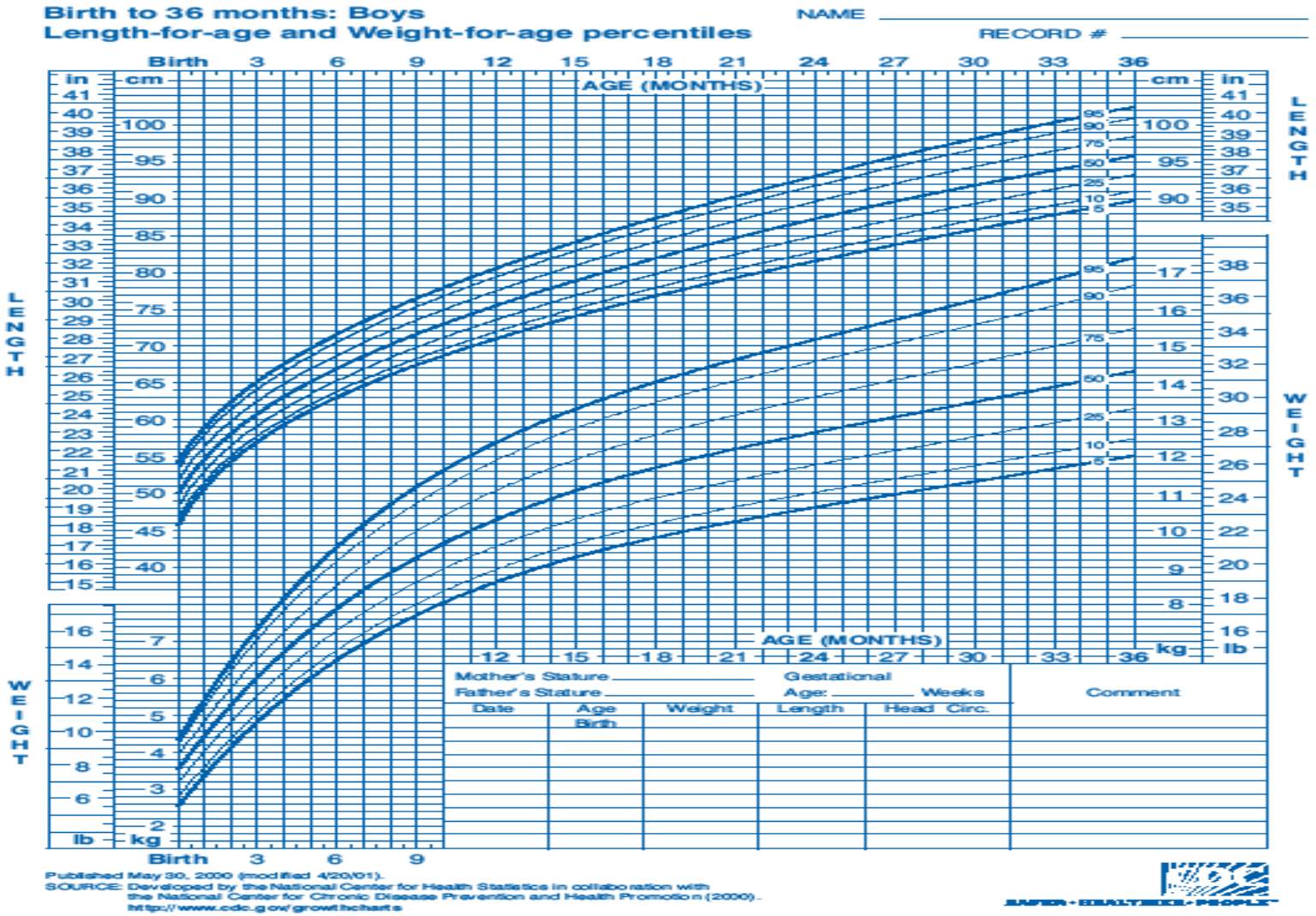
11. Prepare food in a safe and hygienic way. Steam, bake, boil or microwave to help reduce the amount of added fat.

12. Promote exclusive breast-feeding and the introduction of safe and adequate complementary foods from the age of about 6 months, but not before 4 months, while breast-feeding continues during the first years of life.



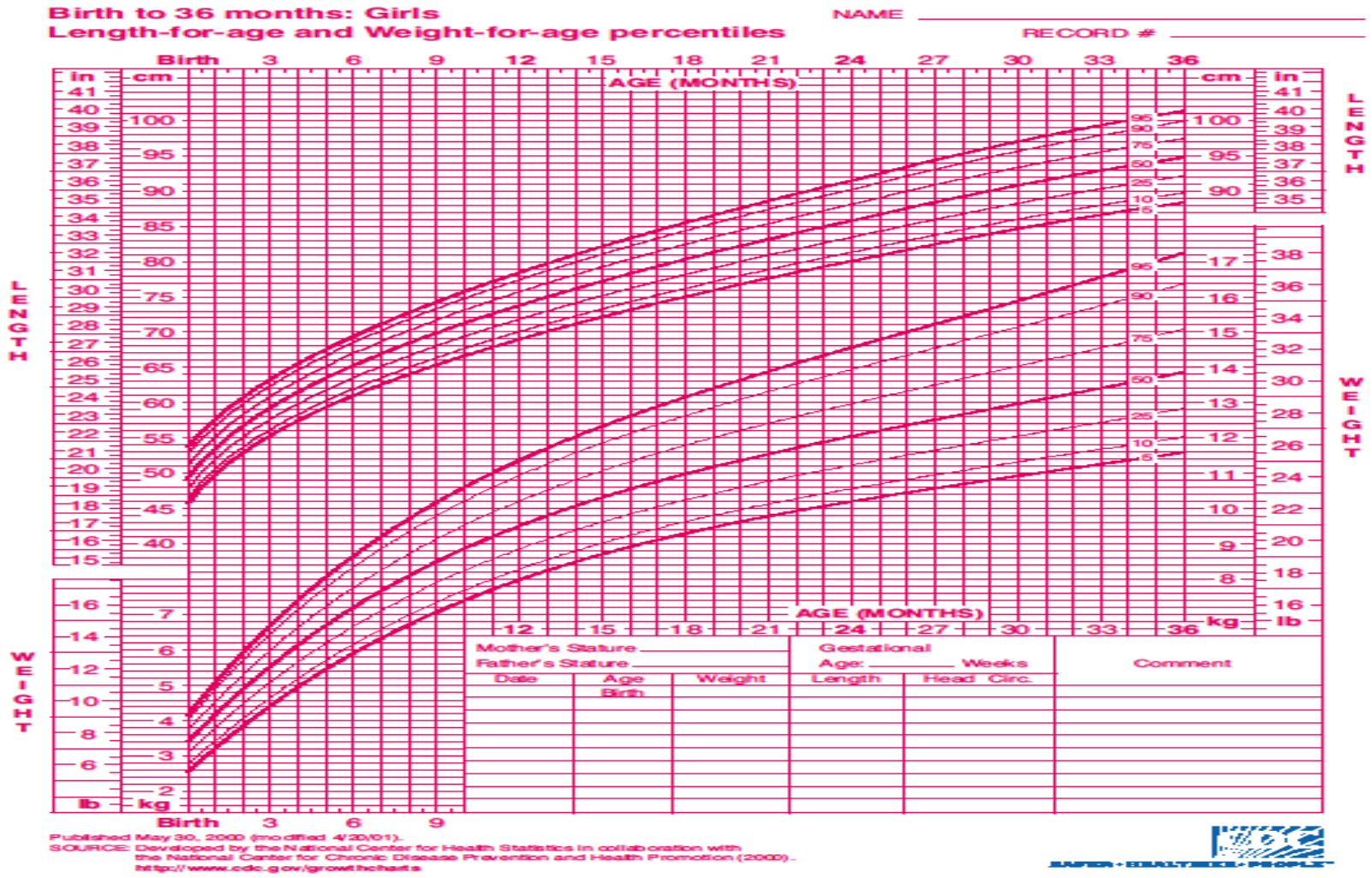
Body Mass Index (BMI)

– BOYS birth-3 YEARS



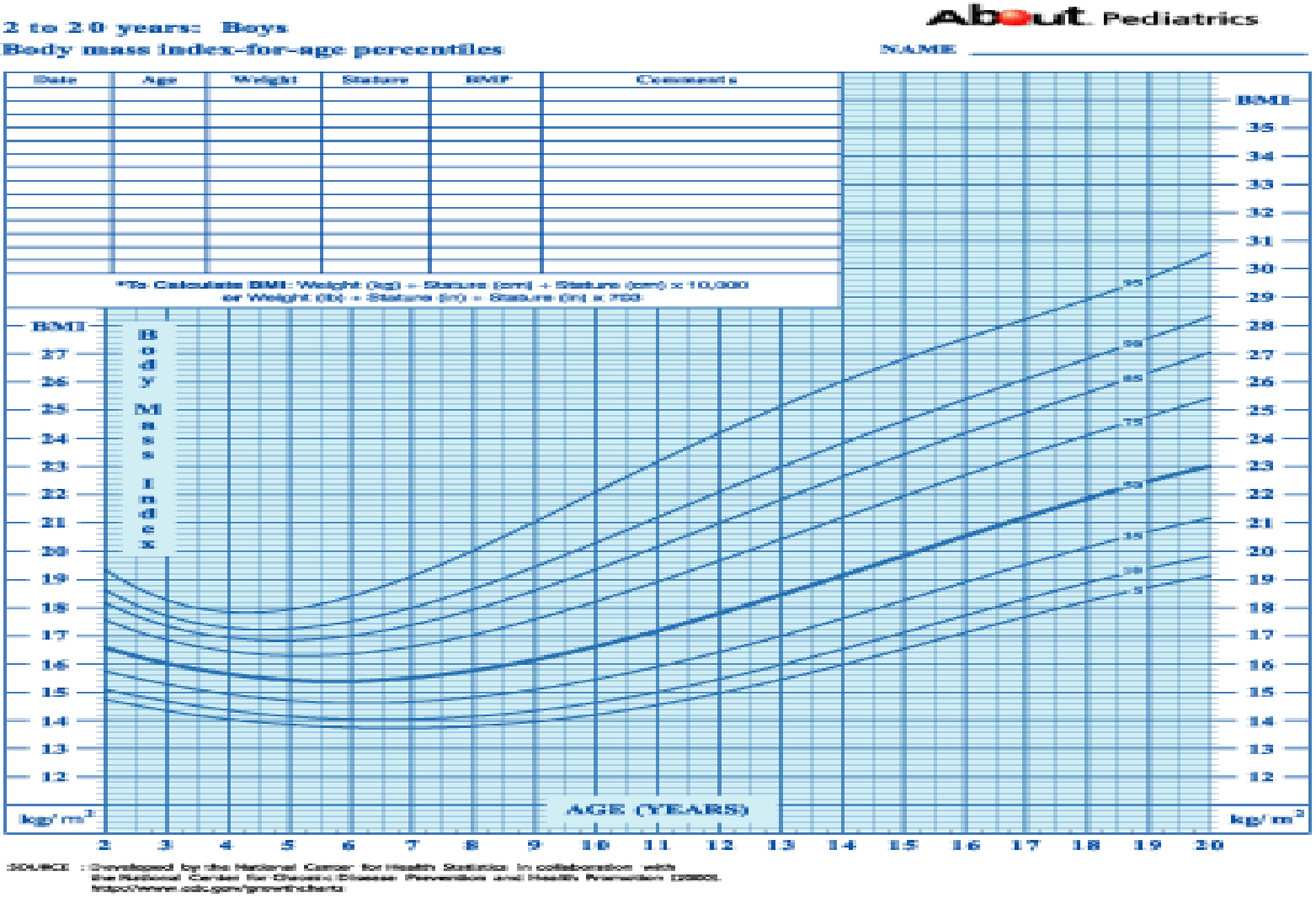
Body Mass Index (BMI)

– GIRLS birth-3 YEARS



Body Mass Index (BMI)

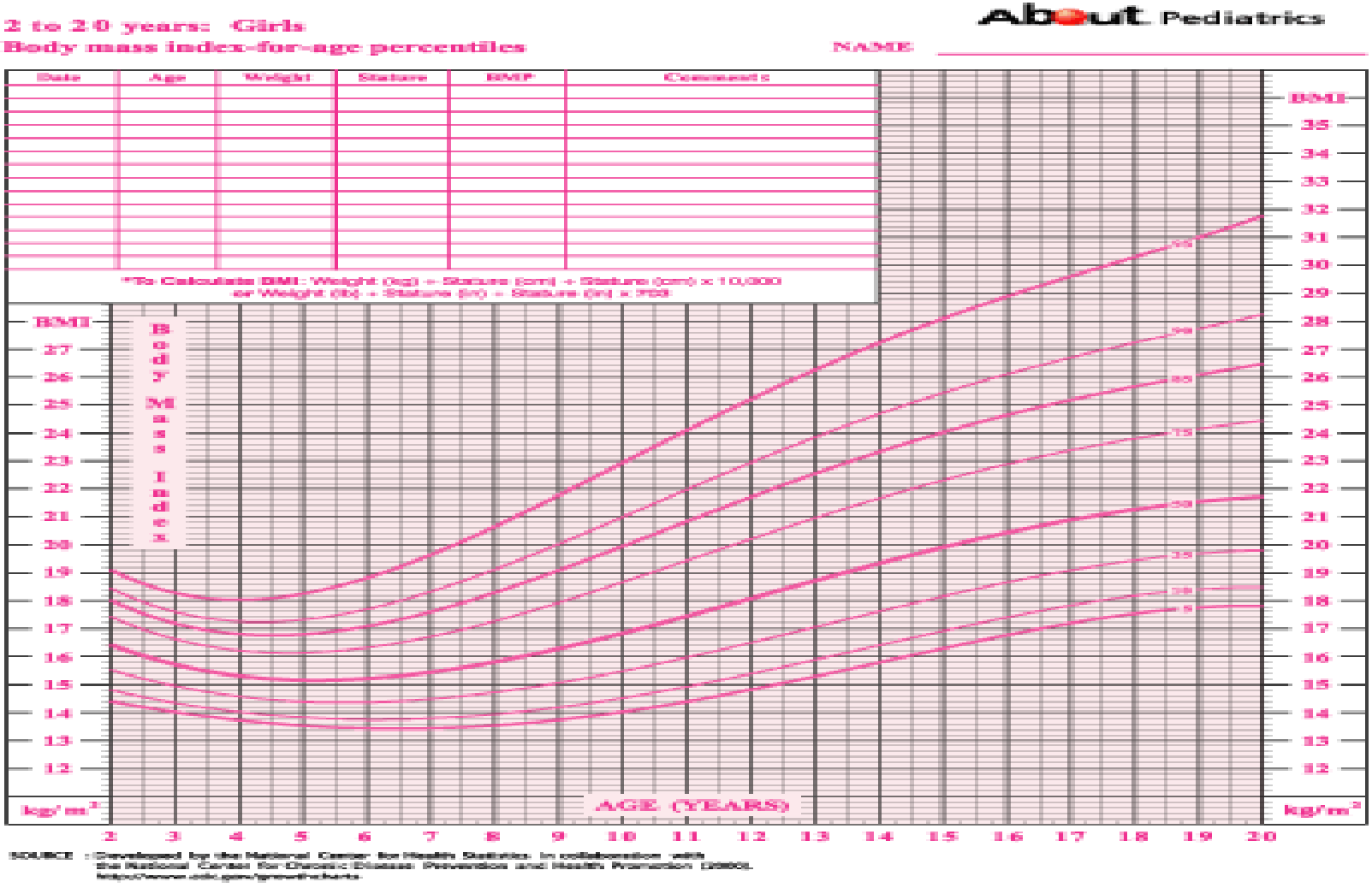
– BOYS 2-20 YEARS



SOURCE: Developed by the National Center for Health Statistics in collaboration with the National Center for Chronic Disease Prevention and Health Promotion (2000). http://www.cdc.gov/growthcharts

Body Mass Index (BMI)

– GIRLS 2-20 YEARS



Topics of interest

- Dietary Guidelines for Healthy Children
- Overweight in Children
- Childhood obesity
- Dehydration in Children

Overweight in Children

- Among American children ages 6-11, the following are overweight, using the 95th percentile of body mass index (BMI) values on the CDC 2000 growth chart:
  - For non-Hispanic whites, 12.0% of boys and 11.6% of girls.
  - For non-Hispanic blacks, 17.1% of boys and 22.2% of girls.
  - For Mexican Americans, 27.3% of boys and 19.6% of girls.

Overweight in Adolescents

- Among American adolescents ages 12-19, the following are overweight, using the 95th percentile of BMI values on the CDC 2000 growth chart:
  - For non-Hispanic whites, 12.8% of boys and 12.4% of girls.
  - For non-Hispanic blacks, 20.7% of boys and 26.6% of girls.
  - For Mexican Americans, 27.6% of boys and 19.4% of girls.

Overweight – STATISTICS

- Based on data from the 1999-2000 NHANES, the prevalence of overweight in children ages 6-11 increased from 4.2% to 15.3% compared with data from 1963-65. The prevalence of overweight in adolescents ages 12-19 increased from 4.6% to 15.5%.

Obese Children in Malta

- Several Maltese studies have indicated that a significant number of Maltese children are Overweight or Obese. In a Study carried out by Grech & Farrugia Sant'Angelo (2008) using the Criteria issued by the C.D.C. one third of children aged 5 – 6 years were classified as overweight/obese.

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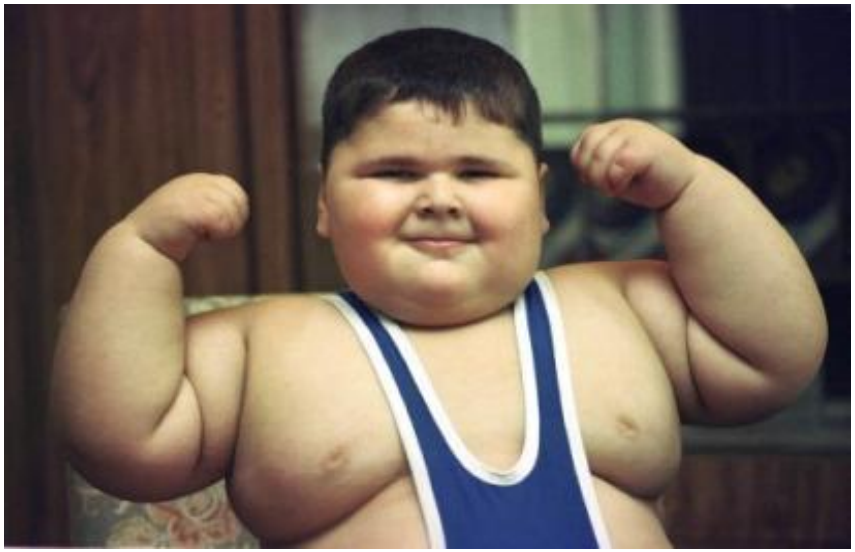
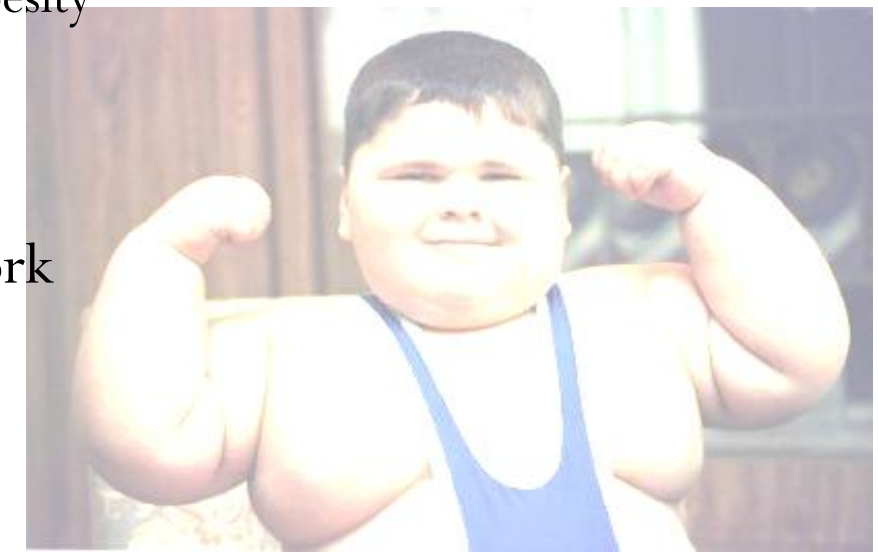


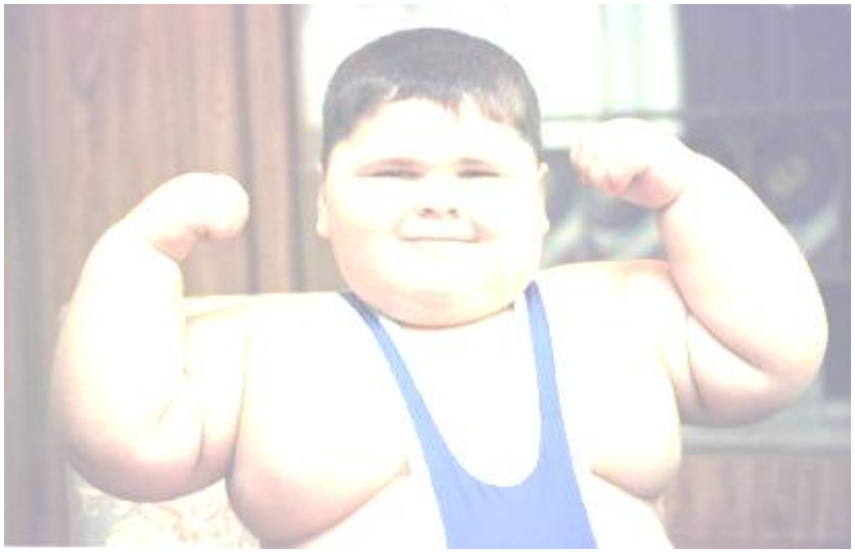
Causes of Childhood Obesity

- Genetics - ??
- Diet
  - Fast food
  - Incorrect cooking methods
  - Rewards
    - 50-100 kcal in excess => obesity
- Physical inactivity
  - Hobbies
  - Excessive school/homework
  - Physical exercise
- Hormones



Preventing & Treating Childhood Obesity

- Reaching and maintaining an appropriate body weight is important. That is why recommendations that focus on small but permanent changes in eating may work better than a series of short-term changes that can't be sustained.



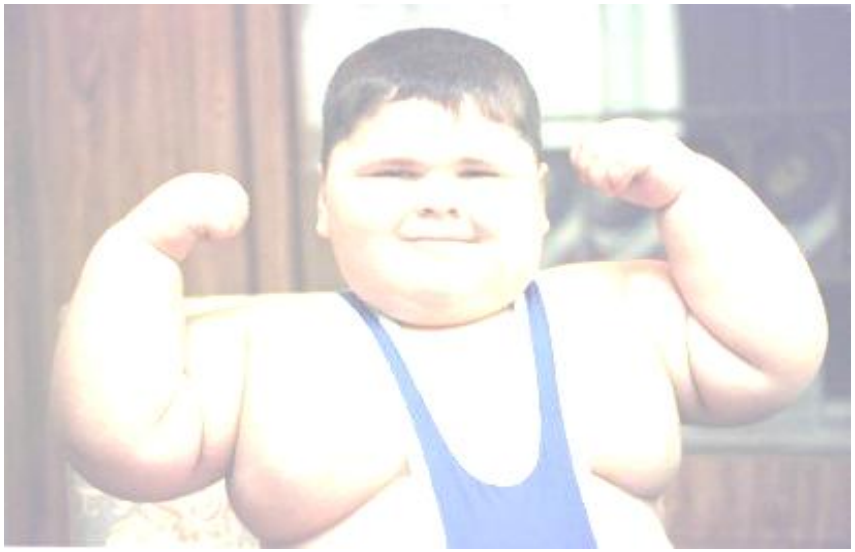
Preventing & Treating Childhood Obesity - RECOMMENDATIONS

1. Reducing dietary fat is the easiest change. Highly restrictive diets that forbid favorite foods are likely to fail. They should be limited to rare patients with severe complications who must lose weight quickly.

2. Becoming more active is widely recommended. Increased activity is common in all studies of successful weight reduction. Create an environment that fosters physical activity.

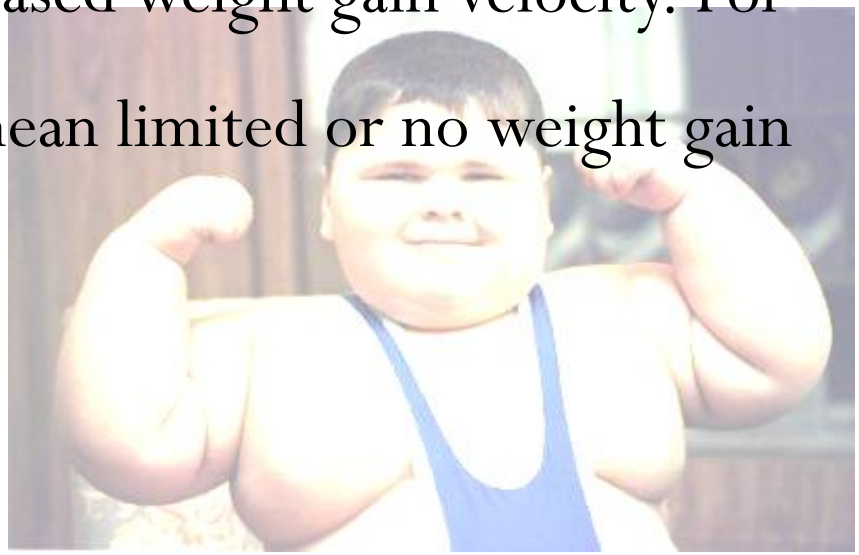
Preventing & Treating Childhood Obesity - RECOMMENDATIONS

3. Parents' involvement in modifying obese children's behaviour is important. Parents who model healthy eating and activity can positively influence their children's health.



Treating Childhood Obesity

- In treating most obese children, the main emphasis should be to prevent weight gain above what's appropriate for expected increases in height. This is called prevention of increased weight gain velocity. For many children this may mean limited or no weight gain while they grow taller.



Treating Childhood Obesity

- Recommendations for maintaining weight should include regular physical activity and careful attention to diet to avoid too many calories.

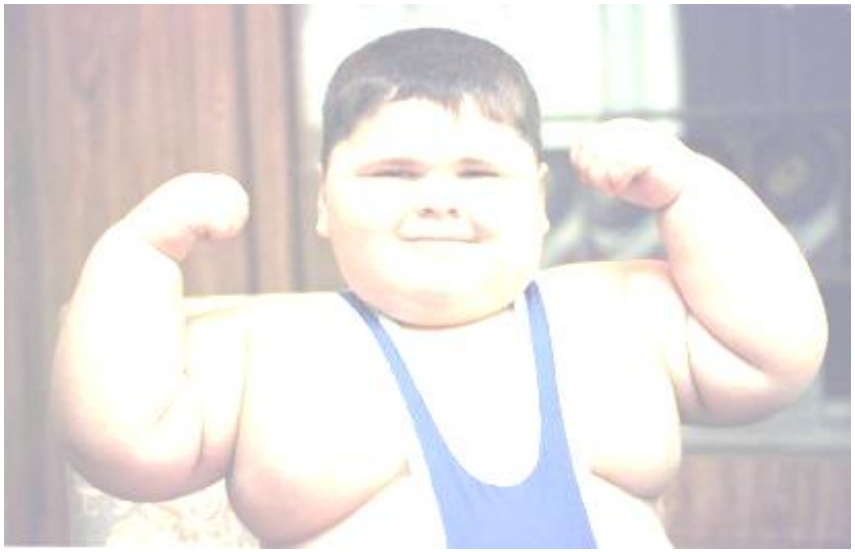
- Diets for weight loss are not recommended in children.

Treating Childhood Obesity

- Factors predicting success are:
  - frequent intervention visits.
  - including parents in the dietary treatment program.
  - strong social support of dietary intervention from others involved in preparing food.
  - regular exercise prescription including social support.

Treating Childhood Obesity

- The importance of continuing these lifestyle changes well past the initial treatment period should be emphasized to the entire family. The healthiest way to change weight is gradually.



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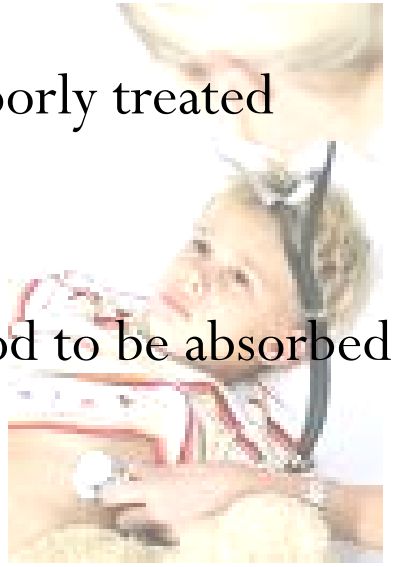
Causes of Dehydration in Children

- Dehydration is most often caused by a viral infection that causes fever, diarrhoea, vomiting, and a decreased ability to drink or eat.
  - Common viral infections causing vomiting and diarrhoea include rotavirus, Norwalk virus, and adenovirus.
- Sometimes sores in a child's mouth caused by a virus make it painful to eat or drink, helping cause or worsen dehydration.
- More serious bacterial infections may make a child less likely to eat and may cause vomiting and diarrhoea.
  - Common bacterial infections include *Salmonella, Escherichia coli, Campylobacter,* and *Clostridium difficile*.

Causes of Dehydration in Children

- Parasitic infections such as *Giardia lamblia* cause the condition known as giardiasis.
- Increased sweating from a very hot environment can cause dehydration.
- Excessive urination caused by unrecognized or poorly treated diabetes (not taking insulin) is another cause.
- Conditions such as cystic fibrosis do not allow food to be absorbed and cause dehydration.



Symptoms of dehydration in children

- Be concerned if a child has an excessive loss of fluid by vomiting or diarrhoea, or if the child refuses to eat or drink.

Signs of dehydration in children

- Sunken eyes
- Decreased frequency of urination or dry diapers
- Sunken front fontanel
- No tears when the child cries
- Dry or sticky mucous membranes
- Lethargy
- Irritability

In cases of mild dehydration

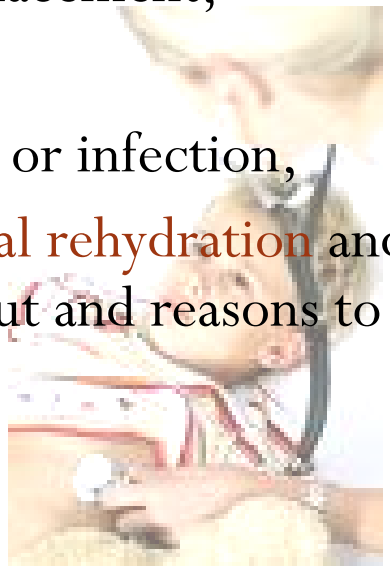
- If the dehydration is mild (3-5% total body weight loss), the doctor may ask you to give the child small sips of Pedialyte® or other oral rehydration fluids.
- If your child is able to drink fluids, and no dangerous underlying illness or infection is present, you will be sent home with instructions on oral rehydration, information about things to be concerned with and reasons to return or call back.

In cases of moderate dehydration

- If the child is moderately dehydrated (5-10% total body weight loss) treatment of choice is IV into a vein.

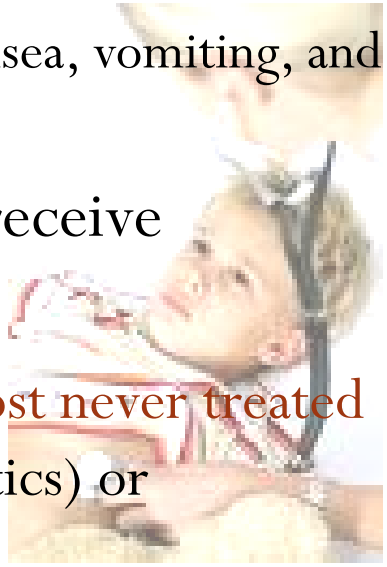
- If your child is:
  - able to take fluid by mouth after IV fluid replacement,
  - looks better after IV fluid replacement, and
  - has no apparent dangerous underlying illness or infection,

  s/he may be sent home with instructions on oral rehydration and instructions on things to be concerned about and reasons to return or call back.



In cases of severe dehydration

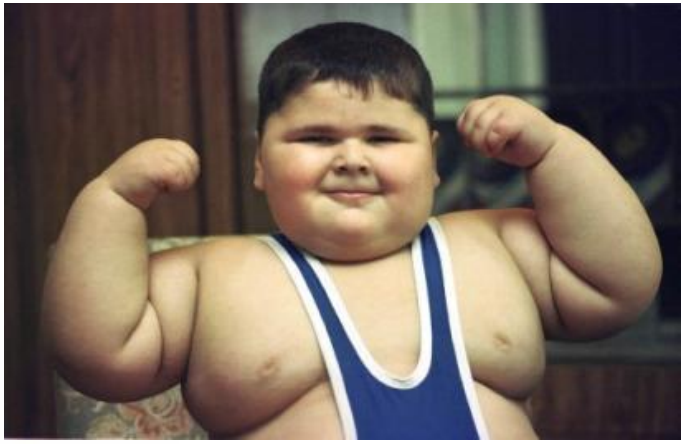
- If the child is severely dehydrated (more than 10-15% weight loss):
  - Child admitted to the hospital for:
    - continued IV fluid replacement,
    - observation, and often
    - further tests to determine what is causing nausea, vomiting, and dehydration.
  - Children with bacterial infections will receive antibiotics.
  - In children, vomiting and diarrhoea are almost never treated with drugs to stop vomiting (called antiemetics) or antidiarrhoeals.

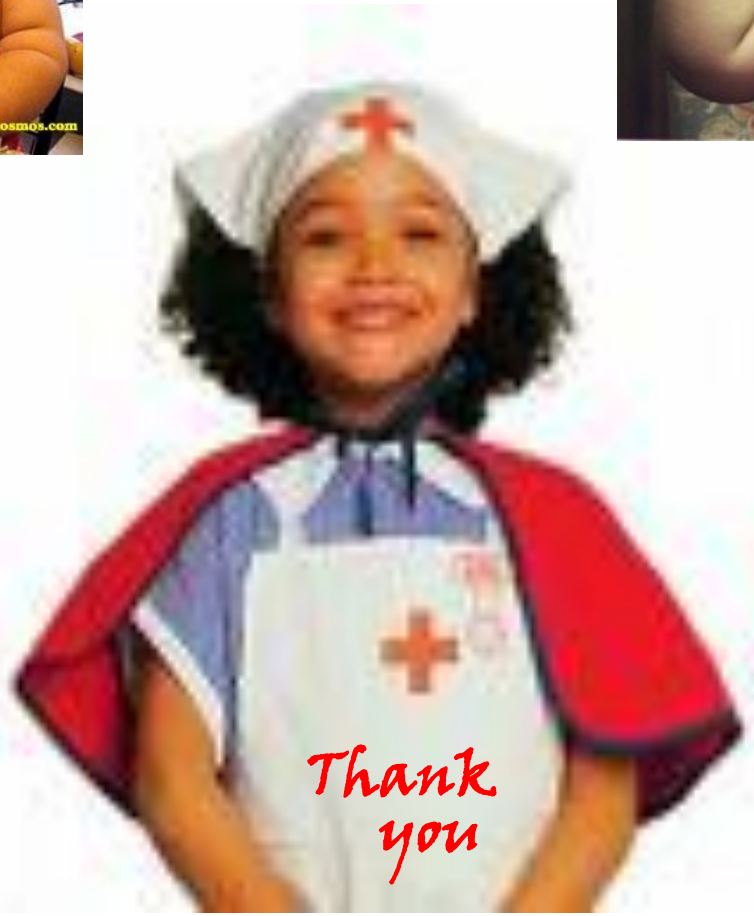


Finally

When in doubt, seek expert help or advice!


www.StrangeCosmos.com

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