

An educational guide by



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# Eat Right, Grow Right

### The Guide To Growing Right

#### **Panel Of Experts:**

#### Chairperson:

Dr Tee E Siong is a Nutritionist and President of the Nutrition Society of Malaysia (NSM). He is actively involved in several community nutrition promotion programmes. Dr Tee is Nutrition Adviser to the Food Safety and Quality Division of the Ministry of Health Malaysia. He is also Scientific Director for the International Life Sciences Institute (ILSI).

#### **Panel Members:**

Roseline Yap is a Nutritionist and Member of the Nutrition Society of Malaysia (NSM). She is a Lecturer in the Food Science & Nutrition Department of UCSI University.

Assoc Prof Dr Faudziah Abd Manan is a Binocular Vision & Vision Therapy Specialist at the Department of Optometry, Faculty of Allied Health Sciences, Universiti Kebangsaan Malaysia.

Ani Mazlina Dewi Bt Mohamed is a Physical Educationist and Head of Programme of the Physical Education & Health Department, Faculty of Education, at Universiti Teknologi MARA.

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# Introduction

Every parent wants the best for his or her child. Yet, some parents wonder if they are doing enough to ensure that their child gets the best out of their growing years.

With this in mind, we have created the 'Eat Right, Grow Right' Guide, a simple yet comprehensive booklet which will serve as an easy reference for parents, teachers and caregivers. Our emphasis is nutrition and a healthy lifestyle as key factors in the overall growth and development of a child, particularly in the growing years of four to fourteen.

This is the phase of the growing child that is sometimes overlooked, as children become relatively less reliant on their parents compared to their earlier formative years. As this phase in life is the prime period for learning to take place, it is important for parents and teachers to know what are the developmental milestones and what can be done if they are not met.

The 'Eat Right, Grow Right' Guide includes indicators and parameters for parents, teachers and caregivers to assess and guide the development progress of their charges. Aspects covered in this booklet include physical growth, healthy eating habits, eye sight, physical fitness and emotional development.

We believe that this booklet will be useful in providing practical tips in promoting healthy eating habits to ensure that your child grows right and develops well.

# **Dr Tee E Siong, KMN**President Nutrition Society of Malaysia



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# **Teating Right**

Eating right is the key to your child growing right, bright and healthy

The old adage still rings true- you are what you eat. Knowing what to feed your child alone is not enough; every parent and caregiver ought to make wise choices on the amount, variety, preparation method and eating environment.

Good nutrition allows your child to grow right, to achieve optimal weight and height. It allows him to grow strong and be healthy. Good nutrition also enables your child to be alert and increases his learning potential. Long-term effects include decreased risks of health problems during adolescence and adulthood.

The 10 practical tips given in the table below are guides to healthy eating for your child. Do try them out!

	Tip	What is it?	Top picks	
1	Variety, variety, variety	Having a varied diet ensures your family gets all the necessary nutrients for healthy growth. It also breaks the monotony of having the same food all the time!	<ul> <li>Have 3 different coloured dishes at each meal</li> <li>Mix and match food as you would with your attire</li> </ul>	
2	Make breakfast a priority	Studies have shown that children who have breakfast concentrate better and are more active in school.	<ul> <li>Cereal or cookies with milk or malted milk</li> <li>Egg with bread or toast with peanut butter, butter, kaya or jam</li> </ul>	
3	Inculcate healthy food choices  You are your child's role model. Show, not just tell, your children what are healthy food options and why and how to make wise food choices.		<ul> <li>Choose fresh foods more often, and reduce processed foods</li> <li>Home-cooked vs outside food</li> <li>Train your children not to be influenced by attractive advertising materials, to read food labels and learn about the nutrient content of foods</li> </ul>	

	Tip	What is it?	Top picks
4	Make eating fun	Children learn more when they are having fun. Involve them in the buying, preparing, cooking and cleaning!	<ul> <li>Be creative with food presentations</li> <li>Cut shapes with carrots and potatoes</li> <li>Rotate the menus and recipes often</li> <li>Turn off the television and share stories with each other</li> </ul>
5	Ensure ready supply of healthy snacks	At their developmental stage, children are constantly hungry. Have healthy snacks handy at all times!	<ul><li>Biscuits without cream and sugar</li><li>Fruit cutlets</li><li>Popcorn</li><li>Yoghurt</li></ul>
6	Care for your bones	Our bones continue growing from the time we are born until the age of 30 when it reaches what is known as peak bone mass. Having strong bones must begin at childhood to prevent osteoporosis in later life.	<ul> <li>Include milk and malted drinks into daily diet</li> <li>Cheese slices</li> <li>Ikan bilis, soya bean products (e.g. soya bean milk, tau-kua)</li> <li>Beans and dark leafy vegetables</li> </ul>
7	Ensure enough fibre intake	Dietary fibres are the non-digestible components of plants. They provide health benefits including helping in digestion and bowel movement. Fibres also make one full faster and reduce the chances of over-eating.	<ul> <li>Legumes (various beans and products)</li> <li>Grains and products (e.g. high fibre bread, biscuits)</li> <li>Fruits, e.g. guava</li> <li>Green-leafy vegetables, e.g. spinach</li> </ul>
8	Less sugar, less salt	Excessive salt is linked to high blood pressure and other health conditions, while excessive sugary foods increase calorie intake and are associated with dental caries.	<ul> <li>Plain water vs sweetened drinks</li> <li>Natural flavourings such as herbs and spices</li> </ul>
9	Inculcate a healthy eating culture	There is nothing wrong with enjoying food, but avoid bribing or rewarding your child with food, which may lead to the habit of comfort eating in adulthood.	<ul><li>Eat together</li><li>Eat slowly</li><li>Eat only when hungry and stop eating when 70% full</li></ul>
10	Respect your child's decision not to finish his food	Force-feeding makes eating pressurising and unpleasant, and may result in your child dreading meal-times	<ul><li>Start with smaller portions</li><li>Offer a mini – meal every few hours</li></ul>













#### **Building Strong Bones and Muscles**

Children need strong bones and muscles in order to stay active and sharp. To strengthen bones, increase intake of high-calcium products such as milk and dairy products including malted milk drink, Ensure your child gets enough Vitamin D from the sun to maximise absorption of calcium. On top of that, exercise is crucial for building strong bones and increasing muscle strength.

#### Pictorial guide to healthy eating

The Food Guide Pyramid is a guide to what foods to take each day, and in what amounts. Use the children's pyramid below to help you select the type and amount of foods your child needs each day.



# Food Guide Pyramid For Children

#### Malted milk- more than just milk!

Malt is made from sprouted grain, usually barley, that is brewed and distilled. Original non-flavoured malted milk, made from a combination of whole milk, malted barley and wheat flour, is high in calcium, iron, folic acid, Vitamins A, B, C and D, making it a healthy, natural and caffeine-free snack and drink for children and adults alike!

#### **Food Hygiene and Safety**

Apart from choosing the right food for their nutritional value, food preparation and cooking methods should not be ignored as they play an important part in preventing food borne diseases. According to the World Health Organization, more than 200 diseases are transmitted through food. Here are the WHO's five keys to safe food:

Keep Clean - Wash hands before and after food preparation and after using the toilet.

**Separate raw and cooked** – This applies to both foodstuff and food containers, even when refrigerated. Utensils for raw and cooked foods should also be kept separate.

**Cook thoroughly** – Meat, poultry, seafood and eggs should be cooked thoroughly, whereas reheating must be carefully done to prevent cold pockets where bacteria can survive.

**Keep food at safe temperatures** – Cooked food should not be left at room temperatures for more than 2 hours as bacteria can multiply quickly at room temperature. Serve food hot as much as possible. Frozen foods should best be thawed in the refrigerator.

**Use safe water and raw ingredients** – Select fresh and wholesome foods and wash all fruits and vegetables thoroughly before consumption. Use safe or treated water for cooking and food preparation.

#### Spot the Allergy!

Certain foods such as peanuts and seafood can cause allergies in some children. Bring your child to the emergency department if your child displays signs of a food allergy such as:

- Tingling in the mouth
- Hives, itching or eczema
- Swelling of the lips, face, tongue or throat
- Wheezing and trouble breathing
- Nausea, vomiting, diarrheoa or abdominal pain

If your child experiences all of the above and also has a weak pulse, dizziness and fainting, bring him to the emergency department immediately as he could be suffering from anaphylaxis, a severe and life-threatening allergic reaction.



# **Right Weight For Height**

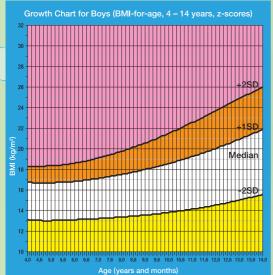


A simple, practical and yet effective way to determine if your child is growing right is to monitor his weight and height regularly

In the olden days, parents marked each child's height on a wall with each birthday to determine how much taller they have grown over the year. It is not different today. At some point in time, most parents would have wondered if their child is growing right.

Today, we have better tools and indicators to monitor growth of our children. In this Guide, we are adopting the Body Mass Index (BMI) for-age charts recommended by the World Health Organisation (WHO) to determine whether a child is growing at an appropriate pace.





BMI Categories
Obese
Overweight
Normal
Underweight

Use the full-size charts at the end of this booklet to monitor the weight and height of your child

#### Get the right height:

- Remove footwear
- Stand up straight with shoulders level
- Hands at side
- Look in front
- Place body flat against measuring board
- Measuring tape to be placed firmly on top of head

#### Weigh it right:

- Have a weighing scale at home
- Weigh at the same time of the day
- Ensure pointer is at zero before weighing
- Wear light clothes
- Remove shoes and things from pockets



### Info Box



The BMI is calculated as:

Weight <kg>

Height <m> x Height <M>

An example:

Child's weight: 20kg

Child's height: 105cm or 1.05m

BMI = 20kg

1.05m x 1.05m

 $BMI = 18.1 \text{ kg/m}^2$ 



#### Check against the BMI chart to determine if your child is of the right weight and height for his age:

- Note your child's age on the horizontal axis and draw a vertical line upwards
- Note your child's BMI on the vertical axis and draw a horizontal line to the right
- Place a dot with a circle at the points where the two lines meet
- Check if the dot is within the desirable weight

The example above shows that your child is within the healthy weight range.

Chart your child's growth every 6 months



#### Seek advice from a doctor, nutritionist or dietitian if:

- Your child is in the overweight, at risk of overweight or underweight range
- There is a sharp increase or decrease in BMI compared with the previous measurement



#### Too much or too little?

Appropriate nutrition is the key to growing right. Insufficient intake of nutrients will result in under-nutrition problems whilst excessive intake of nutrients, especially energy, will bring about over-nutrition problems. Both under and over nutrition are termed as malnutrition.



	What is it?	What are the implications?	
Under-nutrition	When dietary requirements are not met	<ul> <li>Excessive weight loss</li> <li>Increases occurrence of infectious diseases such as coughs and colds</li> <li>Long-term health consequences in later life</li> </ul>	
Over-nutrition	Excessive energy intake which is not balanced by physical activity	<ul> <li>Closely linked to overweight or obesity</li> <li>Increases risks of getting hypertension, cardiovascular diseases, stroke, musculoskeletal disorders such as osteoarthritis, certain types of cancer (endometrial, breast and colon) and diabetes at an earlier age</li> <li>Possibility of premature death and disability in adulthood</li> </ul>	

#### Is Your Child A Statistic?

Worldwide figures for child malnutrition are staggering. The WHO estimates that there are 170 million underweight children globally, 3 million of whom will die each year.

Conversely, 20 million children under the age of five and over a billion adults are believed to be overweight. 2.6 million people die each year due to complications of being overweight or obese.

Closer to home, the Third National Health and Morbidity Survey 2006 conducted on 21,000 children aged below 18 years showed that 13.2% of Malaysian children are underweight, while 5.4% are overweight and 15.8% have stunted growth.

While the situation in Malaysia is not as bad as some regions of the world, it is still important to monitor the growth of our children to ensure proper growth and development.





# **Be Fit, Not Fat!**

Keeping your child physically active and fit is just as important as eating right

Physical exercise is an important aspect of daily life. With rising rates of obesity and increasing sedentary lifestyles among children and adolescents today, parents and teachers need to play an important role in ensuring children get enough physical activity daily.

#### Being physically active helps:

- Strengthen cardiovascular system including the heart and lungs
- Develop healthy bones, muscles and joints
- Improve body coordination and movement
- Maintain healthy body weight and prevent obesity
- Increase self-esteem and reduce anxiety or depression



## Do

- Be a good example! Being physically active yourself shows your child that it is cool to be fit and trim.
- Make physical activity a family value. When choosing gifts, opt for a bicycle, set of badminton racquets, swimsuit or jogging shoes over computer games, a branded watch or trendy bag.
- Allocate an hour daily to physical exercises. Going for a brisk walk, playing badminton, having a swim or jog are some examples.
- Introduce age-appropriate exercises. Being realistic about what your child can do at his age will keep him interested in exercising for a longer time.
- Keep your child properly hydrated. Exercise can deplete liquid resources quickly in your child, so ensure he drinks adequate amount of water before, during and after exercise.

# Don't

- Encourage or allow too much sedentary activities. Limit the time spent on television, computer or video games
- Push your child's limits. Allow them to stop when they are tired and don't encourage exercise if they are unwell
- Be afraid to try different physical activities! Even getting them to help wash the car, do gardening or housework can help them stay fit physically and mentally!



#### Level 4

#### **Occasional**

Examples: Playing video & computer games, watching tv, online chatting, etc



### Level 3

#### 2-3 times a week

- a) Stretching, push ups/curl ups
- b) Shopping with parents, swinging



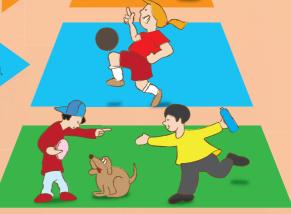
#### 3-5 times a week

Examples: Running, cycling, swimming, badminton, volleyball, basketball, football, swimming etc

### Level 1

#### Daily, as often as possible

Examples: Walking to class, playing outside, taking the stairs, picking up your toys, walking your dog





#### Play Safe!

Most children forget about safety when they are at play. Make safety a top priority with these tips:

- 1 Is your child ready? This includes ensuring your child is physically, emotionally and psychologically ready for a particular activity.
- Is the environment safe? Choose parks, courts, playgrounds or kiddy gyms with well-maintained facilities and equipments.
- Is the activity robust? Provide protective equipment such as helmets, wrist pads or knee pads where necessary.
- Are you comfortable with the other players? Trust your gut instinct remove your child from his playmates if you feel they are excessively aggressive or have the possibility of being a bad influence on your child.
- Is there help available during emergencies? Children need adult supervision when they are at play either indoors or outdoors. Ensure there is a leader who knows what to do and who to call in case of emergencies.
- Ooes your child have basic first aid knowledge? It's never too early to teach your child simple first aid tips such as cleaning a wound, using protective plasters or applying pressure to stop bleeding. Older children can even be taught emergency resuscitation.





# **Vision 20/20**

Good nutrition and proper eye care are vital for developing and maintaining perfect sight for your child

Having good sight is paramount for children at all stages of development. Being able to see well provides them with a wide scope of exposure, so as to allow them good absorbance of their daily experiences for continual childhood learning processes. It also helps them read, communicate and understand better, which helps in the total development of a child, especially in academic performance.

It is important to detect the presence of any visual anomalies in children as early as possible and to seek treatment accordingly. There are many visual defects and childhood blindness that are treatable if they are detected and treated appropriately.

The mode of treatment can be in the form of:

- Visual aids such as glasses, contact lenses and magnifying devices
- Vision therapy to restore visual performance
- Eye exercises to improve the teaming accuracy of the eyes
- Strengthen eye muscle control
- Surgery to correct a squint

Knowing your options can make an entire world of difference for your child as poor eyesight will mar one's potential and affect self-esteem in the long term.



Eye problems don't happen overnight. The problem is that a child with visual problems usually does not complain. Look out for these warning signs:

- Narrowing the eyes when looking at distant objects
- Constantly rubbing the eyes
- Excessive blinking and tearing
- Sitting too close to the television
- Holding a book too close to the eyes
- Closing one eye when outdoors or in bright light
- Red eyes
- Avoiding school work
- Reported painful eyes
- Abnormal eye movements
- Squint

Apart from that, check your family tree to see if you or your spouse wore glasses before the age of ten. If either one of you did, chances are your child probably may need them too. The same applies for children who were born prematurely. It has also been reported that the incident of squint eye also runs in the family.

So, if you notice any eye abnormalities in your child, if there is any one in the immediate family who wore glasses at a young age or has a squint, or if the child is a premature baby, get your child's eyes checked by an ophthalmologist or an optometrist.

Good nutrition is also crucial for development of good eyesight.

Please refer to the previous chapter on Guide to Eating Right on what constitutes a balanced diet.

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#### **Eye Care Tips**

Apart from providing the necessary nutrition for good sight, here are some tips to keep your child's eyes sparkling for a longer time:

- Does he spend a lot of time in the sun? Provide him with UV protection sunglasses or sun visors.
- Does he read or do homework at night? Ensure the lighting is sufficient to prevent eye strain.
- Is he addicted to computer games or television? Encourage your child to break away from the screen every hour to rest his eyes, or better, get him outdoors to sweat it out!
- Does he swim or play contact sports? Provide safety goggles to protect the eyes from accidental injuries.
- Does he have poor eye habits? Draw a line which is the nearest he can get to the television and discourage him from reading when lying down.

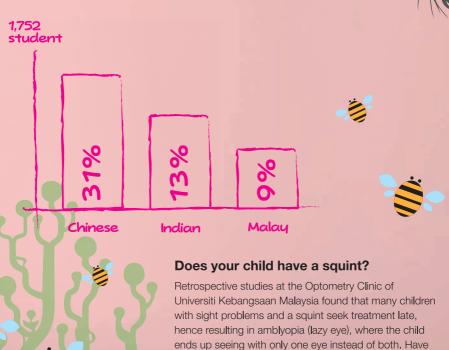


#### Does your child need glasses?

A 2003 study among 1,752 schoolchildren between the ages of seven and nine by the Ministry of Health Malaysia and Universiti Kebangsaan Malaysia revealed that most children who wore glasses were mostly for myopia or short-sightedness.

The study also showed that 31% of Chinese and 13% of Indian children have myopia, compared to about 9% of Malay students. Have your child's eyes checked to see if he is one of them!





your child's eyes checked as early as possible if you

notice your child has a squint!

# Know Your Child 🧼



#### Meeting the emotional needs of your child is equally important

In order for parents, teachers and caregivers to assess whether a child is growing at the right rate, they need to care for the child. This is where bonding is essential. Having a bond with the child prompts the adult to monitor the child's progress and growth, a long term process which requires commitment.

Bonding should ideally start at birth, but it's never too late if you have not already started. It may come naturally to some people, while others may need more time and effort. Here are some tips to get started:

1 Spend quality time together- Find common interests and spend time enjoying it with your child.

Nutrition tip: Share your favourite healthy food choices with your child, such as nuts, salads, or sandwiches. Get your child involved in cooking and cleaning afterwards as exercise!

2 Establish routines or rituals- Sunday walks in the park, fishing trips during school holidays, going to the beach every month... routines like these provide your children with a sense of security and belonging.

Nutrition tip: Children love food-related routines! This can include making spaghetti every weekend, going for the best 'roti bakar' every time you visit a certain village or simply going to the same stall for your fresh vegetables every Saturday.



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- Make bedtime special- Spend a few minutes at the end of each day to talk, read or simply to tuck your child in. Even a simple kiss on the forehead or stroke on the forehead will provide the assurance of your love!

  Nutrition tip: Food should not be encouraged two hours before bedtime, but a class of
  - Nutrition tip: Food should not be encouraged two hours before bedtime, but a glass of warm malted milk can help calm your child and help him sleep better.
- Who are his friends? Investing time in emotional development is as important as keeping a bank account for a growing child.

Nutrition tip: Invite his friends over during weekends and for parties or gatherings. You can actually find out more about your child's likes and dislikes from his friends – so prepare a lovely spread of healthy food!

Be a hands-on parent – Seeing you do things in the home encourages them to do the same. So roll up your sleeves and do some housework yourself!

Nutrition tip: Pay more attention to family meals and routines. If you don't cook regularly,

have occasional spot checks on the person who prepares the family's meals.

#### Red Flags - Warning Signs You Cannot Ignore

	What's normal	What's not	What can help?
Change in sleep patterns	7 – 10 hours of sleep every night	Difficulty in falling asleep or waking up, daytime sleepiness	A glass of malted milk or milk at bedtime can help sleep. Increase Vitamin B-rich foods such as grains, soybeans, peas, fish, lean meat, broccoli, dairy products for day time concentration
Changes in skin, hair and nails	Hair, skin and nails regenerate themselves within 3 weeks	Hair, skin and nails look dull. Abnormal appearances occur such as rashes on skin or colour changes in hair and nails	Introduce more Vitamin A-rich foods such as broccoli, spinach, turnip greens, carrots, sweet potatoes, pumpkin, apricots and dairy products
Change in bowel movements	Going to the toilet daily	Difficulty in passing motion and reduced urination	Increase fluid intake and consumption of fibre-rich fruits and vegetables

# 6 Is Your Child Growing Right?

Nutrition is the key to all aspects of good growth in a child, as our 'Eat Right, Grow Right' Guide has shown. Eating right will give your child the right height for weight, physical strength to stay fit and good vision for learning and discovery.

Apart from providing good nutrition, your child's emotional and psychological development is also an important aspect of healthy growth. For wholesome growth of your child, here is a summary of all the chapters that have been covered in this Guide:

#### **Eat Right, Grow Right**

- · Good nutrition is key to good growth
- Apart from healthy food choices, the right amounts and preparation methods are also important
- Good growth is not only measured in tangible terms of height and weight but also in intangible aspects such as having strong bones and muscle development

#### **Right Weight For Right Height**

- Check your child's BMI and growth regularly
- Ensure your child has the appropriate weight and height for his age

#### Be Fit, Not Fat

- Exercise is a vital aspect of healthy growth. Being active keeps your child healthier and happier
- A sedentary lifestyle is a precursor to obesity and other health conditions in later life
- Be creative with physical activity, with a good combination of structured sports and free play





#### Vision 20/20

- Good sight is paramount for a child in his growing years and learning processes
- Early detection and treatment of vision problems can save your child's sight
- Inculcate good eye care habits in your child from young

#### **Know Your Child**

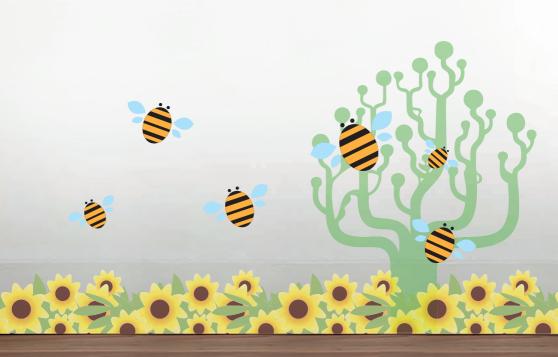
- Spending time with your child allows him to feel secure and confident
- Having a close bond with your child helps him grow into a well-adjusted adult with good dietary habits
- Poor nutrition will manifest itself physically and emotionally. Being close to your child will help you notice abnormalities such as weight loss or gain and changes in hair and nails

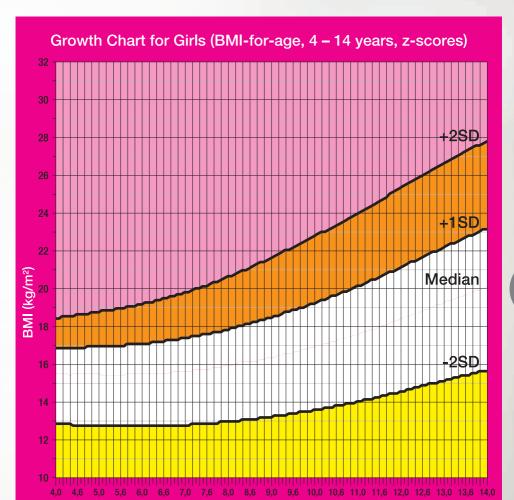


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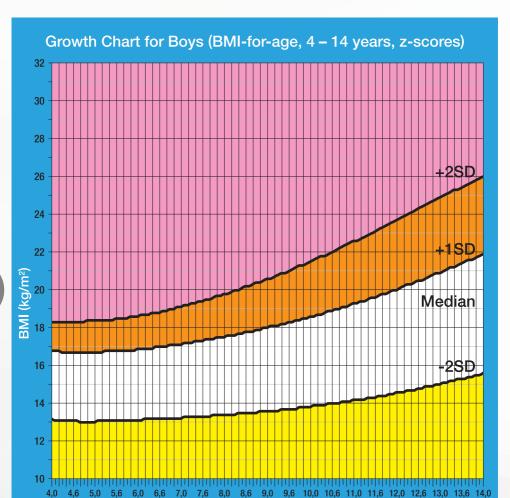
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Age (years and months)





Age (years and months)



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