



## New growth standards can help prevent childhood obesity

The new WHO growth curves provide a single international standard that represents the best description of physiological growth for all children from birth to five years of age and establishes the breastfed infant as the normative model for growth and development. These Standards will be an effective tool for detecting obesity as they allow for earlier diagnosis of excessive weight gain. The current obesity epidemic in many countries would have been detectable earlier had this new standard been available 20 years ago.

**See inside for more details.**

### Is your health workplace supportive of breastfeeding by staff mothers?

Let staff, service users and others know of the supportive environment by participating in the *HPH/BFHI Breastfeeding Supportive Workplace Initiative for Health Care Facilities*. There are Bronze, Silver and Gold level awards to achieve and proudly display.

An award is valid for two years, so if your hospital award is out of date reapply. This is a staff health promotion project and any health care facility can participate. There does not need to be a maternity unit in the hospital. Information is available on the BFHI Ireland web site or from the HPH office.

A breastfeeding supportive workplace has benefits for the baby, family, employer, and the whole community including the tax payers.

Find out more about the award today!



### 3<sup>rd</sup> All Ireland HPH NATIONAL CONFERENCE

*“HPH at the forefront of change”*

19<sup>th</sup> & 20<sup>th</sup> October 2006, Ferrycarrig Hotel, Wexford

This conference will seek to explore and share knowledge on how HPH activities can contribute to organisational development and health gain, in relation to current changes in the health care system.

*BFHI Networking Session on the 19th*

Deadline for Registration October 14th

Information from Irish HPH Network, c/o Connolly Hospital, Blanchardstown, Dublin 15, Tel: 01-6465077, info@ihph.ie



**Focus in this issue:  
Infant Weight Gain**

## **Why are there new WHO growth standards?**

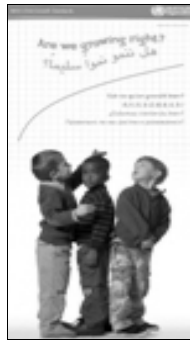
The growth references that have been in use described how children grew in a particular region and time. These charts suffered from a number of technical and biological drawbacks.

Some growth references were based on formula fed children and did not reflect the biologically normal exclusively breastfeeding infant.

Since the growth patterns of formula-fed children differ from those of breastfed children, the use of previous standards had raised concerns about 'overfeeding' infants in an attempt to match the development of unnaturally heavy children.

The WHO multi-country Growth Reference Study involved the recruitment of children in 6 countries representing different regions of the world: Brazil, Ghana, India, Norway, Oman, and the United States. The 8,440 children included in the study were raised in environments that minimised constraints to growth such as poor diets and infection. In addition, their mothers followed health practices such as breastfeeding their children and not smoking during and after pregnancy.

The new growth curves are expected to provide a single international standard that represents the best description of physiological growth for all children from birth to five years of age and to establish the breastfed infant as the normative model for growth and development.



## **How will these growth standards make a difference?**

They are *standards* developed from a large global data set of healthy breastfed children rather than *observations* of a small local group of mixed feeding infants. The new standards prescribe how children *should* grow in all countries rather than merely describing how they grew at a particular time and place.

The study's results show that:

- it is not the breastfed infant who is not growing well, but the formula fed infant who is fed too much and consequently grows too quickly.
- the daily energy intake for babies should be about seven per cent less than current levels. Energy content of formula will be reduced to bring intake more in line with that of breast-feeding babies.
- the differences in growth rates and patterns between exclusively breastfed and formula-fed infants become evident at the early age of two to three months.
- the previous standards based on formula-fed children put a one year old between 22.5 lbs and 28.5 lbs, whereas the healthy breastfed infant weighs in at between 21 to 26 lbs.
- the existing weight guidelines for two and three-year-olds were 15 to 20 per cent too high - contributing to overfeeding and obesity.

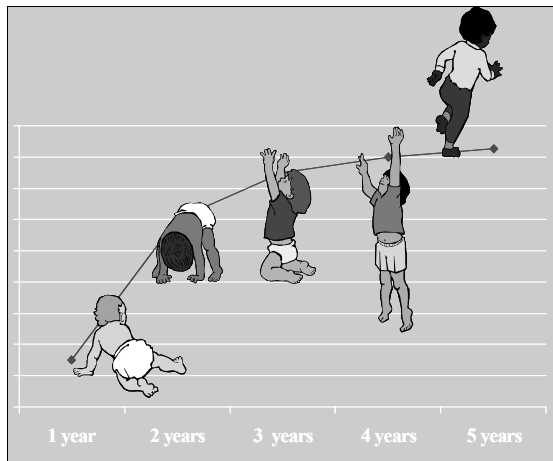
**Importantly the Growth Standards will reduce the practice of supplementation or "topping up" with formula feedings, based on the frequently held misconception that breastfed babies did not grow fast enough, a misconception re-enforced by inappropriate growth standards.**

**Supplementation or early cessation of breastfeeding has been shown to contribute to overweight and obesity in childhood and adolescence; a condition that acts as a trigger to subsequent increased risk of obesity, diabetes and cardiovascular disease in adult life.**

**Thus eliminating the practice of formula supplementation and early weaning onto formula feeding will have the potential to help reduce the current obesity epidemic.**

These standards also include new innovative growth indicators beyond height and weight that are particularly useful for monitoring the increasing epidemic of childhood obesity, such as the skinfold thicknesses. The development of accompanying windows of achievement for six key motor development milestones will provide a unique link between physical growth and motor development.

More information can be downloaded from <http://www.who.int/childgrowth/mgrs/en/> including the charts, endorsements from health organisations, training materials and full reports of the development process of the growth references.



### What if the mother says she “doesn’t have enough milk”?

1. *Decide if the baby is getting enough milk or not.* Reliable signs are output: baby urinates at least 6 times a day and has soft yellow stools (after the first few days) and weight gain: regains birth weight by 14 days and gains 500 gm or more a month (first six months). If the weight/output are ok, reassure the mother and discuss why she feels there is a problem.
2. *If baby is not getting enough milk, decide why.* Is the baby ill: infection, reflux, or increased energy needs, may affect weight. Check feeding: Is baby well attached, feeding frequently, feeding for as long as baby needs, and no pacifier, water or other foods given? Check mother’s health: is she ill? Is stress affecting the way that she cares for her baby?
3. *Decide how best to help the baby and mother.* Build the mother’s confidence. If needed, improve attachment at the breast and feeding management. Follow-up daily until weight starts to increase and then weekly until mother is confident and weight gain is satisfactory.

*Suggesting a bottle of formula as a quick solution can be harmful to both the baby and mother.*

### What does a growth chart tell you? And what does it not tell you?

- A growth chart with multiple measurement points can show how a child has grown in the past months and how this relates to a population of children. However, one measurement point cannot provide definitive information on the growth of a child.
- Weight-for-age is one indicator of growth. Head circumference, length/height, and development are other indicators. There is a need to look at the whole picture. If the child is developing well, alert and with no signs of illness, does slow weight gain constitute a clinical concern?
- Centiles indicate the percentage of the children below that line in the population which was used to construct the chart. For example, a 15th centile means that 15% of that population were below that line. It doesn’t mean that this line is a good or bad place to be. In any large mixed population there will be a variety of sizes of people. What matters for the individual child is the shape of the line made from their own measurements and if it markedly rises or falls across centiles.
- Centile lines are smoothed. They don’t tell you about the normal ups and downs. For example, for a baby born at 4 kg and is 4 kg at 2 weeks, the impression may be that the baby gained no weight, whereas in fact the baby may have gone down to 3.6 gm at day 4 and then gained 400 gm in 10 days - quite a good weight gain.
- Growth charts assume the measurements are accurate. Accurate measuring takes suitable equipment and training. Readings on different scales or by different people are likely to differ. Some babies are weighed naked, some with nappy and vest and some fully clothed, some before a feed and some after a feed. A scale that bounces around in a car is unlikely to be accurate. Even a fixed scale should be checked regularly.

#### Further Reading

Sachs M., Dykes F. & Carter B. (2005) Weight monitoring of breastfed babies in the United Kingdom – centile charts, scales and weighing frequency. *Maternal and Child Nutrition*, **1**, 63–76.

Sachs M., Dykes F. & Carter B. (2006) Weight monitoring of breastfed babies in the United Kingdom - interpreting, explaining and intervening. *Maternal and Child Nutrition*, **2**, 3-18.

de Onis M, Garza C, Onyango AW (2006) WHO Child Growth Standards. *Acta Paediatrica* 95:S450, 1–104

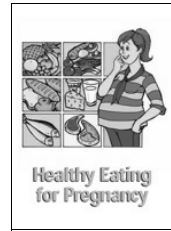
“Not enough milk” (1996) Helping mothers who complain of “not enough breastmilk”. *UPDATE*, N 21 [http://www.who.int/child-adolescent-health/publications/NUTRITION/Up\\_21.htm](http://www.who.int/child-adolescent-health/publications/NUTRITION/Up_21.htm)

Information in this newsletter refers to the population of healthy, full-term infants and healthy mothers, unless stated otherwise. The information may need to be individualised, particularly for infants and mothers with special needs.

**The National Breastfeeding Week campaign theme is *Families Supporting Breastfeeding*.**

Campaign Resources will be available through the regional HSE Health Promotion Departments including:

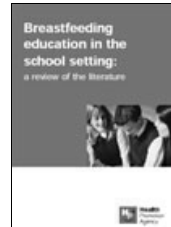
- A poster and information leaflet addressing the campaign theme of providing information to partners and new grandparents.
- The Pregnancy Calendar , originally developed by the Breastfeeding Committee in the former ECAHB, has been up-dated and is being re-issued for use nationally. It is envisaged that a copy of the calendar along with a copy of the Healthy Eating in Pregnancy leaflet will be given to all expectant mothers when they book for antenatal care with the maternity services.
- The HPH BFHI leaflet *Breastfeeding Your Baby* is also being re-printed.



**New publications from the Health Promotion Agency, Northern Ireland**

***Breastfeeding education in the school setting: a review of the literature* (June 2006)**

This document aims to highlight opportunities and approaches to breastfeeding education in schools. It examines the policy context and summarises the research evidence and current practice, and points to available resources and pilot projects. It makes suggestions for incorporating breastfeeding into the curriculum and concludes by offering recommendations for action. 20 pages.



***Bottlefeeding* (Feb 2006)**

This 16 page booklet provides new safety information on the preparation and storage of infant formula milk and is aimed at minimising the risk of infection from bacteria which may sometimes be present in the milk powder. It explains how to sterilise feeding equipment and make up formula milk, and highlights the safety precautions which need to be observed. To be used with formula feeding mothers post-natally as needed.

Download these materials from <http://www.healthpromotionagency.org.uk/Resources>



**As well as promoting breastfeeding and supporting mothers, remember to also protect breastfeeding.**

This means abiding by the International Code of Marketing, maternity legislation, anti-discrimination laws and other protections.



25 years of the International Code of Marketing is the WABA theme this year. To mark this, ILCA have produced this heart-shaped badge. [www.ilca.org](http://www.ilca.org)

BFHI Link is written by Genevieve Becker, National Co-ordinator of BFHI, and reviewed by members of the BFHI Advisory Committee.

**We welcome your news and suggestions.**

Contact the BFHI Co-ordinator, c/o Health Promoting Hospitals Network, Connolly Hospital, Blanchardstown, Dublin 15, email: [bfhi@iol.ie](mailto:bfhi@iol.ie)  
Web site: [www.hphallireland.org](http://www.hphallireland.org) then go to Links



**Diary Dates**

- Oct 1<sup>st</sup>-7<sup>th</sup> **National Breastfeeding Week** including Conference Oct 6th, Dublin.
- Oct 7<sup>th</sup> **Association of Lactation Consultants in Ireland, Study Day, Weight gain and growth charts.** Dublin. Contact: [alci@iol.ie](mailto:alci@iol.ie)
- Oct 19<sup>th</sup>-20<sup>th</sup> **Health Promoting Hospitals National Conference.** Wexford Contact: 01-6465077
- March 10<sup>th</sup> – 11<sup>th</sup> **La Leche League of Ireland Annual Conference,** Westport, Co.Mayo. Contact: 021 4776197
- May **Breastfeeding Week UK** for events in Northern Ireland see [www.healthpromotionagency.org.uk](http://www.healthpromotionagency.org.uk)
- Aug 1<sup>st</sup>-7<sup>th</sup> **World Breastfeeding Week.** Information: [www.waba.org.my](http://www.waba.org.my)
- Aug 15<sup>th</sup>-19<sup>th</sup> **International Lactation Consultant Association Annual Conference,** San Diego, USA. Contact: [www.ilca.org](http://www.ilca.org)

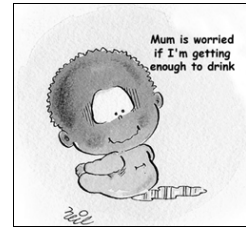
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## Do I have enough milk?

### Look at your baby:

- Does your baby look healthy: is he/she alert and looking around, with firm skin, and growing out of clothes?
- Does your baby have at least 6 wet nappies in 24 hours and soft yellow stools? (after the first 5 days)
- Many babies lose some weight in the first few days. Is your baby back to birth weight by 2 weeks, and then gains 250 grams or more in a two week period (in the first six months)?



If you can say yes to these questions, it is likely that you have plenty of milk for your baby.

### My baby isn't growing, what do I do?

If your baby is healthy, then look at the way feeding is going.

- *How often:* In the first few weeks, babies usually feed 10 times or more in 24 hours. If your baby feeds less than 8 times, he/she may not get enough milk.
- *How much:* Most young babies feed for 10-15 minutes or more at each feed. When they have taken enough they let go of the breast themselves. If the mother stops the feed after a short time, the baby may not have taken enough.
- *How well:* Your baby needs to be able to suck well at the breast to get enough milk. Check the baby is turned towards you, bring baby to breast, not breast to baby. Look for a very wide open mouth and the lips curled out. Baby should have a big mouthful of breast. Baby starts sucking with short sucks and these should change to long deep sucks and you notice swallowing.
- *What else:* If you give water, juice, formula, spoon feeds or if a pacifier is given instead of a feed, your baby will suck less at the breast and you will produce less milk.
- *What to do:* Feed more often or for longer if that is the problem. Ask for help to check the position and attachment of your baby. Reduce the use of formula, water or a pacifier if these are used instead of feeding the baby yourself.



The most common reason for slow weight gain in a healthy baby is related to the way feeding goes. Your health and less common reasons may be checked also. Follow-up with your midwife, nurse or lactation consultant each week until weight gain is good.

### Do you know that:

You don't need to time feeds. Watch the baby instead. Look for longer pauses between sucks and baby letting go of the breast to know when the baby has had enough.



Babies have growth spurts every few weeks and they want to feed more for a day or two. This extra sucking makes more milk.

A baby's tummy is the size of the baby's fist so can only hold small amounts of milk at a time. They need to feed often because they need to double their weight in the first 6 months.

Think how often you have something to eat or drink. Are you trying to double your weight? What would it be like if you had to wait until someone else decided it was a suitable time for you to eat or drink?

**If your baby is sleepy and does not want to feed, has few wet or soiled nappies, or has skin that feels dry and 'loose', take your baby to see your doctor quickly.**