

Information Pack

Food & Nutrition

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Feeding Your Baby

Feeding your baby

During your pregnancy you will want to think about how you are going to feed your baby. You might find it helpful to talk to your doctor or the nursing staff at your prenatal check ups. If you can attend ante-natal ("before birth") classes they will answer a lot of your questions on breast and bottle feeding, as well as prepare you for childbirth and early care of your baby. You might also like to attend a support group such as La Leche League or the Irish Childbirth Trust.

Breast or Bottle? You have a choice

There is no doubt that breastmilk is best. Medical research has shown how perfectly designed it is as a food for infants. Irish mothers are recognising more and more that they have a choice in this matter, and are turning to breastfeeding as the first choice for themselves and their babies.

Nurses and doctors involved in your care are generally very enthusiastic about breastfeeding and the benefits it yields to your baby and yourself.

The idea that you might breastfeed may be new to you. If so, do not be afraid to ask for all the information and support you need.

You and your partner might like to look through and discuss the benefits of breastfeeding listed here. Generally, fathers are supportive of breastfeeding and happy about the good start it gives their babies.

BREAST FEEDING

The benefits of breastfeeding

- Breastmilk is the natural food for infants to encourage growth and development. Breastmilk changes in composition to meet your growing baby's needs.
- Breastmilk is the most completely absorbed and digestible food for your baby. Breastfed babies rarely become constipated.
- Breastfeeding is hygienic because, unlike other foods, breast milk does not have to be prepared in special equipment which can so easily be contaminated by germs.
- Breastmilk is available at all times. There is no limit to the amount of milk a mother can produce. Supply will meet whatever your baby demands.
- Breastfeeding can promote a feeling of security for baby and a close bond between mother and baby through physical contact.
- Breastmilk helps to protect baby against infections such as Respiratory tract disease, gastroenteritis and ear infections.
- Breastfeeding may reduce the risk of developing allergies like eczema, asthma and skin rashes and general food reactions.

- Breastfeeding may reduce the risk of developing certain diseases such as celiac disease and certain bowel conditions.
- Breastfed babies are less likely to overfeed and become overweight.
- Breastfeeding helps the mother's uterus (womb) to return to its original size, and may delay the return of periods.
- Breastfeeding helps the mother to return to her normal weight after delivery by using up the fats stored in pregnancy.
- Breastmilk is a natural resource and provides a free source of nutrition for infants in the first months of life, when compared to the cost of infant milk formula.
- Premature babies have special needs and breastfeeding provides them with many advantages. Premature babies tolerate their own mother's milk more easily than formula, and it helps to protect them against serious bowel infections, such as necrotising enterocolitis.

Work out which method of feeding is best for you and your child. You and your partner will know your own circumstances and feeling best. It is your choice and whichever you choose, have confidence in your own decision.

Just one important point for first time mothers. If you choose to breastfeed and for some reason cannot continue, you can easily change to bottle feeding. However, if you decide to bottlefeed from the start it is then very difficult to switch to breastfeeding if you change your mind. Whichever way you decide, the information in this book will help answer some of your questions.

Once established, breastfeeding is a pleasure, and many mothers get great satisfaction from being able to provide naturally for their baby's nourishment. Physically and emotionally, it is the better choice for mother and child. However, it may need patience in the early days to establish a satisfactory routine for yourself and your baby. Early problems can usually be overcome.

Preparing to breastfeed - some practical hints

In recent years it has been found that the major cause of nipple soreness is incorrect positioning of the baby at the breast or improper sucking techniques. While there are still some nipple preparation routines that are suggested during the last few weeks of pregnancy, nipple preparation is no longer considered essential for successful breastfeeding.

- The normal washing routine for keeping breasts clean is all that is needed both before and after your baby is born.
- Soap may cause dryness, so use sparingly, if at all, and rinse well.
- The skin of your breasts may become dry during pregnancy. If so, apply an unperfumed body lotion or cream such as lanolin daily.

- When you start to breastfeed, the glands around the nipples secrete a substance which keeps them germ free, so there is no need to use sprays or creams.
- The baby's sucking increases the protective layer (called keratin), of the nipples, and together with good positioning, should ensure comfortable feeding.
- Do not worry about breast size or shape and suitability for Breastfeeding. Most babies manage adequately with whatever nature has provided.
- If your nipples are very small, flat or inverted, you can use breast shields during pregnancy. There are round discs with a hole in the middle which help the nipples to protrude. A nurse or doctor will advise and help you about this. Once you are breastfeeding, the sucking of your baby will help to draw out the nipples.

These steps will make breastfeeding easier when the time comes, and with other measures will help to prevent sore nipples in the early stages of feeding.

BOTTLE FEEDING

Breast milk is the perfect first food for your baby. However some mothers may decide not to breast feed. If your baby is not being breast fed then you should choose an infant milk formula. Bottle feeding can also be a warm and satisfying experience for you and baby.

Choosing the right infant milk formula

There are different types of infant milk formula. The first group is as follows:-

Aptamil,

Cow & Gate Premium,

Farleys First Milk,

SMA Gold.

These formulae have a high whey content and a low casein content. This means that they contain a good mix of amino acids, the building blocks of protein, which will allow your baby to grow well. These formulae are made from cow's milk which has been modified. Levels of minerals and vitamins make these formulae most suitable for newborn and older infants who are not being breast fed. They can be given to babies up to one year of age.

The second group is:

Cow & Gate Plus,

Farleys Second Milk,

Milumil,

SMA White.

These infant milk formulae contain more casein than whey. They are less suitable for newborn infants but could be used for older babies.

Other infant milk formulae are available, these are called "follow up" milks. They are also made from modified cow's milk with extra iron and vitamins. They are not to be used for infants under six months of age.

These are:

Farleys Follow On Milk,

SMA Progress,

Cow & Gate Step-up,

Forward (Milupa).

In general there should be no reason to change your baby from one "type" of formula to another. If bottle feeding, it is best to keep your baby on an infant milk formula which is suitable from birth to one year. If you are anxious about what you are feeding your baby, get in touch with your health professional, for example your doctor, public health nurse or dietitian.

Milk from the carton or bottle, or unpasteurised cow's or goat's milk from the farm, are **not** suitable for your new baby. This is because cow's and goat's milk are too high in protein and salt, and very low in iron. Infants fed cow's milk have a higher risk of developing anaemia (low blood iron).

Do not confuse infant milk formula with ordinary skimmed powdered milk.

If you are not breastfeeding then you should feed your baby with an appropriate infant milk formula from birth to one year of age.

Guidelines to amounts of feed your baby may take.

Every baby is different, so the amount of feed taken will vary from time to time. He/she will not always wake up exactly three hours after each feed either - so allow your baby to feed on awakening. Don't expect your baby to finish all of the infant milk formula at each feed.

The table below gives a rough guide to amounts your baby might take:

Age

Birth to 1 month	6 feeds of 3-4 oz each.	90 - 12 ml.
1-2 months	5 feeds of 5-6 oz each,	150 -180 ml.
2-3 months	5 feeds of 6-7 oz each	180 - 210 ml.
3-4 months	5 feeds of 7-8 oz each	210 – 24ml.

Feeding

This is the part to enjoy - a time to cuddle your baby close and get to know each other. Try to make it a time when you sit down, relax and make yourself comfortable.

The feed can be at room temperature or warm to the touch. To warm the feed, put the bottle in a jug of hot water to below the neck of the bottle. Do not let it stand around for longer than an hour like this, as warm milk is an ideal breeding ground for germs. Check that the milk is not too hot by shaking a few drops on the inside of your wrist.

- Feeds should not be warmed in a microwave oven as fluids heat unevenly. This could burn or scald baby's mouth.
- Hold your baby close to you and offer the teat, tilting the bottle to make sure that there is always milk in the bottle neck so that your baby is not swallowing air. For the first few months sit your baby up on your lap two or three times during a feed to allow a burp. Babies do not always have wind so do not try for too long. Have a tissue handy, as they can bring up a little curdled infant milk formula with wind.

STARTING ON SOLID FOODS

A baby grows and develops very rapidly in the first year of life. The choice of food at this stage is important in order to supply the essential nutrients needed for growth and to introduce your } baby to varied diet. Weaning is a time for the new tastes and textures of solid foods to be experienced. Wise selection of food and a relaxed attitude towards feeding can make this an opportunity to learn enjoyable and beneficial eating habits.

Babies vary greatly in their readiness to advance from on stage of feeding to the next. However it is important to introduce a variety of tastes and textures during the first year, at times appropriate to your baby.

Equipment Hygiene

Equipment used for preparing your baby's spoon feeds should be very clean. In the early days of feeding with a spoon it is preferable to sterilise your baby's feeding utensils. A plastic feeding bowl and round-edged plastic spoon are good to use and can be sterilised by chemical sterilisation.

Food Hygiene

Good food hygiene practices are essential when preparing food for your baby. Bacteria will grow quickly in food when it is kept warm for a long time or not thoroughly reheated. These bacteria can cause a tummy upset (vomiting and diarrhoea).

Tips

- Poultry and eggs should be well cooked.
- Always check the "sell by" and the "use by" dates on food. Considerable care needs to be taken when using a microwave for reheating foods for babies as it may not reheat food thoroughly. Always read the manufacturer's instruction for using your microwave.
- Do not reheat food more than once.
- Cooked food, if not for immediate use, should always be stored in the fridge.

Remember: if in doubt, throw it out

Some general hints

- It is recommended to breast or bottle feed up to one year of age.
- Previously boiled, cool water is the best drink between feeds.
- Unsweetened, diluted fruit juice can be offered at meal times.
- A friendly calm atmosphere at feeding time can save a lot of problems later. Choose a day when you are not busy to first try spoon feeding. Baby will need time to get used to this new experience.
- Let your baby's appetite determine the size of the portion. Avoid forcing baby to finish the meal.
- Babies soon want to feed themselves. Let them do this as it is an important step in their development.

However, never leave your baby alone with food because of the dangers of choking.

- Introduce one new food at a time, let baby get used to the taste.
- Be flexible. Your baby is an individual and the food ideas given in this book are just suggestions.
- Use sugar very sparingly - avoid sweet foods and sweet drinks, especially between meals, and at nap or bedtime.
- Never add solids to your baby's bottle.
- Do not add salt to baby's food. Remember that gravies, packet soups and instant sauce mixes contain a lot of salt and should not be used for baby's meals.
- Low fat milk, skimmed milk or fortified milks should not be given to children under two years of age. Skimmed milk should not be given to under five year olds.

Early stages of weaning to solids

Development

From about 4 to 5 months, your baby's hand to eye co-ordination is developing. Baby's head begins to be steadier when sitting up. Baby also wants to touch, hold and taste objects and will smile and make sounds to get attention.

Starting spoon feeds

You usually know when to start as your baby will no longer be satisfied with milk feeds alone.

There is no advantage in starting spoon feeds (weaning) before four to six months of age as your baby will be getting all he/she needs from breast or bottle feeds. However it is important to start weaning by the age of six months as your baby will need to learn to eat from a spoon. It is best to introduce a very small amount of "first food" at the beginning. Make sure it just drops off the spoon and contains no lumps. You will still be breastfeeding or giving about five infant milk formula feeds of about 7-8 oz (210ml - 240ml) at this time. As your baby begins to manage to take food from a spoon a little better you can gradually increase the amount you give and add less liquid.

You can also begin to introduce new tastes, however do this one food at a time. Each baby is different so take your time and let baby get used to this new way of feeding. Do not be upset if he/she does not accept spoon feeding the first time you try, offer it again in a couple of days time.

First foods

Here are a number of 'first foods' to use in the early stages of weaning.

- Eating apples can be stewed and as they already taste sweet you will not need to add any extra sugar.
- Soft ripe fresh fruit can also be used, e.g. pears or banana, mash well or sieve to remove lumps.
- You can use pureed fresh or frozen vegetables, remember not to add salt when cooking baby's vegetables.
- All cereals, including the baby varieties, must be gluten free until your baby is six months old. Remember all ordinary breads, biscuits and most rusks contain gluten. Each baby food manufacturer is encouraged to label their packets and jars clearly, so look out for 'gluten free' on baby foods.
- Well cooked eggs or meat can be introduced in a puréed form.
- Nutritious home prepared foods are excellent and allow your baby to get used to your own foods from the start. You will need to liquidize them first. This can be done with a sieve, or by mashing well with a fork.
- Remember foods must be free from lumps at this stage.
- Food can be prepared in bulk, frozen in individual portions and kept in the deep freeze for one month, (not in the freezing compartment of the fridge). Be very careful to defrost carefully.
- Tins or jars of baby food can be very useful, particularly when family foods are too spicy or unsuitable for baby, or when you are travelling. If you use dehydrated baby food from packets, be sure to follow the instructions and make up the food with sufficient water. Food which is left over should be stored in the fridge and used by the end of the next day.
- Choose foods with no added sugar.
- Introduce foods one at a time to allow your baby to get used to the new taste.

The next stage of weaning

Development

From about 5 to 6 months of age baby begins to turn his head freely and begins to try to help you with his/her spoon feeds.

General Hints

This stage of weaning (one to two months later) sees baby move from sieved or liquidized food to well mashed food. This coincides with normal bite development at about 5 to 6 months of age. Babies who have started on solids at 5 to 6 months old move quickly onto this next stage.

- Remember that baby's food should be gluten free until he/she is 6 months old. Choose a rice based cereal or gluten free rusk for breakfast or tea time.
- Try well mashed potato and vegetable with some sieved or liquidised meat, chopped chicken or fish for dinner. However you must be extremely careful to remove even the very small fine bones from fish.
- At this stage you will still be giving about 4 to 4 breast or bottle feeds daily. Use some of this milk to make up plate feeds.
- You can mix soft fruit into rice made with boiled water or infant milk formula from the bottle.
- You may replace a milk feed with diluted fruit juice at one meal. Use fresh fruit juice diluted with cool boiled water or commercial unsweetened juice - no squash, fruit juice with added sugar, minerals, diet drinks or tea.

Introducing lumpier textures

Development

From about 6 to 8 months baby's teeth will begin to show, now you can mash food less finely and start offering foods which will encourage baby to chew the lumps. Teeth should be brushed or rubbed with a soft, damp clean cloth once they appear.

At this stage in development baby loves being included in family situations, and also begins to learn the meaning of "No".

General Hints

- Try some porridge or breakfast cereal which mixes to a smooth consistency, using expressed breast milk or infant milk formula from the bottle feed. You do not need to add sugar.
- You may now introduce a little cow's milk from the carton or bottle to mix with plate feeds. **Some red meat, which is rich in iron should be included in baby's diet at this stage as this is a time of rapid growth requiring extra iron.**
- Use finely chopped soft meat which is easy to chew, or try lean minced meat mashed with different types of vegetable. Use water from cooked vegetables,

or milk, for mixing rather than gravies or packet soups which are very high in salt. Be careful of small bones in meats like chicken.

- Continue to breast feed or use infant formula as your baby's main drink until one year.
- Sometimes pasta, like chopped spaghetti or macaroni, can be offered instead of potato. Add a home made cheese sauce to make a good tea time meal.
- Try to make food look interesting, with different texture, tastes and colours.
- Fish is soft and easy to chew, however you must be extremely careful to remove even the very small fine bones.
- Make sure that eggs are well cooked. Try scrambled egg or you can make up an egg custard with milk.
- Yogurt, fruit or natural, can be poured over mashed soft fruit as a tea time idea. However yogurt containing nuts is best avoided as you baby could easily choke on the nuts.

Introducing finger foods and the training cup/beaker

Development

Babies will begin to crawl or "shuffle" at about 8 to 10 months. You may also see them using furniture to pull themselves into a standing position. Some babies may walk holding on to furniture or your hand, others may be older before they do this. By now baby will be copying what you do and will be looking for attention and approval.

Introducing finger foods will help the development of co-ordination and chewing. Chewing helps develop the muscles that are used for speech.

Ideas for finger foods

- Toast crusts, fingers of brown or soda bread with a little spread and rusks.
- Fish fingers or thin slices of cheese may be exciting tastes for your baby to manage for himself/herself.

Note: Chewing is a learned skill so do not leave your baby with any food until you are sure he/she can chew it and will not choke. Avoid nuts until your baby is at least six years old because of the dangers of choking.

Producing the feeding cup (Training Beaker)

Your baby needs to learn how to drink from a cup, rather than drinking from a bottle. Start with a sturdy plastic cup and make sure that the lid fits will. At the beginning it will spend most of the time upside-down in baby's hand. Some of baby's infant milk formula can be offered in the training beaker. Remember that breast feeds or infant milk formula should be used as your baby's main drink up to one year of age. Diluted fruit juice can be offered at meal times. Tea, fizzy drinks and squashes are not drinks for babies.

Family meals

Development

From 10 to 12 months of age baby is assuming his/her place and position in your home. He/She is beginning to understand words and gestures and enjoys playing games like 'hiding' and saying 'boo', or rolling a ball back and forward. He/she may react strongly to strange faces and places. He/she 'reads' pictures in books while on your knee.

Your baby is now ready to enjoy family meals. He/she is also beginning to eat using fingers and may not want help with feeding. You can always give baby his/her own spoon and use a second one to feed him/her yourself.

You can offer bite sized pieces and a variety of tastes and textures which will help baby enjoy "adult" meals.

Weaning advice for vegetarians

A vegetarian/vegan diet can provide all the nutrients your baby needs if it is well planned and varied. It is important to ensure that foods which are acceptable to you as a vegetarian are also suitable for your baby, and will allow for his/her normal growth and development.

Starting on solid foods

For all babies, weaning onto solid food is a gradual process which usually starts at 4-6 months of age. There is no need to start weaning onto a vegetarian diet at a earlier age.

Breastfeeding or infant milk formula should be continued until at least 12 months of age.

Follow the weaning guidelines already given, (see page 59).

Suitable first foods include baby rice, pureed fruit and vegetables. The weaning guidelines for vegetarian children are similar to these for non-vegetarians except that meat, chicken, fish and other animal products need to be substituted with vegetarian alternatives (see protein section below). However, special attention must be given to the energy, protein, iron, calcium and vitamin B content of your baby's diet.

Energy (calories)

Because some vegetarian diets can be high in fibre and in bulk infants and young children may fill up easily without eating enough energy-rich foods which are needed for normal growth.

- Offer frequent meals and snacks.
- Use full fat, rather than low fat products.
- Breastmilk and infant milk formula are important energy sources.
- Remember, cereals should be gluten-free to age 6 months.

Protein

Meat, poultry and fish are good protein sources. These foods need to be replaced by other protein sources e.g. pulses, tofu, cheese, yogurt, eggs, together with breastmilk or infant milk formula.

- Cook peas, beans and lentils thoroughly. They need to be pureed or liquidised initially but later can be mashed for your baby.
- Include a variety of pulses e.g. peas, beans, chickpeas, kidney beans, aduki beans and lentils.
- Spreads such as hummus (chick pea spread), tahini (sesame seed spread) and smooth peanut butter are also useful.
- Wholenuts e.g. peanuts **should not be** given to babies or young children as they can easily cause choking.
- Use vegetarian cheeses and soya yogurts if animal products are not acceptable.

Iron

From the age of 6 months an extra source of iron is needed in your child's diet. This can be met by including eggs, pulses, fortified cereals and dried fruit in the diet.

- Vitamin C helps the iron in these foods to be absorbed, so offer fruit (especially oranges, satsumas and kiwis) or citrus fruit juice at the same meal.
- Continue breastmilk or infant milk formula until at least 12 months of age.

Calcium

Calcium is needed for strong bones and teeth. Breastmilk and infant milk formula (including infant soya formula) contain adequate amounts of calcium. However, ordinary soya milks are low in calcium and are not suitable for infants and young children.

- For older children use cow's milk or a soya milk fortified with extra calcium (check the label). Infant formula, including infant soya formula, can also be used.

Vitamin B

This vitamin is only found in foods of animal origin. Small amounts are found in breastmilk and it is added to infant milk formula. A supplement may be needed if the animal products are completely excluded from the diet.

Further advice on vegetarian eating can be found in the booklet "A Guide to Vegetarian Eating", available from the Irish Nutrition Dietetic Institute.

Young Children and Healthy Eating

Some important principles of children's nutritional needs and how these differ from adults' : young children and healthy eating.

Healthy eating is important for children. They do require relatively large proportions of nutrients and calories to meet their high energy needs, for growth, body maintenance, to combat illness and enable a busy and active lifestyle.

“Healthy eating for young children” is not exactly the same as “healthy eating for adults”. Each group has different needs. Children have smaller stomachs but very high energy expenditure. They must eat smaller amounts but regularly and more often than adults.

If young children regularly fill themselves up with low-nutrient food this can affect their health and development. If they have too much fibre or eat too many foods with a high sugar and fat content, these readily fill their small stomachs and can prevent them from eating more nutritious foods in sufficient and necessary quantities.

Children require concentrated forms of high calorie foods which are also full of necessary nutrients. Young children need the nutrients and calories contained in full-fat milk and dairy products. For young children dairy fats found especially in full-fat milk products, are important high energy sources.

Why young children need a high-energy healthy balanced diet

The two main reasons why young children (and adolescents) have a significant energy requirement are because they are usually very active and simultaneously they are growing relatively fast. Many parents of older children will tell you that over the years their children have gone through some very noticeable “growth spurts”, often suddenly increasing in height or shoe size. They will also give testimony to their children's related and sudden increases in appetite, which can be especially challenging when feeding rapidly growing teenagers.

Most children quite naturally will eat what their bodies need for healthy growth and to sustain their busy active lives. Poor eating habits tend to result in a child putting on excess weight rather than gaining insufficient weight for optimum growth. It is comparatively rare to find a young child, who is offered a balanced range of foods, whose overall eating fails to meet their nutritional needs.

People who are active need much more energy than someone of the same age and gender who leads a more sedentary life.

Helping young children to develop early healthy eating habits and attitudes gives them the greatest chance to continue to eat healthily as they grow up. A healthy diet from an early age reduces their chances of developing coronary and other dietary related diseases later in life.

The Five Food groups

The concept of the Food Groups has been developed to inform people about healthy

balanced eating without requiring them to have significant or specialised knowledge about the subject of nutrition. Using this model makes it simpler to plan meals and to keep an eye on eating patterns.

Types of food are ascribed to each of the *five food groups* according to which of the *seven essential nutrients* they contain, and the nutrition they provide when digested and absorbed by the body.

The foods in each food group contain a range of nutrients but are categorized according to their largest *essential nutrient* constituent.

The Five Food Groups

Group 1 : Bread, Cereal Foods and Potatoes.

Group 2 : Fruit and Vegetables.

Group 3 : Milk and Dairy Products.

Group 4 : Meat, Fish and Alternatives - high protein foods.

Group 5 : Fat-rich and Sugar-rich Foods.

The Balance of Good Health model shows that around two-thirds of our diet should come from two groups of foods; the Bread and Cereal Group and the Fruit and Vegetable Group. The intake of food from the Meat and Alternative Group and the Milk and Dairy Group together make up the majority of the diet, with the final small proportions coming from the Fat-rich and Sugar-rich Food Group

Making the food groups model more appropriate for children

The overall messages of the *Balance of Good Health* model are relevant but the proportions of foods (shown for adults) are different from those needed by young children. Small children need less fibre and more fat in their diets than older children and adults. Adults need more fibre and less fat than young children.

Guidelines for a healthy diet for young children are to:

- Eat regular meals and snacks, including breakfast.
- Drink plenty of water.
- Eat the right *balance* of foods, which means eating foods from all of the following five food groups but in appropriate *proportions* and *quantities*.

The five food groups and how they can support the planning of nutritionally balanced eating for children.

To ensure a child's diet is healthy and is well balanced, an appropriate *proportion* of foods from *each of the food groups* should be included in what the young child eats. If possible this mix should be present every day for older children too, but realistically most children will thrive on a diet which is regularly balanced over two or three days.

How much food should a child have each day

Children's portions and daily servings

Where *recommended daily servings for children* from each of the Food Groups and *suggested portions* are shown below, the actual amount of food will need to vary according to the age and size of the individual child. Between eighteen months and eight years children's appetites, tastes, individual needs and capacities change enormously! Two fish fingers may be plenty Group 3 Food for a hungry three year old's dinner, but are likely to be viewed with dismay and disdain by a ravenous eight year old after swimming!

On the whole children do not naturally overeat. They tend to eat what they need to feel comfortably full. It is therefore crucial that adults provide children with a variety of foods which provide adequate all-round nutrition in the diet, and which do not fill them up without meeting their nutritional needs

Food Group 1: bread, other cereals and potatoes

This group consists of *carbohydrate-rich* foods, starchy, high energy foods. They naturally contain many vitamins and minerals. Foods in this group are mainly derived from cereal or grain crops and potatoes. These are often termed *staple* foods because they are commonly eaten, should form a significant proportion of each main meal and provide the bulk of our diet.

Examples of Group 1 foods include potatoes, rice, pasta, bread, breakfast cereals, pizza bases, polenta, oatmeal, couscous, millet or mealie, semolina, rice cakes, oat cakes, and crisp bread.

Foods from this group are essential energy providers and should be included in every meal. Products manufactured from these foods can make high energy snacks.

Wholemeal, wholegrains and potato skins are high in fibre. Although they contain some additional nutrients, they are filling and so should be limited for young children. Never give bran to children as it can hinder calcium and iron absorption which are critical nutrients for young children.

Five daily servings are needed from this group.

Examples of “one serving” of Group 1 Foods:

- Two tablespoons of rice or pasta.
- One small boiled potato.
- One slice of bread.
- Two small oatcakes.
- One bowl of porridge.
- One bowl of semolina pudding.

Group 2: fruit and vegetables

They are high in vitamins and minerals. Many are high in fibre. Overall they are low in fat, but some such as avocados, seeds and nuts are a source of nutritionally rich fats. Substances, such as gums and pectins, found in the plant sap of many vegetables and fruit have been linked with reducing blood cholesterol levels and in managing some aspects of diabetes. These substances also regulate the digestion of other nutrients in foods, and slow the release of food out of the stomach which help control hunger pangs.

Raw fruit and vegetables are nutritious and often enjoyed by children with meals or as snacks. Fruit and vegetable juices are nutrient-rich. Frozen vegetables are also nutrient-rich. A fruit or vegetable high in vitamin C should be included daily in a child’s diet.

The recommendation is that children need *five or six daily servings* from this group.

Examples of “one serving” of Group 2 foods:

- One piece of fresh fruit (e.g. an apple or banana).

- One fruit rich in vitamin C (e.g. a tomato, orange or kiwi fruit)
- One glass of fruit or vegetable juice.
- One green vegetable(e.g. two tablespoons of peas, grated courgettes, chopped spinach).
- Tablespoon of dried fruit (e.g. raisins, apricots, dates).
- Raw vegetable sticks (e.g. carrot, cucumber, sweet red pepper).
- Bunch of grapes or some stoned cherries.
- Two tablespoons of sweet corn.

Processing and cooking can destroy the vitamin content of fruit and vegetables. Eating them raw guards against loss of nutrients. Care needs to be taken in cooking.

Group 3: milk and milk/dairy products

This group includes cow's, goat's and sheep' milk and products made from milk. Breast milk is also included (as a baby's sole source of nutrition and during weaning). Milk made from soya beans. All of these foods are rich in protein, in saturated and unsaturated fats, calcium and milk sugars.

Examples of Group 3 Foods include Milk, Milkshakes, Cream, Yogurt, Fromage frais, Cheese spreads, Butter, Crème fraiche, Real dairy or home-made ice-cream.

Children need 1 pint of whole milk or the equivalent in cheese or yogurt, etc. for their daily calcium intake requirements. Semi-skimmed milk is only ever suitable for children over two years if their daily diet includes sufficient quantities of other full-fat dairy products. Reduced dairy fat milks and milk products, such as “skimmed”, “fat free” or “reduced fat “ are low in energy and they have a low fat-soluble vitamin capacity. They should not be given to children under five. Babies under four months should only ever be fed breast or baby formula milks. Be aware of “hidden” non-dairy fats and sugars which may be added to products, such as ice-creams and processed milk drinks.

Children need *three daily servings* from this group.

Examples of “one serving” of Group 3 Foods are:

- One glass (about a third of a pint) of full fat milk.
- One pot of yogurt or fromage frais.
- One tablespoon of grated cheese.
- A third of a pint of full fat milk on cereal or in a sauce or soup.

Food Group 4: meat, fish and alternatives – high-protein foods

These are foods which are rich in first class or high nutrient value proteins. They are mainly foods from animal sources but also include high nutrient value vegetable foods based on pulses and soya.

Examples of Group 4 foods include lean red meat, Poultry, Eggs, Fish, Quorn, Tofu, Pulses (peas, beans, lentils), seeds and nuts.

Foods from animal and vegetable sources as well as combinations of first and second-class types of protein should be included in a child's diet.

Children require *two daily servings* of food from this group.

Examples of “one serving” from Group 4 foods:

- Portion of baked beans
- Fish fingers
- Small piece of chicken
- Portion of savoury minced beef
- Portion of chicken nuggets
- Bowl of lentil and rice soup.

Group 5: fat-rich and sugar-rich foods

These are the foods which ought to form the very smallest proportion of our diet as they are generally filling but low in essential nutrients. Any nutrients they do contain are limited and are more effectively available from the nutritionally richer sources of foods in the other four food groups. These foods are all high in energy, i.e. even a low volume has a high energy density. They carry few other nutrients. They usually contain high levels of refined sugars. They are usually highly processed foods, often containing hydrogenated saturated fats.

They are filling without being rich in a range of nutrients. Eating large proportions of these foods can lead to excessive weight gain, obesity and to dental decay.

Examples of Group 5 foods include Chocolate and other sweet biscuits, Doughnuts, Sausages, Burgers, Sweets and candies, Ice-cream, Mayonnaise, Crisps, Shop bought cakes and pastries, Meat pies, Chips and other foods deep fried in fats, Soft drinks, Table sugar.

Children do need to eat high energy foods. But foods from this group should not provide a significant proportion of their energy intake. If young children eat and fill up on too many foods from the fat-rich and sugar-rich Group it will be at the expense of foods from the other four food groups. Eating a high proportion of Group 5 foods means the diet will be unbalanced and most critically it will not meet their nutritional needs. Children may be offered foods containing high levels of fat or sugar but care must be taken to ensure these are not replacing food from the other four food groups.

If we eat a variety of foods from each of the five food groups daily and eat appropriate proportions of foods from the groups, we can readily and automatically balance our diet and also ensure that children are healthily and well fed.

The key words for ensuring healthy eating are BALANCE, VARIETY, RANGE and PROPORTION – and don't forget ENJOYMENT!

Taken from “Food and Nutrition in the Early Years” by Carolyn Childs (ISBN : 0340772697); available for reading in the National Children’s Resource Centre in Dublin.

DOs and DON'Ts of GOOD EATING for CHILDREN

DO eat regular meals, not one big meal each day.

DO eat as wide a variety of food as possible.

DO eat more fruit, vegetables and salad foods.

DO eat wholegrain cereals and bread.

DO drink plenty of water.

DO use mayonnaise/salad creams/salt sparingly.

DO remember to brush your teeth after breakfast and at bedtime.

DON'T skip meals or eat lots of snacks each day.

DON'T eat fried foods. Grill instead.

DON'T eat sweets, cakes and biscuits too often. Have them as occasional treats.

Taken from "Healthy Eating for Children" - Health Promotion Unit.

LUNCH BOX IDEAS

- Your favourite sandwich, a glass of milk or a yogurt together with some fresh fruit makes a nourishing lunchtime meal.
- Soup, cocoa or hot chocolate ideal to warm you up on cold wintry days. Soup can be made with milk to add extra nourishment.
- Fruit flavoured milk drinks, yogurt drinks and milk shakes make refreshing cold drinks in summer.

Suggested sandwich fillings

- Cheese, lettuce and tomato
- Egg and onion
- Ham, lettuce and tomato

- Tuna and sweetcorn
- Peanut butter
- Chicken salad
- Sardines
- Always combine salad vegetables with cheese or meat or chicken or fish or eggs to ensure you are getting a good balance of nutrients.
- Try to use wholemeal bread or rolls. Alternatives to bread such as scones or pitta bread add variety to our lunch.

Healthy snacks for healthy teeth

To help your teeth, the following list of nutritious tooth-friendly snack foods can be eaten.

- Peanut butter and toast
- Toasted cheese slice
- Fruit scone and butter
- Unsweetened breakfast cereal and milk
- Homemade soup
- Beans on toast
- Milk shake and fresh fruit to flavour
- Fromage frais
- Yogurt

Taken from “Healthy Eats for Midday Feasts” – The National Dairy Council.

Websites, Contact Details and Resources for further information

Barnardos National Children's Resource Centres:

Christchurch Square, Dublin 8.

Tel: 01 4549699

Fax: 01 4530300

Email: ncrc@barnardos.ie

Bowling Green, White St., Cork

Tel: 021 4310591

Fax: 021 4310691

Email: ncrc@cork.barnardos.ie

10 Sarsfield St, Limerick

Tel: 061 208680

Fax: 061 440214

Email: ncrc@midwest.barnardos.ie

River Court, Golden Island, Athlone

Tel: 090 6479584

Fax: 090 6479585

Email: ncrc@athlone.barnardos.ie

41 – 43 Prospect Hill, Galway

Tel: 091 565058

Fax: 091 565060

Email: ncrc@galway.barnardos.ie

<http://www.barnardos.ie/>

The National Children's Resource Centres have many resources on food and nutrition – please contact your nearest centre for more details.

A range of further educational materials is available on request from

Health Promotion Unit, Department of Health and Children

Hawkins House, Dublin, 2. Tel: 01 6354000

The booklet "Food & Babies" can be downloaded in full at

http://www.healthpromotion.ie/publications2.jsp?level=Babies_and_Children

Irish Nutrition and Dietetic Institute

Ashgrove House, Kill Avenue, Dun Laoghaire, Co. Dublin. Tel: (01) 2804839 Fax: (01) 2804299

<http://indigo.ie/~indicom/>

Irish Childbirth Trust

Carmichael House Tel: 01-8724501

Paula Gahan-Mullen I.C.T. P.R.D. Tel: 01-2954953 Fax: 01-2954953

Rollercoaster's pages on food and nutrition:

<http://www.rollercoaster.ie/nutrition/introduction.asp>

irishhealth.com's guide to Feeding Your Baby:

<http://www.irishhealth.com/index.html?level=4&id=376>

irishhealth.com's guide to Nutrition from 2 to 5's:

<http://www.irishhealth.com/index.html?level=4&id=518>

Food Safety Authority of Ireland's <http://www.fsai.ie/kids/index.html> *Kids Korner*'-pages to help children when they're helping out in the kitchen; also teacher's packs to use in explaining food safety in the classroom.