

FACTFILE: GCSE HOME ECONOMICS: Child Development



Current Dietary Recommendations for Children Aged 0–5 Years

Learning Outcomes

Students should be able to:

- Demonstrate knowledge and understanding of the dietary recommendations for children aged 0–5 years.

The World Health Organisation (WHO) recommends that babies are exclusively breast-fed for the first 6 months of life. Exclusive breastfeeding means that no solid foods or formula feeds are given during this 6-month period.

After this, **WHO recommend continued breastfeeding along with complementary foods for up to 2 years of age or beyond¹.**



BREASTFEEDING

WITH A SLING 

Breastfeeding reduces the risk of several serious (sometimes life-threatening) disorders for both babies and mothers. The protection offered by breastfeeding has been seen to last for many years for both the mother and her child.

If a mother chooses not to breastfeed, or cannot breastfeed (e.g. if she is taking certain medications), formula feeding can provide a child with adequate nutrition.

As a general rule, **solid foods should be introduced when the child is about six months old.** The process of introducing solid foods, teaching a child to eat from a spoon and drink from a cup is called weaning.

Some parents will introduce solids a little earlier than 6 months if they think their child is ready, but **weaning before 4 months old is associated with increased risk of food allergy and kidney problems².**

If a parent decides to begin weaning before 6 months, they should avoid offering cows' milk, eggs, wheat (and gluten), nuts, peanuts, seeds, fish and shellfish until the child has reached 6 months (when the digestive system and kidneys have developed a little more). These foods should be introduced in stages to monitor the child's response to them (e.g. in case of allergy or food intolerance).

Eggs should be fully cooked to avoid salmonella food poisoning. Shark, marlin and swordfish should be avoided because of the risk of mercury to the child's brain development. Honey can be given after the child is a year old – a bacterium present could cause serious illness to younger infants.

Weaning should not be delayed beyond 6 months as baby's need for nutrients, particularly iron, will not be adequately supplied by milk alone.

Weaning foods should be unsalted and sugar-free. Salt is toxic to the infant's immature kidneys. Sugar will damage the emerging teeth which have only a thin layer of protective enamel.

By one year old, the child should be eating a wide range of foods, similar to the rest of the family, but with a higher proportion of fat and a lower amount of fibre. **Fat provides a concentrated energy source needed for rapid growth.**

Too much fibre will fill up the child before they have taken in enough food to meet their high demand for nutrients. The main drink should still be breast milk or formula milk.

Full fat cow's milk can be used in food (e.g. soups, puddings) from 6 months, and can be given as a drink from 12 months onwards, and semi-skimmed from the age of 2 if they are growing well. There is no need to use "follow-on" formulas.

From the age of 5, families can introduce 1% fat or skimmed milk, but semi-skimmed is still good.

Between the ages of 2 and 5, the food a child eats should move towards the recommendations set out in the Eatwell Guide. The British Nutrition Foundation have published advice for children of 1–3 years old, called 5532-a-day³. Details of this healthy eating model are described on the CCEA Fact File, "Factors to Consider when Planning Meals and Choosing Food". In brief, it recommends that a child aged 1–3 years should eat 5 portions of carbohydrate, 5 portions of fruit & vegetables, 3 portions of dairy foods and 2 portions of protein foods per day.

The Department of Health recommends that all under-fives are given vitamin supplements containing vitamins A, C and D every day.



Babies who are having more than 500ml (about a pint) of infant formula a day shouldn't be given

vitamin supplements because formula is already fortified with nutrients⁴.

Based on recommendations from the Committee on Medical Aspects of Food Policy (COMA) and the Scientific Advisory Committee on Nutrition (SACN), **carbohydrate should provide 50% of a child's energy per day⁵.**

Free sugars are any sugars added to food or drinks. Additionally, free sugars are found naturally in honey, syrups and unsweetened fruit juices. SACN recommend that **only 5% of food energy should come from free sugars** in children over 2 years⁵. This equates to 13g per day for girls and 15g per day for boys of 2–3 years, and 18g per day for girls and 20g per day for boys of 4–5 years. There are no recommendations for free sugars for those under 2 years of age, quite simply, intake should be as close to 0 as possible.

Dietary fibre recommendations were updated by SACN in their report, "Carbohydrate and Health" (2015)⁶. There are no recommendations for children aged under 2 years, however it is recommended that from about six months of age, an increasing amount of variety is added to the diet, giving opportunities for children to eat whole grains, pulses, fruits and vegetables.

Recommendations for Fibre

2–4 years	15g fibre per day
5 years	20g fibre per day

The SACN have also made recommendations for salt consumption. It should be recognised that the targets set do not represent the ideal level of consumption, but an achievable goal (in other words, if intake can be lower than the figure set, there can be additional benefits to health).

Children aged 1–3 years should eat less than 2g salt per day. Children aged 4–5 years should eat less than 3g salt per day⁷.



Fish should not be introduced to a child's diet before 6 months due to the risk of allergy. When solid foods are well established, the recommendation for fish is **2 portions of fish are eaten per week (one of which should be oily)**. However, the UK Food Standards Agency recommends that **children avoid eating shark, marlin and swordfish**. This is because they contain methyl-mercury, which can be harmful to the child's brain⁸.

Hydration

Fluid intake is very important for infants and young children. They are less able to cope with heat than adults and are more likely to get dehydrated. This is especially true when they are being physical or if the weather is hot.

The amount of fluid needed depends on:

- The age of the child;
- Level of physical activity;
- Weather conditions.

The Eatwell Guide recommends 6–8 glasses of fluid per day. The British Nutrition Foundation suggest that an appropriate serving size for a young child is 120–150 ml per serving. In hot weather, formula fed infants can be given a drink of cooled boiled water between feeds. Breastfed infants are less likely to be dehydrated; the consistency of the milk changes during each feed, beginning with a more fluid consistency and ending with a more filling feed.

For healthy hydration, children should be offered water or milk.

Water hydrates, is kind to teeth, does not add calories to the diet.

Milk provides calcium in an easily absorbed form and is a good source of zinc and protein. Sweetened milk drinks are best avoided to protect the teeth.

Advice about other drinks:

- **Fruit juice and smoothies** can be a useful source of Vitamin C, but these drinks are also a source of free sugars and they are acidic, which can cause damage to the tooth enamel. **A maximum of one 150ml serving per day is recommended.**
- **Sugary drinks** are best avoided altogether. They can contribute significantly to total calorie intake and could play a part in the development of

childhood obesity. They will also cause damage to teeth.

- **Sugar-free drinks** can still cause dental erosion due to the acidic nature of the drink.
- **Sports and energy drinks** are not recommended for children. In addition to their sugar content, they can contain stimulants such as caffeine which can cause problems of sleeping and irritability in children.

Activities

1. Organise the advice above into a timeline from birth to 5 years. Add images and icons to help you to visualise the information.
2. Use the Eatwell Guide to plan a range of suitable packed lunches and snacks for a five-year-old to take to school.

Reference Material:

1. <http://www.who.int/topics/breastfeeding/en/>
2. https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/547050/government_dietary_recommendations.pdf
3. https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/445503/SACN_Carbohydrates_and_Health.pdf
4. https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/338782/SACN_Salt_and_Health_report.pdf
5. <http://www.nhs.uk/Conditions/pregnancy-and-baby/Pages/solid-foods-weaning.aspx>
6. <https://www.nutrition.org.uk/healthyliving/hydration/hydration-for-children.html>

