## HOW TO CHOOSE NUTRITIOUS FRESH OR CONVENIENCE FOODS

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#### LEARNING POINTS

- Fresh and convenience foods can contribute to a healthy balanced diet based on the five food groups.
- Some convenience foods are nutritious and suitable for toddlers. Others are low in key nutrients and may contain inappropriately high amounts of added salt/sodium, fat and sugar.
- 3 The criteria for selecting nutritious convenience foods vary from one food type to another.
- Food labels may be misleading when used to select nutritious foods, because they often display only the amounts of protein, fat, carbohydrate, sugar and omit other key nutrients such as iron, zinc, calcium and vitamins.
- Ready meals containing large amounts of vegetables and flavoured with herbs and spices are more appropriate for toddlers than those that contain fewer vegetables, more added fat and are flavoured with salt.

- Toddlers should be given only small amounts of adult ready meals, served ideally with some extra vegetables to make a more nutritious meal.
- Pre-prepared baby / toddler foods are regulated to ensure they contain minimum adequate amounts of key nutrients and do not contain excessive amounts of salt, fat, sugar and pesticides.
- Foods marketed for young children may contain higher amounts of sugar than equivalent standard products or those in the baby aisle of a supermarket.
- 9 Fresh fruit and vegetables lose some of their vitamin C and folic acid when they are stored or transported for long periods of time.

## BALANCING FRESH AND CONVENIENCE FOODS

Until about 60 years ago toddlers in the UK were fed almost exclusively on freshly prepared foods. Since then the availability of convenience foods has increased and nowadays most families use a combination of both fresh and convenience foods. However, some families eat almost only convenience foods.

Convenience foods are used because:

- of a lack of time in busy households to prepare all meals from fresh ingredients
- some parents lack cooking skills because they have never been taught to cook and they do not have the confidence to try
- some families only have access to shops where fresh food is expensive or of poor quality

A healthy nutritious diet for toddlers is based on a balanced combination of foods from the five food groups. see Factsheet 1.2

Each food group contributes different key nutrients. Both fresh foods and convenience foods can provide this balance but parents and carers need to understand how to make the best choices when including convenience foods in a toddler's diet.

Some convenience foods are nutritious and very suitable, containing essential vitamins and minerals. Other convenience foods are less nutritious, containing few of the key nutrients toddlers need and they may have high amounts of added salt, fat and sugar.

Knowing which convenience foods to use and which to avoid is never easy. This Factsheet will help you guide parents to make sensible choices.

see Factsheet 1.9i for labelling information and see Factsheet 1.1i for a full list of nutrients and their functions. Both will be helpful to read in conjunction with this Factsheet.

### WHAT IS CONVENIENCE FOOD?

Convenience foods have been prepared or processed by a food manufacturer or retailer either to make them last longer than fresh foods or to make them easier to use. Specific additives are often incorporated to prevent or slow down the deterioration of the food. Sugar and salt are commonly used for this purpose as well as other preservatives. Some additives are used to add flavour, colour or sweetness or to maintain a consistent texture.

Convenience food includes:

- pre-prepared foods and ready-to-eat dishes, hot or cold
- room temperature, shelf-stable products such as sweets, soft drinks, fruit juices, dried fruits, cakes, biscuits, puddings, packet snacks and canned products such as fish, meat, fruit, vegetables, soups and pasta dishes
- refrigerated or frozen products that require minimal preparation



## NUTRITIONAL CONTENT OF CONVENIENCE FOODS

#### FROZEN FOODS

Frozen foods retain a high percentage of all their nutrients. Fruit and vegetables are frozen very soon after harvesting and retain high levels of vitamin C. Freezing can make foods more palatable for toddlers. For example toddlers usually prefer frozen peas to cooked fresh peas. The longer shelf life of frozen foods makes them available when fresh varieties are not in the shops or are more expensive because they have been transported long distances.

#### CANNED FOODS

Canning is a traditional way of preserving food. After canning the tin is heated to a high temperature to destroy any bacteria present. The vitamin content, particularly vitamin C and the B vitamins, declines with high temperatures and so will be lower in canned foods compared to fresh foods. However not all the vitamin content is lost. Canned tomatoes, for example, are still a good source of vitamin C because fresh tomatoes are so rich in this vitamin. Other nutrients such as fibre, antioxidants and iron are retained. So canned fruit and vegetables are certainly better than not having fruit and vegetables at all.

Traditionally salt is added to savoury canned foods and sugar is often added to canned fruits, some canned vegetables and baked beans or pasta in sauce. Nowadays there are canned foods available without added salt or sugar and these are better choices for toddlers.

Even when the ingredients list does not include added sugar, the nutritional information may indicate sugar is present. This will be either from the natural sugars in the food or it may be sugar formed when some starch breaks down during the canning process.

#### **DRIED FRUIT**

Dried fruit has a lower content of some vitamins than fresh fruit, but the minerals iron and zinc become more concentrated making them nutritious foods for toddlers. However the sugar in dried fruit also becomes more concentrated. Dentists recommend that dried fruit should be offered only with meals, not as snacks.

## DRIED VEGETABLES AND SOUP POWDERS

Much of the vitamin content of these foods is lost in the drying process and soup powders are usually high in salt.

## PACKET SNACK FOODS (such as crisps, potato rings and puffs)

These snack foods contain high levels of fat and salt and very few essential nutrients. They are not suitable for toddlers and should be eaten in very small amounts, such as three to four crisps occasionally. A whole packet provides an excessive amount of calories, fat and salt for a toddler.







## CHILLED AND FROZEN READY MEALS

Chilled and frozen meals vary considerably in their nutrient content. Those containing vegetables are better choices than those without. Sauces in ready meals that are based on vegetables, spices and herbs are more nutritious than those rich in cream, oil, salt and added colourings and flavourings.

When comparing two ready meals, check the labels and buy:

- the one with more vegetables because the meal will be higher in vitamins and it may also be lower in salt and fat
- the one lower in salt and fat. However if the meal contains cheese, ham and bacon, the amount of fat and salt will be higher, although this is acceptable

It is advisable to give toddlers small servings of adult ready meals and add extra vegetables to make a more nutritious meal.

#### TAKEAWAY MEALS

Takeaway meals vary considerably in their nutrient content. Meals that contain vegetable-based sauces, herbs and spices are generally nutritious. However, sauces that look the same may contain a lot of oil, salt, colourings and artificial flavourings rather than vegetables, herbs and spices. These are less nutritious and are not suitable for toddlers.

Fried foods that are not served with a large portion of non-fried vegetables provide an unbalanced meal.

## PRE-PREPARED BABY/TODDLER FOODS

Pre-prepared toddler foods that are found in the baby aisles of supermarkets must comply with strict regulations on their nutrient content. They must contain adequate amounts of key nutrients and must not contain excessive amounts of salt, fat and sugar. They must also comply with a very low maximum limit of pesticides.

## FOODS SPECIFICALLY MARKETED FOR YOUNG CHILDREN

Foods decorated with cartoon characters are designed to appeal to young children. However they can be of poorer nutritional quality than standard foods. Extra sugar is often added to breakfast cereals, yogurts and desserts to satisfy young children's preference for sweet foods. Parents should be advised to check labels for the amount of added sugar and compare it with that in an adult equivalent product or choose a product from the baby aisle.

#### PASTA SAUCES

Vegetable sauces flavoured with herbs and spices rather than salt are more nutritious. Those with the lowest amounts of fat and salt should be chosen. The cheese in cheese-based sauces provides a certain amount of fat and salt but also provides valuable nutrients, such as calcium and B vitamins.

## CONVENIENCE FOODS WITH ADDED NUTRIENTS

By law, some of the nutrients lost during the processing of some processed foods must be replaced. The manufacturers of other products may do this voluntarily.

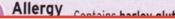
Examples of nutrients replaced include:

- iron and B vitamins added to commercial breakfast cereals - additions are listed on the packet
- iron added to white and brown flour, because some iron is lost during milling
- folic acid added to some breads and breakfast cereals

This pack contains approximately 14 servings. This packet is sold by weight, not volume. The contents of this pack may settle during transit.

#### **Ingredients**

Rice, Sugar, Salt, Barley Malt Extract, Emulsifier: Mono-and Diglycerides Of Fatty Acids, Iron, Niacin, Pantothenic Acid, Vitamin B6, Riboflavin (B2), Thiamin (B1), Folic Acid, Vitamin D, Vitamin B12.



Label from a rice based breakfast cereal showing list of added nutrients.

#### **FUNCTIONAL FOODS**

Foods that have specific nutrients added to them that are not normally present in significant amounts are called functional foods.

Long-standing examples are:

- calcium added to bread
- vitamins A and D added to margarine

More recently, growing consumer interest in health and nutrition has encouraged the food industry to introduce more foods with added nutrients.

Recent examples include the addition of:

- omega 3 fats to some margarines, yogurts, eggs, berry fruit juices, breads, milk, some breakfast cereals, children's pastas and biscuits
- calcium to some cereal bars
- prebiotics and probiotics to some yogurts and milk desserts

The extra cost of buying these foods is not easy to justify, particularly for toddlers who eat well and for families on a limited budget. They can be useful if the toddler is a faddy eater.

## SALT, FAT AND SUGAR IN CONVENIENCE FOODS

Salt, fat and sugar are cheap ingredients and can be added to convenience foods to enhance their taste and flavour. The government is now putting pressure on food manufacturers to reduce this practice. Convenience foods that are high in sugar and/or fat are less nutritionally valuable because they contain fewer nutritious ingredients and consequently lower amounts of vitamins and minerals. Consumption of a large amount of such poor quality convenience foods can reduce a toddler's intake of key nutrients. Not all convenience foods are too high in salt, fat or sugar. It is important to read the label to identify appropriate convenience foods for toddlers. see Factsheet 1.9i

#### SALT IN CONVENIENCE FOOD

Salt contains sodium, too much of which can cause raised blood pressure in later life. However toddlers need a certain amount of sodium, which is essential for their growth and health. This should be provided by foods that contain it naturally, such as milk and milk products, meat, fish and bread. These foods are also important for toddlers because of the other nutrients they contain.

Preserving food with salt is a traditional way to extend the shelf life of foods such as cheese, salted fish, bacon and salami. These foods are part of a balanced diet and can be included in toddlers' meals as long as extra salt is not added during cooking or at the table.

For toddlers aged one to three years old, the Food Standards Agency (FSA) recommends a maximum limit of 2g salt or 0.8g sodium per day.



This is extremely difficult to calculate because it includes the sodium from fresh foods and unlabelled foods that are also eaten.

In practice the FSA guidance means:

- salt should not be added to toddlers' food at the table
- salt added during cooking should be minimal and herbs and spices should be used as flavouring in place of extra salt
- compare pastas/spaghetti in tomato sauces and choose those with a lower salt content
- only occasionally should toddlers be given salty foods such as:
  - crisps and similar packet snacks
  - tinned foods with added salt or brine such as tinned fish and vegetables
  - potato waffles, and other processed potato products
- toddlers should not be given ready meals and take away meals made for adults and older children regularly, as these may contain a lot of salt. Only foods low in salt/sodium should be chosen and only small portions given to toddlers. Extra vegetables should be added to make a meal more nutritionally balanced.

#### FATS IN CONVENIENCE FOOD

About one third of total energy (calories) comes from fat in a healthy balanced diet. Many nutritious foods (such as eggs, meat, oily fish, milk, milk products and nuts) naturally contain some fat and are suitable for toddlers. But when extra fat is added to convenience foods the energy content of the food increases and there is less space for other nutritious ingredients. When toddlers eat excess amounts of fat they can become overweight or obese. see Factsheet 3.3

Fats in foods are usually a mixture of all types of fats - saturated, monounsaturated and polyunsaturated. Toddlers need some of all these types of fat.

#### **Saturated fats**

About one tenth of the energy in a healthy balanced diet comes from saturated fat. Nutrient rich foods such as meat, eggs, milk and cheese contain around 50% saturated fat and 50% unsaturated fat. These foods should not be excluded from toddlers' meals because they provide important key nutrients alongside the fat.

Convenience foods that include meat, eggs, milk or cheese will contain a higher amount of saturated fat than foods not containing these ingredients.

When choosing convenience foods without meat, eggs, milk and cheese, those that have lower amounts of saturated fats are a better choice. Palm oil is high in saturated fat and food products that contain other vegetable oils or butter are a better choice.

#### **Unsaturated fats**

Monounsaturated and polyunsaturated fats do not raise cholesterol levels in blood, but too much of them can cause overweight and obesity. They should be used sparingly. Oils and margarines from vegetable sources generally have more unsaturated fat than saturated fat (palm oil is an exception).



#### Omega 3 and omega 6 fats

These two types of unsaturated fats are as essential for toddlers as they are for the rest of the family. They are vital for the developing brain, eyes and nerves. Convenience foods generally contain omega 6 fat but very little omega 3 fat.

Omega 3 fat can be increased in a toddler's diet by:

- offering oily fish once or twice per week see Factsheet 1.2
- choosing bakery goods that have rapeseed oil in the ingredients
- serving foods containing crushed walnuts
- using milk and meat products from areas where the animals graze on grass
- using rapeseed oil in cooking and walnut oil or olive oil in dressings

#### **Trans fats**

There are two types of trans fats and they differ from a health point of view:

- trans fats that are found naturally in milk and milk products are not harmful
- trans fats that are produced by industrial processing raise cholesterol blood levels in the same way that excess saturated fat does

Foods most likely to include industrial trans fats are margarines and fried foods such as:

- high fat snacks such as crisps
- processed foods containing hydrogenated vegetable oils: margarines, cakes, biscuits, puddings, ready-made sauces and meals
- processed foods which have been fried e.g. crumb coated foods such as fish, chicken and meat products



#### SUGAR IN CONVENIENCE FOOD

Toddlers naturally prefer sweet food but need to learn to like other tastes. see Factsheet 2.1 and 2.2

There is no need to avoid sugar completely and about 10% of energy comes from sugar in a healthy balanced diet. Sweet nutritious puddings are an important part of the two main meals.

see Factsheet 1.2 Cakes and biscuits can also be nutritious when they contain nutritious ingredients such as milk, eggs, flour and fruit.

Because puddings, cakes and biscuits are high in calories, serving sizes should be small and a healthy toddler should not be given second helpings of sweet foods.

Small amounts of sweet foods, such as biscuits or cake, can be made into a more nutritious dessert by serving them with fruit.

When buying convenience food it is difficult to determine the amount of sugar that has been added even though the total amount of sugar must be displayed on the label. This is because the figure on the label includes the natural food sugars found in fresh food as well as sugar added as an ingredient.

Natural food sugars are:

- Lactose the sugar in milk
- Fructose the sugar in fruit
- Maltose the sugar that is present in small amounts in all starchy foods

Sugar is usually added in various forms as an ingredient to improve flavour.

#### Additional sugars are:

- Sucrose
- Fructose
- Dextrose
- Golden syrup
- Glucose syrup
- Honey
- Corn syrup
- Fruit juice concentrate

By checking the list of ingredients on a label it is possible to see if sugar has been added in more than one form. The ingredients on a food label are listed in descending order by the amount used in the recipe. If the added sugar is included in two or three forms, for example dextrose, glucose and fruit juice concentrate, each of these items will be placed further down the ingredients list than if the sugar was included only in one form, such as sucrose alone. See Factsheet 1.9

When choosing sweet foods such as breakfast cereals, compare the sugar per 100g and buy the product with the lowest sugar content. However this rule does not necessarily apply if milk, yogurt or fruit are also ingredients in the food.

Limiting sweet foods to just four times per day (as part of the three main meals and one snack) helps to reduce the risk of dental decay which is increased by grazing on sweet foods throughout the day<sup>2</sup>. Small amounts of sugar in foods that are eaten in small quantities as part of a meal, such as tomato ketchup, add insignificant amounts of sugar to a toddler's diet. see Factsheet 1.1



## ARTIFICIAL ADDITIVES IN CONVENIENCE FOOD

Some additives used to preserve foods are substances that are found naturally in foods, such as ascorbic acid (vitamin C). However other manufactured additives may have been introduced into foods. Although each additive is tested for safety, the longterm effect of all the various different combinations of them is not known. Growing toddlers could potentially be more vulnerable and it is preferable to keep artificial additives in their food to a minimum. see Factsheet 1.9 for an explanation of the different additives in food.



Food or drinks containing the following food additives should not be given to toddlers1.

**Colours:** Tartrazine E102

Ponceau 4 R E124 Sunset yellow E110 Carmosine F122 Quinoline yellow E104 Allura red AC E129

**Preservative:** Sodium benzoate E211

**Sweetener:** Sorbitol

## PROCESSING PRACTICES THAT MAKE FOOD LESS NUTRITIOUS

Some manufacturers bulk out foods using cheap ingredients to reduce manufacturing costs. For instance the meat in cheap sausages may be bulked with gristle, fat, cereal and skimmed milk powder in the place of lean meat. The iron and zinc content of sausages modified in this way will be lower than that of sausages with a higher lean meat content. Water is sometimes pumped into meat to increase its weight. Such meat will be lower in key nutrients such as iron, zinc and protein.

The Food Safety Act aims to prevent these practices becoming excessive by specifying acceptable levels of certain nutrients in the following foods:

- bread and flour

- soluble coffee
- evaporated and dried milk

cocoa and chocolate

- fruit juice honey
- formula milks
- jams
- meat products: sausages, burgers and pies
- natural mineral waters
- spreadable fats
- sugars

#### TIPS TO IDENTIFY GOOD NUTRITIOUS FOODS FOR TODDLERS

Foods	Good choices	Poor choices that are less nutritious
Fruit	Fresh, frozen, canned without sugar and dried	Tinned with added sugar
Vegetables	Fresh, frozen, canned without salt and freeze dried	Tinned with added salt
		Dried vegetables because vitamins B and C are lost when vegetables are dried
Breakfast cereals	Cereals low in sugar (<8g sugar/100g cereal) - with added dried fruit	Sugar coated cereals with >10g sugar/ 100g cereal
	Wholegrain cereals	Cereals with oil or fat in the ingredients list
	Those with <0.7g salt or 0.27g sodium/ 100g cereal	
Bread	Offer toddlers a mixture of white and wholemeal, granary or mixed grain	Those with fat in the form of vegetable oil. This is added to keep bread fresher for
	Choose those with lower levels of salt and fat:	longer but adds extra unnecessary fat and calories
	<ul> <li>up to 1.0g salt or 0.4g sodium/100g bread</li> </ul>	
	<ul> <li>up to about 2g fat/100g bread</li> </ul>	
	Breads that contain more nuts and seeds will be higher in fat but also higher in other key nutrients	

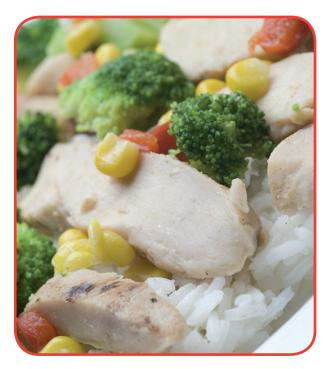
Foods	Good choices	Poor choices that are less nutritious
Savoury Foods		Those with hydrogenated vegetable fat or palm oil
Rice, pasta or couscous dishes	Those with added vegetables	Those that have been fried
	Those with added cheese	
	Those lower in fat and salt	
	Offer a mixture of white and wholegrain sometimes	
Sausages	At least 90% lean meat content	Those with added skimmed milk powder or soya products - these ingredients are added to raise the protein level in sausages with a lower amount of lean meat
Meat and meat products	Look for a high lean meat content in meat products  Choose salamis and cold sausages that have over 95% meat content. Choose those lower in fat and salt	Coated in batter or breadcrumbs particularly those with more batter or breadcrumbs than meat
Fish products	Fish, tinned in water or oil. Drain the oil off Offer oily fish about twice per week	Fish tinned in brine as this contains extra added salt
	Choose fish in batter or breadcrumbs that has lots of fish and very little batter or breadcrumbs - at least 70% fish	Those with more batter or breadcrumbs than fish
Vegetable sauces	Those with vegetables at the top of the ingredients list and less than 1g fat/100g sauce	Those with oil in the ingredients list
Cheese sauces	Those with the highest amounts of cheese and milk	
Pizzas	Those with thin baked crust and lots of vegetables	Those with fried bases, cheese stuffed crusts and few vegetables
Ready meals	Those with more vegetables	Those with the highest amounts of fat and salt
Crisps and packet snacks	None - limit toddlers to 3-4 crisps occasionally - never a whole packet	All
Nuts	Plain nuts that have been cut into small pieces so that there is no risk of aspiration or choking	Salted and dry roasted
Oils	Those rich in omega 3 fats:	Those with very little or no omega 3 fats
	Rapeseed oil for cooking	such as corn oil, sunflower oil, safflower oil
	Walnut or olive oil for salad dressings	
	Pure vegetable oil is often rapeseed oil and some bottles of vegetable oil have the little yellow rapeseed flowers on the label to indicate that source of oil	
Cream	Fresh cream - use small amounts	Substitute creams - they are lower in vitamin A
Butter and margarine	Butter	Margarines that may contain trans fats
	Margarines that are labelled 'no trans fats'	
	Just a thin scrape of butter or margarine should be used on bread and toast	
Herbs	Fresh and dried herbs but fresh herbs are the better choice and can be home grown even in a small window box	
Spices	All ground spices contain nutrients	

Foods	Good choices	Poor choices that are less nutritious
Sweet Foods	Those sweetened with sugar	Those sweetened with sweeteners
		Any with hydrogenated vegetable oil
Jam	Those with at least 50g fruit per 100g jam	Those with added flavourings and colours because they will contain less fruit
Yogurts and fromage frais	Those with fruit rather than fruit flavourings	Those with sugar higher than fruit in the ingredients list
Puddings	Those with milk or fruit at the top of the ingredients list. A milk based pudding should have at least 60% milk in the ingredients list	Those with sugar at the top of the ingredients list
Packet puddings	Those that are mixed with milk	Those with sweeteners or hydrogenated vegetable fat
Biscuits, cookies and cakes	Those with oats, some wholemeal flour or dried fruit	Those containing hydrogenated vegetable oil or palm oil
	Those made with rapeseed oil rather than other oils	
Ice cream	Those containing milk, cream and fruit puree	Those containing vegetable oil rather than cream
Fruit juices	Pure unsweetened fruit juice - it should always be diluted with water one part juice to ten parts water	Fruit juice drinks as they have very little fruit juice content and are sweetened with sugar or sweeteners
Smoothies	Those that are based on milk or yogurt and fruit	Commercial smoothies, as they are very concentrated drinks and high in fruit sugars
Sweet drinks	Those sweetened with fruit juice	Those with very little fruit juice and sweetened with sugar
Flavoured milk	Those with natural flavourings such as vanilla and cocoa	
Chocolate and confectionery	Only give very small amounts e.g. six or seven chocolate buttons (5g) as part of pudding at the end of a meal	Sweets with artificial colours

#### TIPS FOR MAKING CONVENIENCE FOODS MORE NUTRITIOUS

Foods	
Breakfast cereals	Choose one that is low in sugar and salt content and add flavour by serving with fruit - use fresh fruit, lightly stewed fruit or canned fruit, but fresh fruit is best
Yogurts and fromage frais	Buy plain, unsweetened varieties and mix them in equal quantities with fresh fruit or fruit puree
Biscuits, cookies, puddings, cakes and ice cream	Give a small serving and add some extra fruit or dried fruit on the side
Packet puddings	Give a small serving along with some slices of fresh fruit
Vegetable sauces	Add in some herbs or spices for more flavouring and more nutrients
Cheese sauces	Use small amounts and add some extra grated cheese
Pizzas	Before heating in the oven add some extra diced vegetables such as diced peppers and courgettes. Add some extra grated cheese
Ready meals	These do not generally have a large amount of vegetables. Always serve a small portion of the ready meal and add some extra vegetables such as sliced salad vegetables or a serving of peas or corn that can be quickly prepared from a frozen packet
Sweets and chocolates	Keep servings small and always give as part of a pudding at the end of a meal – not as a reward or treat in between meals. Darker chocolate has slightly more nutrients
Snacks	Give nutritious snacks such as sandwiches, muffins, crackers, fruit and vegetable sticks, breadsticks and cheese, yogurt and fromage frais, and breakfast cereal with milk





Balancing convenience foods is essential for healthy eating and adding fresh vegetables or fruit to some convenience foods will improve the nutritional value of the meal or snack.

## GOOD CHOICES OF FRESH FOODS

#### FRUIT AND VEGETABLES

It is advisable to choose those that have had short storage and transport times because vitamin C and folic acid decrease over time. Recently-harvested local foods are therefore best. Vitamin C and folic acid decrease more rapidly once food is cut up, and it is preferable to cut up fruit and vegetables just before eating or cooking rather than purchase them pre-cut.



#### **MEAT**

Meat from animals which graze on grass has a higher omega 3 content than meat from animals given cereal-based feeds. Parents should be advised to choose lean mince meat rather than normal mince. The price will be higher, but so will the content of iron and zinc. The fat will be lower.

#### **FISH**

The nutrient levels of wild and farmed fish vary according to season and the quality of their food, but both are a good source of nutrients. Oily fish, including mackerel, salmon and sardines, is the best source of omega 3 fats. White fish contains less omega 3 fat and iron but similar amounts of other nutrients. Both oily and white fish should be offered to toddlers regularly. Many toddlers like fish cakes or fish pies with a mixture of white and oily fish.

Swordfish, shark and marlin should not be offered to children as they may contain high levels of mercury.

#### **EGGS**

Eggs with a higher amount of omega 3 fat are produced by hens fed with added omega 3 fats. If toddlers eat some fish, including oily fish, each week then the extra cost of buying these more expensive enriched eggs is avoided.



#### **NUTS**

Nuts provide valuable nutrients particularly iron and protein. Walnuts are a good source of omega 3 fat and almonds are a good source of calcium. For toddlers, all nuts need to be chopped into small pieces or ground to reduce the risk of choking. They can be added to muesli, cereals, puddings, cakes, muffins and biscuits to add extra nutrients. Choose nuts that do not have added salt or artificial flavourings.

#### **BREAD**

A mixture of white and wholegrain breads is suitable for toddlers. Fat is often added to bread to stop it going stale but this just adds unnecessary calories. Choose bread without added fat or bread that has less than 2g fat per 100g bread. A higher fat content is acceptable if there are a lot of seeds or grains in the bread.



#### COST

Seasonal fresh foods offer the best value for money as their price generally goes down when there is a large and ready supply. Some street markets and green grocers may offer very good value compared to larger shops and supermarkets. Farmers' markets are making a comeback in parts of the UK and offer locally grown fresh seasonal foods. However prices vary depending on the area.

A website that gives information on seasonal foods is: www.eattheseasons.co.uk

Foods grown at home are of course the cheapest, and families should be encouraged to try growing one or two fruits or vegetables in a pot, tub or a window box. Herbs can be grown easily in a pot and provide fresh flavours to be used instead of salt in salads, sauces and savoury dishes.

### **OTHER CHOICES**

#### **ORGANIC VERSUS NON-ORGANIC**

Organic food is produced without the use of most agrochemicals. Certain legal requirements must be met before it can be labelled as organic. Naturally occurring fertilisers and pesticides are allowed but all other pesticides, herbicides and genetically modified (GM) organisms are banned. Organic food has a shorter shelf life and so fresh organic fruits and vegetables need to be used within a day or so of purchase.

The yield of an organic crop is usually lower than that of a non-organic crop and consequently organic foods are often more expensive than non-organic foods. Organic and non-organic food contain similar amounts of all nutrients.

Although each pesticide used in non-organic food production is checked for safety, the effects of ingesting combinations of different pesticide residues that a family might consume in a meal of several different foods is not known. Fresh fruit and vegetables should be washed carefully before eating to remove as much as possible of any pesticides.





#### **GENETICALLY MODIFIED**

Genetic modification of foods involves changing the genetic material of the plant or animal. This is usually done to improve the yield of the crop by making it resistant to a pest or infection. Strict controls are in place and each genetically modified product is thoroughly assessed for any other difference from its non-GM counterpart.

Since 1996, GM soya, maize, rapeseed oil and other minor crops, have been eaten regularly by hundreds of millions of people and animals in the USA and there is no reported evidence of harm arising from their consumption. However there remain concerns that we do not know enough about the science or any possible long-term effects of consuming GM foods. In the UK most supermarkets have opted not to stock GM products.

#### References and Further Reading

- 1. Food Standards Agency Website: http://www.food.gov.uk
- 2. Moynihan P, Petersen PE. Diet, nutrition and the prevention of dental diseases. *Public Health Nutr.* 2004;7(1A):201-26

Additional copies of this Factsheet can be downloaded from www.infantandtoddlerforum.org

# HOW TO CHOOSE NUTRITIOUS FRESH OR CONVENIENCE FOODS GUIDANCE & TIPS FOR PARENTS



Nutritious foods are those that contain a high amount of some nutrients and make up a healthy balanced diet. Here are some tips for choosing nutritious food for your toddler.

#### 1. Choosing nutritious fresh foods

Fruit, vegetables, meat and fish are usually cheaper when they are in season. You can find lists of fresh foods in season on www.eattheseasons.co.uk

Fruit and vegetables that have been picked locally and sold quickly will have more vitamin C and folic acid than those that are stored or transported for long periods of time.

There is no real nutritional difference between organic and non-organic foods but organic foods are usually lower in pesticides as they have only been exposed to naturally occurring fertilizers and pesticides.

## 2. Choosing nutritious convenience foods for toddlers

Some convenience foods are nutritious and appropriate for toddlers. Others are less suitable because they do not contain enough of some key nutrients and contain too much salt, fat and sugar.

It is not necessary to cut out all the salt, fat and sugar in your toddler's diet. However, you should keep these ingredients to a minimum when you have a choice.

Unfortunately food labels do not always provide sufficient information to enable you to decide which convenience foods are the best for your toddler. Try to choose those that contain plenty of vegetables or fruits that are low in fat and are not too sweet.

Pre-prepared baby/toddler foods found in the baby aisles of supermarkets contain minimum levels of key nutrients and tend to have low levels of salt, fat, sugar and pesticides. Choose those that have higher amounts of meat, fish, eggs, lentils or other pulses for more iron.

#### Salt

Salt contains sodium, which is essential for your toddler to grow. However, too much salt in the diet can cause high blood pressure later in life.

To keep the salt in your toddler's diet low:

#### DO.

- serve nutritious foods that are preserved with salt, such as cheese, ham, bacon and Marmite BUT:
- use herbs and spices rather than salt to flavour your cooking
- choose canned food that is unsalted or low in salt
- compare the labels on packaged foods and choose those that are lower in sodium or salt

#### DON'T...

- add salt to food at the table
- give your toddler salty snacks such as crisps
- give your toddler adult ready meals or takeaway food regularly. If you do, then serve a small portion and use extra vegetables to make up the difference
- buy food with added salt if it already contains cheese, ham or bacon. Added salt should be listed in the ingredients

#### Eat

Most food contains some fat. In moderation this is not a problem because fat enhances the flavour of the food and provides valuable energy and essential fatty acids. However, too much fat can cause your toddler to become overweight.

To keep the fat in your toddler's diet at a healthy level:

#### DO...

- serve full fat milk and yogurt until your toddler is at least two years old – these foods are high in vitamin A so you can go on using them throughout childhood unless your toddler is overweight or gaining weight too quickly
- give your toddler cheese, eggs, lean meat and oily fish
- use oils with omega 3 fats such as rapeseed oil or soya oil for cooking and rapeseed, olive, soya or walnut oil for dressings
- compare food labels and choose those lower in fat
- limit pastries to an occasional treat

#### DON'T...

- let your toddler eat crisps or other packet snacks. Three
  or four crisps occasionally is fine but a whole packet is
  too high in salt, fat and calories
- $\bullet \;$  spread butter or margarine too thickly on bread or to ast
- use large amounts of cream
- buy fried takeaway food

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#### Sugar

Too much sugar can cause obesity and tooth decay. However there is no need to cut out sweet foods altogether. Ideally you should limit sweet food and drinks to just four times a day – that is as part of three meals and one snack.

To make sure your toddler has the right amount of sugar:

#### DO...

- dilute fruit juices and only serve them at meal times.
   In between meals give water, milk or sugar-free drinks
- give a pudding with each of the two main meals but keep it to a small serving and make sure it contains some fruit or add some pieces of fresh fruit to make it more nutritious
- choose cakes, biscuits and puddings that contain nutritious ingredients such as eggs, ground nuts, fruit, dried fruit, milk, flour and oats

#### DON'T...

- allow sweets or chocolates between meals. You can allow three or four sweets as part of the dessert sometimes
- buy yogurts with extra sugar it will be listed in the ingredients list if it has been added. Choose those sweetened with fruit or fruit puree

#### Additives in food and E numbers

All additives with an E number have been tested for safety. However the Food Standards Agency now advises that toddlers should not be given foods that contain the following:

Colours: Tartrazine E102 Ponceau 4 R E124

Sunset yellow E110 Carmosine E122 Quinoline yellow E104 Allura red AC E129

**Preservative:** Sodium benzoate E211

Sweetener: Sorbitol

Some additives are quite nutritious. For instance ascorbic acid is vitamin C. Generally, however, it is best to choose foods for toddlers that contain few additives.

#### Tips to choose good nutritious foods for toddlers:

Foods	Good choices	Poor choices that are less nutritious
Fruit	Fresh, frozen, canned without sugar and dried	Tinned with added sugar
Vegetables	Fresh, frozen, canned without salt and freeze dried	Tinned with added salt Dried vegetables because vitamins B and C are lost when vegetables are dried
Breakfast cereals	Cereals low in sugar (<8g sugar/100g cereal) - with added dried fruit Wholegrain cereals Those with <0.7g salt or 0.27g sodium/100g cereal	Sugar coated cereals with > 10g sugar/100g cereal Cereals with oil or fat in the ingredients list
Bread	Offer toddlers a mixture of white and wholemeal, granary or mixed grain  Choose those with lower levels of salt and fat:  • up to 1.0g salt or 0.4g sodium/100g bread  • up to about 2g fat/100g bread  Breads that contain more nuts and seeds will be higher in fat but also higher in other key nutrients	Those with fat in the form of vegetable oil. This is added to keep bread fresher for longer but adds extra unnecessary fat and calories
Savoury Foods		Those with hydrogenated vegetable fat or palm oil
Rice, pasta or couscous dishes	Those with added vegetables Those with added cheese Those lower in fat and salt Offer a mixture of white and wholegrain sometimes	Those that have been fried
Sausages	At least 90% lean meat content	Those with added skimmed milk powder or soya products - these ingredients are added to raise the protein level in sausages with little meat in them
Meat and meat products	Look for a high lean meat content in meat products Choose salamis and cold sausages that have over 95% meat content. Choose those lower in fat and salt	Coated in batter or breadcrumbs particularly those with more batter or breadcrumbs than meat
Fish products	Fish, tinned in water or oil. Drain the oil off Offer oily fish about twice per week Choose fish in batter or breadcrumbs that has lots of fish and very little batter or breadcrumbs - at least 70% fish	Fish tinned in brine as this contains extra added salt Those with more batter or breadcrumbs than fish
Vegetable sauces	Those with vegetables at the top of the ingredients list and less than 1g fat/100g sauce	Those with oil in the ingredients list

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Foods	Good choices	Poor choices that are less nutritious
Cheese sauces	Those with the highest amounts of cheese and milk.	
Pizzas	Those with thin baked crust and lots of vegetables	Those with fried bases, cheese stuffed crusts and few vegetables
Ready meals	Those with more vegetables	Those with the highest amounts of fat and salt
Crisps and packet snacks	None - limit toddlers to 3-4 crisps occasionally - never a whole packet	All
Nuts	Plain nuts that have been cut into small pieces so that there is no risk of aspiration or choking	Salted and dry roasted
Oils	Those rich in omega 3 fats: Rapeseed oil for cooking Walnut or olive oil for salad dressings Pure vegetable oil is often rapeseed oil and some bottles of vegetable oil have the little yellow rapeseed flowers on the label to indicate that source of oil	Those with very little or no omega 3 fats such as corn oil, sunflower oil, safflower oil
Cream	Fresh cream - use small amounts	Substitute creams - they are lower in vitamin A
Butter and margarine	Butter Margarines that are labelled 'no trans fats' Just a thin scrape of butter or margarine should be used on bread and toast	Margarines that may contain trans fats
Herbs	Fresh and dried herbs but fresh herbs are the better choice Grow your own even if you only have a window box	
Spices	All ground spices contain nutrients	
Sweet Foods	Those sweetened with sugar	Those sweetened with sweeteners Any with hydrogenated vegetable oil
Jam	Those with at least 50g fruit per 100g jam	Those with added flavourings and colours because they will contain less fruit
Yogurts and fromage frais	Those with fruit rather than fruit flavourings	Those with sugar higher than fruit in the ingredients list
Puddings	Those with milk or fruit at the top of the ingredients list. A milk based pudding should have at least 60% milk in the ingredients list	Those with sugar at the top of the ingredients list
Packet puddings	Those that are mixed with milk	Those with sweeteners or hydrogenated vegetable fat
Biscuits, cookies and cakes	Those with oats, some wholemeal flour or dried fruit Those made with rapeseed oil rather than other oils	Those containing hydrogenated vegetable oil or palm oil
Ice cream	Those containing milk, cream and fruit puree	Those containing vegetable oil rather than cream
Fruit juices	Pure unsweetened fruit juice - it should always be diluted with water one part juice to ten parts water	Fruit juice drinks as they have very little fruit juice content and are sweetened with sugar or sweeteners
Smoothies	Those that are based on milk or yogurt and fruit	Commercial smoothies, as they are very concentrated drinks and high in fruit sugars
Sweet drinks	Those sweetened with fruit juice	Those with very little fruit juice and sweetened with sugar
Flavoured milk	Those with natural flavourings such as vanilla and cocoa	
Chocolate and confectionery	Only give very small amounts e.g. six or seven chocolate buttons (5g) as part of pudding at the end of a meal	Sweets with artificial colours

#### 3. Choosing ready meals for the family

Adult ready meals and takeaway foods are often high in fat and salt and may not be suitable for your toddler.

However, you can reduce the fat and salt content of ready meals by serving your child a small portion and making up the difference with extra vegetables. You can prepare these quickly in the time it takes to heat the ready meal. Wash some cherry tomatoes or peel a carrot and cut it into sticks.

Frozen vegetables can be prepared in minutes by adding them to a small saucepan of boiling water and simmering for a few minutes.

If you are comparing two ready meals check the label and buy:

- the one with more vegetables as this makes the meal lower in fat and salt and higher in vitamins for your toddler
- the one lower in salt and fat but any with the nutritious ingredients cheese, ham or bacon will be high in fat and salt and this is acceptable

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#### 4. Making convenience foods more nutritious

Foods	
Breakfast cereals	Choose one that is low in sugar and salt content and add flavour by serving with fruit - use fresh fruit, lightly stewed fruit or canned fruit, but fresh fruit is best
Yogurts and fromage frais	Buy plain, unsweetened varieties and mix them in equal quantities with fresh fruit or fruit puree
Biscuits, cookies, puddings, cakes and ice cream	Give a small serving and add some extra fruit or dried fruit on the side
Packet puddings	Give a small serving along with some slices of fresh fruit
Vegetable sauces	Add in some herbs or spices for more flavouring and more nutrients
Cheese sauces	Use small amounts and add some extra grated cheese
Pizzas	Before heating in the oven add some extra diced vegetables to the top e.g. diced peppers and courgettes. Add some extra grated cheese on top
Ready meals	These do not generally have a large amount of vegetables. Always serve a small portion of the ready meal and add some extra vegetables such as sliced salad vegetables or a serving of peas or corn that can be quickly prepared from a frozen packet
Sweets and chocolates	Keep servings small and always give as part of a pudding at the end of a meal – not as a reward or treat in between meals. Darker chocolate has more nutrients
Snacks	Give nutritious snacks such as sandwiches, fruit and vegetable sticks, scones, pancakes, breadsticks and cheese, yogurt and fromage frais, and breakfast cereal with milk.
	Snack bars such as cereal bars are often very high in fat and sugar. However they also contain some nutritious ingredients such as nuts, seed, oats or other cereals. Consider them as a biscuit or cake and offer your toddler small amounts served with some fresh or canned fruit.
	Packet snack foods such as crisps, potato rings and puffs contain fat and salt and virtually no nutrients. They are not suitable for toddlers and should be limited to very occasional small amounts such as three or four crisps. A whole packet has too many calories, and too much fat and salt for your toddler

## 5. What to look for in foods marketed for children

Foods that are marketed for children with cartoons and child friendly designs are not always the best choice for your toddler. Extra sugar is often added to breakfast cereals, yogurts and desserts. Always compare the label on these foods to a standard product or a product in the baby aisle and choose the one that has more nutritious ingredients such as fruit, vegetables, milk, eggs, flour, oats, meat, fish or cheese.

If your toddler insists on a product that contains no nutritious ingredients then give a small serving and offer some nutritious foods alongside it. For example offer some pieces of fresh or canned fruit with a chocolate pudding.

If you buy processed cheese products such as cheese straws, choose the ones that have about the same amount of salt and fat as normal cheddar cheese. That is around 35g fat and 0.7g sodium/1.75g salt per 100g processed cheese.

If you buy processed meat products, choose those that have about the same amount of protein, fat and salt as ham. That is about 20g protein, 5g fat and 1g sodium or 2.3g salt per 100g processed meat.





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