



Follow-on formula

Key points

Follow-on formula is unnecessary (WHO, 2013). The NHS is clear that follow-on formula should never be fed to babies under 6 months and that there are no benefits to switching to follow-on formula after 6 months, with infant formula recommended throughout the first year.

Follow-on formula can be marketed in the UK and manufacturers use similar labelling on follow-on formula and infant formula products to cross-brand, as infant formula cannot be marketed directly to the public. Despite regulations saying there should be a clear distinction between follow-on formula and both infant formula and infant milks marketed for special medical purposes in terms of text, images and colours used on labels, product branding and packaging between infant milk types remains very similar.

The EFSA opinion on the essential composition of infant and follow-on formulae suggests only one compositional distinction between infant formula and follow-on formula related to iron content (EFSA, 2014), and this is mirrored in new compositional regulations where differences in composition are minimal. The majority of infant formula currently available in the UK provide sufficient iron to meet at least the minimum iron recommendation for follow-on formula.

Follow-on formula is marketed for infants over the age of 6 months who are receiving complementary foods. Follow-on formula currently available on the market generally contain protein, micronutrients and iron at higher levels than those found in infant milks designed for use from birth. As most infant formula is designed for use by infants from birth to 1 year of age, those receiving complementary foods with adequate protein, carbohydrate, fat and iron do not need to have their infant formula replaced by follow-on formula. The Scientific Advisory Committee on Nutrition (SACN), in their 2007 review of infant feeding, stated that:

“There is no published evidence that the use of any follow-on formula offers any nutritional or health advantage over the use of whey-based infant formula among infants artificially fed.”
(SACN, 2007)

For this reason, follow-on formula is not included in the Healthy Start (England, Wales and Northern Ireland) and Best Start (Scotland) Foods schemes.

The SACN report *Feeding in the First Year of Life* (SACN, 2018) reiterated that breastmilk or infant formula should be the main milk drink throughout the first year of life. The NHS website says that follow-on formula should not be used for children under 6 months of age and that there is no benefit to moving to follow-on formula after 6 months (NHS, 2020).



It is globally agreed that follow-on formula serve no nutritional purpose, and WHO have stated why it believes these milks are unnecessary (WHO, 2013).

Current regulations allow the marketing of follow-on formula in the UK and manufacturers spent over £13 million marketing infant milks in 2018 (Mintel, 2018). Despite regulations saying that the label text, images and colours should clearly differentiate follow-on formula from infant formula and for infant milk marketed as foods for special medical purposes manufacturers continue to use similar product design and colours, with the brand the biggest feature of the product label. This enables them to cross-brand products and allow the advertising of follow-on formula to influence families in their infant formula choice.

Iron in follow-on formula

Follow-on formula has been marketed as a good source of iron for older infants, despite having been shown to offer no advantage over standard infant formula after the age of 6 months (Moy, 2000). There is however some evidence that excessive iron intakes may result in a reduced uptake of other trace metals and the oxidation of lipids (Aggett et al, 2002). Studies among iron replete toddlers have shown adverse effects on cognitive outcomes and growth for infants with high iron intakes (Lozoff et al, 2011, Idjradinata et al, 1994.)

A large trial of nearly 500 infants and toddlers given follow-on formula between 9 and 18 months of age in the UK found that there were no developmental or growth advantages in children given iron-supplemented follow-on formula (Morley et al, 1999).

EFSA (2014) in its *Scientific opinion on the essential composition of infant and follow-on formulae* suggested that follow-on formula should have a higher minimum (target) iron content than infant formula and current regulations on the compositional requirements for infant formula and follow-on formula reflect these recommendations. The majority of infant formula available in the UK meet the higher target for iron required for follow-on formula and are therefore, by EFSA criteria, appropriate throughout the first year.

It is however, important to remember that UK infant feeding guidelines recommend that after 6 months of age additional iron requirements should be met by including iron rich complementary foods in the diet.

Nutritional composition of follow-on formula

The nutrient content of different brands of follow-on formula sold in the UK is generally very similar as all are formulated to meet compositional regulations. Any differences between the brands are therefore primarily due to the nutrient sources used and the addition of some non-mandatory ingredients.

Manufacturers historically created the impression that follow-on formula are distinct and necessary by including nutrients at the higher end of the regulatory range compared to those

in infant formula. More recently products have become closer in composition with iron being the nutrient most likely to differ between infant formula and follow-on formula.

Summary of some of the differences in selected nutrients between major-brand first infant formulas suitable from birth and follow-on formulas marketed from 6 months of age (powder formulations)

Nutrients per 100ml	Energy kcal	Protein g	Carbo-hydrate g	Fat g	Vitamin D µg	Calcium mg	Iron mg	Zinc mg
Aptamil 1 First Milk	66	1.3	7.4	3.4	1.65	60	0.53	0.48
Aptamil 2 Follow-on Milk	68	1.4	8.2	3.2	1.7	73	1.0	0.5
Cow & Gate 1 First Infant Milk	66	1.3	7.5	3.4	1.45	53	0.53	0.48
Cow & Gate 2 Follow-on Milk	68	1.4	8.3	3.2	1.7	69	1.0	0.5
Hipp Organic Combiotic First Infant Milk	66	1.3	7.0	3.6	1.5	51	0.5	0.5
Hipp Organic Combiotic Follow-on Milk 2	68	1.3	7.2	3.7	1.6	70	1.0	0.5
SMA Pro First Infant Milk	67	1.2	7.4	3.6	1.5	43	0.31	0.48
SMA Pro Follow-on Milk	67	1.1	8.2	3.3	1.7	66	0.9	0.5

Cost of follow-on formula

Whilst all follow-on formula available on the UK market comply with compositional regulations, they vary widely in price. A higher price generally reflects the addition of non-essential ingredients and a higher spend on brand promotion. For information on current prices of follow-on formula follow the website link to costs. Follow-on formula can be included in special offers and consumers can obtain store points on purchases which are not allowed on infant formula.

Labelling and marketing of follow-on formula

Follow-on formula are permitted under current regulations to carry nutrition and health claims, which are not allowed on infant formula or infant milks marketed as foods for special medical purposes. There are specific regulations around the labelling and marketing of follow-on formula, you can find out about these regulations by following the links to regulations on this website.



References

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