

A close-up photograph showing a pair of adult hands gently cupping the feet of a newborn baby. The baby's feet are small, pink, and appear slightly wrinkled, characteristic of a low birth weight infant. The hands are positioned to support the feet from underneath. The background is softly blurred, focusing attention on the hands and feet.

HOME CARE FOR LOW BIRTH WEIGHT INFANTS

Please read this guide carefully as it contains important information on home care for low birth weight babies (under 2.5 kg) and/or premature babies (born before the 37th week of pregnancy). Please also visit the [Terveyskylä.fi](https://www.terveyskyla.fi) health portal website, which contains more information (in Finnish).

Terveyskylä > Lastentalo > Sairaalahoitoa tarvitseva vastasyntynyt

<https://www.terveyskyla.fi/lastentalo/tietoa-lasten-sairauksista/sairaalahoitoa-tarvitseva-vastasyntynyt>

Terveyskylä > Lastentalo > Keskosena kotiin

<https://www.terveyskyla.fi/lastentalo/tietoa-lasten-sairauksista/keskosena-kotiin>

Terveyskylä > Naistalo > Raskaus ja synnytys

<https://www.terveyskyla.fi/naistalo/raskaus-ja-synnytys>

Child's name _____

Date of birth _____

Gestational age at birth _____

Discharge ward and tel. _____

Discharge date _____

Measurements when discharged:

weight _____ length _____ head circumference _____

Medication instructions _____

First child health clinic (neuvola) appointment at _____

Basic baby care

A newborn baby's eyes, bellybutton and skin folds should be cleaned daily. Wipe both eyes with tap water, starting from the outer corner in towards the nose, using a separate, moistened pad for each eye. Clean the umbilical stump using a dry cotton bud when you change the baby's nappy. The baby can be bathed even if the umbilical stump is still attached. After bathing, thoroughly dry the bellybutton and skin folds. A basic moisturizing cream can be applied to dry skin, if necessary.

Once discharged, low birth weight babies can be taken outdoors for short periods of time. Once the baby's weight reaches around 2.5–3 kg, he/she can spend longer periods of time outdoors. The baby should only be put down to sleep outdoors after the due date. Also, the weight has to be over 3 kg and the baby's breathing has to be stable with no difficulties. The season, temperature and weather conditions should be taken into account when assessing how long the baby can spend outdoors.

Infections

Premature babies with a low birth weight are at a higher risk of infections than full-term babies. During the first few months, you should avoid contact with people who have an infection. The risk of infection is high at e.g. shopping centers or events where there are lots of people. Siblings in day-care also increase the risk of infection in infants younger than one year of age. The risk of infection can be reduced through good hand hygiene at home.

The symptoms of an infection in babies can vary widely. Call the discharge ward or the medical helpline if your baby's condition clearly changes, if he/she is very sleepy or listless, feeds poorly or is exceptionally irritable, sensitive to touch or breaths rapidly. Fever in a child less than 3 months of corrected age (i.e. age calculated from the due date) should always be assessed in hospital.

A safe sleeping environment

The baby should be put to sleep on his/her back, not on the belly or side. The mattress should be firm enough, this prevents the baby from sinking into it. The baby should be put to sleep in his/her own cot and not in a children's car seat or next to an adult in the same bed. Twins should also sleep in separate cots. Loose bedding, pillows or soft toys are not recommended for a baby's cot. If using a pacifier during sleep, a cordless model is recommended. If the baby has a nasogastric tube, care should be taken to prevent the tube from twisting around the baby's neck. Also monitor the baby to make sure that he/she is not too hot (a baby should not be sweaty or have red cheeks). Avoid smoking indoors and even outdoors when near the baby.

Clinic follow-up

After discharge, standard follow-ups will take place at the child health clinic (neuvola). If necessary, a physician may also schedule follow-up visits at the hospital outpatient clinic. The first follow-up appointment with a child health clinic doctor is recommended around 6–8 weeks after the **due date**.

The vaccination program begins at the child health clinic (neuvola) in accordance with the baby's chronological age. For premature infants, the series of rotavirus vaccines should begin at closer to 12 weeks of chronological age, and latest by 15 weeks. The rotavirus vaccine can not be given to infants born before the 25th week of gestation or to infants who have had necrotizing enterocolitis. Also prematurely born infants can be given other vaccines than those included in the standard vaccination protocol as long as the vaccines meet the criteria for vaccines intended for infants. During the winter season, it is recommended that family members and people caring for the baby vaccinate themselves against influenza.

Nutrition

Breast milk is the primary source of nutrition for newborns. Breast milk protects against infection and supports the child's growth and development. The mother is advised to maintain milk production and to breast feed for as long as feels good.

Breastfeeding a premature baby requires patience and practice. The aim is to transfer from bottle to actual breastfeeding as the baby grows and develops. The kangaroo mother method supports breastfeeding. The baby should be kept in skin-contact and guided to the breast when he/she begins to root thus indicating the need to feed.

After discharge, a newborn baby or baby with a birth weight less than 3 kg should feed every 2–4 hours, taking the baby's own rhythm into account. The total amount of milk obtained over the course of the day is more important for the growth of your baby than a single feed. Avoid forcing the baby to feed. Monitor the baby's weight gain weekly at the child health clinic. The baby is likely receiving enough milk if he/she gains around 150 g per week after discharge.

The amount of milk is about 1/6 of the baby's weight, but he/she may choose to eat more if there is no need to restrict the fluid intake. Babies with growth restriction will often want to eat significantly more.

300–350 ml/day at 1.8 kg
350–400 ml/day at 2.0 kg
400–500 ml/day at 2.5 kg
500–600 ml/day at 3.0 kg
600–700 ml/day at 3.5 kg

If necessary, the physician will design a personalized nutrition plan for your baby. Some babies are given supplementary protein powder in addition to breastmilk. One sachet of powder can be added to 10–20 milliliters of expressed breastmilk and given to the baby just before daytime meals, there is no need to add the powder to night-time meals.

If necessary, your baby may be prescribed either a special formula for premature babies or a regular baby formula as complementary feeds. For babies who vomit or have reflux, milk can be thickened using a special powder available over-the-counter. During the follow-up visit around 1 month after discharge, the physician will assess the baby's growth and make further plans on nutrition, e.g. is there still a need for a special premature baby formula or protein supplements to the breast milk.

Baby bottles and teats should be rinsed with cold water after use. Baby bottles can be washed in a standard dishwasher at a temperature of 60 degrees and do not need to be boiled. Teats can be boiled for around five minutes each day. If the baby requires a nasogastric tube, it can be flushed through with a small amount of tap water after each feed. The water does not need to be boiled.

Complementary feeding

In babies born later than the 34th week of pregnancy, solid foods are introduced as for full-term babies at around 4–6 months of chronological age, according to the healthy baby clinic's instructions.

To babies born prior to 34 weeks of pregnancy, solids are usually introduced at around 3–4 months of corrected age, that is, 5–8 months of chronological age, depending on how prematurely the baby was born. Complementary feeding can be started earlier or later, depending on individual discretion. In general, the nutritional content of breast milk or a baby formula is significantly better than that of solid foods (purées as well as gruel). Starting complementary feeding early reduces the amount of breastmilk the baby receives and may even weaken their nutritional intake.

The introduction of solid foods begins with **vegetable and fruit purées**. **Puréed meat** should be introduced around 1 month after beginning puréed fruit and vegetables, at an adjusted age of around 4–5 months in order to ensure sufficient iron, mineral and trace element intake. Meat also contains high levels of protein. Chicken, fish and egg can also be given. **Finnish cereals** (oats, barley, wheat, rye) are introduced after puréed meat, usually at around an adjusted age of 5–6 months. With regard to cereals, favor porridges over gruels. Restricting the baby's diet or delaying the introduction of solids is not recommended, even in allergy-risk families.

Whenever possible, breastfeeding should continue after the introduction of solid foods until the age of 1–2 years. Regular cow's milk is not recommended for babies under 1 year of age. **Sour milk products** can be introduced at 10 months, but there is no rush to introduce them if the child is still breastfeeding.

Vitamin supplements

Vitamin D

All children in Finland require vitamin D all year round until the age of 18 years in order to prevent rickets. A lack of vitamin D can also cause growth and development delays, convulsions and skeletal damage.

Vitamin D should be introduced gradually no later than at 2 weeks of age e.g. by increasing the dose by 1 drop per day. Vitamin D is primarily recommended in its D₃ form, which is more effective than vitamin D₂.

Vitamin D₃ products include D-tipat[®], Minisun drops[®], Jekovit-D₃[®] and Devisol Drops-D₃[®]. In addition, Gephilus + D₃[®] and Reladrops-D[®] drops also contain vitamin D₃. Vitamin D products are sold in pharmacy.

Recommendation when the baby is fed	Dose / day
Breastmilk	10 µg
Regular baby formula	
- daily amount less than 500 ml/ day	10 µg
- daily amount more than 500 ml/ day	6 µg

In most products, **5 drops = 10 µg and 3 drops = 6 µg** of vitamin D, but always check the dose on the packaging. Products in spray form are not recommended due to inaccurate dosing.

Keskostippa®

Low birth weight babies require lots of vitamins during the first few weeks as they have low vitamin stocks. Keskostippa® is a product for low birth weight infants and contains vitamins A, E, B₁₂ and folic acid. Treatment begins already in the hospital or immediately after discharge. The dose of drops depends on the type of milk given to the baby.

Milk	Dose / day	Duration
Breastmilk - babies under 2.5 kg - babies over 2.5 kg	0.25 ml 0.15 ml	Until the weight is 2.5 kg Until the bottle is empty
Regular baby formula for normal birth weight babies	0.15 ml	Until the bottle is empty

If the baby is fed fortified breastmilk or premature baby formula, there is usually no need for Keskostippa® drops. Follow the instructions above when moving to breastmilk or regular baby formula.

Iron medication

Low birth weight babies require several times more iron than babies with a normal birth weight. Although the body's iron stocks are well utilized, they are low and the baby needs iron both from dietary sources and as medical supplements in order to support red blood cell formation, growth and normal brain development.

All babies with a birth weight under 2500 g are given iron supplements starting at 2 through 4 weeks of age. The amount is introduced gradually over 3 days. The dose is increased as the baby gains weight (see Table). Iron supplements are usually given until the age of 12 months.

In case of intestinal disorders give the baby iron medication every second day with the same dose for two weeks and after that return to daily dosing. If the intestinal disorders don't disappear contact rehabilitation instructor or physician. Do not discontinue the iron supplementation by yourself.

In all children, blood hemoglobin (Hb) levels are at their lowest at 6–8 weeks of age and they gradually rise so that low birth weight and normal birth weight children will have equal levels of Hb by one year of age at the latest.

A Dose

Ferrous glycine sulfate (Niferex®) is often given as an iron supplement. The dose of iron supplementation is approx. 2 mg/kg/day, but the total amount of supplementary iron should not exceed 15 mg/day. In addition, the baby will receive some iron from milk and other dietary sources (meat products, industrial cereal gruels and porridges).

If a low birth weight infant is given special premature baby formula (Premilon®), the dose of iron supplement is 0.1 ml (2 drops). When the baby is transferred from a premature baby formula to a regular baby formula, follow the instructions below.

Iron is given around 15 to 30 minutes before a meal, preferably with water and later with puréed fruit, to aid absorption.

Iron should be administered directly into the mouth using a 1 ml syringe or spoon.

Iron supplement dose for children on **breast milk or regular baby formula:**

Child's weight	Iron supplement dose Niferex® 30 mg/ml	1 ml = 20 drops
2 kg	0.15 ml	3 drops
3 kg	0.20 ml	4 drops
4 kg	0.25 ml	5 drops
5 kg	0.35 ml	7 drops
6 kg	0.40 ml	8 drops
≥ 7 kg	0.50 ml	10 drops

Contact information

Jorvi Hospital

Neonatal Ward L2a: 09 471 82420 (24 h)

Neonatal Ward L2b: 09 471 65582 (24 h)

Neonatal Appointments at Ward L2, Jorvi: 09 471 65384 (Mon–Fri
8 am – 3 pm)

Rehabilitation Instructor Marjatta Heikka: 050 427 2801 (Mon–Fri
8 am – 4 pm)

Rehabilitation Instructor Eva Sepponen: 050 380 7857 (Mon–Fri
8 am – 4 pm)

Women's Hospital

Neonatal Intensive Care Unit Saari, office: 09 471 72717 (24 h)

Neonatal Outpatient Clinic, Women's Hospital: 09 471 75278
(Mon–Fri preferably between 7.30 am – 9 am and 1 pm – 3 pm)

Terveysneuvonta health advice

Helsinki: 09 310 10023 (weekdays 8 am – 4 pm)

Espoo: 09 816 34500 (weekdays 7 am – 6 pm)

Kauniainen: 09 8789 1350 (weekdays 8 am – 4 pm)

Vantaa: 09 839 10023 (weekdays 8 am – 4 pm)

Medical helpline (24/7)

Urgent health advice in the Uusimaa region: 116 117

Emergency number: 112

Peer support

Keskosvanhempien yhdistys
(Association for parents of
premature babies)

Kevyt ry

<https://www.kevyt.fi>



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*Patient instructions, Children and
Adolescents, approved 30.4.2020*