



Litter and Waste Theme

Cloth Nappies vs. Disposable

Is it more beneficial to use cloth nappies instead of disposable ones and what are the various options out there? The answers to these questions are outlined below along with a detailed description of how to wash and care for reusable, real nappies.

Why use Cloth Nappies?

Cloth nappies have evolved a lot over the years. There are many new choices in materials and modern fabrics which are encouraging parents to think about whether disposable nappies are the best choice. Cloth nappies are cheaper, they are healthier because they are free from chemicals and they are better for the environment (it is estimated to take about 250-500 years for one disposable nappy to decompose!)

Further benefits include:

- 1)** Cloth nappies are cheaper than disposables, although initial cost is greater. Approximate cost of purchasing and home laundering real nappies for 2.5 years ranges from £185 (€227) to about £380 (€466) depending mainly on the nappy you choose. The minimum cost of disposables for 2.5 years is £840 (€1031), but could cost as much as £1000 (€1227).
- 2)** Your family will NOT produce 1 ton (1 small car) of waste that would go into landfills. It is estimated that 10,000 tons of disposable nappies are added to landfills EVERY day.
- 3)** Your baby will have less nappy rash.
- 4)** Your baby won't be exposed to sodium polyacrylate (the shiny crystals in the nappy that can stick to babies skin causing skin reactions and has been linked to Toxic Shock Syndrome).
- 5)** Your family doesn't have to put 1-2 bags of disposable nappies out on bin collection day.
- 6)** Using cloth nappies vs using disposable nappies will reduce your babies chances of getting asthma. The Archives of Environmental Health tested 6 leading cloth nappies and 6 leading disposable nappies and discovered that the emissions from one disposable nappy were high enough to produce asthma-like symptoms in mice.
- 7)** Your family is reducing their carbon footprint by using cloth nappies. The manufacturing of disposables takes over 1 million metric tons of wood pulp and 75,000+ of metric tons of plastic each year.
- 8)** Using cloth nappies will help facilitate quicker potty training. During potty training time children who have been in cloth will recognise sooner when they are wet vs a baby in disposable nappies.
- 9)** Cloth nappies are just as easy to use as disposables.
- 10)** There is no need to go to the shop specifically for nappies when using reusable nappies, making them more convenient and saving petrol.

(See <http://www.theclothdiaperwhisperer.com/2009/04/10-benefits-to-using-cloth-diapers.html> and <http://www.happybums.co.uk/content/nappyfacts.asp>)

Nappy Types

There are two main types of nappy systems each with a variety of designs and then particular brands have additional features. These are called one and two part systems.

One Part Systems:

These are nappy systems that are designed for simplicity and convenience. A nappy change is similar to that of a disposable nappy. The main types are called pocket nappies and all in one nappies.

- 1) A **pocket nappy** comes in two parts: an outer part that has a pocket in it and some "boosters" to go **in the** pocket. The pockets can be "stuffed" quickly and well in advance of a nappy change so nappies can be stored "ready to go"!

Boosters (See **Terms** section below for explanation) can be separated from the nappy, hence they can be dried in the drier while the water proof part dries in the air and can be swapped for different materials.



Image taken from: www.handmade-adelaide-baby.com



Image taken from www.beansproutbubba.com.au

- 2) An **all-in-one nappy** comes in one part: "boosters" are stuck to the outer part of the nappy. Additional boosters can usually be added as necessary. This nappy is "ready to go" as soon as it's dried. **Boosters** are attached to the nappy, hence they cannot be dried separately and boosters cannot be swapped (although additional boosters can usually be added).



Image taken from: www.handmade-adelaide-baby.com



Image taken from: www.diaperco.com

Two Part Systems:

These nappies consist of two parts that are put on baby separately: an inner nappy that is not water proof (it may be fitted nappy, a flat nappy or a prefold) and a water proof outer layer (a cover, a wrap or a shell). This design is intended to allow you to reuse the waterproof layer and change only the inner nappy. This saves on washing and saves on expense too as you can buy fewer outer layers. Inner and outer layers can be purchased together (e.g. All-in-two Nappies) but can often be mixed and matched between different brands. Wraps come in all sorts of designs and patterns. They can come in different sizes or have snaps to adjust the size as baby grows. The two part system options are described below in greater detail.

- 1) A **"fitted nappy"** is one option for the inner part of a two part system. It is shaped quite like a disposable nappy or some of the other cloth nappy options, but it is not water proof and hence the need for a wrap.



Image taken from: www.handmade-adelaide-baby.com

- 2) A **"flat nappy"** is one option for the inner part of a two part system. It is not shaped and you may need to fold some types (**called prefolds**). It is not water proof and hence the need for a wrap.



Image taken from: <http://www.naturalmamas.co.uk>

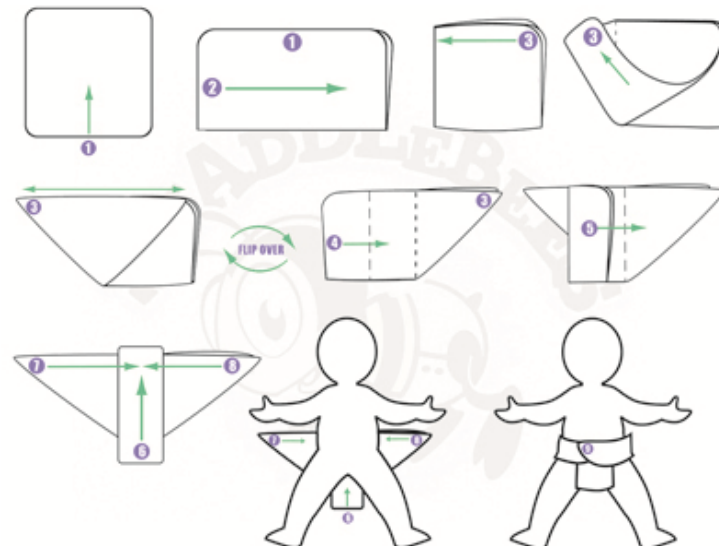


Image taken from: <http://www.swaddlebees.com/Products/Fitted-Diapers/flats>

- 3) An **all-in-two nappy (hybrid nappy)** consists of an inner nappy and a cover. The nappy can be attached to the cover, so a nappy change does not involve putting on two separate parts. Covers must be matched to the correct insert to make use of this advantage, but they can usually fit over other inserts too. Like other two part systems, covers do not need to be washed at every change.



Image taken from: <http://www.clothnappyreviews.com.au/softbums-omni/>

Information on home trials and events relating to the above products can be found on the following website www.clothnappylibaby.ie

Another example of a **hybrid nappy** is the Pop-In Nappy by Close Parent. It is unique in its design as it is a birth-to-potty hybrid cross between an All-in-One and a two-part system. It is comprised of a bamboo liner which pops inside the waterproof shell, and also comes complete with a detachable extra bamboo liner and a wrap around night-time booster.

Information available from <http://www.babiesnappies.co.uk/2008/09/15/nappy-reviews-modern-baby-pop-in/>

Prewashing

All new reusable nappies should be washed (without detergent) before use to increase their absorbency.

Like new towels, new nappies need to be washed through a few times to fluff them up and improve their absorbency. If baby wets in a brand new nappy the wetness will simply run off the surface rather than soaking in.

A nappy made of natural fibres (bamboo, cotton, terry towelling) will reach its maximum absorbency after about 3-4 washes, hemp may take 5-6 washes. There is no need to dry the nappies between washes.

Nappies made of man-made fabrics (micro-fibre, micro-fleece) can be washed just once or twice before first use.

Wash deep coloured nappies and white nappies separately for the first 1-2 washes to avoid colour run.

It is advisable to wash waterproof wraps before their first use to be sure that they are thoroughly clean.

Please bear in mind that nappies cannot be returned once they have been washed.

Information available from <http://www.lizziesrealnappies.co.uk/index.cfm/washing>

Changing Time

If you are using flushable liners you simply remove the liner and the poo, as one, and flush them down the toilet. If there is any poo remaining on the nappy itself, this can be removed with a bit of toilet paper. The nappy is now ready to be stored in a nappy bucket or waterproof bag ready for the next wash.

NB. Flushable liners should only be flushed one at a time. If just wet, they can be rinsed through, dried and used again. Wet-only liners can be composted.

If you are using a washable nappy liner, hold the liner over the toilet and the majority of the poo will simply fall off into the toilet. More stubborn soiling can be removed by sluicing the liner in the toilet. Washable nappy liners should be placed in the nappy bucket with the nappies ready for the next wash. Due to the watery consistency of newborn baby poo (especially with breastfed babies) the liners can be washed without removing the poo first - the poo will wash out easily during the wash cycle.

Liners, both washable and flushable, can be wetted and used as wipes. Washable fleece wipes are a great cheap and green alternative to commercial baby wipes.

Information available from <http://www.lizziesrealnappies.co.uk/index.cfm/washing>

Storing

Leave nappies and liners in a dry plastic bucket with a sealed lid until you have enough to do a wash (usually every 2-3 days) - no soaking required.

Another option is to use a pail such as the Smart Pail by Smartipants. It will hold approximately 15 nappies, and can be used to store nappies until wash day. You can then open the zip and empty the whole bag into the machine, washing the whole lot. A pail has a lot of benefits over a traditional nappy bucket:

- Can be hung out of reach of toddlers
- Can be easily folded and transported for trips away
- There is no need to touch the wet nappies to transfer them into the washing machine
- Washes easily alongside your nappies

You can use a nappy mesh bag to make it even easier from bucket to machine. You can get little mesh bags from Popolini which you can place in your nappy bucket to store used nappies and then add the whole lot to the washing

machine in the mesh bag. The bag has a zip fastening and can also double up for use with any laundry item that needs special care. For best results leave the mesh bag open when you put it in the machine so that the nappies will fall out during the wash.

You can also get waterproof bags such as those from Popolini, Itti Bitti and Smartipants that can be used to store reusable cloth nappies when you are out and about. They can fit about 3-4 nappies.

Information can be found on www.earthmother.ie and www.fill-your-nursery.com/nappy-accessories/hanging-pail.html

Cleaning

Each of the different brands and nappy types (one and two part systems) have washing instructions with them. Some washing tips that generally apply to most cloth nappies are as follows:

How do I wash my nappies?

When you are ready to wash (generally when the nappy bucket is full or after a maximum of 3 days), place the nappies in the washing machine. A mesh bag contained within the bucket will make transferring the nappies easier - but make sure that the bag is left open so that the nappies can be released into the wash!

Washing instructions can differ for different nappies, and people often follow their own system but as a rule it's good practice to prewash the nappies on a cold cycle to remove the urine and any poop from the nappies, and then do a proper wash. By rinsing nappies out first you stop urine from 'locking in'.

Generally a 60 degree wash is recommended but some people do a 40 degree wash with just the occasional 60. If you wash at 30/40 degrees use a little antibacterial nappy wash as not all bacteria is killed at less than 60 degrees.

Use non-biological washing powder or liquid. You will only need a very small amount of washing powder (a third of the recommended amount). Using too much detergent will simply make your reusable nappies stiff and the build up of residue may lead to smelly nappies, nappy rash and decreased absorbency. If you can see soap suds in the machine during the final rinse, then you have used too much powder.

You should avoid fabric conditioner/softener when washing real nappies, as this can greatly decrease the absorbency of the nappies and may lead to skin irritations.

Every now and again, it can be useful to wash all nappies with no detergent at all to 'strip' them and help prevent washing detergent residue build up as this can decrease absorbency.

You can place other washing in with the nappies to avoid operating the machine on a half load. Include sheets, babygros etc in the wash.

If your real nappies have aplex (velcro), it is important to fold the tabs back on themselves, otherwise the nappies will stick to each other and to other garments in the wash.

Always wash according to manufacturer washing instructions.

How do I clean my waterproof wraps / covers?

Waterproof covers do not have to be washed after every use. Unless a nappy has become very wet, or the wrap has become soiled, it should only need changing after every 2-3 uses. Most wraps can be washed in the machine at a maximum of 60°C, although wherever possible it is best to wash on a cooler temperature or by hand as continued machine washing will accelerate deterioration of the fabric.

Wraps dry quickly and are best dried naturally. To avoid damaging the waterproof coating, avoid hanging them directly on radiators and do not wring them.

See manufacturer's instructions.

What are nappy liners?

Nappy liners are thin sheets of paper that can sit inside the nappy to help keep them cleaner after your baby does a number two. The liner can be hygienically flushed down the toilet with any solid waste inside it and the nappy itself stays much cleaner for the washing machine. Using nappy liners along with your cloth nappies can make life much easier! You can get 100% biodegradable liners by Popolini on a roll (suitable for newborns) or in a box (suitable for all ages). It can be beneficial to use liners if you are using nappy creams that contain oil as they can stop the oil from getting stuck on the material affecting its ability to wick moisture away from your babies bum.

Information available from: <http://www.earthmother.ie/products/bumGenius-Reusable-One-Size-Cloth-Nappy.html>

Drying

Reusable nappies can be dried either on the line, in a tumble drier, over an airer or in the airing cupboard.

Line drying: the cheapest and most environmentally friendly option is to dry nappies on the line. This will maximise the life of your reusable nappies, while the sunshine will deodorise, sanitise and naturally bleach them. If you do not have a tumble dryer (or want to minimise the use of one) it's worth considering quick-drying nappies such as BumGenius V4, FLIP stay-dry, Bambinex Teddy etc. During the winter months nappies can be dried in airing cupboards, on free standing airers or airers that hang from radiators. It is not advisable to hang nappies directly on radiators as this can scorch and thus damage the fabric.

Tumble drying: putting a clean dry towel in the tumble drier with your nappies will reduce the amount of time it takes to dry them, as it will absorb some of the condensation. Dry on a low-medium heat. Try to avoid drying nappies (especially bamboo nappies) on a high heat as it can alter the texture of the fabric and may prevent the effective use of the nappies.

Always tumble dry according to manufacturer instructions and always ensure that nappies are thoroughly dry before being stored away.

Smelly Nappies

Smelly nappies are only rarely an issue, but if your nappies suffer from it you'll know about it!

The sharp ammonia smell is, in the main, as a consequence of teething. When teething, urine tends to change and can result in the build up of ammonia in the nappies.

Also, if you're using too much washing powder this can lead to a build-up of detergent in the wash that can 'soak up' this smell.

It's likely to only be a temporary thing but it can last a few weeks and can come back during future teething periods, so here's what you can do about it:

Give the nappies a cool wash before giving them their main wash. High temperatures can seal the smells in, so it's a good idea to wash them on a cool setting first. Cut right back on washing powder. A build-up of detergent can lead to a build-up of smells, so limit the detergent to about 1 tablespoon per wash - no more. If there are still soap suds in the wash during the final spin you have put too much powder in and need to cut down further.

Get the nappies out on the washing line as much as you can.

If you are still having stink issues, run a hot wash cycle with no detergent.

For most people, the smelly nappy issue will disappear within a couple of weeks.

Also, some people put a bit of tea tree or lavender oil in with nappies that are being stored to kill any odour and to help fight bacteria.

Information from <http://www.lizziesrealnappies.co.uk/index.cfm/washing>

Biodegradable Nappies (Eco Disposable Nappies)

If you're going to go the disposable route **eco disposable nappies** are a great option. They are made from chlorine and bleach-free, sustainable, naturally derived materials such as maize and wood pulp from sustainable resources and are more airy, comfortable and breathable than conventional nappies. (See www.spiritofnature.co.uk) Furthermore, they are more environmentally friendly than normal disposable nappies seeing as most of the material is compostable and can be put into municipal brown bins. Some of the main suppliers of this type of nappy are: Bambo, Moltex, Nature Babycare and Totsbutts (www.earthmother.ie and www.ecobaby.ie/catalog/ are suppliers).

Extras

- 1) **Organic Wipes are 100% Biodegradable, Compostable, made from natural and organic resources (e.g. viscose) and free from:** Chlorine, alcohol, paraben preservatives, sodium laureth sulphate (See **Terms**). (See www.earthmother.ie)
- 2) **Biodegradable nappy sacks**
This product is better for the environment than normal refuse sacks as they are 100% degradable. They're an ideal size to hold used nappies and the tie handles make them easy and safe to use. You can get a roll of 50 sacks. (See www.earthmother.ie)
- 3) **Reusable Nappies Cleanser (Antibacterial)**
Bio D Nappy Fresh is a unique, antibacterial, germicidal sanitizing powder for the safe, effective cleansing of re-usable textile nappies at low, energy-efficient temperatures. Ideal for soaking your nappies and it also makes an excellent wash booster to help keep your white's white. An environmentally friendly alternative to chemical nappy soaks.

Benefits for you and your baby:

Hypoallergenic
Enzyme free
No chlorine bleach
Perfume free
Biodegradable
Available in 500g recyclable boxes.

Bio-D is an independent, family-owned, ethically motivated company, dedicated to promoting the use of hypoallergenic, environmentally responsible detergents that have a minimum impact on the ecosystem both in their use and in their manufacturing process. Where possible, all raw materials are plant-derived and are obtained from renewable sources, they are not tested on animals and have no animal by-products. The packaging is recyclable. Free from (SLS) Sodium Lauryl Sulphate. All products are allergy tested. (See www.earthmother.ie)

Websites:

- www.anniepooh.ie
- www.babame.com
- www.babiesnappies.co.uk
- www.babybots.co.uk
- www.bambo-nature.com
- www.blueberrydiapers.com
- www.bumgenius.com
- www.charliebanana.com
- <http://www.cleangreennappy.co.uk/bambinex>
- www.cleverclogs.ie
- www.clothnappylibrary.ie
- www.easypeasynappies.co.uk
- www.earthmother.ie
- www.ecobaby.ie/catalog/
- <http://econobum.com>
- www.fill-your-nursery.com
- www.fill-your-pants.com
- www.greenpees.co.uk/
- <http://shop.fuzzibunz.com/>
- <http://ittibitti.co.uk/>
- www.joeyroo.com
- www.littlecomfort.com
- www.littlelambnappies.com
- www.lizziesrealnappies.co.uk

- www.mother-ease.com/
- www.mumandme.ie
- www.naturalnursery.co.uk
- www.naty.com (Nature Babycare)
- www.organico.ie/news/organico-news/real-nappies-online
- www.organiccottonshop.ie (for Bambo products)
- www.spiritofnature.co.uk
- <http://tillysworld.com/>
- www.totsbots.com
- www.wonderoos.com

Terms

Booster (Inserts) - A booster is used to 'boost' the absorbency of a nappy and hence the length of time the nappy can be worn. It is a piece of absorbent material designed to sit snugly inside the nappy. A booster is especially useful for night time use and for use when you know that your baby's nappy can't be changed for a long time.

(Information taken from: <http://www.bumpybuns.com.au/ClothNappyAccessories/ClothNappyBoosters.html>)

Paraben preservatives - Parabens are a class of chemicals widely used as preservatives by cosmetic and pharmaceutical industries. Parabens are effective preservatives in many types of formulas. These compounds, and their salts, are used primarily for their bactericidal and fungicidal properties.

(Information taken from: <http://en.wikipedia.org/wiki/Paraben>)

Sodium laureth sulfate, or sodium lauryl ether sulfate (SLES) - is a detergent and surfactant found in many personal care products (soaps, shampoos, toothpaste etc.). SLES is an inexpensive and very effective foaming agent that is used in many cosmetic products for their cleansing and emulsifying properties. They behave similarly to soap. However, it is known to be a skin and eye irritant.

(Information taken from: http://en.wikipedia.org/wiki/Sodium_laureth_sulfate)

Sodium polyacrylate, also known as **waterlock**, is a **sodium** salt of **polyacrylic acid** with the chemical formula $[-CH_2-CH(COONa)-]_n$ and broad application in consumer products. It has the ability to absorb as much as 200 to 300 times its mass in water. Sodium polyacrylate is **anionic polyelectrolytes** with negatively charged **carboxylic** groups in the main chain. While sodium neutralized **polyacrylic acids** are the most common form used in industry, there are also other salts available including **potassium**, **lithium** and **ammonium**.

Super absorbent polymers. These cross-linked acrylic polymers are referred to as "Super Absorbents" and "Water Crystals", and are used in nappies.

Sodium Polyacrylate is a super absorber. This chemical was considered to contribute to Toxic Shock Syndrome and the use of it in tampons was banned in 1985. Sodium Polyacrylate gives the illusion that your baby's skin is dry and actually it isn't. Sodium Polyacrylate when found in a disposable nappy looks like small crystals. Anyone who has used disposable nappies, know that as the nappy gets wet it expands and turns to a gel like substance. Sometimes this can leak from the nappy onto your baby's skin.

(Information taken from: http://en.wikipedia.org/wiki/Sodium_polyacrylate and <http://www.happybums.co.uk/content/nappyfacts.asp>)