



# The **Real Nappy** Handbook

for parents and carers

'Guiding you through your real nappy years'



## Acknowledgements:

© **The Real Nappy Handbook** – for parents and Carers  
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© **Nappy Folding Instructions and additional extracts** – courtesy of Eva Fernandes,  
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### Real Nappy Models:

Special thanks to all the Buckinghamshire real nappy babies, children and parents who gave their time and enthusiasm to help model all the nappies featured in this guide.

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# What is



# Buckinghamshire

# Real Nappy Initiative?

**Buckinghamshire Real Nappy Initiative is an initiative within the Recycle For Buckinghamshire campaign co-ordinated by the Waste Partnership for Buckinghamshire.**

The Waste Partnership for Buckinghamshire is made up of all the district and county councils in Buckinghamshire: Aylesbury Vale District Council, Buckinghamshire County Council, Chiltern District Council, South Buckinghamshire District Council and Wycombe District Council.

## **PLEASE NOTE:**

The information, advice and guidance in this handbook is intended to guide parents and carers during their child's real nappy years to help make real nappy usage enjoyable and sustainable. References to medical conditions and explanations are for reference only and should not be treated as a substitute for qualified medical advice from your doctor or other qualified medical practitioner. The reader is advised to consult a doctor or their health care professional regarding all aspects of individual health care for their child/ren.

The information presented in this handbook is accurate and current to the best of the author's knowledge. Due to the constantly evolving nature of this subject matter the information is subject to change. However, the authors, Buckinghamshire Real Nappy Initiative and the Waste Partnership for Buckinghamshire, make no guarantee, and assume no responsibility for any errors, omissions or changes in details given which have been presented in good faith.

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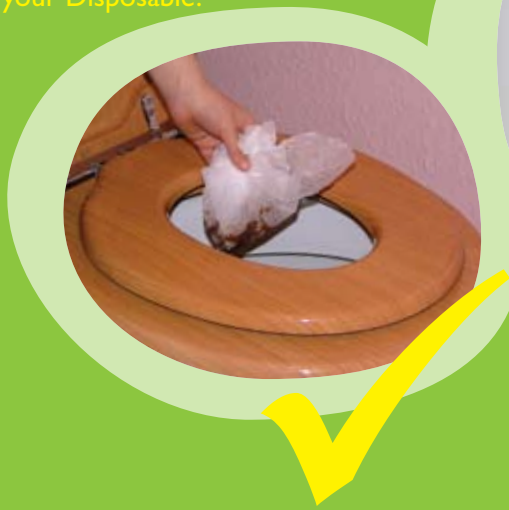


## Alternative Disposable Nappies....



Compostable nappies  
 should not be put in here

If you use any type of disposable nappy, always remember to:  
 'Put the Poo in the Loo before Disposing of your Disposable!'



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We receive many enquiries about 'COMPOSTABLE' nappies. Common questions asked are:

'Can I put my 'compostable/bio-degradable' disposable nappy in to my 'GREEN/ KITCHEN' waste collection to be collected fortnightly?

'Can I put my 'compostable' disposable nappy into my home composter?'

So before reading this fact file, which outlines the reasons why this can't be done, please read the following:

For parents who have 'green' and 'kitchen' waste collected fortnightly in Bucks, which is taken to our High Heavens Compost facility or those who would like to home compost these nappies, please note that:

Disposable nappies that claim to be 'compostable' are not accepted in your 'green' and 'kitchen' waste collections. We also do not recommend these nappies to be composted at home in your home composter.

This is because they will contaminate these sites rendering the compost useless. So please remove baby's excrement from the disposable nappy - pop this down the toilet to be treated in the sewerage system properly. Put the disposable nappy in your 'refuse' household bin. The disposable nappies will be taken to a Bucks landfill site to be buried.

## 1. Introduction

In Bucks today, 87,000 disposable nappies will be disposed of in household bins that ultimately end up in Buckinghamshire landfill. That amounts to 31 million disposables per year at a cost of ¼ million pounds to Buckinghamshire Council Tax payers. Disposable nappies are impacting on local finances as well as our local landfill environment and cannot be sustained in the future. So what is the alternative....?

Buckinghamshire Real Nappy Initiative is actively encouraging parents to use Real, washable nappies instead of disposable nappies on their children. Using modern Real nappies are a viable option especially with the fabulous range of real nappies currently available and modern laundering facilities. However, it is claimed that nationally 95% of parents

are using disposable nappies so a major shift in nappy behaviour would need to happen to solve this problem. Parents, who generally use real nappies, also use disposables on occasions such as at night or when away from home. Many try to choose disposables which they hope will have a reduced impact on the environment.

So are eco-disposable, biodegradable or even 'compostable' disposable nappies preferable to the high street brands? Enquiries to the initiative have included questions about these new breed of disposables. Until further research is carried out to confirm that these nappies are compostable, fully biodegradable or ecologically sustainable, we prefer to call them 'Alternative Disposable Nappies'.

Are Alternative Disposables really eco-friendly? Can they be composted to such an extent that they bio-degrade? Are the materials they use from sustainable sources? And when they are manufactured, are ecological and ethical processes incorporated?

## 2. What Is A Disposable Nappy Made Of?

First we need to know what disposable nappies are made of. If you have the chance, take a look at a disposable nappy. You will see paper, wood pulp, plastic coatings, colour dyes and a bit of Velcro to hold it together. But what actually makes the nappy absorb all of your child's urine (pee)?

What you won't see, hidden in the core of the nappy liner amongst the wood pulp, is a crystal gel that you may have seen on the skin of your child – a super-absorbent polymer gel (sodium polyacrylate or SAPS as they are commonly known). The tiny individual grains, can absorb 100 times their own weight in moisture.

*Experiment!* An interesting experiment is to fill a disposable nappy with a couple of litres of water, allow it to absorb then cut the core of the nappy open to expose the swollen gel. You may have noticed these tiny balls of gel on your child during nappy changes – these have escaped from the core, although manufacturer's say this shouldn't happen, many parents experience this common problem.

The horticulturists amongst you may have come across similar crystals that are sprinkled around the base of plants, which swell and absorb water so that plants can draw from over a long period of time (generally whilst your away on holiday!). The crystal gel eventually shrink down to almost the original size, after the plant has removed all the moisture via the osmosis process.

These are a very similar to the gels used in disposables except extra chemicals have been added to the disposable gel to deal with the hygiene of urine, human faeces and associated smells.

## 3. Superabsorbent Gels (Commonly Known As SAPS)

When you hear that disposable nappies don't degrade very well, bearing in mind that they have a high content of paper products, we are referring to these gels and the plastic coatings, dyes and bleaches. These are the reasons why they don't degrade! Guessimates suggest each nappy will take 200-500 years to break down but no-one really knows – yet. The other problems with SAPS are that they continue to absorb any type of moisture around them once in the refuse bin, truck and in landfill. But as there is nothing to draw the excess moisture off (such as the horticulturists gel), the nappies grow in considerable size and weight, adding to the tonnage weight and bulk in the landfill environment.

## 4. Children With Eczema, Skin Or Chemical Sensitivities

Parents and carers who have children with these health conditions need to consider which nappies will not aggravate these conditions. Special consideration should be given to disposable nappies containing these gels. The reason for this is that gels can migrate from the core of the nappy and can come into direct contact with the skin; this can lead to direct irritation of skin as the gels are abrasive especially when children move. In addition to this, the gels are not only excellent at absorbing urine but any type of moisture it comes into contact with. This includes skin moisture. So for a child that experiences dry skin because of eczema or skin sensitivities, skin moisture loss can be increased by exposure to these gels, causing greater aggravation to broken, dry/cracked or sore skin.

## 5. Do Alternative Disposable Nappies Contain SAPS?

So one would expect that in an Alternative Disposable nappy which claims to be bio-degradable or compostable that no SAPS would be used? Is the expectation that they should have less chemicals, bleaches and dyes so – in theory – they could be very degradable once the ‘poo’ has been removed? Perhaps another expectation would be that they are made from sustainable materials such as recycled paper/wood pulp or the manufacturing processes are ecologically sustainable?

**Are SAPS used?** YES Unfortunately all disposable nappies that currently suggest they are either: ‘eco-friendly’, ‘degradable’, or ‘compostable’, contain super-absorbent gel (SAPS). All that is, except one American brand called Tushies, which doesn’t claim to be degradable or ecologically sustainable at all.

**Sustainable Materials?** NO Most of these nappies do not use any recycled materials, however even if recycled wood pulp or paper were used, research would have to consider the impact (if any) it could have on a child’s health? Virgin wood pulp is used instead although the Nature Boy & Girl manufacturers ‘Naty’ state that:

- ‘...The back sheet of the Nature diaper is a lamination of renewable/biodegradable maize Bio film and of natural tree-pulp TCF-pulp (totally chlorine free) tissue.’
- The printing colour on the diapers is, Nr S-i2: OK Compost; PMS 3425 Green. Certificate attesting to the fact that the printing ink is free of heavy metals injurious to health.

- Naty AB has developed the renewable/biodegradable maize Bio film, which is used in the lamination. The film is based on cornstarch and biodegradable polyester. The compostability of this product is certified by the ‘Ok Compost’ label, based on the guidelines of the European normalisation committee Cent/TC261/SC4/WG2N97, 05REV3 and issued by AIB Vincotte.
- Naty is exclusive holder of the renewable/biodegradable maize Bio film
- The renewable/biodegradable maize Bio film is 100 % GM free.
- The renewable/biodegradable maize Bio film is not only watertight but also ‘breathes’ resulting in an airier, drier and more comfortable nappy.

However Naty also confirm that:

‘...The products also reduce the need for non-biodegradable super absorbents in the nappy with 50 % compared with the market leaders.

’

## 6. Do Alternative Disposables Have Any Benefits?

However, there is one benefit of these nappies as highlighted by Naty. They use 50% SAPS, reducing the amount of plastics and chemicals by half, compared with leading brands. In theory then, this could equate to the nappy weighing 50% less on absorption.

Could this be a benefit to waste authorities bearing in mind that waste is charged per tonnage weight? Perhaps, but no studies have been conducted to see if this is the case. So the decision is yours!



## 7. Do Alternative Disposables Help In The Landfill Environment?

One might assume that 'compostable' disposable nappies mean that they degrade down more quickly in the landfill environment. Unfortunately this is not the case. The landfill environment is compacted down to make way for more refuse. Such compaction means that everything is squashed tightly together so oxygen (which is essential for the decomposition/break down of materials) levels drop and decomposition is slowed down. In Bucks, we regularly pull out newspapers from our landfill sites that are dated over 50 years old and can still be read. Newspaper is generally considered highly degradable yet in a landfill environment they take decades to finally degrade. So what hope has 7,500 tonnes (per year) of Bucks disposable nappy waste, whether 'alternative' or not?

## 8. Cautionary Guidance on Disposing of Alternative Disposables

### Fortnightly green/kitchen waste collections in Bucks

For residents who have 'green' and 'kitchen' waste collected fortnightly from their homes, which is taken to High Heavens Compost facility or to an external Compost Facility, please note the following:

*Disposable nappies that claim to be 'compostable' ARE NOT ACCEPTED IN YOUR GREEN/KITCHEN WASTE COLLECTIONS.*

This is because they will contaminate these sites and put waste operators at risk. So please remove poo (line the nappy with a paper liner and pop this down the toilet as you normally do when using real nappies) and put the disposable nappy in your normal household refuse bin. Removing the poo will reduce any odours and discourage flies during storage. They will then be taken to a Buckinghamshire landfill site to be buried.

### Home Compost Bins

- If you see claims on disposable nappy wrappers stating that the nappies are 'compostable', treat these nappies with caution.
- No thoroughly conducted research has been undertaken in this area, and those that have, have been carried out on a very small scale.
- A single compost bin would be overwhelmed with the large volume of disposable nappies generated over just 1 week (40+ nappies). Even if only 1 nappy per night is used for example, that's still 7 per week, 30 per month, 364 per year!
- Household compost bins do not reach high enough temperatures to breakdown excrement (poo) or SAP gels.
- Human excrement should not be put into your household compost bin as it could result in local contamination of your home and garden environment. Poo belongs in the Loo not in your garden.
- If you do manage to produce compost from disposable nappies, the advice is to only put the compost on flower borders not on fruit + vegetable plots, unless future research conclusions suggest otherwise.
- If you do decide to use disposables in conjunction with real nappies, remember to line them with a paper liner to make excrement disposal into your toilet system easier – just as you normally do when using real nappies.
- Poo should be put in the toilet so it enters the sewerage system where it will be treated.
- The nappy should then be put in the 'household' bin!

### Horse and cow manure heaps

Should be treated with the same caution as home compost bins, especially where SAPs and excrement are concerned and even though the temperatures generated are generally higher. Horses and cows are vegetarian so manure produced doesn't need to be treated like human sewerage.

### Wormeries

Putting them in a wormery, is another suggestion that you may hear. Experienced Compost Officers in Buckinghamshire who are very knowledgeable about wormeries advise against putting 'alternative' disposable nappies into wormeries – even if there is a claim on the wrapper that this can be done.

A small home wormery would be unable to manage the sheer quantity of nappies that 1 child would produce (up to 5,500 disposables - 1½ tonnes over a 2½ year period), or even if you only used 1 each night = 7 per week. The worms would be affected by the chemicals they consume. No thoroughly conducted research has been undertaken in this area, and those that have, have been carried out on a very small scale. Worms are essential to our environment and 'wormery' worms need looking after too with a healthy diet & TLC!

### Home Incineration

Parents have also advised, that instead of putting their disposable nappies in the refuse bin (because of concerns about landfill or they do not have storage space prior to collection) that they have put them on the open fire in their living room or in the garden incinerator/bonfire instead. Some parents also advise, that when they run out of disposables they sometimes dry out a 'used, urine-soaked' disposable nappy on a radiator, they genuinely didn't realise that they contained chemicals.

*Home Incineration: Please do not do this as the chemicals that are contained within the nappies could affect your home environment and potentially your health. No studies exist looking at the potential effects of heating up the gels in these ways. Incinerating them on open fires, indoors or out, speeds up the release of CO2 (Carbon Dioxide), dioxins and chemicals directly into your immediate atmosphere and ultimately into the global atmosphere. CO2 is a gas that can be harmful to the environment and is the gas that is said to be linked to global warming.*

## 9. Are Disposable nappy ingredients listed on the wrapper to help you choose?

Many parents are genuinely unaware of the chemical gels disposable nappies contain, as nappy manufacturers are not obliged to list the ingredients on the wrapper. This is because disposable nappies are not considered a 'cosmetic' product. Legislation changed approx. 25 years ago whereby cosmetic companies had to list the ingredients used in their product. This doesn't apply to disposable or sanitary products as they are not considered to be a 'cosmetic' product. Interestingly, real nappies are clothing and as such have to list their ingredients on their labels.

*If disposables aren't classed as 'cosmetics' then surely they should be classed as 'clothing'? DISCUSS!*



## 10. Your Council's Viewpoint on Alternative Disposables

Disposable nappies, when wet, weigh a considerable weight. Your council is charged per tonnage weight of waste that is disposed of at local landfill sites.

Although 'alternative' disposable nappies claim to be compostable and more environmentally friendly, indications are that they still consume a lot of natural resources in their production and transportation and do not do what they say on the tin! i.e. they are not compostable or degrade any more quickly than a conventional disposable nappy in the landfill environment.

In Bucks, your waste management teams would prefer you to put ALL types of disposable nappy in your household bin rather than try to manage the disposal of this waste at home – even if your intentions are for the sake of the planet! The only alternative to reducing the amount of disposable nappy waste going into local landfill are by using real nappies or by adopting Natural Infant Hygiene.

On a more positive note, alternative disposable nappies, along with 'own-brand' disposable nappies, tend to have 50% less SAP gels in them, which mean

they will ultimately weigh 50% less after swelling to full capacity. So in considering all the known facts to-date and by disposing of your disposable nappy in the correct way, the choice about which 'alternative' nappy to use - is yours!

## 11. Where To Purchase 'Alternative' Disposable Nappies ?

Nearly all the local real nappy advisers and online real nappy suppliers can offer an 'alternative' disposable nappy brand of one type or another. Tushies are available locally from Little Green Earthlets or from online suppliers. Nature Boy & Girl are sold via some local Mothercare, Waitrose and Sainsbury stores.

If you would like an updated list of local and national real nappy suppliers, this can be found on the website or by contacting the initiative direct.

*Alternative disposable nappies that you may hear about are listed below. Please note: new 'ALTERNATIVE' brands are emerging all the time so this list is only for starters! Apply the same consideration to any you find....*

### Tushies

Only 1 nappy called 'Tushies' (an American brand) which actively doesn't claim that it is bio-degradable or otherwise, is totally gel-free (SAP free), dye and chlorine/bleach/perfume free and contains only wood pulp, paper and a bit of sticky tape. It's a very effective disposable nappy but again shouldn't be composted, as baby's faeces would need to be completely removed before shredding up. In theory, if this nappy only contains urine and has the plastic securing tape and external coating plastic removed, it could be composted, as it would only contain wood pulp, paper and urine. Urine is an excellent 'activator' within the composting process.

### Tender Care

Is made by the same manufacturer of Tushies, but contains gel (SAPS), albeit 50% less than leading manufacturers. It is chlorine, latex and perfume free. Visit: [www.tendercarenappies.co.uk](http://www.tendercarenappies.co.uk) for more information.

### Nature Boy & Girl

Made in Sweden with revolutionary environmentally conscious manufacturing techniques, however this still contains gel albeit 50% less than the leading brands. Claims that it is made of 70% degradable materials. Available from Mothercare, Waitrose and Sainsburys. Visit: [www.naty.se](http://www.naty.se) for more information.

### Moltex

Made in Germany. Claims to have minimal impact on the environment during manufacture. Virgin paper and wood pulp, no dyes, bleaches/chlorine but still has super-absorbent gels (SAPs). Again contains 50% less gels than leading brands. Claims that it can be composted or put in a wormery, however this is not possible in a home compost system (due to the excrement and sheer volume produced) or in Buckinghamshire High Heavens compost facility. Visit: [www.moltex.de](http://www.moltex.de) for more information.

### SMART Disposable Pads by Mothercare

New pad designed to be used with Mothercare's SMART nappy system. This pad also has superabsorbent gels in them so do not home compost or put down the toilet.

### Weenee Pads

Another disposable pad option is the Weenee pad that can also be inserted into a real nappy for extra absorbency. Again, this pad has the superabsorbent gels but claims it can be composted, put in a wormery or even torn up and put down the toilet.

Studies that are available via the internet are on a small scale and do not consider the short or long-term impact of the SAP gels if compost is put onto soil used for growing fruit or vegetables, which will ultimately be consumed.

Shredding these pads and putting them in the toilet is also a cause for concern as they are entering the sewerage system. The gel swells to 100 times its original weight and size so could block pipes and have an impact within septic tanks e.g. on the essential bacteria that is present. No studies have been conducted to consider this impact. Anglian Water request that these pads are not disposed of in the toilet as they will affect their natural bacteria filtration systems and cause blockages. If you would like to dispose of this product in this way, contact your water supplier to see if this product is acceptable in their systems. For more information visit: [www.teamlollipop.co.uk](http://www.teamlollipop.co.uk)

© Written by Janice O'Flynn-Mundin, Buckinghamshire Real Nappy Initiative Updated February 2008

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