

# Why Use Cloth Diapers?

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The answer is simple really - it is better for your baby, less expensive than paper diapers and better for the environment.

## Why is it better for your baby?

Hmmm ... paper underwear ... well I don't know about you but I am positive I would prefer fabric underwear to paper underwear – hands down. But that is just comfort speaking. Let's talk about what's really important. Your babies health.

### Let's start with diaper rash.

The percentage of American babies who wore COTTON DIAPERS in 1955 was 100%. In 1991 it was 10%.

The percentage of American babies who wore DISPOSABLE DIAPERS in 1955 was 0%. In 1991 it was 90%.

The percentage of American babies who experienced DIAPER RASH in 1955 was 7.1%. In 1991 it was 78%.

Cloth diapers allow your baby's skin to breathe and heal more quickly. This helps prevent and treat diaper rash.

### The chemicals in paper diapers

Disposable diapers are made in good part of super-absorbent chemicals, paper pulp and plastics while cloth diapers are mostly made of natural fabrics.

Dioxin is a chemical found in many paper products and is an unwanted side effect of the bleach-

ing process. Dioxin has been found to cause damage to the immune system, and birth defects when administered to some species of animals even in extremely low doses. Industry officials acknowledge that some disposable diapers contain traces of Dioxin. Based on the animal tests, the federal environmental agency classifies Dioxin as a "probable human carcinogen."



Environmentalists have contended that the presence of Dioxin in products that come in contact with sensitive parts of the body, where the chemical might be absorbed, presents a possible serious health threat.

Perfumes and chemical emission have for a long time been linked to asthma. Results of a study

*Disposable paper diapers contain chemicals that may be unhealthy for your baby.*

*Babies who wear cloth diapers are less likely to have diaper rash.*

published in 1999 showed that the chemicals in disposable diapers may have the same effect on your baby.

Most disposable diapers contain a super absorbent gel to absorb moisture away from your babies skin. Have you ever found little beads of clear gel on your babies bottom during a diaper change? It is small beads of the super absorbent gel that have escaped the diaper. I was unable to find evidence or studies on the effects of extreme drying of babies thin skin or genitals.

In 2000 British study of disposable diapers several brands were found to contain trace quantities of TBT (tributyl tin) a highly toxic chemical known to disrupt the human immune system and disrupt sex hormones.

## Is it really less expensive to use cloth diapers?

**A**bsolutely, we've calculated it every which way and there is no doubt about it, using cloth diapers is easier on the pocketbook.

### You want proof? Read On ...

We have based our figures on an average of 6 disposable diapers being used each day. I couldn't find research to support this figure but based on logic I assumed this would be a 'very' conservative estimate.

Based on my own research done in November, 2003 the cost of a disposable diaper was \$0.22 per disposable diaper this was the lowest price I could find with the most expensive being \$0.50. For the purposes of this article I will use the least price of \$0.22 per disposable diaper.

Let's not forget about paper wipes. I am assuming that a wipe is being used with each diaper change. So again a very conservative estimate of 6 wipes per day.

Based on the above figures each disposable diaper change costs \$0.27. Over a 2.5 year period disposable diapers will cost \$11.34 per week for a grand total of **\$1474.20**.

## How much for cloth?

### Prefold Package

Small Prefold Diapers	36	\$1.65	\$59.40
Large Prefold Diapers	36	\$2.15	\$77.40
Bummis Whisper Pants	18	\$4.60	\$82.80
Economy Diaper Liners	18	\$0.75	\$13.50
Wipes	50	\$0.45	\$22.50
Diaper Pins	16	\$0.30	\$4.80
<b>Total Cost for 2.5 years</b>			<b>\$260.40</b>

All prices based on November 2003 USD prices at [www.thebabymarkteplace.com](http://www.thebabymarkteplace.com)

### Fitted Package

Sammy's One Size	36	\$7.66	\$275.76
Bummis Wraps	9	\$8.60	\$77.40
Aristocrats Small	3	\$17.75	\$53.25
Aristocrats Large	3	\$21.75	\$65.25
Fleece Liners	3	\$6.00	\$18.00
Wipes	50	\$0.45	\$22.50
<b>Total Cost for 2.5 years</b>			<b>\$512.16</b>

All prices based on November 2003 USD prices at [www.thebabymarkteplace.com](http://www.thebabymarkteplace.com)

It's starting to sound great right? It's good for baby and you are going to save tons of money. But, your husband is insisting that it is going to be expensive to wash the diapers. Let's figure it out.

## Washing Machine and Dryer

Life span of the average washing machine is 9 years (I think it is probably longer but we are being conservative). Based on my own research (November 2003) the average Washing Machine and Dryer costs \$1100.00

Therefore, depreciation based on 30% use to

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wash and dry diapers over 2.5 years, where the machines have a life expectancy of 9 years.

$$\$1100 \times (2.5/9) = \$305.56$$

$$\text{Depreciation} = 30\% \text{ of } \$305.56 = \$91.66$$

## Laundry Detergent

Based on my own research (November 2003) the cost of Laundry detergent per load is \$0.29

## Energy Costs

Washer: \$0.15 per load

Dryer: \$0.21 per load

Washing machine and dryer costs are based on 3 loads of laundry per week and 2000 U.S. Government national average cost of 8.03 cents per kWh for electricity.

## Overall Laundry Costs

Based on 3 loads per week for 2.5 years (130 weeks) for a total of 390 loads

$$\text{Detergent: } \$0.29 \times 390 = \$113.10$$

$$\text{Washer: } \$0.15 \times 390 = \$58.50$$

$$\text{Dryer: } \$0.21 \times 390 = \$81.90$$

$$\text{Depreciation: } \$91.66$$

Laundry Costs for 390 Loads = \$ 345.16 for 2.5 years.

## Total Cost of Using Cloth Diapers for one Child

Cost of Diapers + Laundry = Total Cost of Using Cloth Diapers

$$\text{Prefold: } \$260.40 + \$345.16 = \$605.56 \dots \text{ savings of } \$868.64^{(+)}$$

$$\text{Fitted: } \$521.16 + \$345.16 = \$866.32 \dots \text{ savings of } \$607.88^{(+)}$$

Why the (+) sign next to the savings? Because this estimate is so conservative that I think that this is the minimum you will save. Newborns use 12 diapers per day and not 6. The \$0.22 cents per diaper is if you are lucky enough to get them on sale and are using a coupon. Large diapers for your toddler can cost more than \$0.50 cents a diaper. For laundry detergent prices I'm using the leading brand at regular cost. There are all kinds of comparable detergents and frugal laundry soap recipes that will save you money. To top it off you only need about half the recommended amount of soap to wash your diapers. The less soap residue the better it is for your baby. Energy costs were based operating your washer and dryer using electricity. If you use gas appliances your costs are about 70% less. And I haven't left anything out of our diaper packages I have included all of the extra's to make your cloth diapering experience a positive one.

## Environment:

I have covered your babies health and your financial savings. We're still not finished; the health of the planet is also compromised by the use of disposable diapers. Approximately 20 Billion diapers end up in US and Canadian landfills every year. It is unknown exactly how long it will take disposable diapers to decompose but estimates are in the 100's of years.

Remember the chemicals I told you weren't good for your babies' health? They are not good for the earth either. Remember the how they were referred to as trace chemicals? Do you think that if you take the trace chemicals from 20 Billion diapers you still have only trace amounts?

Lastly, there is something else in a good portion of those diapers that doesn't belong in your local landfill either. Feces! You are supposed to flush the 'poop' down the toilet. Many people don't know this. Why you ask? Human feces can contain harmful pathogens (for example, babies who have been vaccinated for polio will excrete

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poliovirus) when feces are discarded with disposable diapers there is potential for public exposure (via small mammals, birds and insects). This practice violates World Health Organization guidelines and is technically illegal. This is a good time to point out that flushing the toilet 4 times uses the equivalent amount of water as washing a load of diapers. You can now increase the savings of using cloth diapers even more.

*A Life-Cycle Inventory of Children's Disposable and Cloth Diapers Subject to Canadian Conditions, Vizcarra Feb 1993, pp 11-19*  
*Women's Environmental Network, Nappy Facts.*  
*Tim Cooper, Sheffield Hallam University 28<sup>th</sup> January, 2003*

## Environmental Impact

Footprinting is a method of assessing environmental impact by measuring it in terms of land use. It looks at the whole lifecycle of a product from its production, through its use to its disposal. Footprinting has been used to compare the environmental impacts of disposable diapers and cloth diapers including all resource, water and energy use.

## Conclusion

**D**isposable diapers have nearly twice the impact of home laundered diapers. So, by using a cloth diapers at home parents can do their best for the environment.

I've covered all the bases now, your babies' health, your financial savings and the benefits to the environment. I hope you will consider Cloth Diapers as an option for your family. If you have additional questions please email:

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### **Sources:**

*Journal of Pediatrics 1959, Vol 54 pp. 793-800*  
*"Relationship of Peri-Anal Dermatitis to Fecal pH" by Drs. Tamio, Steiner, Benjamin*  
*Clinical Pediatrics May 1991, Vol 30*  
*Department of Internal Medicine & Pediatrics, Loyola University Medical Ctr.*  
*"Newborn Chemical Exposure from over-the-counter Skin-Care Products" by Drs. Cetta, Lambert, & Ross Anderson, Rosalind, and Julius Anderson. "Acute Respiratory Effects of Diaper Emissions," Archives of Environmental Health, 54, October 1999.*

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