



Why Cloth Diapering?

SAFE

PURE

NATURAL

Cloth Diapering is making a **HUGE comeback** that no fashion designer or children's clothing manufacturer could ever have anticipated.

Cloth Diapering has come a long way since your Mother and Grandmother. Abandon the image of the white cloths of yester year! Cloth and cotton diapering today is about comfort, convenience, cleanliness, cost and conservation! You will not be able to resist the **cozy, stylish designs** of cloth diapers once you see them. Manufacturers, many WAHMs (Work At Home Moms), have designed the most delightful and *panache lines of baby diaper apparel*. This beautiful array of colorful and healthy cloth diapers really could be considered a new fashion line. Even more, consider your baby's diaper a decrease in your carbon footprint. Your baby will thank you for having the foresight and protecting their future world.

Cloth/Cotton diapering is the only *natural* choice. Cloth diapers are made of *breathable* and *safe* cotton fabric. Cotton diapers are *renewable, reusable, recyclable*, and ultimately have a gentler impact on the environment than their disposable counterparts.

Apply the same standards of comfort and health that you would for your own body, and then cotton diapering is the only pure and natural choice for your baby¹.



Let's break it down and take a closer look.

WHY CLOTH IS BETTER FOR BABY?

1. BABY'S SKIN

Your baby has wonderfully soft, smooth skin. That skin has important differences from normal adult skin—differences that could increase your baby's susceptibility to diaper rash.

- The epidermis or outer layer of your baby's skin is 20-30% thinner and therefore less resilient than adult skin
- Infant skin both absorbs and loses moisture more quickly than adult skin
- External irritants penetrate infant skin more easily as the barrier is not yet fully developed

¹ EPA, "Integrated Risk Assessment for Dioxins and Furans from Chlorine Bleaching in Pulp and Paper Mills."

- Friction from diapers may make it easier for your baby's skin to become irritated (<http://www.desitin.com/adult-skin-vs-baby-skin>)².

Unfortunately, disposable diapers are made using many chemical by-products that you certainly do not even want touching your baby's skin. Among the many chemicals found in disposable diapers are *sodium polyacrylate* and another toxin called, *Dioxin*. Dioxin has received a great deal of press and research, due to its potential harm.

Dioxin, an extremely toxic by-product of the paper-bleaching process, has been shown by the Environmental Protection Agency and Green Peace as a carcinogenic chemical. Listed by the EPA, as one of the most toxic of all cancer-linked chemicals, it has been banned in most countries, but not the United States. Dioxin has also been linked with birth defects, liver damage, and skin diseases.³

Other chemicals cited in disposable diapers, are the tremendously complex combinations of heavily treated paper pulp, polyethylene (and other plastics), glues, dyes, synthetic perfumes, and -- above all -- a superabsorbent chemical, sodium polyacrylate (mentioned above). Sodium Polyacrylate is the "gel" that absorbs urine and holds it next to a baby's skin. It is still used in disposable diapers that are advertised as "organic" and found in your neighborhood health food stores. Sodium polyacrylate is the chemical that was banned in the 1980s in women's tampons, but it continues to be used today to improve absorbency in *children's diapers*.⁴

2. LESS RASH

In the 1955, before the birth of disposable diapers, 7% of babies and toddlers had diaper rash in the United States using cloth diapers. In 1961, Procter & Gamble introduced Pampers, a disposable diaper. By 1991, approximately 90% of babies in the United States were diapered using disposable diapers. Coincidentally, **the occurrence of diaper rash has increased from 7% in 1955 to 78% in 1991 with the use of disposable diapers, according to the Journal of Pediatrics**.⁵

Your baby will have up to a **95% decreased** chance of suffering from diaper rash, because of your wise and caring decision to choose cloth diapers. Disposable diapers contain chemicals, even home washed cotton diapers, are not pH balanced to an infant's skin. When the pH balance is disturbed, irritation becomes a breeding ground for bacteria to grow and cause painful rash. With our modern and industrial washing and drying machines, The Diaper Nanny matches the pH balance to a baby's skin to keep diaper rash occurring. If you recall, this is the reason that pediatricians instruct parents to use a "commercial diaper service" to solve the problem of diaper rashes, because it is the only way to guarantee a balance in pH to the baby's skin.⁶

Plastic barriers are used in every disposable diaper on the market. *Plastic doesn't breathe*. The problem, *it is hot*. It *promotes bacteria growth*. As you know, our skin is an organ that needs to breathe. Switching to a cloth diaper is a natural cure for diaper

² Company of Johnson & Johnson. Destin. <http://www.desitin.com/adult-skin-vs-baby-skin>.

³ Characterization of Municipal Solid Waste in the United States: 1990 Update. (1990). U.S. Environmental Protection Agency, EPA 530 SW-90-042. Washington D.C.: U.S. Government Printing Office

⁴ EPA, "Integrated Risk Assessment for Dioxins and Furans from Chlorine Bleaching in Pulp and Paper Mills."

⁵ Lyman, F. (1990) "Diaper hype" *Garbage: the Practical Journal for the Environment*, 2 (1), 36-40.

⁶ www.mothernaturesdiapers.com

rash. When cloth breathes, there is seldom a need for creams with cotton diapers.⁷

3. DECREASE BABY'S ASTHMA RISK

Harsh perfumes and chemical emissions have long been known to induce asthma-like symptoms in children and adults. Now, researchers have found that disposable diapers might be a trigger for asthma.

Dr. Rosalind C. Anderson, of Anderson Laboratories has reported that chemical emissions of some disposable diapers have immediate health effects in animals breathing the diluted chemical mixtures. "Upon analysis, the diaper emissions were found to include several chemicals with documented respiratory toxicity," according to Dr. Rosalind.

"Mice were used in this study because of their general physiological and biochemical similarity to humans", Anderson explained, "adding that both humans and mice develop bronchial constriction as a response to certain (odors and substances)". Bronchial constriction refers to a narrowing of air passages in the lungs that is associated with respiratory difficulties.

Anderson Labs found that lab mice exposed to various brands of disposable diapers experienced asthma-like symptoms. Dr. Rosalind Anderson, lead author of the report, says the following chemicals were among those released from the disposables: xylene and ethylbenzene, suspected endocrine, neurological and respiratory toxins; styrene, a suspected carcinogen and respiratory toxin; and isopropylene, a suspected neurotoxin⁸

Further study is needed to determine what level of diaper chemical emission triggers infant respiratory distress. In the meantime, Dr. Anderson advises asthmatic mothers to avoid exposure to these chemicals, and to be mindful of the fact that their children may be sensitive to these and other asthma antagonists such as dust mites, roaches, and smoking. Asthma rates remain on a sharp incline in the US and worldwide, particularly among poor and inner-city children.⁹

4. PROTECT THE ENVIRONMENT

Fact: Disposable diapers are the ***3rd largest source of waste in the world.***¹⁰ Astonishing, disposable diapers in landfills actually trump tires, paper and beverage containers!

- *Disposable diapers* have a huge **negative** impact on our environment. Disposable diapers are not readily biodegradable which is why it is estimated they take up to 500 years to decompose.¹¹ That means every disposable diaper ever made is still in a landfill somewhere.

⁷ The National Association of Diaper Services. "Why Choose Cloth"

⁸ Anderson, Rosalind, and Julius Anderson. Acute Respiratory Effects of Diaper Emissions, Archives of Environmental Health, 54, October 1999.

⁹ Anderson, Rosalind, and Julius Anderson. Acute Respiratory Effects of Diaper Emissions, Archives of Environmental Health, 54, October 1999

¹⁰ Characterization of Municipal Solid Waste in the United States: 1990 Update. (1990). U.S. Environmental Protection Agency, EPA 530 SW-90-042. Washington D.C.: U.S. Government Printing Office

¹¹) Lehrburger, C. (1988). Diapers in the Waste Stream: A Review of Waste Management and Public Issues, P. O. Box 580, Sheffield, MA.

- Disposable diapers are made from wood (cellulose based inside unit), chemicals (absorbent gel), and oil-based (polypropylene water-proof layer) materials. Some estimates suggest that 82,000 tons of plastic and 1.8 million tons of wood pulp (1/4 million trees) are consumed each year in the production of disposable diapers.¹²
- One child in disposable diapers will require 20 trees, 420 gallons of petroleum and generate one ton of garbage. Single-use diapers represent between 2% to 4% of solid waste in our nation's landfills and the emissions of carbon dioxide and methane from landfills are major contributors to Global Warming.¹³
- Over 300 lbs. of wood are used to produce disposable diapers for one baby each year.¹⁴
- An estimated 450 billion disposable diapers are used each year and contribute nearly 77 million tons of waste to landfills.¹⁵
- A home-washed *cloth diaper* has only 53% of the *ecological footprint* of *disposable diapers*, and a *diaper laundry service* has a mere 37% of that footprint.¹⁶
- Solid human waste in landfills may seep into local ground waters. Most *disposable diapers* have directions on their box instructing you to dump solid waste into the toilet...does anyone really do this?
- According to Independent studies, the disposable diaper manufacturing process uses **three times more energy, two times more water** and **twenty times more raw materials, thereby producing 60 times more waste**.
- A commercial diaper service uses much less water and energy. Due to the industrial and energy efficiency of our washer and dryers, this precise engineering ensures a sanitary and pure product, without the energy or water waste found in some home washer and dryers.

William Rathje , is a respected archaeologist and professor of anthropology at the University of Arizona and Bureau of Applied Research in Anthropology, and is consulting professor of anthropological sciences at Stanford University. He was the longtime director of the Garbage Project, which studied trends in discards by field research in Arizona and landfills.

His incredible research and works have compiled data and thought provoking facts:

In 1987, when the Garbage Project added the excavation of landfills to its research repertoire, investigations focused on the composition of landfilled wastes, the rate of breakdown of these materials within landfills, the contribution of residential hazardous wastes to the leachate (or fluids) which leak out of MSW landfills, and the impact of various waste

¹² Hollis, R. W. (1989). "The ethics of diapering"; *Mothering* (Fall), 29

¹³ Little, A. D. *Disposable Versus Reusable (Cloth) Diapers: Environmental, Health and Economic Considerations*. Cambridge, MA: Arthur D. Little, Inc.

¹⁴ *Characterization of Municipal Solid Waste in the United States: 1990 Update*. (1990). U.S. Environmental Protection Agency, EPA 530 SW-90-042. Washington D.C.: U.S. Government Printing Office

¹⁵ Lehrburger, C. (1988). *Diapers in the Waste Stream: A Review of Waste Management and Public Issues*, P. O. Box 580, Sheffield, MA

¹⁶ Lyman, F. (1990) "Diaper hype" *Garbage: the Practical Journal for the Environment*, 2 (1), 36-40.

reduction strategies -- recycling, composting, "source reduction" (which just means "using less stuff" in the first place) -- on what wastes are landfilled.¹⁷

1) "An association of States Attorneys General determined from dig data that several products which claimed to be "biodegradable," including some brands of disposable diapers and plastic garbage bags, did not biodegrade in landfills, and the false advertising of these products was eradicated. All of this was evidence that some crucial views of garbage held by policy planners, the media, and the public had changed -- and that garbology had been validated as a new kind of archaeology.

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5. COST, CONSERVATION and CONVENIENCE:

The savings associated with using *cloth diapers* is phenomenal compared to using *disposable diapers*. This has already been partly outlined above in terms of savings of money and time.

As we discussed, a home-washed *cloth diaper* has only 53% of the *ecological footprint* of *disposable diapers*, and a *diaper laundry service* has a mere 37% of that footprint.

According to the book Whitewash: Exposing the Health and Environmental Dangers of Women's Sanitary Products and Disposable Diapers, What You Can Do About It, the disposable diapers' manufacturers **use amounts to 2.3 times more water wasted compared to the use of cloth.**

Your automatic clothes washing machine accounts for about 20% of total water use in the home. So, when you launder cloth diapers in your home, this figure may be a bit higher, and in some areas where drought conditions exist, this may present a problem. It is also a source of ammunition for disposable diaper advocates who are always looking to find reasons why using cloth diapers are comparably earth unfriendly. Of course, cloth diaper users know that they are acting in the best interests of mother earth, but in order to balance things out, we can always find ways to cut back on our water usage so that cloth diapers are simply not an issue. The first step you can take to reduce water usage is to use a dry pail method for laundering. Presoaking your diapers in a wet pail is not required (and not recommended by The Diaper Nanny) to keep them clean, and it would help to conserve water by skipping this procedure entirely.⁽¹⁴⁾ This is where the Diaper Nanny steps in to help and returns with sanitized diapers.

At this point, let us turn to another cost saving, energy saving, and time liberating issue for the parent: Earlier potty training. At nearly a dollar a diaper and if your child is in disposable pull-ups, we know that is a great deal of money you would like to use on numerous other necessities. Most kids in cloth are trained by 2 years old. In disposables, you may be looking at 3 years or more. On average, a child until the age of 2 ½ years old using disposable diapers will cost approximately \$1,800-\$2,000.00. Quite a contrast, to a diaper service for the same child (2/12 years old) will cost an average of \$1,000, depending on the type of diaper you choose. What's

¹⁷ Rathje, WL. The archaeology of us. In Ciegelski, C.(ed.), Encyclopaedia Britannica's Yearbook of Science and the Future--1997 (New York, Encyclopaedia Britannica), 158-177, 1996.

¹⁸ Rathje, W. L. (1989). "Rubbish" *The Atlantic Monthly*, 264 (6), 99-109.

more, this figure for a diaper service could be less, as a child is usually toilet trained by age 2. (See Appendix A).

With a diaper service, such as [The Diaper Nanny](#), there is no worry being without diapers. With enough the responsibilities of being a new parent, we save you from extra runs to the store.

6. CLEANLINESS

You are delivered your fresh and pure diapers weekly for you and your baby to enjoy.

For you as the parent or caretaker, it is hard to underplay to relish of not having to wash any soiled or wet diapers! The Diaper Nanny takes care of this part. You do not need to rinse the diapers that you may recall your Mother or Grandmother doing. Some parents wish to use a spray. All that you need to do is dump any stool into the toilet. This is regulation to keep our groundwater free of any biohazard substances whether you choose cloth or disposables. You are delivered your fresh and pure diapers weekly for you and your baby to enjoy.

Our washing process has been adapted after much study and research. We run your baby diapers through a washing process that is safe, nontoxic, and hypoallergenic and is over 99% free of any bacteria or fungi with the helpful use of high temperatures that are achieved with our elite washing machine and dryers. We use biodegradable and no harsh chemicals. Your baby's diaper is pH balanced to their own special skin.

We use a very small amount of bleach, just for sanitary reasons. During our research, we have found that the very small amount of bleach that we use is not harmful to the diapers, baby, caretaker or the environment. We would be happy to accommodate any request if you would prefer us not to use bleach, your diapers will still be return sanitized and cleaned – heat and the multiple washings being the biggest factor here.

We start this business with the expectation of achieving accreditation of the National Association of Diaper Services (<http://diapernet.org/whycloth.htm>). We are also investigating additional environmental/sustainability advocacy, regulator and overseer organizations, so that our customers can be assured of our reliability and integrity of service and products.

WHY DOES THE DISPOSABLE MYTH CONTINUE?

Hence, after reading this report of valid research from well respected environmentalists and scientists, you may ask yourself: Where is the anger over disposable diaper use? Why does society seem to casually accept the use of disposable diapers? How did this nonsense start? Why did believe "them" (disposable diaper manufacturers)? Rest assured, I was one who was also fooled, until I stumbled upon this research.

In 1989, Proctor & Gamble™ decided to launch a multi-million dollar international advertising in response to a major trend of consumers switching to cloth diapers. It was designed to cloud the issues. Unfortunately, this campaign was wildly successful. Even though P&G was found guilty of false and misleading advertising as a result, they did regain their market share as misinformed consumers returned to "disposables" in droves.¹⁹

Susan Verver continues in "[Cloth Diaper Benefits](#)" again, P&G has stopped most of this very

¹⁹ Verver, Susan. "THE TRUTH ABOUT "DISPOSABLE" DIAPERS.

dubious advertising now, and consumers are now starting to learn that they were misled, especially as they realize that the objective environmental groups still insist that "disposables" are BY FAR the worst environmental choice in diapers.

To manufacture a disposable diaper requires massive amounts of non-renewable resources. Over 300 pounds of wood, 50 pounds of petroleum feedstock and 20 pounds of chlorine are used to produce disposable diapers for one baby EACH YEAR⁽¹⁴⁾. Those trees aren't coming back anytime soon. Not to mention that a used disposable diaper can't be recycled like the paper you take notes on.²⁰

²⁰ Beck, Autumn. (2008, November 25) Cloth Diapers and Water Usage. www.AllAboutClothDiapers.com.

