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NEWSLETTER

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The Diaper Debate - examining both sides of the cloth vs. disposable diapers debate -

By Terri Shobbrook (Copyright 2005)

In 1961 Proctor and Gamble gave us Pampers – the one-use paper/plastic disposable diaper. Ten years later a Pennsylvania Boy Scout group, after conducting a highway cleanup, reported “that the largest single source of litter [was] the disposable diaper.” Today, one-use disposable diapers comprise 2% of the solid waste diverted to landfills. US Senators have introduced Bills designed to ban the use of disposable diapers and in 1990 twenty-four US States introduced legislation to reduce the use of disposable diapers. Hundred’s and thousands of dollars are spent by both sides conducting studies comparing cloth and disposable diapers. In 1990 Proctor and Gamble sent “more than 14 million copies of a pamphlet [which included coupons] to US households stating that their diapers can be effectively composted in municipal solid-waste plants.” In 1991 The American Public Health Association and the American Academy for Pediatrics recommended that “only modern disposable paper diapers with absorbent gelling material” met their suggested standards for daycares. Others advocate that disposable diapers are more sanitary. In 1994 Proctor and Gamble settles out of court for misleading advertising regarding their claims of composting and recycling. By 1998 only one in ten Canadian and US households were using cloth diapers. The National Association of Diaper Services membership dropped by 37% and 35% fewer cloth diapers were produced in 1997 as compared to 1996. A 1999 study shows that certain disposable diaper brands released chemicals into the air causing eye, nose and throat irritation which included asthma-like symptoms. A German study in 2000 links disposable diaper use to male infertility.

(From: The Politics of Diapering: A Timeline of Recovered History. Mothering, Issue 116, Jan/Feb 2003).

It's 2005, 43 years later, and the cloth vs. disposable debate rages on. With advocates on both sides of the debate claiming that their diaper is more economical, healthy, convenient and environmentally friendly how does the consumer decide? Let us look at the facts.

ENVIRONMENTAL IMPACT

- It takes 250,000 trees annually to produce diapers in the US or one-billion trees world-wide.

Although wood and wood products such as paper can be considered a renewable resource we need to remember that our forests are complex, fragile ecosystems. Selective logging, the practice of removing some trees and leaving the healthier ones standing, creates a more stable, sustainable environment for the water, fish, and the wildlife on the land. Clearcutting, a common practice, is the removal of all the trees and vegetation. Pine seedlings are then planted in rows and thus transform a once diversified forest ecosystem into a barren plantation of same-age, same-species trees.

- Annually In Canada 75.5 million pounds of paper goes into the production of 1.7 billion disposable diapers and in the United States 800 million pounds of paper goes into the manufacture of ten billion diapers.

In 1981 a proposed Disposable Diaper Ban Bill from Oregon reported that all of this paper, which could not be recycled, was only used once and then thrown away. It further stated that the diversion of this precious pulp/paper into disposable diapers was diminishing valuable resources and could be better used elsewhere.

- It takes about 30 lbs of cotton to manufacture 6 dozen diapers

Growing cotton can have a negative environmental impact. Cotton growers are a major user of harmful pesticides but organically grown cotton is becoming more readily available as is unbleached cotton or cotton bleached with hydrogen peroxide instead of chlorine bleach.

- Dioxin, a bi-product of the production of wood pulp, is a highly toxic chemical that has been linked to health issues such as cancer, birth defects, miscarriage, and immune-system depression.
- Waste water from the production of pulp, paper, and plastics used in disposable diapers contains harmful ingredients such as dioxins, sludge, solvents, and heavy metals.
- Waste water from washing cloth diapers is generally benign due to the use of biodegradable detergents.

Many cloth diaper manufacturers recommend the use of environmentally friendly laundry products. (My Lil' Miracle Inc. does not condone the use of chlorine bleach on their diapers. Its usage causes the product warranty to be "null and void".)

- A valuable, non-renewable and diminishing resource, petroleum, is used to produce the plastic in the disposable diaper and in the packaging. 3.5 billion gallons of oil are used to produce 18 million disposable diapers each year.
- Cloth diapers require a cover or wrap. The manufacture of the synthetic covers does have a negative impact on the environment. If you compare 25-30 covers (and that number may be high) to 6006 disposable diapers (and that number could go as high as 10,000) per child the negative impact of the covers can be put into perspective.

Advocates of disposables diapers claim that cloth diapers "consume more water and produce more sewage than disposables." (Proctor and Gamble, Diapers and the Environment, 1991)

- It is unclear as to whether the P&G study refers to the actual production of the disposable diaper or if they are including the production of its components as well. The actual amount of water consumed is not indicated.
- We do know that you use approximately 50 gallons of water every three days washing those cloth diapers. This is equivalent to an adult (or toilet-trained child) flushing the toilet 5 - 6 times per day.

Let's put this into perspective. Washing cloth diapers for approximately 2 ½ years will use about 20,000 gallons of water. Two adults taking a 5 minute daily shower each (and how many of us take a 5-minute shower?) will use, in those same 2 ½ years, almost 60,000 gallons of water.

- As for the claim that cloth diapers create more sewage ... well, technically they are correct. They create more sewage because the feces are going into the toilet where they belong, rather than hidden in a disposable diaper and taken to the landfill. Dumping human waste into landfills violates the World Health Organization guidelines and is technically illegal. Depositing

feces laden disposable diapers into landfills creates a potential biohazard. There is the risk leakage which could cause the contamination of our drinking water with bacteria and live viruses. Fortunately, Landfills are fairly well constructed in North America and the risk of contamination is more of an issue in developing countries.

Disposable diaper packaging contains instructions on the proper disposal of the feces. The inner liner is supposed to be removed and flushed away.

Most reports on both sides of the debate agree that disposable diapers contribute to 2% of the solid waste that goes into landfills.

- That 2% represents the 3rd largest contributor after newspapers and food and beverage containers.

Bluewater Recycling, from Grand Bend, Ontario (Canada) recently conducted a Waste Audit. They studied 83 households in a user-pay community over a one-month period (during the winter). They concluded that each household produces 360 kg of residential waste per year. Of that, 48% was directed to the bluebox. That left 187 kg that was directed to the landfill. Almost 25 kg/household/per year, 13%, was disposable diapers.

Despite Proctor and Gamble's claim in 1991 that disposable diapers can be effectively composted in municipal solid waste plants the reality is that these facilities are not setup to compost diapers and likely will not be. The financial costs are too high. There are only 14 composting facilities in the United States and none in Canada.

- It takes a disposable diaper 500 years to decompose (contained in a plastic garbage bag and buried in a landfill).
- This disposable diaper has only been used once.
- It takes a cloth diaper about 6 months to decompose.

This discarded cloth diaper has been used countless times as a diaper on at least one child in the family and then it has been turned into a rag or donated to a developing country for further use as a diaper. It has many practical uses before it eventually goes to the landfill.

Sources:

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- The Loma Prietan, March/April 2002 (Clearcutting: Serious Trouble in Our Forests by Karen Maki, Forest Protection Committee Chair)
- Various In-House Training Publications