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Bhavini Patel

Going Green: Products and Toys for a New Baby

What is the main concern when it comes to baby products?

Baby products are of special concern because infants can be sensitive to a variety of ingredients and materials (Sathyanarayana et al., 2008). Infancy is a fundamental period during which regular exposure to certain toxins can be detrimental to development. In 2007, a scientific study revealed that bisphenol A (BPA) in baby bottles was found to cause long-term effects such as the early onset of puberty, impaired brain development, dysfunction of reproductive systems, compromised immune system, and increased likelihood of cancer (Gibson, 2007). Even substitution chemicals such as bisphenol S (BPS) and bisphenol F (BPF) (alternatives found in “BPA-free” products) have been found to have detrimental effects on human health (Zhang et al., 2018). Furthermore, toxins that can be tolerated by adults are not as effortlessly processed in young infants who have immature metabolisms (Milsap & Jusko, 1994). Additionally, chewing and swallowing behaviours make it easier for infants to ingest dangerous toxins such as lead and cadmium, which are commonly found in polyvinyl chloride (PVC) soft/plush toys (Kumar & Pastore, 2007). Considering all of these risk factors, picking the right infant products is a task that requires heightened care and attention.

Association pour la santé environnementale du Québec / Environmental Health Association of Québec (ASEQ-EHAQ)

C.P. 364, Saint-Sauveur, Québec J0R 1R0 / P.O. Box 364, Saint-Sauveur, Québec J0R 1R0

☎ 514-332-4320 ☎ 450-227-4143 bureau@aseq-ehaq.ca / office@aseq-ehaq.ca

aseq-ehaq.ca / EnvironmentalSensitivities.com / ecoasisquebec.ca / EcoLivingGuide.ca

What makes baby products unsafe?

Over the years, many baby products such as lotions, powders, diapers, bottles, and toys have been suspected to contain unsafe ingredients as summarized in the table below.

TOXINS/IRRITANTS	PRODUCTS	HEALTH EFFECTS
Bisphenol A (BPA) <i>plastic</i>	Bottles, teethingers, plastic toys	BPA can impair the development of the brain, immune system, reproductive organs, and may also increase the risk of cancer cell growth (Gibson, 2007).
Polyvinyl chloride (PVC) <i>plastic</i>	Soft toys like teddy bears	PVC can impair the development of the reproductive system in males (Latini et al., 2004).
Phthalates <i>plasticizer that adds flexibility to products</i>	Lotions, creams, shampoos, furniture, and toys	Phthalates can reduce growth rate, impair liver and renal function, and disturb reproductive hormonal cycles in males and females (Hauser & Calafat, 2005).
Talc <i>clay mineral used to reduce friction</i>	Baby powders	Talcum powder has been linked to respiratory issues (Mofenson et al., 1981).
Volatile Organic Compounds (VOC)	Mattresses, furniture, wall paint, wallpaper, laundry products, etc.	VOCs can cause or worsen respiratory issues like asthma, bronchitis, and infections (Kampa & Castanas, 2008). They may also increase the risk of lung cancer.
Parabens <i>preservative</i>	Care products	Parabens can cause DNA damage, increase the likelihood of breast cancer development, and affect the thyroid hormone (Bledzka et al., 2014).
Fragrances <i>creates a pleasant scent</i>	Lotions, creams, oils, shampoos, powders, etc.	Fragrances can irritate the respiratory system and the skin (Zhou et al., 2018).

Not only are these chemicals dangerous to babies, but they also pose a risk to the environment. Bisphenol A, polyvinyl chloride, and phthalates contribute to the accumulation of plastics in various ecosystems (Gibson, 2007; Leadbitter, 2002; Hauser & Calafat, 2005). Similarly, parabens accumulate in various species, thereby impeding their development (Bledzka et al., 2014). On the other hand, volatile organic compounds (VOCs) lead to air pollution (Oz et al., 2019; Montero-Montoya et al., 2018).

What are some safe baby products?

Plastic products can be replaced with glass products, which do not cause the leaching of bisphenol A, lead, or cadmium (Kubwabo et al., 2009). To make use safer, one can look for glass products (e.g., bottles) with coverings that will prevent shattering in case of fall. As for personal care products such as creams, oils, and shampoos, it is better to look for phthalate-free, paraben-free, and fragrance-free alternatives. Such products are offered by brands like Babyganics, Druide, Earth Mama, and Attitude. As was suggested in a previous newsletter published by EHAQ, one effective way to shop for the right products involves looking for certification logos that are approved by public authorities (ASEQ, Newsletter, July 2020). Logos that are reliable in Canada include: Ecologo and Ecocert. Lastly, for toys, it is important to look for PVC-free options. As an alternative, wooden toys are much safer for both infant health and the environment (Madar et al., 2012). Avoid mass-produced cheap toys as they are likely to contain many toxic chemicals (Kumar & Pastore, 2007).

For more information on infant products, you can visit www.ecolivingguide.ca

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