MAKEUP AND PREGNANCY

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***Makeup and Pregnancy***

Congratulations!! You are pregnant! This is one of the most exciting and special times in a woman’s life. Everyone wants to have a perfect pregnancy and healthy baby.

You are always told to eat healthy and exercise during pregnancy. “Don’t smoke” and “Don’t drink alcohol” are statements often discussed between a doctor and their pregnant patient. But why??

Why not smoke?

Why not drink alcohol?

Well the answer is simple; these activities expose the developing baby to toxins. These toxins are known to cause serious damage. For instance exposure to alcohol during pregnancy is associated with a serious adverse outcome called Fetal Alcohol Syndrome. Similarly cigarette smoking either directly or second hand smoke is associated with babies that are smaller. The toxins in the smoke prevent a baby from growing to its full potential.

In fact in a surprising study that was released in February 2013, it was found that pregnant women who have been exposed to higher levels of air pollution are more likely to give birth to underweight babies. 3 million pregnant women were followed in this international, multicenter study. Those centers that have higher levels of air pollution report higher risks of low birth weights compared with those centers that have lower levels of pollution. This is a clear example, of how just inhaling toxins in the air can impact your babies’ ability to grow!

In 2004, and 2009, two different studies from the Environmental Working Group examined newborn’s blood, and found over 200+ toxins in newborn’s blood! Some of these toxins were pesticides, Bisphenol A, mercury, some are known to cause cancer, and some are known to be neurotoxic. The babies were exposed in utero to these chemicals directly from the mother’s exposure.

In July 2012, the FDA banned Bisphenol A (BPA) in baby bottles and infant cups. BPA is a chemical that makes plastics more malleable, and lines the inside of canned food. California is poised to declare BPA as toxic to the reproductive system in people under Proposition 65, the state's consumer products safeguards law. The California Office of Environmental Health Hazard Assessment made its decision following a review of the 2008 National Toxicology Program study that was the first time a federal government agency expressed significant concerns about the adverse impacts of BPA exposure to human health. Proposition 65 requires a warning label on any item that contains a certain level of a toxic chemical like BPA.

BPA is thought to be an endocrine disruptor which can mimic estrogen and may lead to negative health effects. BPA may absorbed into the milk, or even food from canned food or formula, then the baby drinks the milk and it gets absorbed in the babies stomach. As this toxin accumulates over time it is believed to be associated with obesity, adult infertility in both men and women, breast cancer, prostate, and other serious long term morbidities. This is a clear example of how exposure to a chemical from a baby bottle is believed to have such serious effects later on in life. Unfortunately, millions of babies were exposed to BPA all over the world until these studies revealed its toxicity. The key is to avoid all exposure to any possible toxic substances when pregnant!

The World Health Organization (WHO) just released a report called Global Assessment of the State-of-the-Science of Endocrine Disruptors (<http://www.who.int/ipcs/publications/new_issues/endocrine_disruptors/en/>). The WHO are determined to examine the potential adverse effects that may result from exposure to a group of chemicals that have the potential to alter the normal functioning of the endocrine system in wildlife and humans. BPA is an example of an endocrine disruptor who’s adverse effects are now known. With the current epidemic of global obesity, one thought is that it is not just diet and a lack of exercise, but also the exposure to endocrine disruptors either during pregnancy, or as a child that places people at risk for obesity, diabetes etc.

It is apparent that the air that you inhale (pollution, tobacco, drugs) and certain things that you eat or drink (BPA, alcohol) can have adverse effects on your pregnancy and baby. What about things you apply to your skin? Have you ever wondered what about makeup “Is my makeup safe for my baby?” The Food and Drug Administration (FDA) states that cosmetics aren't subject to the same oversight as food and pharmaceuticals. The FDA doesn't have the responsibility to approve new ingredients or issue safety recalls. It's up to the individual manufacturer to decide whether a product is safe, and label the product. The nonprofit Environmental Working Group ranks cosmetics containing chemicals with known or suspected health risks. The group reviews cosmetic brands, and types and their ingredients and reports them as low, intermediate and high risk. Their review of common cosmetic ingredients is included at the end of this report in a color coded easy to read fashion.

While many people pay close attention to what they eat, they forget to realize that other products they apply to their skin can also pose a risk. In this ebook I will help you understand basic skin physiology and how ingredients move from the skin into the mother’s body and then to the baby.

This is what can be described as transdermal absorption or across the skin absorption.

**Figure 1: Chemical Absorption by Fetus**

Skin

Blood stream

Placenta

Fetus

Absorption in bloodstream

Finds its way into Placenta

Gets to the fetus

Chemicals are absorbed into the bloodstream

***What happens when you apply makeup to the skin?***

Absorption of the chemicals applied to the skin takes place through diffusion whereby molecules are spread from regions of high concentration to regions of lower concentration. This process occurs via three mechanisms:

1. Intercellular lipid pathway

2. Trans-cellular permeation

3. Through Appendages (hair).

These are illustrated in the diagrams below.

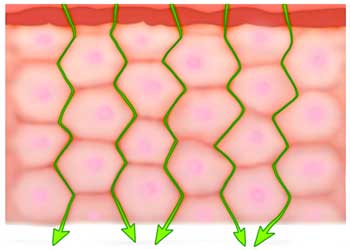


Figure 2: Intercellular lipid pathway

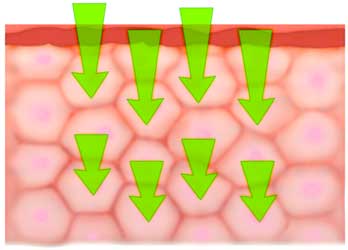


Figure 3: Trans-cellular permeation

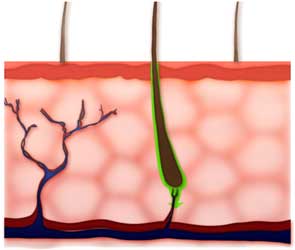


Figure 4: Via the appendages (hair follicles, glands)

After the chemicals pass through the skin, they get absorbed into the bloodstream. The mothers’ blood directly goes to the baby along with nourishment, oxygen etc. The mother’s blood goes to the placenta which is the interface between the mom and the baby. Nourishment, oxygen and other substances get transferred to the placenta, and then from the placenta to the baby via the umbilical cord.

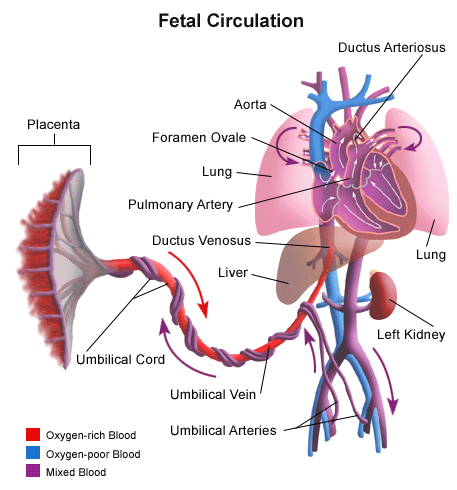


Figure 4: Fetal blood circulation

***How do chemicals in cosmetics affect the baby?***

Chemicals found in cosmetics have been found to affect both the mother and the baby in a number of ways. Most commonly, they interfere with hormonal balance amounting to what is commonly known as endocrine disruption. This can occur in the mother, and the baby. For instance, in pregnancy, exposure to parabens, and phthalates may be associated with reproductive anomalies in the baby later in life. For the mother, prolonged exposure to certain chemicals such as parabens may be associated with breast cancer. The European Union classifies pthalates as a suspected endocrine disruptor on the basis of evidence that it interferes with hormone function, and as toxic to reproduction on the basis that it may cause harm to the unborn child and impair fertility. As well, Health Canada notes evidence suggesting that exposure to phthalates may cause health effects such as *liver* and kidney failure in young children when products containing phthalates are sucked or chewed for extended periods. Parabens can mimic estrogen, the primary female sex hormone. They have been detected in human breast cancer tissues, suggesting a possible association between parabens in cosmetics and cancer. Parabens may also interfere with male reproductive functions.

***What is Gluten-Free? What is Vegan? Why is it important?***

**Gluten is a protein composite found in foods processed from wheat and related grain species. It gives elasticity to dough, helping it rise and keep its shape and often gives the final product a chewy texture. Gluten may also be found in some cosmetics and hair products. About 10% or more of the population may be gluten sensitive. This means if they eat a pizza, or drink beer, or eat a donut, or pita (all of which have gluten in them), they may experience symptoms of abdominal pain, bloating, diarrhea, joint pains, and they even may get an itchy rash. Celiac disease is a condition where one may have a severe reaction to even the smallest amount of gluten in any product. These reactions to gluten result in inflammation; this can be locally, in the stomach/intestines, or systemic and affect your joints, headaches etc. Most people don’t realize they have a gluten sensitivity, and may think they have irritable bowel syndrome, or that these symptoms are normal. Gluten free foods are now common place and give consumers choices in their diet. If up to 10% of people have gluten sensitivity, then 1 out of 10 of you reading this ebook will have it too!**

***But Why Gluten Free Cosmetics?***

**If one has a Gluten sensitivity, then that sensitivity applies to all the cells of the body not just the gut. So applying some makeup may cause severe irritation, swelling, a rash, or even acne. Unfortunately, this may prompt more makeup! It is a vicious cycle, but it may be broken if that person changes to Gluten free cosmetics. Even if you are not Gluten sensitive, using Gluten free cosmetics is one less ingredient that you will be exposed to.**

Most people with gluten-intolerance, gluten-sensitivitity and even with Celiac disease don’t realize that gluten is commonly found in makeup. For example, a common form of Vitamin E put in cosmetics is found in Wheat Germ Oil which contains gluten. To avoid any gluten in our cosmetics we use rice bran oil which contains a gluten-free form of Vitamin E and does not cause any skin inflammatory reaction.

***Makeup Brushes***

I doubt anyone has ever thought about their makeup brushes as they rush through their morning routine! Makeup brush hair is made from animals, or is Vegan/synthetic. In the past it was thought that synthetic hair was inferior to animal hair, but now the quality of synthetic hair mimics animal hair.

Generally animal hair that is used is from hog, boar, pig, pony, goat, mongoose, sable (weasel), cow, squirrel, badger, raccoon, cattle, dog and deer. The same hair is used for paint brushes.

We use the finest Taklon (synthetic nylon) hair brushes that are comparable or better than the animal counterpart.

Some of the benefits of synthetic hair over animal hair are:

1. Synthetic bristles don't need to be sterilized like animal hair does, making Vegan brushes more hygienic and hypoallergenic
2. Synthetic brushes don't dry out like animal hair does
3. Synthetic brushes last FAR longer than animal hair
4. Finally, no animals are injured making Vegan brushes!



To minimize risks to pregnant women and their babies, I started this company to offer women who are pregnant choices for cosmetics. This is the only company in the world to offer cosmetics to pregnant women, created by a High Risk Pregnancy Physician. Note however, anybody can use this makeup, it promotes safety and reduces toxicity that can lead to other issues in your health. We try to keep ALL of our products as natural as possible, from our makeup, to our brushes and more. We have many more exciting products in our pipeline! I encourage all of you to review the ingredients in your makeup and in our brand too and feel free to contact me with any questions from the website. I also encourage you to be involved in our blog.

I personally endorse all of my products to be safe, and non-toxic.

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