Henna and Your Health

Henna, Pregnancy, Nursing, and Doctor's Orders

Most physicians recommend that women who wish to become pregnant, or who are pregnant or nursing stop using permanent oxidative chemical hair dye. There have been studies that suggest chemical hair dye may be linked to birth defects, and though these have been inconclusive, physicians prefer to recommend that mothers not risk the health of their infants or their own health.

Based on toxicity assays, the European Union recommends that henna is safe to use as a hair dye when formulated and applied as a paste to hair.¹ There have been no published medical journal articles indicating that henna, indigo, or cassia cause any hazard to a mother or her child when used to dye the mother's hair. Many physicians recommend that women switch to henna if they want to continue dyeing their hair. Since henna has been used by women to dye their hair across a large part of the world for over four thousand years with no hazard perceived, a mother may henna her hair with a reasonable assurance of safety, as long as the henna has no chemical adulterants, additives, pesticides, or impurities. 1% of the available lawsone in henna crosses the dermal layer into the blood stream, a level that is safe for people. The only exception to this harmlessness is for individuals, especially young children, with homozygous G6PD deficiency.²

Women who want to cover their gray while pregnant or nursing can do so safely with Ancient Sunrise® henna, indigo, and cassia. Every batch of Ancient Sunrise® henna, indigo, and cassia is sent to an independent laboratory to be tested for lead, pesticides, contaminants and adulterants. Many products sold as henna contain metallic salts and toxic coal tar dyes. Even henna products which carry a 'natural' or 'organic' label may have unlisted ingredients and contaminants.

Henna has been tested and has been shown to not be genotoxic in normal applications on humans; you can dye your hair with henna without any increased risk of cancer.³ Present research on the association between the chemicals in dark-colored oxidative (permanent, chemical) hair dyes and non-Hodgkins lymphoma⁴ and other cancers,⁵ lupus, and asthma is suspected and statistically linked but research is inconclusive and ongoing. Many ingredients in

⁴ Bolt HM, Golka K. The debate on carcinogenicity of permanent hair dyes: new insights. *Critical Reviews in Toxicology* 2007; 37(6):521–536.

⁵ de Sanjose S, Benavente Y, Nieters A, et al. Association between personal use of hair dyes and lymphoid neoplasms in Europe. *American Journal of Epidemiology* 2006; 164(1):47–55.

"Ancient Sunrise® Henna for Hair," Chapter 13, Henna and Your Health, Copyright © 2015, Catherine Cartwright-Jones PhD, TapDancing Lizard® LLC <u>www.mehandi.com</u> <u>www.hennaforhair.com</u> <u>www.ancientsunrise.com</u>

¹ SCCP, 2013. Opinion on *Lawsonia Inermis* (henna). European Commission.

² See chapter 13, Henna and G6PD Deficiency

³ Kirkland, D., Marzin, D. 2003. An assessment of the genotoxicity of 2-hydroxy-1,4-naphthoquinone, the natural dye ingredient of Henna. *Mutation Research*. 2003 Jun 6;537(2):183-99.

chemical hair dye, particularly dark-colored hair dye, are known to be carcinogenic,⁶ but a direct cause and effect relationship between chemical hair dye use and cancer has not been proven, as is the case with tobacco use and cancer.

Physicians often recommend that their patients who are being treated for cancer, or who are recovering from cancer discontinue the use of chemical oxidative hair dye. They often recommend that people who have or who have survived cancer use only henna and other plant dyes to dye their hair. Since Ancient Sunrise® henna, indigo, and cassia have been tested by an independent laboratory to be certain that they are free of pesticides, adulterants, contaminants, and chemical additives, they may be safely used by people who are being treated for or who have survived cancer.

Henna and G6PD Deficiency

People who have homozygous G6PD deficiency, also known as Favism, should not use henna to dye their hair.⁷ This disorder is a genetically inherited anomaly on the X chromosome; henna may cause hemolytic anemia in people who have this disorder because the G6PD enzyme deficiency leaves the blood cells vulnerable to oxidative hemolysis. Your doctor can diagnose G6PD deficiency with a blood test and advise you of these risks. If you have G6PD deficiency, there are many foods and drugs that you must avoid, and your physician can advise you of these. The homozygous condition of G6PD deficiency is far more common in males than females. Males under the age of ten who have G6PD deficiency are the most vulnerable to oxidative hemolysis from henna. Do not henna the hair of any child unless you are certain that they do not have this genetic disorder.⁸

Though the appearance of green urine after dyeing your hair with henna is harmless, the appearance of blood in your urine is potentially serious and should be brought to the attention of your physician, to see whether you might have homozygous G6PD deficiency. A simple blood test will confirm whether or not you have Glucose-6-Phosphate Dehydrogenase Deficiency, or whether there is blood in your urine from some other condition.

⁶ Baan R, Straif K, Grosse Y, et al. Carcinogenicity of some aromatic amines, organic dyes, and related exposures. Lancet Oncology 2008; 9(4):322–323

⁷ Katar, S., C. Devecioglu, M. N. Özbek, and S. Ecer. 2007. "Henna causes life-threatening hyperbilirubinaemia in glucose-6-phosphate dehydrogenase deficiency." *Clinical & Experimental Dermatology* 32, no. 2: 235-236. Academic Search Complete, EBSCOhost (accessed February 26, 2014).

⁸ Eghbal, Fariba, Mohammad Reza Fakoorziba, Mohammad Hossein Eghbal, and Soheila Latifnia. 2012. "Survey on causes of hemolysis in Glucose-6-Phosphate Dehydrogenase (G6PD) deficient pediatric patients." *Pakistan Journal of Medical Sciences* 28, no. 3: 666-669.

[&]quot;Ancient Sunrise® Henna for Hair," Chapter 13, Henna and Your Health, Copyright © 2015, Catherine Cartwright-Jones PhD, TapDancing Lizard® LLC <u>www.mehandi.com</u> <u>www.hennaforhair.com</u> <u>www.ancientsunrise.com</u>

TapDancing Lizard LLC, parent company of mehandi.com and Ancient Sunrise® does not recommend, suggest, or imply any product shown in a search engine, in our website search, or in a health related category on our website is intended for use in the diagnosis, cure, mitigation, treatment, or prevention of any diseases, illness, or condition.

Ancient Sunrise® Henna for Hair Chapter 13, Henna and Your Health

Copyright © 2015 Catherine Cartwright-Jones PhD

Cover Graphic by Alex Morgan

Published by TapDancing Lizard® LLC

339 Tallmadge Rd. Kent, Ohio, 44240

Terms of Service: Creative Commons: Attribution-NonCommercial-NoDerivs 3.0 Unported

You are free to **Share**, to copy and redistribute this material in any medium or format under the following terms. The licensor cannot revoke these freedoms **as long as you follow the license terms.**

Attribution - You must give <u>appropriate credit</u> and provide a link to the license. You may do so in any reasonable manner, but not in any way that suggests the licensor endorses you or your use.

Non-Commercial - You may not use this material for commercial purposes.

No-Derivatives - If you <u>remix, transform, or build upon</u> the material, you may not distribute the modified material in any form or by any means.

For further information on henna and hair, please visit www.hennaforhair.com

To purchase henna, please visit www.mehandi.com

HELP DESK AND ORDER DESK: call 330-673-0600 or toll-free 855-MEHANDI

[&]quot;Ancient Sunrise® Henna for Hair," Chapter 13, Henna and Your Health, Copyright © 2015, Catherine Cartwright-Jones PhD, TapDancing Lizard® LLC <u>www.mehandi.com</u> <u>www.hennaforhair.com</u> <u>www.ancientsunrise.com</u>