

# Hormonal Contamination of Test Results

## Guidelines for Providers and Patients

- ▶ Blood Spot and Saliva samples may be contaminated by exogenous hormones in a number of ways, and only trace amounts of hormone are needed to significantly elevate hormone levels in the sample tested.
- ▶ Identifying and preventing specimen contamination will save time and money for the patient, healthcare provider, as well as the laboratory.
- ▶ Healthcare providers are encouraged to contact ZRT physicians to discuss test results.

<b>Common Causes of Hormone Contamination in Saliva Samples</b>	<ul style="list-style-type: none"> <li>▶ Hormones applied to the face/neck/chest within 3 days of testing</li> <li>▶ Hormones applied to the inner arms/legs or other areas that may come into contact with face/lips/mouth</li> <li>▶ Topical hormones used &lt; 12 hours prior to sample collection</li> <li>▶ Sublingual hormones used &lt; 36 hours prior to sample collection (consider blood spot testing instead)</li> <li>▶ Linens, e.g., pillow cases and bath/hand towels, not changed the night before collection</li> </ul>
<b>Common Causes of Hormone Contamination in Blood Spot Samples</b>	<ul style="list-style-type: none"> <li>▶ Topical hormones applied using fingers up to two days prior to collection (rub in wrist-to-wrist instead)</li> <li>▶ Handling blood spot collection card before or after collection with fingers used to apply hormones</li> </ul>
<b>Other Exposure Sources</b>	<ul style="list-style-type: none"> <li>▶ Close contact with family members or others using topical hormones</li> <li>▶ Faucets/countertops/towels/doorknobs contaminated with topical hormones</li> <li>▶ Applying topical hormones for others (e.g. hydrocortisone cream on a child)</li> </ul>
<b>Hidden Hormone Sources</b>	<ul style="list-style-type: none"> <li>▶ Wild Yam” creams may contain actual progesterone (wild yam derivatives cannot be converted into progesterone naturally by the human body)</li> <li>▶ “Phytoestrogen” creams may contain actual estrogens (listed as “phytoestrogens” or “natural estrogens” from herbal extracts)</li> <li>▶ Some cosmetics, such as anti-aging/wrinkle-removing/skin firming creams, may also contain trace amounts of hormones (hormones in trace amounts are not required to be listed on ingredients)</li> <li>▶ Placenta-containing shampoos and lotions (may be labeled “protein rich”)</li> </ul>
<b>Occupational Hormone Sources</b>	<ul style="list-style-type: none"> <li>▶ Compounding Pharmacists/Pharmacy Technicians working with hormone powders and creams</li> <li>▶ Estheticians, cosmetologists, beauty product consultants, and make-up artists applying/ displaying hormone-containing products/cosmetics</li> </ul>