SALIVARY ANDROSTENEDIONE QUICK START GUIDE



BIOLOGICAL CONSIDERATIONS

Androstenedione is a steroid hormone produced in the adrenal glands and the gonads. It is synthesized from Dehydroepiandrosterone (DHEA) or 17OH-progesterone and serves principally as the immediate precursor compound that is converted into testosterone or estrone. Approximately 95% of circulating androstenedione is available to tissues. Unbound androstenedione enters saliva from blood by passive diffusion and therefore the correlation between serum and saliva values is strong. Studies exploring factors which disrupt pathways of steroid hormone metabolism and/or the transition to adrenarche/ pre-puberty may be especially interested in salivary androstenedione.

Biological Representation	Systemic
Serum-Saliva Correlation	0.77

SAMPLE TIMING AND DESIGN

Androstenedione exhibits a diurnal rhythm with the highest levels in the morning and a nadir in the late evening. Levels of androstenedione begin to increase in children at about age 6-8 during adrenarche, and androstenedione serves as the main source of androgens prior to puberty.

FREQUENTLY STUDIED WITH

Cortisol, Estradiol, Estrone, Melatonin, Testosterone

TECHNICAL SUMMARY

Sample Collection Methods & Volumes		
Passive Drool	✓	
SalivaBio Swabs	-	
Optimum Collection Volume	125 μL*	
*Add 300 µL to the total collection volume for all analytes of interest.		

METABOLIC PATHWAY FOR STEROID HORMONES

This image of the biological process, by Haggstrom 2014, represents steroidogenesis. The generation of steroids from cholesterol.



KEY RESOURCES

- 1. S. L. Davison, et al., (2005), Androgen Levels in Adult Females: Changes with Age, Menopause, and Oophorectomy, The Journal of Clinical Endocrinology & Metabolism, Volume 90, Issue 7, 1 July 2005, Pages 3847–3853,
- 2. Dorfman, R. I., Shipley, R. A. (1956). Androgens. New York: John Wiley and Sons.
- 3. Longcope, C., Baler, S. (1993). Androgen and estrogen dynamics: Relationships with age, weight, and menopause status. J Clin Endocrinol Metab, 76(3), 601
- 4. Häggström M, Richfield D (2014). "Diagram of the pathways of human steroidogenesis". WikiJournal of Medicine. 1 (1). doi:10.15347/wjm/2014.005. ISSN 2002-4436.
- 5. Granger, DA, Taylor, MK. (2020). Salivary Bioscience: Foundations of Interdisciplinary Saliva Research and Applications. Springer. https://springer.com/book/10.1007/978-3-030-35784-9

