
Subject: Androgenmatabolismus und HA: 5ar vs Aromatase

Posted by [Yes No](#) on Wed, 27 May 2009 12:03:10 GMT

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Androgen metabolism and hair loss

As already discussed, it is the altered metabolism of androgen in a genetically pre-disposed male and female which plays a major role in female and male pattern hair loss. Two steroid-metabolizing enzymes (5 α -reductase and aromatase), and androgen receptor proteins (ARPs) are the major metabolites of androgen metabolism.

Women have 3 to 3.5 times less 5 α -reductase (types I and II) in their hair follicles as compared to men but the levels of enzyme aromatase in their bodies is significantly higher than those in males.

The aromatase enzyme is also part of normal androgen metabolism and has a protective effect on hair follicles. It brings about the conversion of androgen to estradiol and estrone, and therefore, there is less conversion of testosterone to DHT. It is also interesting to note that aromatase level in frontal hair follicles is 50% that of occipital hair follicles. This is the reason why women with androgenetic alopecia usually retain their frontal hairline and also explains the reason for difference in pattern of balding in men and women.
