Waist-to-Hip Ratio

A preference for a particular ratio of waist size to hip size in men and women.

The waist-to-hip ratio is a primary factor for determining attractiveness for men and women. It is calculated by dividing the circumference of the waist (narrowest portion of the midsection) by the circumference of the hips (area of greatest protrusion around the buttocks). Men prefer women with a waist-to-hip ratio between .67 and .80. Women prefer men with a waist-to-hip ratio between 0.85 and 0.95.[1]

The waist-to-hip ratio is primarily a function of testosterone and estrogen levels, and their effect on fat distribution in the body. High estrogen levels result in low waist-to-hip ratios, and high testosterone levels result in high waist-to-hip ratios. Human mate selection preferences likely evolved to favor visible indicators of these hormone levels (i.e., waist-to-hip ratios), as they are reasonably indicative of health and reproductive potential.[2]

For men, attraction is primarily a function of physical appearance. Women who are underweight or overweight are generally perceived as less attractive, but in all cases women with waist-to-hip ratios approximating 0.70 are perceived as the most attractive for their respective weight group. For women, attraction is a function of both physical appearance and financial status. Financial status is biologically important because it ensures a woman of security and status for herself and her children. However, as women become increasingly independent with resources of their own, the strength of financial status as a factor in attraction diminishes. Similarly, women of modest resources may be attracted to men of low financial status when their physical characteristics indicate strong male features like dominance and masculinity (e.g., tall stature), but men with both high waist-to-hip ratios and high financial status are perceived as the most desirable.

The waist-to-hip ratio has design implications for the depiction of the human form. When the presentation of attractive women is a key element of a design, use renderings or images of women with waist-to-hip ratios of approximately 0.70. When the presentation of attractive men is a key element of a design, use renderings or images of men with waist-to-hip ratios of approximately 0.90, strong male features, and visible indicators of wealth or status (e.g., expensive clothing).

See also Anthromorphic Form, Attractiveness Bias, Baby-Face Bias, and Golden Ratio.

[1] The seminal work on the waist-to-hip ratio is "Adaptive Significance of Female Physical Attractiveness: Role of Waist-to-Hip Ratio," *Journal of Personality and Social Psychology*, 1993, vol. 65, p. 293–307; and "Female Judgment of Male Attractiveness and Desirability for Relationships: Role of Waist-to-Hip Ratio and Financial Status," *Journal of Personality and Social Psychology*, 1995, vol. 69, p. 1089–1101, both by Devendra Singh.

[2] While preferences for particular features like body weight or breast size have changed over time, the preferred waist-to-hip ratios have remained stable. For example, in analyzing the measurements of *Playboy* centerfolds since the 1950s and Miss America winners since the 1920s, researchers discovered that the waist-to-hip ratios remained between 0.68 and 0.72 despite a downward trend in body weight.

When asked to select the most attractive figures from renderings of men and women of varying weights and body types, people favored *male C* and *female A*, corresponding to waist-to-hip ratios of 0.90 and 0.70, respectively.

The world famous Adel Rootstein mannequins have changed to match the ideal look and body type of men and women for over five decades (1960s - 2000s). The waist-to-hip ratios of the mannequins, however, have not changed—they have remained constant at around 0.90 for men, and 0.70 for women.