## **CORRESPONDENCE**

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# 1. Why is it said that obese men have a low erectile potential? How can you explain that obese men have reduced sexual activity?

#### Answer:

Normally, in men, the highest serum testosterone level is experienced around the age of 20-30. In the man with overweight (obesity), that generally appears after the age of 35, the testosterone serum titre starts to drop slightly. Testosterone is metabolized by the aromatase, an enzyme that converts it to estriol.

Also, in the obese men the level of "sex hormone binding globulin" is low, so the impairment of the blood transport of testosterone further decreases its serum level.

In obese men, the adipose tissue on the lower abdomen covers 2-4 centimetres of the length of the penis in the fat of the pubic region. In this situation, the visualization of the penis by the man and the woman reduces the partner's state of excitation through the brain inhibition process determined by the visual information transmitted through the optic nerve pathway, significantly lowering the libido, which is also influenced negatively by the decrease of testosterone by the aforementioned process. At maturity, the desire to have a sexual intercourse is directly correlated with the level of testosterone in the blood.

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### 2. What are copulins? Does it exist in humans?

#### Answer:

As in other mammals, in the woman's vagina, under the action of estrogen, there are changes in local pH (normal values = 4-5) followed by the synthesis of volatile aliphatic acids, molecules that have between 2 and 5 atoms of carbon, with the role of pheromones and called "copulins"; these substances have a sexually exciting effect on the male as well as the one of the man secreted copulins on the female sexual partner.

Pheromones induce changes in the sexual behavior of the human individual, either at the time of ovulation (in female) or accumulation of sperm fluid (in male), the presence of copulins, as in animals, being another way of determining the human reproduction, respectively for the purpose of procreation. (Niţescu V.)

Additional data on this topic will appear in a future edition of JCS.