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## [Too Much Sugar 'Kills' Your Sex Life](#)

### *It plummets SHBG levels*

Could you imagine your life without pumping every day countless amounts of sugar in your body? If not, you should at least know that it can affect your sexuality: high levels of fructose and glucose entering your blood can deactivate the gene controlling the amounts of sex hormones in both men and women, as revealed by a Canadian research published in the Journal of Clinical Investigation. The research made on mice and human cell cultures warns that we should replace simple sugars (like table sugar, glucose and fructose) with complex ones, like starches. Table sugar is a dimer made of glucose and fructose (and as glucose and fructose it enters the blood), while fructose abounds in sweetened beverages, syrups, and many other products. In North America, the annual average intake per person is of 33 kg (74 pounds) of table sugar and 20 kg (45 pounds) of fructose corn syrup. The simple sugars (glucose and fructose) go to the liver to be metabolized, and the excess is stored as fats. The cell cultures revealed that too much fat synthesis deactivated the SHBG (sex hormone binding globulin) gene, plummeting the levels of SHBG protein in the bloodstream. This protein tunes the levels of testosterone and estrogen circulating through the body. Less SHBG protein translates into higher testosterone and estrogen levels, increasing the likelihood of acne, infertility, polycystic ovaries, and uterine cancer in overweight women. This also impairs the ratio estrogen to testosterone, so women are more exposed to heart disease. "We discovered that low levels of SHBG in a person's blood means the liver's metabolic state is out of wack - because of inappropriate diet or something that's inherently wrong with the liver - long before there are any disease symptoms," said lead researcher Dr. Geoffrey Hammond, scientific director of the Child & Family Research Institute in Vancouver, Canada, professor in the Department of Obstetrics & Gynecology at the University of British Columbia and Tier 1 Canada Research Chair in Reproductive Health. "With this new understanding, we can now use SHBG as a biomarker for monitoring liver function well before symptoms arise. We can also use it for determining the effectiveness of dietary interventions and drugs aimed at improving the liver's metabolic state.", said Hammond. Blood SHBG was already used to assess the levels of blood testosterone, to check for hormonal imbalances and likelihood of getting type 2 diabetes and cardiovascular disease. Previously, it was thought that high insulin levels lowered SHBG, as overweight, pre-diabetic persons possess high blood amounts of insulin and decreased SHBG levels.