

Nutritional Aspects of Sexual Behavior and Development

Notice

Some of the following material is theoretical and suggestive for further investigation. It is presented for creative thought and subject for further investigation.

Introduction

Can nutrition influence sexual behavior and development? Sexual aberrations appear to be increasing in the modern world. This paper will attempt to deal with some of the possible causative factors of a world run wild with sterility, impotence, homosexuality and premature sexual development of young people.

None of what is said here should be understood as negating the element of choice in the sexual lifestyles. Doubtless many otherwise healthy and normal individuals become involved in unusual forms of sexual behavior. To neglect possible physiological predispositional factors associated with sexual problems would be foolish negligence.

Pesticides and Sexual Function

Pesticides and herbicides have the potential to alter sexual functioning. Evidence for this began to accumulate as early as 1968, "It has recently been discovered that relatively small amounts of DDT over-activate a liver enzyme in birds, which results in the production of fragile shells that cannot withstand the weight of the nesting mother."¹ Inability to properly use calcium appears to result from estrogen imbalance.

Another study with pheasants found that with exposure to herbicides, "the genital tract of the male embryo resembled that of a normal female...It is important to note that even the vapors of 2,4D have an analogous action...When non-treated eggs were put in treated nests, the embryos show the same sexual anomalies." These studies demonstrate that herbicides feminize or physiologically castrate male animals!²

Chlorinated hydrocarbon pesticides like DDT cause liver damage which can cause estrogen accumulation in the body. Herbicides may do the same thing.³

References:

1. Knight, Granville, "Physical Degeneration and the Allergic Diathesis," *American Society of Ophthalmologic and Otolaryngologic Allergy*, Vol. 9, No. 1, 1968, p. 32.

2. Knight, Granville, "What Are Pesticides Doing to Human Beings?" Price-Pottenger Nutrition Foundation, 1972, p. 12.

3. Carson, Rachel, *Silent Spring*, Greenwich, Conn.: Fawcett Crest, 1962, p.210.

Estrogens

Excess accumulation of estrogens in the body of both males and females may contribute to many of the health problems we see today. Dr. Sam Addanki is on the senior faculty in the division of Endocrinology and Metabolism at Ohio State University. He has found that fatty tissue and certain intestinal bacteria which proliferate on a low-fiber high-fat diet cause a production of estrogens in the human body.

Addanki points out that these elevated estrogens decrease response of muscle tissue to insulin leading to diabetes. In addition 50% of diabetic men become impotent, while women who are diabetic become oversexed due to increased estrogen levels in the tissue.

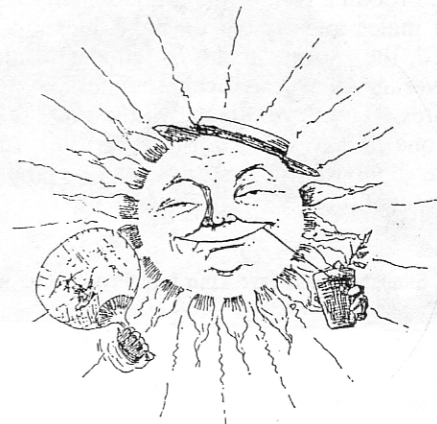
Reference:

- "Dr. Sam Addanki Publishes New Findings," *Speak Out*, January 1982, p. 9. (National Speaker's Association, 5201 7th St., Suite 200, Phoenix, Arizona 85014.)

Maternal Hormone Production

Gunter Dörner of East Germany believes that homosexuality is a result of maternal lack of male sex hormone "during a critical period of fetal brain development. In some cases...the hormonal imbalance results from stress in the pregnant mother."

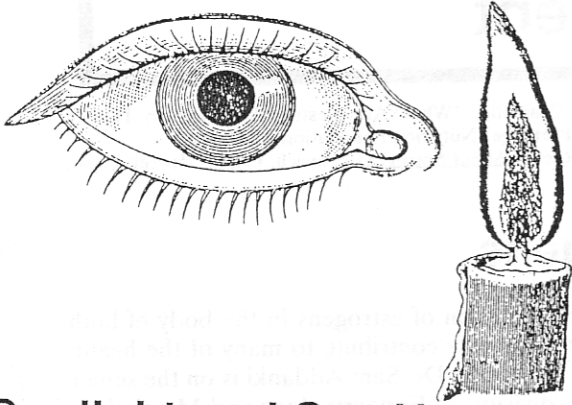
Dörner's association of homosexuality with stress has been challenged due to the fact that there was no boom in homosexuality among babies born during World War II. It is possible that the diet during WWII was superior in many ways to the modern diet--less refining of foods took place. If improper nutrition contributes to homosexuality,



the incidence might have actually decreased among those born in WWII. Of course one must consider the damage that can take place to hormone balance in adulthood as a result of the factors discussed in this paper.

Reference:

Murray, Linda, "Sexual Destinies," *Omni*, April 1987, p.100.



Sunlight and Sex Hormones

Sunlight is an aid in the formation of male and female sex hormones. Young women who do not have regular periods can often reestablish them after prolonged sunbathing and outdoor lifestyle.

Different skin areas vary in their hormone producing characteristics. For example, skin of the back is better at producing vitamin D than is the skin of the abdomen. Exposure of the skin of the back or chest to sunlight will cause male sex hormone to increase 120 percent. Exposure of the genitals to sunlight increases male sex hormone 200 percent.¹

The kind of light reaching the eye may influence sex hormone production as well. It appears to influence offspring born of chinchillas.

John Ott, father of the science of photobiology, writes, "The pituitary gland is the master balance wheel of the entire glandular system, not only in chickens but in other animals and humans as well. If this is so, and the entire glandular system can be affected--or glandular actions modified--by light received through the eye, the resulting consequences and possibilities of what this might mean are utterly fantastic."²

"In April of 1970, the Kline Chinchilla Research Foundation at Utica, Illinois, announced the results of a five-year study in which the Environmental Health and Light Research Institute and more than 2,000 chinchilla ranchers throughout the world participated. The final results indicated that when ordinary incandescent light was used in the breeding rooms, the litters would average 60-75 per cent males and, when "daylight" incandescent bulbs were used, the ratio of males to females would be reversed and average 60 to 75 per cent females."³

Ott also writes, "The development of the male sex organs was only one-fifth as great in those hamsters under the cool white light source as those under the full spectrum fluorescent tubes."⁴

Reference:

1. Kime, Zane, *Sunlight Could Save Your Life*, Penryn, Ca.: World Health Publications, 1980, p. 217.

2. Ott, John Nash, *Health and Light*, New York: Pocket Books, 1976, p. 53.

3. Ott, p. 150.

4. Ott, p. 151.

Drug Usage and Sex Hormones

Marijuana and perhaps other drugs have the ability to alter male sex hormone levels in the body. In one study of twenty young heterosexual males, "The testosterone level was directly related to the amount of marijuana they smoked. Those smoking five to nine joints a week had an average plasma testosterone of 503 nanograms per 100 milliliters (ng %); those smoking ten or more joints averaged only 309 ng %. The nonusers had an average plasma testosterone of 742 ng %. Plasma testosterone levels returned to normal within two weeks when users abstained from marijuana."

Lowering of male sex hormone may explain why marijuana usage causes users to be passive and unaggressive (mellow).

References:

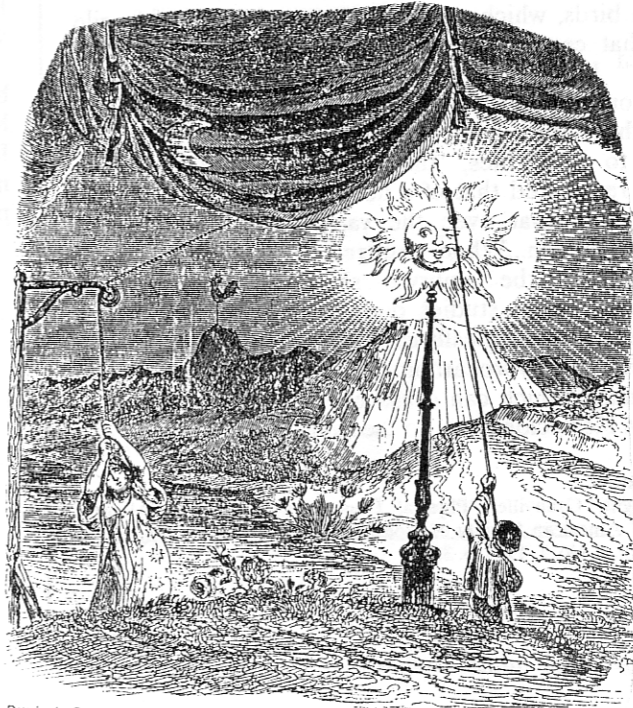
Lesser, Michael, *Nutrition and Vitamin Therapy*, New York: Bantam Books, 1981, p.199.

Kolodny, Robert C. et al., "Depression of Plasma Testosterone Levels after Chronic Intensive Marijuana Use," *The New England Journal of Medicine* 290, no. 16 (18 April 1974): p. 872-874.

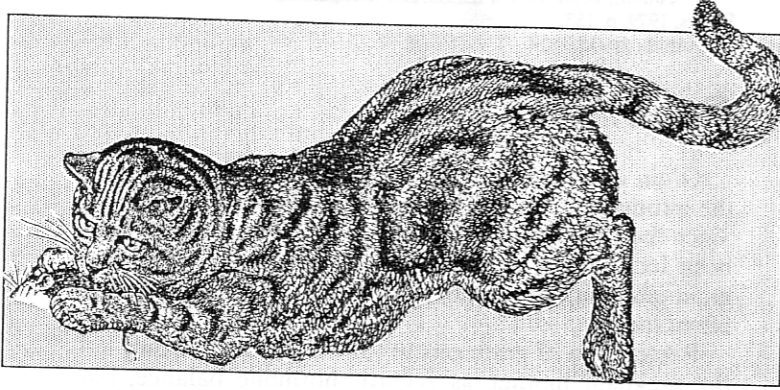
Zinc and Sexual Problems

Lack of zinc has been demonstrated to produce dwarfs with infantile sexual organs.¹ Pfeiffer suggests that microphallus (small penis) improves with zinc supplementation as well as increase in beard and axillary hair if they are lacking.²

Pfeiffer also writes, "Zinc will do many things to lubricate the sexual machinery, such as: (1) increase penis and testes size in young growing males; (2) increase sperm and motility; (3) decrease prostatitis and normalize



Drawing by Grandville. *Un Autre Monde*



secretion, (4) replace zinc loss occasioned by excessive prostate secretion as in sexual foreplay and replace the zinc lost in the ejaculate; (5) help to prevent impotency.³

Pfeiffer believes that the reason males lag behind females in sexual development is the lack of adequate zinc in the diet of the average male adolescent in the United States.⁴

References:

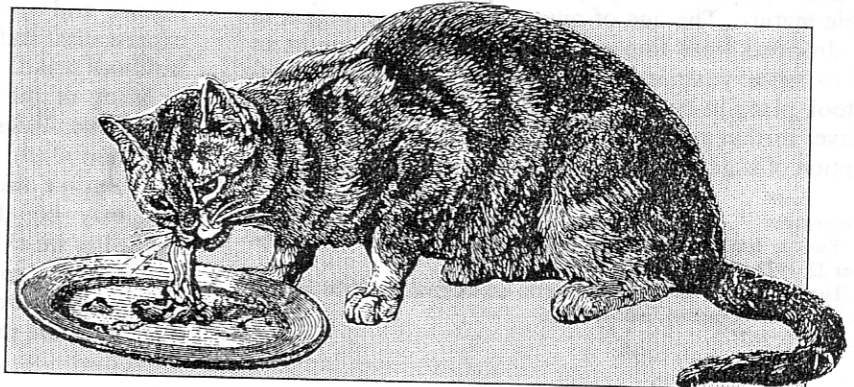
1. Pfeiffer, Carl, M.D., Mental and Elemental Nutrients, New Caanan: Keats, 1975, p. 220.
2. Ibid., p. 225.
3. Pfeiffer, Carl, M.D., Zinc and Other Micronutrients, New Caanan: Keats, 1978, p. 42.
4. Pfeiffer, Mental and Elemental, p. 229.

General Malnutrition and Sexual Function

Francis M. Pottenger, Jr., M.D., conducted a study in which cats were fed raw and cooked foods. Animals eating a diet with 2/3 cooked food began to behave abnormally in regard to both personality and sexual function.

Pottenger wrote, "Cooked meat fed cats show much more irritability. Some females are even dangerous to handle and three are named Tiger, Cobra and Rattlesnake because of their proclivity for biting and scratching. The males, on the other hand, are more docile, often to the point of being unaggressive and their sex interest is slack or perverted. In essence, there is evidence of a role reversal with the female cats becoming the aggressors and the male cats becoming passive as well as evidence of increasing abnormal activities between the same sexes. Such sexual deviations are not observed among the raw food cats."¹

Pottenger wrote, "Experimental work with animals shows a loss of secondary sexual characteristics after two or three generations on impoverished diets. Males lose their heavy masculine frame and their general contour begins to resemble the female. Females also tend to lose their distinguishing build so that both sexes approach a state of physical neutrality. The male no longer has the strength of body that normally makes him the breadwinner and dominant personality. The female no longer has the pelvic capacity required for easy childbearing."²



Pottenger related his research to human beings as well. Pottenger showed four photographs at one of the conventions of the American Medical Association. He asked physicians, nurses, and educators to identify male and female by looking at the nude back of teenagers. Only 30% of the respondents could do so correctly.

He later presented a paper entitled, "Which are Girls and Which are Boys?" His point was that the diet of American young people is so poor that it has become difficult to distinguish between male and female. Malnutrition contributes to the development of a unisex world.³

References:

1. Pottenger, Francis M. Jr., Pottenger's Cats, La Mesa, Ca.: Price Pottenger Nutrition Foundation, 1983, p. 11.
2. Ibid., p. 45.
3. Ibid., p. 43.

Manganese and Sexual Function

Manganese may be the most difficult of all nutrients to obtain in the average diet. While abundant in plants, the mineral is so closely bound to the cellular structure of the plant that it is not available.

Constance Kies, nutrition researcher at the University of Nebraska said, "For too long now we have been overly concerned about precisely how much of a given nutrient is in a food while ignoring the bioavailability of the nutrients."

There is no RDA for manganese. The National Academy of Sciences recommends 2.5 to 5 milligrams a day. Women average 1.75 milligrams and men are on the low end of the recommended intake.

The importance of manganese for prevention of osteoporosis is just beginning to be recognized. Less well understood are the effects of lack of manganese upon animals and the possible implications of this for people.¹

Male rabbits and rats suffer from testicular degeneration and sterility when deprived of manganese. Lack of manganese in female rats results in prolonged menstrual cycle and inadequate development and functioning of the mammary glands. Offspring born to a mother lacking in manganese will demonstrate a lack of coordination.²

References:

1. "Manganese Deficiencies may be Hard to Overcome," Medical Update, December 1976, Volume X, No. 6.
2. Schutte, Karl, Ph.D., and Myers, John, M.D., Metabolic Aspects of Health, Kentfield, Ca.: Discovery Press, 1979, p.106.



Sugar Consumption

Table sugar has been demonstrated to increase the activity of the adrenal cortex. Sugar can cause an increase of 300 to 400 percent in secretions of the adrenal cortex.¹ This stimulation of the cortex of the adrenal gland has the potential for altering sexual behavior and development.

One text on endocrinology writes, "Both androgens (male sex hormones) and estrogens (female sex hormones), as well as progesterone, are elaborated by the adrenal cortex. Since these sex hormones may arise from the adrenal, there is considerable overlapping between adrenal cortical and gonadal functions."²

Stress of any kind tends to cause an outpouring of adrenal cortical steroids.³ The fact that sugar causes such an activation of the gland indicates the powerful stress it imposes upon the body.

Yudkin believes that sugar alters sexual functioning. He notes one experiment in which pigs become more sexually active when fed sugar.⁴ There have been two significant changes in the developmental process of American young people in the last 100 years. Young people appear to be getting taller and becoming sexually mature earlier.

Between 1938 and 1968 the height of boys eleven years of age increased 4 1/2 inches and the height of girls twelve or thirteen years of age increased as much as 8 inches. Adult males increased nearly two inches and females just over one inch. This may indicate that sugar influences the pituitary gland increasing height.

Yudkin believes it may speed the rate at which young people mature. The age of onset of first menstruation in girls dropped from fourteen years and three months in 1905 to twelve years in the the early 1970's. Similar changes took place in boys.⁵ Obviously, this area of nutrition deserves further research due to the extremely heavy consumption of sugar today.

References:

1. Yudkin, John, M.D. "Sugar and Disease," Nature, vol. 239, September 22, 1972.
2. Turner, C. Donnell, Ph.D., General Endocrinology, Philadelphia: W. B. Saunders Company, 1961, p. 246.
3. Ibid., p. 247.

4. Yudkin, John, M.D., Sweet and Dangerous, New York: Bantam Books, 1979, p. 153.
5. Ibid., pp. 152-154.

Grain Oils

Grain oils have been shown to dramatically influence the production of sex hormones in laboratory animals. Since the 1880's grain products in the United States have been increasingly refined. Usually it is these very same grain oils which are removed in order to prolong the shelf life of foods.

Restoration of grain oils to the diet would not only aid the pregnant mother as regards hormone balance, but also aid in the normal maturation of the child and young adult. These oils may be essential for normal sexual development! Animals raised with grain oils appear to develop healthier adrenal and sex glands than animals denied the oils. This would facilitate not only sexual maturation, but also greater ease in coping with stress.

References:

- "Research Report: Formula IV Tre-en-en Grain Concentrates," The Counselor, Hayward, Ca.: Neo-Life Company of America, September, 1987, pp. 19-22.
- "Formula IV with Tre-en-en Grain Concentrates Research Report II," The Counselor, Hayward, Ca.: Neo-Life Co. of America, October/November 1987, p. 12.

Conclusions

Obviously, the problem of normal sexual development in the day in which we live is not a simple one. Many factors can contribute to hinder normal reproduction and sexual development. Avoidance of herbicides and pesticides and unnatural light may be important. Adequate nutrition is of critical importance.

This paper has not even attempted to deal with the question of whether female hormones or antibiotics fed to animals might play a role in influencing sexual behavior. Nor has the role of high fat intake or lack of dietary fiber been discussed. Both of these may play a role. Bacteria or yeasts in the digestive tract may alter estrogen balance in the body.

Here we have looked at what appear to be the more significant nutritional and physiological factors which can influence sexual behavior and development. All these factors act upon one another, influence and are influenced by experiences and decisions individuals make.

Many of the factors which have been discussed are under our control and altered by the decisions we willingly make. It just may be that that little candy bar we choose to eat has an impact upon our personality that we do not even imagine at the present time.

