

### 3.2.2.3.7.4 Phenylalanine and sexual enhancement

The positive effects of phenylalanine supplementation in the human diet have been studied less extensively than the positive effects, for example, of lysine supplementation or arginine supplementation. However, unlike for many other amino acids, there have been extensive studies on possible negative effects of phenylalanine, though they occur in less than 1 in 15,000 persons.

Negatively affected by all phenylalanine intake are phenylketonurics. These are people who lack an enzyme needed to digest phenylalanine. Intake of phenylalanine by people with phenylketonuria (PKU) will cause mental retardation, especially in children. But even adults with PKU will experience mental and intellectual disturbances after an intake of phenylalanine. As the amino acid phenylalanine is part of almost all proteins, especially those of animal origin, phenylketonurics have to restrict themselves to a lifelong vegetarian diet.

To people who are not phenylketonurics, there is by and large little danger from phenylalanine, especially if it's part of a normal diet. The exception are people on monoamine oxidase inhibiting drugs (MAO inhibitors), as phenylalanine is converted into the amino acid tyrosine. If the enzyme which breaks down monoamines such as tyrosine is inhibited, the body is flooded with substances that can cause extreme hypertension.

One man's side effect is another man's cure.

That phenylalanine is converted into tyrosine which is a precursor to dopamine and other neurotransmitters is exactly the reason why some people use phenylalanine as dietary supplement. A lack of the neurotransmitter dopamine is not only the reason for the development of Parkinson's disease but also responsible for the loss of sex drive as people get older. The link between dopamine and sex drive is well proven. It is also known that practically all Parkinson's medications have as side effect an increased susceptibility to sexual stimulation.

Some Parkinson's medications such as deprenyl and bromocriptine are used for sexual enhancement. Tyrosine is an amino acid which, as dietary supplement, does seem to increase dopamine levels but it's not as strong as deprenyl or bromocriptine and not the medication of first choice in usual Parkinson's cases.

While the prosexual effects of phenylalanine are a consequence of the conversion of phenylalanine into tyrosine, it is assumed that phenylalanine has other health benefits. We have pointed out above that phenylalanine is not as well researched as are, for example, the amino acids lysine and arginine. This means that some of the alleged health benefits haven't been proven conclusively in scientific tests.

For conclusive results, it is not sufficient that just a few studies are conducted. In order to judge what amount of scientific studies will be needed for definite knowledge, we may take a look at cholesterol research. Cholesterol has been researched hundreds of times more extensively than phenylalanine. Nevertheless, we have been told over the years to avoid foods high in dietary cholesterol, such as eggs, in order to safeguard against cardiovascular disease. And only after hundreds of studies, it appeared that saturated fat intake is the prime culprit, rather than dietary cholesterol.

If one reads that the prosexual effect of phenylalanine (via the tyrosine route) hasn't been proven, it means just this: it hasn't been proven. It hasn't been proven either that a diet high in cucumber helps to avoid baldness. It hasn't been proven because it hasn't been studied. Strictly speaking, it has also not been proven that a diet high in cucumber does not help to avoid baldness.

If something hasn't been proven, it means just that: it hasn't been proven. That something hasn't been proven doesn't automatically mean the opposite would have been the case. It HAS been proven that phenylalanine converts into tyrosine, and that tyrosine is a precursor to dopamine, and that dopamine levels have a definite function in sexual desire.

It may not have been proven, however, that taking phenylalanine supplements of, let's say, 500 mg a day will straighten out the absence of sexual desire. The dosage may be insignificant, or there may be limitations to absorbency, and so on. Conventional wisdom is

that taking phenylalanine supplements will not hurt one's sex and general life (unless one is a phenylketonuric), while it may or may not mean an improvement.