



SEXING

THE MALE



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The link between food and male fertility has long been known. The ancient Greeks prescribed that a man should eat dry foods such as pulses, cereals and nuts to increase fertility and raise his chances of producing healthy offspring. Hippocrates (5th century BC) advised against taking hot baths and eating 'unhealthful' foods.

by Ros Ben-Moshe

Today, the trend is once again returning to recognition of the invaluable role food plays in our wellbeing. Food has an important role as a hormone regulator that influences many bodily functions, including sex drive, reproduction, menopausal symptoms, cardiovascular disease and susceptibility to hormone-dependent cancer, such as breast and prostate cancers.¹

Studies in Europe have shown that over the past 50 or so years sperm counts have dropped dramatically, with trends similar all over the western world.² With this in mind, male health issues must be more adequately addressed, particularly with reference to fertility. Failure to recognise and act on a fertility problem can, in time, render a man infertile.

Factors affecting fertility

Many factors affect male fertility, some of which are only now starting to be recognised and acknowledged. In the UK, the Ministry of Agriculture, Fisheries and Food is investigating the effects of 'oestrogenic' pollutants (present in river water and plastic food wrapping), which can act like the feminising hormone, oestrogen. Scientists are looking at the "possibility that these oestrogen-mimicking compounds form part of a complex environmental cocktail of chemicals which may have an effect on unborn male babies, interfering with their ability in later life to produce enough healthy sperm."³ These compounds, which are used to make plastic more flexible, are prone to leak into foods that contain fat, such as hot chips, chocolate and even milk products. In a society where polluted rivers are becoming more the norm and takeaway fast-food production is on the rise, the threat posed by these pollutants needs to be taken seriously. At present there is no study in Australia, however the Advisory Committee on Pesticides and Health is considering whether any specific research should proceed.

It's also important to be aware that there could be medical reasons underlying a fertility problem. Conditions such as prostate

disease, previous illnesses such as mumps or inflammation of the testicles (orchitis), injury and so on might cause fertility problems, in which case medical advice should be sought.

Infertility is defined as the failure to achieve pregnancy after one year of unprotected intercourse. It affects as many as 10 to 20 per cent of couples. In at least 40 per cent of cases a woman is unable to conceive because of her partner.⁴ Reasons for this can include poor sperm production, where sperm could be too few in number and volume, too sluggish or of abnormal or poor quality. Sperm might clump together, preventing them from moving quickly, a condition known as agglutination.

Signposts to general health

Impotence and decreased sperm count are not usually the result of falling testosterone levels or ageing but rather blockages in the genital arteries. These can be caused by a number of factors, including a diet high in saturated fats and low in fibre; diabetes; medication; and environmental or psychological factors. The good news is that in the vast majority of cases impotence is reversible, and if men and women are in good health they should be able to remain sexually active to any age.

Because an erection depends on blood flow, the more blocked the arteries, the more difficult it is to get an erection. Impotence occurs as the blockage worsens. If, however, the arteries are cleared, a normal erection will be attainable and normal sexual functioning will return.

Research has demonstrated a strong link between artery problems and impotence. Men who have heart attacks very often have difficulty getting an erection. Furthermore, impotence precedes a heart attack in 40 to 70 per cent of cases, illustrating that blocked arteries in one part of the body often indicate blocked arteries elsewhere. So strong is this evidence that older men with a reduced genital flow have about a one in four chance of a heart attack or stroke occurring within the following 24 to 36 months.⁵

Testosterone for that sexual feeling

In men, the sex hormone testosterone, together with psychological factors such as romance, creates sexual feelings and urges. In most healthy men testosterone levels stay pretty much the same throughout life, but in some, as time goes on, the testes decrease production of testosterone. Fortunately, minor changes in testosterone levels do not make any difference as far as sex drive is concerned, because "a lot of testosterone goes a long way".⁶ As long as a man is healthy and his testosterone levels are somewhere in the normal range, his sexual interest remains active. In fact, in some instances, dietary changes that lower testosterone levels (for example, to reduce the risk of cancer) will improve a man's sexual functioning.

It's time for the conventional burger to be replaced with a healthier alternative. Studies have shown that not only will a diet predominantly high in saturated fats clog the arteries, but eating fatty meals might actually dampen sex drive by sending blood stores of testosterone plunging. A study of eight men conducted at the University of Utah's School of Medicine, Salt Lake City, found that their blood testosterone levels plunged by about 50 per cent after they drank fatty milkshakes containing 57 per cent of their calories

in fat.⁷ Men with higher body fat have not only sunken testosterone levels but a significantly increased chance of clogging of the genital arteries.

Dietary factors

To produce healthy sperm, your diet should include essential fatty acids (found in oily fish and polyunsaturated oils), vitamins A, B, C and E, zinc and selenium. Arginine, an amino acid supplement, is also good for increasing sperm count. Just as it's important to include certain things in your diet, it's equally important to refrain from others, such as alcohol. Alcohol is toxic to the male reproductive tract and if consumed in large enough quantities over a long enough period can cause infertility. Findings have shown, however, that damage caused to sperm by alcohol is at least partially reversible when a man who is infertile from alcohol refrains from drinking for a moderate period of time.⁸

Vitamin B₁₂

Vitamin B₁₂ deficiency can also cause infertility. When an ageing stomach lining fails to excrete enough intrinsic factor (a substance necessary for the proper absorption B₁₂), a B₁₂ deficiency results, causing serious or pernicious anaemia, which can eventually cause infertility in both men and women. Again, diet is crucial. Vitamin B₁₂ injections have been shown to restore fertility.

The oyster's reputation

Many studies have demonstrated the link between healthy sperm and zinc. High concentrations of zinc are found in male sex glands and also in sperm. Several clinical trials have found zinc supplementation to be an effective fertility treatment. In one study, 14 infertile men with unexplained low sperm counts received 220mg of zinc sulphate daily. After four months there were significant improvements in sperm count and in the number of progressively motile and normal sperm, with two of the men impregnating their partners.⁹ High levels of zinc can be found in several foods, the highest source being oysters, with notable levels in fish, meat, poultry, wholegrains, egg yolks, brewers yeasts and pumpkin seeds. If you don't eat seafood or meat, it's good to know that many cereals are fortified with zinc, providing a large percentage of the Recommended Daily Allowance (RDA).

An orange a day

Sperm's elixir of youth is increasingly being recognised as vitamin C. The seemingly magic powers of vitamin C can be attributed to its main role as an antioxidant. Oxidation occurs naturally in the body when incomplete free radical oxygen molecules latch onto a hydrogen ion from a nearby molecule, which in turn grabs one from another structure, setting off a chain reaction. Without antioxidants to prevent this from happening, free radicals can multiply, placing stress on the body's defence systems. Vitamin C helps protect sperm from oxygen free radicals. It attaches to the surface of sperm, preventing the agglutination (clumping) of sperm that stops their mobility.

Studies at the Texas University Medical School have illustrated the vital role vitamin C plays in maintaining healthy sperm.

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Patients were given 1000mg doses of vitamin C and after a period of two months their sperm counts jumped nearly 60 per cent, sperm were 30 per cent 'friskier' and the percentage of abnormal sperm dropped. Most remarkably, all men who had been given this high dose of vitamin C had managed to impregnate their partners at the end of the two-month trial. None of the control group, ie those not given any vitamin C, managed to do so.¹⁰ Findings also showed that a lower dose of 200mg was just as effective, though it took a couple of weeks longer.¹¹

Low levels of vitamin C can increase the likelihood of passing on genetically damaged sperm, which can cause birth defects. A study

at the University of California, Berkeley, analysed sperm from 24 men, finding that 15 had subnormal levels of vitamin C; of these, eight showed high levels of genetic damage to their sperm.¹² Although cells continually work to repair damaged sperm, with the daily stresses of life systems can become overloaded and a birth defect may 'get through'. According to the study, genetic damage to sperm occurred when vitamin C levels were only slightly below the RDA.

It's very difficult to gauge how much vitamin C is needed to rejuvenate sperm, as there are so many variables to take into account, such as whether you smoke or drink or are exposed to toxic chemicals or air pollutants and so forth. Thus, a man who smokes, drinks and works and lives in a heavily polluted environment would need more vitamin C to keep his sperm 'detoxified' than a man living under healthier conditions.

Below is a list of the top 12 vitamin C-rich foods that will, among other things, enliven your sperm. All it takes is about 200mg per day.

References

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3. Ibid
4. *Conception Connections*
5. Neil Barnard MD, *Eat Right Live Longer. Using the natural power of foods to age-proof your body*, Random House, Australia, 1995, p112
6. Ibid, p78
7. Jean Carper, p372
8. *Conception Connections*
9. Ibid
10. Jean Carper, p373
11. *Conception Connections*
12. Jean Carper, p375

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1 papaya, medium	188mg
1 guava, medium	165mg
1 cup orange juice	124mg
½ cup blackcurrants	101mg
1 cup broccoli	98mg
1 cup brussels sprout	96mg
1 orange, medium	80mg
1 grapefruit, medium	94mg
1 cup strawberries	85mg
1 rockmelon, medium	68mg
1 cauliflower, medium	68mg

'Stay young' recipes

Change can be a difficult thing, and the pace at which you make changes is a highly personal choice. Going immediately from a diet of hamburgers and fatty chips to steamed vegetables and brown rice might be a bit too dramatic for your body. Instead, progressive adoption of healthy dietary substitutes will ultimately create the best possible environment for optimal fertility and enhanced health.

Following are a few quick-to-prepare recipes with not only your tastebuds in mind. All are brimming with nature's goodness. For better

nutritional value and food minus the chemicals, you are strongly encouraged to use organic produce.

Start the day with a glass of orange juice or half a grapefruit. Great snacks to keep your prostate happy are figs and pumpkin seeds. (In China, pumpkin is known as the 'Emperor of the Garden' and has become a symbol of fruitfulness.) Other great 'sperm foods' include green leafy vegetables, asparagus and avocado, all of which contain the antioxidant glutathione, which helps inhibit sperm deterioration.

Creamy Cold Avocado Soup

Ingredients:

2 large avocados
1 clove garlic, crushed
4 cups vegetable stock
(or 4 cups water with 1 vegetable stock cube)
250g silken tofu
sea salt
freshly ground pepper
2 tbsp freshly chopped chives

Method:

In a food processor, puree the avocados. Add garlic, stock, silken tofu and seasonings. Blend well. Chill before serving. Garnish with a sprinkling of fresh chives.

Quick Adzuki Bean & Orange Salad

Ingredients:

2 cups soaked and cooked adzuki beans (1 tin)
1 red onion, finely chopped
2 oranges, cut into 1.5cm cubes
½ cup freshly chopped basil
1 tbsp honey
3 tbsp apple cider vinegar
2 tbsp safflower oil
sea salt
freshly ground pepper

Method:

Place beans, onion, orange and basil (reserve about 1 tablespoon) in a bowl. In a separate bowl, mix the honey, cider vinegar, safflower oil and seasonings. Mix bowls together and serve with reserved basil sprinkled on top.

Barbecued Marinated Tofu Kebabs

(makes 12)

Ingredients:

250g firm tofu, cut in 2.5cm cubes
2 small zucchini, cut in 1cm slices
½ red capsicum, cut in 2.5cm chunks
½ green capsicum, cut in 2.5cm chunks
½ pineapple, cut in 2.5cm cubes

2 cups baby button mushrooms
1 tbsp vegetable oil
2 medium onions, cut in 2.5cm wedges

Marinade:

2 tbsp tamari
1 tbsp fresh crushed ginger
1 clove garlic, crushed
2 tbsp mirin
1 tbsp honey
2 tbsp water

Method:

Place cubed tofu into a shallow baking dish and cover with marinade for at least 1 hour, stirring occasionally. Alternately thread tofu and vegetables on skewers. (If using bamboo skewers it's best to soak them overnight in water.) Baste with remaining tofu marinade, then barbecue (or grill or shallow fry) until lightly brown on all sides and cooked through.

Tempeh Satay

(serves 4)

Ingredients:

1 medium red pepper, chopped
1 medium onion, sliced lengthways
1 cup broccoli, roughly chopped
1 cup cauliflower, roughly chopped
1 cup pumpkin, chopped in 2cm cubes
1 cup tempeh, cut in cubes
½ cup water
2 tbsp safflower oil (for pre-frying tempeh)
1 tbsp safflower oil, for frying vegetables
freshly chopped coriander or parsley
to garnish

Satay sauce:

6 tbsp crunchy peanut butter
1½ cups water
2 cloves garlic
3 tbsp tamari
juice of 1 lemon
½ tsp cayenne pepper

Method:

1. Heat oil in a saucepan and add cubed tempeh. Fry for a few minutes either side until golden, then transfer to a plate covered in absorbent paper.
2. In a large saucepan, heat oil, then add onion. Saute for a couple of minutes before adding the pumpkin, cauliflower, broccoli and capsicum. Add half a cup of water and stir intermittently. Turn down the heat and cover.
3. In a separate saucepan, mix in the peanut butter with the water and heat on a low flame. Add remaining ingredients and mix thoroughly. Add the satay sauce to the vegetables and cook for a further 10 minutes. Add the fried tempeh (adding the tempeh at this late stage should keep it slightly crunchy) and cook for a further 5 or so minutes before serving on a bed of brown rice or rice noodles. Sprinkle the fresh herbs on top. (Rich in B₁₂ and vitamin C, this is a really tasty treat.)

Lentil Burgers

(makes 12+)

Ingredients:

1 cup brown lentils
1 cup brown rice
4 cups water
½ cup breadcrumbs
(or rice crumbs if gluten-sensitive)
1 medium onion, finely chopped
1 tbsp freshly chopped parsley
sea salt
freshly ground pepper
olive oil for frying

Method:

Bring water to the boil in a medium saucepan and add rice and lentils. Simmer for 40 or so minutes until tender. Cool a little and transfer to mixing bowl. Mash with any remaining liquid. Mix in all other ingredients. Heat frying pan and add olive oil. Wet your hands (this prevents the mixture from sticking to your hands) and shape the mixture into burgers. Fry for 3 to 5 minutes per side or until lightly golden (alternatively, these burgers can be barbecued). Serve in pita with salad. (Lentil burgers can take the edge off those cravings for hamburgers.)

Fruit Salad

(makes 4 generous serves)

Ingredients:

2 small cantaloupes (rockmelons)
½ papaya, cut in 2cm chunks
1 punnet blueberries
1 punnet strawberries, cut in halves
2 kiwifruits, peeled and sliced
1 honeydew melon, cut in 2cm chunks
½ cup fresh mint, chopped

Method:

Halve and de-seed the cantaloupe. Using a melon baller, scoop out balls and place in a large mixing bowl. To this add remaining fruits. Return mixed fruits to cantaloupe 'serving bowls' and top with fresh mint. (This fruit salad is just bursting with vitamin C.)

Raspberry Tofu Cream/Icecream

Ingredients:

250g silken tofu
225g punnet fresh raspberries
1 cup coconut milk
1 tsp pure vanilla extract
1 tbsp orange rind
3 tbsp honey or maple syrup

Method:

Place all ingredients (except the raspberries) in a blender until smooth. Add the raspberries and briefly blend. Chill either in the refrigerator (to use as cream) or freezer (to use as icecream).