

Sexual dysfunction

Do the benefits of weight loss extend to improved sexual function?



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Traditionally, sexual dysfunction – in particular in people with diabetes – has been considered relentless and progressive, associated in many cases with dysglycaemic-related changes to the neurovascular supply of the sexual organs

themselves. As a consequence, the standard reply to people who ask their clinician if there are any measures they can take to improve sexual function, without resorting to pharmacological agents or invasive medical devices, is usually a negative one. However, in recent years, investigators have examined whether weight loss can improve sexual function – with some encouraging results.

One of the first studies to demonstrate an improvement of sexual function following weight loss was Esposito et al's 2004 article. The authors found that weight loss (mean reduction of 15 kg [equivalent to 14.5% of original body weight]) was associated

with improved erections and a concomitant improvement in endothelial function and a reduction in vascular inflammation.

More recently, Ranasinghe et al (2011; summarised alongside) have further developed the understanding of this phenomenon by showing that weight loss through bariatric surgery resulted in improvements in elements of sexual function. Moreover, Bond et al (2011; summarised below) showed that in obese women (mean BMI 45.1 kg/m²) undertaking bariatric surgery, sexual dysfunction resolved in many participants by 6 months postoperatively.

While people with diabetes may require intervention to improve sexual function, evidence is mounting that weight loss per se may – in some cases – improve or restore sexual function,

representing an additional weight-loss incentive for some.

“... evidence is mounting that weight loss per se may – in some cases – improve or restore sexual function, representing an additional weight-loss incentive for some.”

Esposito K, Giugliano F, Di Palo C et al (2004) Effect of lifestyle changes on erectile dysfunction in obese men: a randomized controlled trial. *JAMA* **291**: 2978–84

BJU INTERNATIONAL

Improvement in sexual function following weight loss surgery

Readability	✓✓✓✓
Applicability to practice	✓✓✓✓✓
WOW! factor	✓✓✓✓

1 The authors sought to retrospectively investigate the effects of weight loss on urinary and sexual function in men and women who had undergone laparoscopic gastric banding surgery (LGBS).

2 Women ($n=653$) and men ($n=145$) who had undergone LGBS in the past 10 years at a single centre in Australia were recruited.

3 Pre-LGBS BMI was higher in male than female participants (47.3 kg/m² and 43.5 kg/m², respectively).

4 There was significant weight loss and BMI reduction in both men and women (23.2 kg, 7.51 kg/m² and 22.7 kg, 8.28 kg/m², respectively; $P<0.0001$) following LGBS.

5 Significant improvements in the International Consultation on Incontinence Questionnaire (short form; $P=0.0008$) and quality-of-life scores ($P<0.0001$) were seen in women.

6 Improvement in International Index of Erectile Function scores was seen in men post-LGBS; however, more men had started using phosphodiesterase type-5 inhibitors.

7 The authors concluded that surgically induced weight loss improved overall urinary function and quality of life. There was overall sexual function improvement after LGBS in men. Further evaluation is required in larger prospective cohorts.

Ranasinghe WK, Wright T, Attia J et al (2011) Effects of bariatric surgery on urinary and sexual function. *BJU Int* **107**: 88–94

SURGERY FOR OBESITY AND RELATED DISEASES

Sexual dysfunction resolved in many women after bariatric surgery

Readability	✓✓✓✓
Applicability to practice	✓✓✓✓✓
WOW! factor	✓✓✓✓

1 Fifty-four reportedly sexually active women (43.3 ± 9.5 years) completed the Female Sexual Function Index (FSFI) pre-bariatric surgery and 6 months postoperatively.

2 Prior to surgery, 34 women (63%) had FSFI scores indicative of sexual dysfunction (SD).

3 By 6 months postoperatively, mean excess weight loss was 42.3% and SD resolved in 68% of previously dysfunctional women, with significant improvements in all FSFI domains ($P<0.05$).

4 SD resolved in a large percentage of women after surgery, becoming consistent with those of normative controls. Improvement in sexual function did not depend on weight loss amount.

Bond DS, Wing RR, Vithianathan S et al (2011) Significant resolution of female sexual dysfunction after bariatric surgery. *Surg Obes Relat Dis* **7**: 1–7

DIABETES CARE

Bupropion therapy improves sexual function in T2D with major depression

Readability	✓✓✓✓
Applicability to practice	✓✓✓✓
WOW! factor	✓✓✓✓

1 The adverse effects of T2D on sexual functioning (SF) are well established. Furthermore, depression and the medication used to treat it may impose additional risk of sexual dysfunction in people with T2D.

2 Bupropion (BU) is a non-tricyclic antidepressant with reportedly few sexual side-effects, but its effects in people with major depressive disorder (MDD) and T2D has not been reported.

3 The authors reported the secondary analysis of SF in 90 people with T2D who were treated for MDD with BU.

4 Participants (aged 18–80 years) had T2D and symptomatic MDD and were treated with extended-release BU in an open-label study over a 10-week period. SF at baseline was insufficient in 71.1% of participants.

5 During BU treatment, the percentage of participants with sufficient SF improved significantly (30.6% vs 68.1%; $P=0.001$); likewise, mean Sexual Energy Scale scores improved during treatment ($P<0.0001$).

6 Participants with persistent hyperglycemia had higher rates of sexual dysfunction; however, SF improvement was evident in some participants with persistent hyperglycemia (25.9%) or persistent MDD (18.2%).

7 The authors concluded that BU treatment of MDD had few sexual side-effects and was associated with significant improvements in SF in the present cohort with T2D.

Sayuk GS, Gott BM, Nix BD, Lustman PJ (2011) Improvement in sexual functioning in patients with type 2 diabetes and depression treated with bupropion. *Diabetes Care* **34**: 332–4

JOURNAL OF UROLOGY

Regular NSAID use associated with ED

Readability	✓✓✓✓
Applicability to practice	✓✓✓✓
WOW! factor	✓✓✓✓

1 A potential relationship between inflammation and erectile dysfunction (ED) has been suggested.

2 In this prospective cohort study the authors examined the association between nonsteroidal anti-inflammatory drug (NSAID) use and ED as part of the California Men's Health Study.

3 Participants were aged 45–69 years at baseline. ED was assessed by questionnaire. NSAID exposure was determined by automated pharmacy data and self-reported use.

4 Of the 80 966 participants, 47.4% were NSAID users and 29.3% reported moderate or severe ED. ED strongly correlated with regular NSAID use – a positive correlation that persisted after adjustment for age, ethnicity and a range of comorbidities (adjusted odds ratio, 1.38).

Gleason JM, Slezak JM, Jung H et al (2011) Regular nonsteroidal anti-inflammatory drug use and erectile dysfunction. *J Urol* **185**: 1388–93

JOURNAL OF SEXUAL MEDICINE

Depression, diabetes associated with ED during haemodialysis

Readability	✓✓✓✓
Applicability to practice	✓✓✓✓
WOW! factor	✓✓✓✓

1 Erectile dysfunction (ED) is highly prevalent among men undergoing haemodialysis and the authors aimed to identify the influence of ED on quality of life (QOL) and to evaluate the influence of depression on erectile function of these men.

2 In this cross-sectional study, 275 men (mean age, 48.6 years) undertook a series of questionnaires on ED, QOL and depression.

3 Advanced age, diabetes and high depression score were independent risk factors for the development of ED (all $P\leq 0.002$). QOL was worse among men with any degree of ED, and more severe forms of ED were associated with a lower QOL.

4 The authors concluded that, in men undergoing haemodialysis, depression is an important trigger for the development of ED.

Fernandes GV, dos Santos RR, Soares W et al (2010) The impact of erectile dysfunction on the quality of life of men undergoing hemodialysis and its association with depression. *J Sex Med* **7**: 4003–10

INTERNATIONAL REVIEW OF PSYCHIATRY

ED contributes to poorer QOL in men with T2D

Readability	✓✓✓✓
Applicability to practice	✓✓✓
WOW! factor	✓✓✓

1 To study the quality of life (QOL) of men with T2D and erectile dysfunction (ED), 63 men with T2D and ED were compared with 30 male controls with T2D matched for sociodemographic and clinical profiles on depression and anxiety.

2 QOL was measured using the World Health Organization QOL-BREF, which comprises 26 items in the following domains: physical health, psychological health, social relationships, and environment.

3 Men with ED had poorer QOL in all domains, except physical; however, the differences between the two groups were significant only for the environmental domain.

4 The authors concluded that ED contributes to poorer QOL in men with T2D and recommended that screening and treatment for ED should be undertaken to improve QOL.

Avasthi A, Grover S, Bhansali A et al (2011) Erectile dysfunction in diabetes mellitus contributes to poor quality of life. *Int Rev Psychiatry* **23**: 93–9

“Erectile dysfunction strongly correlated with regular nonsteroidal anti-inflammatory drug use – a positive correlation that persisted after adjustment for age, ethnicity and a range of comorbidities.”