



FACT SHEET

About EnteroMedics Inc. and VBLOC Therapy:

EnteroMedics, Inc. is the developer of VBLOC® Vagal Blocking Therapy, delivered via a pacemaker-like device called the Maestro® System, the first new medical device approved by the FDA for obesity in over 10 years. VBLOC® Therapy intermittently blocks the vagus nerve using high-frequency, low-energy, electrical impulses, which help control both hunger and fullness. A less invasive and reversible procedure that offers sustained weight loss, VBLOC allows people with obesity to take a positive path towards addressing the lifelong challenge of obesity and its comorbidities, such as diabetes and hypertension, without sacrificing wellbeing or comfort. EnteroMedics' Maestro Rechargeable System has received CE Mark and is listed on the Australian Register of Therapeutic Goods.

Major Advantages of VBLOC Therapy:

- **Safety:** Studies to date have demonstrated excellent safety, including cardiac safety as well as a minimal side-effect profile.
- **Efficacy and Sustainability:** On average, VBLOC Therapy patients lose 25% of their excess weight and studies have shown the weight loss is sustained over time in a majority of patients.
- **Control of Hunger:** VBLOC Therapy is designed to control sensations of hunger between meals and to limit food intake during meals by creating a feeling of fullness.
- **Clinically Meaningful Effects on Obesity-Related Comorbidities:** diabetes and hypertension.
- **Preservation of Normal Anatomy:** VBLOC Therapy is minimally invasive and involves no surgical alteration or restriction of the digestive system and does not create barriers to prevent absorption of nutrients.
- **Reversibility:** The technology can be non-invasively turned off or completely removed.
- **Promotes Healthy Eating:** Patients are able to eat normal, healthy meals without food restrictions.

The Obesity Epidemic:

- More than one-third of U.S. adults (34.9%) are obese (defined as a body mass index or BMI of 30 kg/m² or greater)¹.
- Worldwide obesity has nearly doubled since 1980².
- The estimated annual cost of obesity in the U.S. was \$147 billion in 2008³.
- Obesity now accounts for almost 21 percent of U.S. healthcare costs, more than twice previous estimates⁴.
- Higher BMI is a major risk factor for comorbidities such as cardiovascular disease (leading cause of death in 2012), diabetes, hypertension, musculoskeletal disorders and some cancers.⁵

¹ Prevalence of Childhood and Adult Obesity in the United States, 2011-2012 Cynthia L. Ogden, PhD¹; Margaret D. Carroll, MSPH¹; Brian K. Kit, MD, MPH^{1,2}; Katherine M. Flegal, PhD¹ *JAMA*. 2014;311(8):806-814. doi:10.1001/jama.2014.732.

² "Obesity and Overweight Fact Sheet N° 311." *WHO.*, May 2014. Web. 11 July 2014.)

³ Eric A. Finkelstein, Justin G. Trogon, Joel W. Cohen and William Dietz Annual Medical Spending Attributable To Obesity: Payer-And Service-Specific Estimates *Health Affairs*, 28, no.5 (2009):w822-w831 (published online July 27, 2009; 10.1377/hlthaff.28.5.w822)

⁴ Cawley, John, and Chad Meyerhoefer. "The Medical Care Costs of Obesity: An Instrumental Variables Approach." *Journal of Health Economics* 31.1 (2012): 219-30.

- Bariatric Surgery helps to improve or resolve more than 40 obesity-related diseases and conditions, including type 2 diabetes, heart disease, certain cancers, sleep apnea, GERD, high blood pressure, high cholesterol, sleep apnea and joint problems^{6,7,8,9}
- By 2030, another 65 million people will be considered obese, placing half of all men and between 45-52% of all women in this category. This could also mean an additional 7.8 million cases of diabetes and 6.8 million cases of heart disease¹⁰.

⁵ World Health Organization, Obesity and Overweight Fact sheet N°311, Updated August 2014

⁶ American Society of Metabolic and Bariatric Surgery. *Metabolic and Bariatric Surgery Fact Sheet*. [www.asmbs.com](http://asmbs.com). Nov. 2013. Web (http://asmbs.org/wp/uploads/2014/05/Metabolic+Bariatric-Surgery.pdf). 11 July 2014.

⁷ Kokkinos, A., et al. (2013) Improvement in Cardiovascular Indices After Roux-en-Y Gastric Bypass or Sleeve Gastrectomy for Morbid Obesity. *Obesity Surgery*. 23(1) pp. 31-38 Accessed October 2013 from <http://link.springer.com/article/10.1007/s11695-012-0743-8> .

⁸ 26 Chikunguw, S., et al. (2009). Durable resolution of diabetes after roux-en-y gastric bypass associated with maintenance of weight loss. *Surgery for Obesity and Related Diseases*. 5(3) p. S1.

⁹ 27 Kaplan, L. M. (2003). Body weight regulation and obesity. *Journal of Gastrointestinal Surgery*. 7(4) pp. 443-51. Doi:10.1016/S1091-255X(03)00047-7. Accessed October 2013 from <http://edulife.com.br/dados%5CArtigos%5CNutricao%5CObesidade%20e%20Sindrome%20Metabolica%5CBody%20weight%20regulation%20and%20obesity.pdf> .

¹⁰ Wang, Y., et. al. "Health and economic burden of the projected obesity trends in the USA and the UK" *The Lancet*, Volume 378, Issue 9793, Pages 815 - 825, 27 August 2011 .