Is Europe Ready for the Ultra Obese Patient?

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Stanford, CA

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Growth rate of obesity in different BMI categories

% increase (1986 = 100%)

Obesity is at a crisis stage, “…9% of national health-care expenditures -- $123 billion (83.5 billion EUR) a year -- is due to obesity...and the indirect cost to business is significantly higher.”
Medical Care related to Obesity now estimated at $147 Billion (2008)

(100 Billion EURO)

Percent Gross Domestic Product spent on Health Care

$4,871 per year obese patient versus $3,442 per year normal weight patient

Per Capita Health Care Expense (USD)
### Big numbers

Obesity among US adults aged 20-74
1999-2002, &%

<table>
<thead>
<tr>
<th></th>
<th>Men</th>
<th>Women</th>
</tr>
</thead>
</table>
| All races and origins | ![Chart showing obesity rates](chart)
| White     | ![Chart showing obesity rates](chart)
| Black     | ![Chart showing obesity rates](chart)
| Mexican   | ![Chart showing obesity rates](chart)

Source: US Department of Health and Human Services
Socio-Economic (Income) Level

Obesity more common in **poor**
(Industrial/Developed Countries)

<table>
<thead>
<tr>
<th>INCOME</th>
<th>1971-74</th>
<th>2001-02</th>
</tr>
</thead>
<tbody>
<tr>
<td>Less than $25,000</td>
<td>22.5%</td>
<td>32.5%</td>
</tr>
<tr>
<td>$25,000-$39,999</td>
<td>16.1%</td>
<td>31.3%</td>
</tr>
<tr>
<td>$40,000-$60,000</td>
<td>14.5%</td>
<td>30.3%</td>
</tr>
<tr>
<td>More than $60,000</td>
<td>9.7%</td>
<td>26.8%</td>
</tr>
</tbody>
</table>

Obesity more common in **wealthy**
(Undeveloped Countries)
GLOBESITY

From least to most developed countries: overweight is on the rise

As countries develop, they face many of the problems common in industrialized nations. Obesity is one of the most worrisome. Source: WHO, 2000.
Table 4.4c – Body mass index (BMI) in % of the population

<table>
<thead>
<tr>
<th>Country</th>
<th>Under-weight %</th>
<th>Normal-weight %</th>
<th>Over-weight %</th>
<th>Obese %</th>
</tr>
</thead>
<tbody>
<tr>
<td>Austria</td>
<td>10</td>
<td>48</td>
<td>32</td>
<td>10</td>
</tr>
<tr>
<td>Belgium</td>
<td>12</td>
<td>48</td>
<td>31</td>
<td>9</td>
</tr>
<tr>
<td>Denmark</td>
<td>13</td>
<td>49</td>
<td>31</td>
<td>8</td>
</tr>
<tr>
<td>Finland</td>
<td>9</td>
<td>48</td>
<td>33</td>
<td>10</td>
</tr>
<tr>
<td>France</td>
<td>17</td>
<td>52</td>
<td>24</td>
<td>7</td>
</tr>
<tr>
<td>Germany</td>
<td>8</td>
<td>48</td>
<td>35</td>
<td>11</td>
</tr>
<tr>
<td>Greece</td>
<td>9</td>
<td>45</td>
<td>35</td>
<td>11</td>
</tr>
<tr>
<td>Ireland</td>
<td>10</td>
<td>50</td>
<td>31</td>
<td>8</td>
</tr>
<tr>
<td>Italy</td>
<td>14</td>
<td>49</td>
<td>30</td>
<td>7</td>
</tr>
<tr>
<td>Luxembourg</td>
<td>11</td>
<td>53</td>
<td>27</td>
<td>9</td>
</tr>
<tr>
<td>Portugal</td>
<td>8</td>
<td>50</td>
<td>33</td>
<td>9</td>
</tr>
<tr>
<td>Spain</td>
<td>9</td>
<td>47</td>
<td>33</td>
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<td>Sweden</td>
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<td>33</td>
<td>7</td>
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<td>The Netherlands</td>
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<td>10</td>
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<tr>
<td>United Kingdom</td>
<td>12</td>
<td>49</td>
<td>30</td>
<td>12</td>
</tr>
<tr>
<td>European Union</td>
<td>11</td>
<td>48</td>
<td>31</td>
<td>10</td>
</tr>
</tbody>
</table>

United States 67 35

We’re #1

Percentage of Population Classified as OBESE
CHINA

45% of 1.2 billion people =

540 million people
Half-ton man loses 321 pounds

A man who once weighed more than half a ton has lost 321 pounds under the care of a team of doctors and hopes to lose 450 pounds more. Patrick Deuel, 42, of Valentine, Neb., weighed 1,072 pounds when he was admitted to Sioux Falls' Avera McKennan Hospital in South Dakota eight weeks ago. Deuel, who is just under 6 feet tall, is on a 1,200 calorie-a-day diet. “If we hadn’t gotten him here, he’d be dead now,” said Fred Harris, Deuel’s lead doctor.

Man says he’s too fat to kill

A Hackensack, N.J., man accused of running up and down a flight of stairs to kill a former son-in-law is offering a novel defense: At 5 feet 8 and 283 pounds, he was just too fat to have pulled it off.

An attorney for Edward Ates is making the case that his client wouldn’t have had the energy needed to fatally shoot Paul Doncsak, a 40-year-old pharmaceutical executive, from a perch on the staircase. Lawyer Walter Lesnevich claims that Ates, 62 at the time of the 2006 killing, was in such bad physical shape — with asthma, sleep apnea and other ailments — that he couldn’t have pulled off the shooting or the fast getaway the killer made.
Obese Texas inmate hides gun in his flabs of fat

HOUSTON – An obese inmate in Texas has been charged after officials learned he had a gun hidden under flaps of his own flesh.

Twenty-five-year-old George Vera was charged with possession of a firearm in a correctional facility after he told a guard at the Harris County Jail about the unloaded 9mm pistol. The Houston Chronicle reported Thursday that Vera was originally arrested on charges of selling illegal copies of compact discs.

The 500-pound man was searched during his arrest and again at a city jail and the county jail, but officers never found the weapon in his rolls of skin. Vera admitted having the gun during a shower break at the county jail.

Obese Ind. woman's body hauled away by wrecker

INDIANAPOLIS – A 750-pound woman who died in her bed was covered with a carpet and pulled out of her apartment on the mattress in view of neighbors, then hoisted onto a flatbed wrecker to be taken to the county morgue. Marion County Coroner Frank Lloyd Jr. says he’s investigating why a contractor with equipment capable of handling obese corpses was not used, and he has apologized to the family.

"It could have been handled in a better fashion, there’s no question about that," he said Thursday.

Teresa Smith, 48, died Tuesday at her apartment, where she had been confined to bed because of her weight.
Solution # 1


dietary regimen
appropriate exercise
behavior modification
psychological support
Solution # 2

SURGERY
Solution # 2


- dietary regimen
- appropriate exercise
- behavior modification
- psychological support

Bariatric Surgery

Bariatric Surgery (USA)

2008 > 250,000 operations

Jejuno-Ileal Bypass
Malabsorptive

<table>
<thead>
<tr>
<th>Complication</th>
<th>No.*</th>
<th>5 y</th>
<th>10 y</th>
<th>15 y</th>
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<tbody>
<tr>
<td>Diarrhea</td>
<td>107</td>
<td>10.9</td>
<td>17.0</td>
<td>28.8</td>
</tr>
<tr>
<td>Liver disease (all)</td>
<td>35</td>
<td>5.7</td>
<td>7.3</td>
<td>10.3</td>
</tr>
<tr>
<td>Acute liver failure</td>
<td>24</td>
<td>4.2</td>
<td>4.8</td>
<td>6.9</td>
</tr>
<tr>
<td>Cirrhosis</td>
<td>28</td>
<td>3.2</td>
<td>6.1</td>
<td>8.1</td>
</tr>
<tr>
<td>Renal disease (all)</td>
<td>135</td>
<td>21.3</td>
<td>31.7</td>
<td>36.9</td>
</tr>
<tr>
<td>Renal 1-bladder</td>
<td>119</td>
<td>8.9</td>
<td>12.6</td>
<td>28.7</td>
</tr>
<tr>
<td>Renal insufficiency</td>
<td>36</td>
<td>3.2</td>
<td>6.4</td>
<td>9.0</td>
</tr>
</tbody>
</table>
RESTRICTIVE

Vertical Banded Gastroplasty

Adjustable Gastric Banding

RESTRICTIVE + MALABSORPTIVE

BILIARY-PANCREATIC DIVERSION
RESTRICTIVE and MALABSORPTIVE

ROUX-EN-Y GASTRIC BYPASS

LAPAROSCOPIC SLEEVE GASTRECTOMY

RESTRICTIVE
1st of 2 stage procedure for Super-Obese Patients
INTRAGASTRIC BALLOON

RESTRICTIVE

FIGURE 1A: Allergan's ORBERA™ (intragastric balloon) System, which is only approved for use in several countries in Europe at this time. 1B: Diagram depicting ORBERA™ System deployed within the stomach.

INTRA-ABDOMINAL VAGAL NERVE BLOCKADE (VBLOC)

Electrodes implanted laparoscopically on both vagi near the esophagogastric junction


Gastric 'condoms' could help obese avoid surgery

02 February 2009

GASTRIC surgery is a last resort for people who are dangerously obese. But there may soon be a gentler option in the shape of a removable device inserted into the gut through the mouth.

The EndoBarrier, developed by GI Dynamics of Lexington, Massachusetts, is an impermeable sleeve that lines the first 60 centimetres of the small intestine. In animal experiments and preliminary human trials, it reduces weight and rapidly brings type II diabetes under control.
Is Europe Ready for the Ultra Obese Patient?
Is Europe Ready for the Ultra Obese Patient?
Both in the USA and across the demanding needs of bariatric patients, Gendron’s suite of bariatric products includes a complete offering of beds, plus: custom wheelchairs, lifts, walkers, shower chairs, commodes, and more.

Gendron’s products provide total solutions for multiple modalities of bariatric patient care.

GENDRON
Bariatric Leadership

One Call Does It All
800-537-2521

NEW
Extra Care Heavy Duty Bed
A bariatric cot by Stryker, one of several companies making rescue equipment for obese patients.

- Push-pull handles
- Ring for winch attachment
- Wide mattress
- Oversize wheels
- Frame supports up to 1,600 pounds

THE NEW YORK TIMES, IMAGE COURTESY OF STRYKER.
Caregivers moving a patient using the AirPal™ Patient Air Lift Transfer System, an air-assisted lateral transfer system designed to help reduce the risks associated with patient handling.

Transfer of a patient out of the BariMaxx® II bariatric bed using the EZ Lift™ battery-powered electric patient lift/transfer system. Image courtesy of Kinetic Concepts, Inc.
HERCULES 6500HD
The #1 Selling Bariatric/General Purpose Table

1000 lbs
(450 kg)
HERCULES 6700B
Power & Elegance

1200 lbs (545 kg)

- 1,200 lb Lift and 1,000 lb. Male Mount Capacity
- 30" Low Table Height
- Automatic Break Chair Position
- Removable Back & Leg Sections
- Optional Infrared (IR) Wireless Control

---

8" Bariatric Table Width Extender

Fits US Rails Only, depending on table limitations.

- Increases the support surface of your surgical table by 8" (20 cm) on each side.
- Attaches to the back, seat and leg sections to create extra width needed by larger, heavier patients.
- Full length extender provides ample support for patients.
- Shorter extender provides space on table rail for weight-bearing accessories (stirrups, thigh retractors, armboards, etc.)
- Both versions accommodate up to a 1,000 lb. (454 kg) patient.

<table>
<thead>
<tr>
<th>Extender</th>
<th>Size</th>
<th>Price</th>
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</thead>
<tbody>
<tr>
<td>#A-800100</td>
<td>8&quot; x 15&quot; (20 cm x 38 cm) Table Width Ext. (shown)</td>
<td>$799</td>
</tr>
<tr>
<td>#A-801150</td>
<td>8&quot; x 11&quot; (20 cm x 28 cm) Table Width Ext.</td>
<td>$499</td>
</tr>
</tbody>
</table>

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543EURO
Fluoroscopy Table

Two views of the Aspirint High-TIP™ Fluoroscopic Procedure Table, features a repositioned tilt from horizontal to 70 degrees upright. A footswitch operator control allows for “steer-in” patient loading. Patient weight capacity—625 pounds.
The AirPal® Rapid Airway Management Positioner® (RAMP®) combines airway management with patient transfer to place the patient in the "ear to sternal notch" position—placing the patient onto their back and elevating or "ramping" the chest at about 15 to 20 degrees, creating optimal airway alignment.
**Bariatric Armboard**

Our Bariatric Armboard is exactly what you need to help secure larger patients. It is easy to mount and easy to use. The spring lever mounting mechanism, accessible from both sides, securely locks the armboard to the rail and eliminates the uncertainty of gravity locks. The trigger adjustment offers easy articulation as well as fine increments of adjustment to allow for precise positioning. The tooth-free mechanism is engineered to withstand the rigors of the operating room. Accommodates up to a 1,000 lb. (454 kg) patient. Purchase contoured armboard surfaces or our unique inclining surface that does not require extra padding to prevent hyper-extending the arm. For armboard surfaces, call Customer Service.

**#A-080200 Bariatric Armboard**  **€400**

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**Bariatric Security Strap**

Our Bariatric Security Strap has an ample pad which provides a comfortable hold for bariatric patients. Four extra-durable straps allow for a secure hold and a good fit. Straps loop around side rails for simple table attachment. Accommodates up to 1,000 lb. (454 kg) patient. Fits all tables.

- Pad is 12" (30 cm) wide and 30" (76 cm) long
- Straps are adjustable in usable length up to 80" (203 cm)

**#A-80200 Bariatric Security Strap**  **€599**

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**Bariatric Nissen Straps / Thigh Retractors**

Bariatric Nissen Straps offer the support larger patients need during steep reverse Trendelenburg positioning. The pad is wide and long to offer comfortable support. Integral clamps attach to rail tightly and securely. Accommodates up to a 1,000 lb. (454 kg) patient when used at a pair.

- Pad is 7" (17 cm) wide and 31" (79 cm) long
- Straps are adjustable in usable length up to 76" (193 cm)

**#A-80400 Bariatric Nissen Straps / Thigh Retractors (Pair)**  **€1,100**

---

**Ultrafin™ Stirrups**

The Ultrafin Stirrup is the latest in bariatric lithotomy positioning. This stirrup features a roomier boot for larger calves and accommodates up to an 800 lb. (363 kg) patient. Poison technology helps to position heavy legs more easily. Includes clamshell-type boot pads.

**#O-UFS Ultrafin Stirrups**  **€7,249**
Introducing the only toilet in the world for **big people**

The Great John Suite Co.

Improve your life... feel the difference
CONCLUSION:
Is Europe Ready for the Ultra Obese Patient?
(Solution # 1 – Print Money)

ONE-TRILLION DOLLARS ($ 1,000,000,000,000)
= 700,000,000,000 EURO

Alternative Solution!
< 70 EURO

MORBID OBESITY
Peri-operative Management
SECOND EDITION

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Hendrikus J. M. Lemmens
and John Morton

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