MANAGING WEIGHT CAN BE AS EFFECTIVE AS AN ABLATION – TRUE OR FALSE

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10AM HALL 8B
THE PROBLEMS OF BEING OVERWEIGHT

Central nervous system
Reduced breathing drive

Respiratory
Snoring with poor sleep
Low oxygen level from restrictive breathing

Airway
Atrial Fibrillation & Coronary Disease

Cardiovascular

Others
Joint Problems
HOW MUCH IS TOO MUCH?

An abnormal or excessive accumulation of body fat that to a degree that threatens health

Measured by the Body Mass Index

\[ \text{BMI} = \frac{\text{Weight}}{\text{Height}^2} \]

- Less than 25: Normal weight
- 25 to 30: Overweight
- 30 to 35: Moderately obese
- 35 to 40: Severely obese
- More than 40: Morbidly obese

Example

Weight = 90 kg,
Height = 1.65 m

\[ \text{BMI} = \frac{90}{(1.65 \times 1.65)} = 33 \]

The causes
- Heredity
- Psychological troubles
- Sedentary lifestyle
- Fat- and sugar-rich diet

The risks
- Arterial hypertension, diabetes, sleep apnea, heart and breathing problems, arthritis, gall bladder problems, spinal damage, some cancers, premature death
AF & WEIGHT

Weight Increase → Atrial Fibrillation

But does weight loss get rid of AF?
LEGACY STUDY

• Losing weight is difficult
• Keeping weight off is even more difficult

• Is it really possible to achieve this?
LEGACY - WEIGHT LOSS PROGRAM

• A structured motivational and goal-directed program using face-to-face counselling was used for weight reduction.

• Weight loss clinic run by a dedicated physician responsible for delivering risk factor management to the patient with the help of a research assistant.
LEGACY STUDY

• Counselling and support
• Targeted weight loss with calorie controlled high protein and low glycemic index foods
• Exercise Regime
• Meal Diary
LOW GLYCAEMIC INDEX FOODS

• **Low GI Foods**
  - 100% stone-ground whole wheat or pumpernickel bread
  - Oatmeal (rolled or steel-cut), oat bran, muesli
  - Pasta, converted rice, barley, bulgar
  - Sweet potato, corn, yam, lima/butter beans, peas, legumes and lentils
  - Most fruits, non-starchy vegetables and carrots

• **Medium GI**
  - Whole wheat, rye and pita bread
  - Quick oats
  - Brown, wild or basmati rice, couscous

• **High GI**
  - White bread or bagel
  - Corn flakes, puffed rice, bran flakes, instant oatmeal
  - Shortgrain white rice, rice pasta, macaroni and cheese from mix
  - Russet potato, pumpkin
  - Pretzels, rice cakes, popcorn, saltine crackers
  - melons and pineapple
DIET OF 1200 CALORIES PER DAY

**BREAKFAST**
- Brown Bread
- Bacon
- 400 Calories

**LUNCH**
- Canned Green Peas (357 grams / 12.6 oz)
- Chicken
- 400 Calories

**DINNER**
- Baby Carrots (570 gram / 20.1 oz)
- Fish Finger
- 400 Calories
SIMILAR CALORIE COUNTS

102g is 200 calories

≈

≈

CORONA EXTRA

Corona is a premium beer, classic and authentic, recognized worldwide for its high quality, distinctive taste and image plus its iconic fume ritual. It is a beer that embraces tranquility and invites consumers to enjoyable experiences.

355 ML

4.50 ALCOHOL BY VOLUME

149.45 CALORIES

625.32 ENERGY

0.00 FAT

0.00 SATURATED FAT

14.20 CARBOHYDRATES

0.71 SUGAR

1.14 PROTEIN

0.13 SALT

Ingredients are shown on back.
ANOTHER OPTION FOR 1200 CALORIES

DINNER

1. Brown bread
2. Broccoli (588 grams / 20.7 oz)
3. Cooked Pasta (145 grams / 5.11 oz)
4. Canned Sweet Corn (308 grams / 10.9 oz)

All options are 400 Calories
MAINTAINING A FOOD DIARY

**Food Diary**
Use this diary to record what you have to eat and drink every day. Don’t forget a balanced diet is best and aim to get your 5 a day of fruit and vegetables.

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<th>Monday</th>
<th>Tuesday</th>
<th>Wednesday</th>
<th>Thursday</th>
<th>Friday</th>
<th>Saturday</th>
<th>Sunday</th>
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<tr>
<td><strong>Breakfast</strong></td>
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REGULAR EXERCISE
– AT LEAST 20MINS THREE TIMES A WEEK
REGULAR EXERCISE MORE 30MINS PER DAY
The initial goal was to reduce body weight by 10%.
- So 100kg to 90kg

If <3% weight loss after 3-months they were then prescribed very-low-calorie meal replacement sachets (Nestle Health Science) for 1-2 meals/day.
LEGACY PATIENTS

355 Patients Participated

135 (38%) lost more than 10% of their weight

103 (30%) lost 3-9% of their weight

117 (32%) lost less than 3% of their weight
BEST LEGACY GROUP

Average weight: 101 kg down to 85 kg at 3 years
BMI down from 34 to 28

Number of episodes of AF halved, the duration of episodes halved
PATIENTS WITHOUT AF
WITHOUT ABLATION OR DRUGS

PATIENTS WITHOUT AF
WITH ABLATION AND/OR DRUGS

A

B
BEST LEGACY GROUP

• Improved Blood Pressure
• Improves Cholesterol Levels
• Better control of blood sugar (Diabetic control)
• No risks
IS WEIGHT LOSS BETTER THAN ABLATION?

- Legacy would suggest it is

- Weight loss is always medically recommended

- We would want to see the program repeated in other centres
WHAT ARE WE WAITING FOR?

• The health problems of obesity are well known

• What do we need to do?
GROUP 1 (<3% WL)  GROUP 2 (3-9% WL)  GROUP 3 (≥10% WL)

Baseline

- **Paroxysmal**
- **Persistent**

Follow Up

- **Paroxysmal to Persistent**
- **Persistent to Paroxysmal**
- **No Change**
- **AF Free**

$P < 0.001$
GROUP 1 (<3% WL)

- Paroxysmal
- Persistent

- 25
- 32
- 48
<table>
<thead>
<tr>
<th>Risk factors</th>
<th>Control Group (n = 88)</th>
<th>RFM Group (n = 61)</th>
<th>p Value*</th>
<th>p Value†</th>
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<tbody>
<tr>
<td></td>
<td>Baseline</td>
<td>Follow-Up†</td>
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<tr>
<td>Weight, kg</td>
<td>96.6 ± 16.8</td>
<td>95.8 ± 17.6</td>
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<td>BMI, kg/m²</td>
<td>32.1 ± 4.7</td>
<td>31.8 ± 4.9</td>
<td>0.12</td>
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<td>Mean SBP, mm Hg</td>
<td>158.7 ± 21.3</td>
<td>138.2 ± 18.0</td>
<td>&lt;0.001</td>
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<td>DM with HbA₁c ≥7%, n</td>
<td>17</td>
<td>5</td>
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ARREST-AF STUDY