



THE OBESITY MYTH

© ATOM 2017

A **STUDY GUIDE** BY FIONA HALL



AUSTRALIAN TEACHERS OF MEDIA

<http://www.metromagazine.com.au>

ISBN: 978-1-76061-056-2

<http://theeducationshop.com.au>



Series Synopsis

Fifty years ago obesity barely existed. Today, two out of three Australian adults are either clinically obese or overweight. It's predicted children born today will be the first generation to die at an earlier age than their parents from obesity related conditions like diabetes, heart disease and cancer. So why, in the midst of a global obesity epidemic, are obese people judged, criticized and shunned? *The Obesity Myth* challenges the commonly held view that obesity is a lifestyle choice by following the work done at Austin Health.

Backed by new research, Austin Health in Melbourne treats obesity as a genetic illness. International obesity expert Professor Joe Proietto is the softly spoken head of its Weight Control Clinic. He believes people are obese because they experience significantly more hunger and need more food to feel full than a thin person. And it's all to do with their genes.

This 3x1 hour documentary series follows the incredible work of the doctors at Austin Health, a public hospital in Melbourne's northern suburbs, as they transform the lives of people battling obesity. For patients who often wait up to two years for an appointment, the treatment begins with an extremely low carb diet, often followed by appetite suppressing medication.

The series follows several weight loss patients including Karen - a 40-year-old wheelchair bound wife who tops the scales at 246kg. Despite being a patient at the clinic for more than twelve months, Karen weight loss is showing little progress causing Professor Proietto to raise concerns about the support of those around her. Cara, a 32-year-old stroke victim, who has battled weight her whole life, is facing the terrifying prospect of life in a nursing

home because her excess weight means she cannot look after herself. And greyhound-loving Wayne, diagnosed with weight related diabetes as a teen, is now facing foot amputation aged 40.

For patients who struggle on Professor Proietto's diet, the last resort is bariatric surgery in which most of the patient's stomach is removed. Headed by Mr. Ahmad Aly, Austin Health's bariatric clinic performs 80 operations each year.

Surgery patients featured in the series include former New Zealand national gridiron player Robert who weighs more than 200kg and faces premature death if he can't lose weight. Huss is a Lebanese Australian boxer who undergoes bariatric surgery and then struggles to deal with eating vastly reduced amounts of food.

The Obesity Myth highlights the challenges faced by the obese patients and the medical staff who care for them. Through their stories we reveal the broader challenges facing our medical system as it tries to deal with the obesity epidemic.

Curriculum Links

The Obesity Myth can be linked to the following subject areas of the Australian National Curriculum:

- Year 10 Science
- Year 9 & 10 Health and Physical Education

The Obesity Myth can also be used as a supplementary text in relation to subjects such as:

- Health and Human Development
- Food Technology



Note

Certain episodes of 'The Obesity Myth' contain graphic images of surgical procedures; as such, teachers should be aware of this and pre-warn students.

+ Year 10 Science - Relevant Content Descriptors:

Biological Sciences

Transmission of heritable characteristics from one generation to the next involves DNA and genes ([ACSSU184](#))

Chemical Sciences

Different types of chemical reactions are used to produce a range of products and can occur at different rates ([ACSSU187](#))

Physical Sciences

Energy conservation in a system can be explained by describing energy transfers and transformations ([ACSSU190](#))

Science as Human Endeavour

Scientific understanding, including models and theories, is contestable and is refined over time through a process of review by the scientific community ([ACSHE191](#))

Advances in scientific understanding often rely on technological advances and are often linked to scientific discoveries ([ACSHE192](#))

People use scientific knowledge to evaluate whether they accept claims, explanations or predictions, and advances in science can affect people's lives, including generating new career opportunities ([ACSHE194](#))

Values and needs of contemporary society can influence the focus of scientific research ([ACSHE230](#))

+ Year 9 & 10 Health and Physical Education – Relevant Content Descriptors:

Personal, Social and Community Health

Evaluate factors that shape identities and critically analyse how individuals impact the identities of others ([ACPPS089](#))

Propose, practise and evaluate responses in situations where external influences may impact on their ability to make healthy and safe choices ([ACPPS092](#))

Critically analyse and apply health information from a range of sources to health decisions and situations ([ACPPS095](#))

Plan, implement and critique strategies to enhance health, safety and wellbeing of their communities ([ACPPS096](#))

Plan and evaluate new and creative interventions that promote their own and others' connection to community and natural and built environments ([ACPPS097](#))

Critique behaviours and contextual factors that influence health and wellbeing of diverse communities ([ACPPS098](#))



Episode One

The Obesity Myth follows the lives of morbidly obese patients at Austin Health – a public hospital which, backed by new research, treats obesity as a chronic disease caused by genetics. Challenging our misconceptions about obesity as a lifestyle choice, the episode features patients Leanne, Karen, Huss and Nicole as they battle their biology to reclaim their lives.

ACTIVITY: FOCUS ON PATIENT PROFILES

► Leanne

A former taxi driver, Leanne is sad and angry about the way obese people are made to feel ashamed and humiliated. Leanne's weight soared after the still birth of her third child but after a decade weighing more than 200kg she's finally seeing the scales move in the right direction with the help of the clinic.

- When we first meet Leanne, she discusses the often cruel and discriminatory treatment that obese people receive. Explain what she is referring to and her feelings on this.
- Leanne says she felt liberated when her obesity was diagnosed as a chronic disease. Why do you think this is?

► Karen

Arriving at 248kg, Karen is the clinic's heaviest patient. Karen and husband David face some difficult truths when she struggles to lose weight. She's on the clinic's prescribed extremely low carb diet and should be losing 3kg a week. Unable to shop or cook due to her weight, Professor Proietto looks at her family support to see where the problem may lie.

- How long has Karen been treated by Professor Proietto?
- Explain the role that her husband David is playing in her weight loss program and the feelings he has about this.

► Huss

Boxer Huss faces his biggest opponent – his ever-increasing weight. He gained 54kg in just twelve months and now weighs in at 187kg. Having struggled on diets, Huss is hoping bariatric surgery to remove most of his stomach will help him lose weight for a milestone charity boxing match.

- What weight loss option has Huss decided to pursue?
- What will be the outcome of this procedure?

► Nicole

Junk food loving Nicole discovers just how strong her hunger hormones are when her love affair with MacDonald's burgers falters when she starts taking appetite suppressing pills.

- How does Nicole describe her relationship with junk food (and in particular, MacDonalds)?
- Why is she on appetite suppressing pills?

Throughout the episode, take notes to help you complete the **'Character Profile'** table on the following page.



LEANNE



KAREN



HUSS



NICOLE

Episode 1

Character Profile



	Relevant background info regarding their current weight	Main motivation for losing weight	Weight Loss Option(s) they are pursuing	Support in their life	Achievements throughout the episode	Challenges throughout the episode
Leanne						
Karen						
Huss						
Nicole						



ACTIVITY: FOCUS ON OBESITY

50 years ago, obesity was not a public health issue. Today, approximately 65% of Australian adults are overweight or obese. On average obese people die seven years younger from heart disease, cancer and diabetes, with this statistic rising dramatically for the morbidly obese.

- What are the main reasons for the rise in obesity in Australia (and other developed nations around the world)?
- Hunger is a primal instinct, and there was a time when being constantly hungry gave humans an edge. This survival advantage has, today, turned into a distinct disadvantage. Explain why this is the case?
- We meet Professor Joe Proietto. Professor Joe Proietto subscribes to the medical theory that most obese people are big because they experience significantly more hunger and need significantly more food to feel full than a thin person. You cannot become obese without a genetic predisposition. This view treats obesity as a disease, not a lifestyle choice – a view supported by the WHO and peak medical bodies in the US and Canada.

While there are many factors at play in weight gain (including lifestyle, environment, and psychological factors), Professor Joe believes that the biggest influence of weight are your genes. Why is the view that obesity is genetic controversial?

- What are the findings from twin and adoptive studies in relation to body shape and obesity, and how do these support Professor Proietto's



views?

- Working in pairs, you are to prepare a public health lecture on the topic of 'Obesity in Australia.' Your presentation can be in the form of a Powerpoint or Google Slides, and should include relevant images and information on the following areas:
 - Definitions of healthy weight, overweight, obesity and BMI.
 - What is the current percentage of obesity in Australia (for adults and for children).
 - A graph showing changes in obesity rates over the past 50 years.
 - The social, health, and economic impact of obesity in Australia.
 - Bust at least five generally accepted 'obesity myths'.
 - The ways you think Australia can best tackle the problem of obesity.

Suggested sites for research:

<http://www.obesityaustralia.org/>

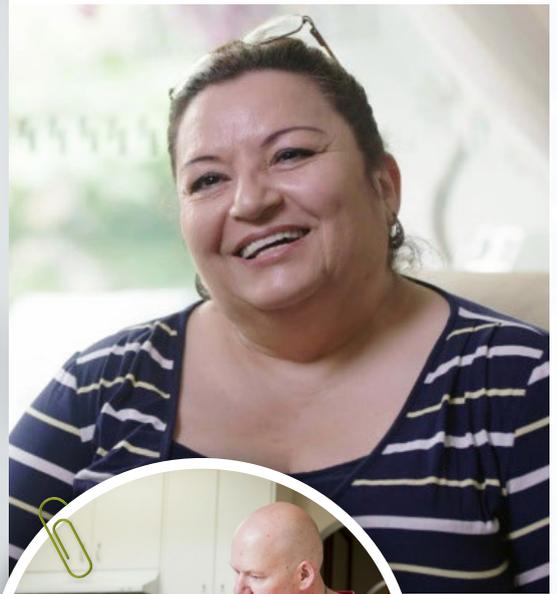
<https://www.heartfoundation.org.au/about-us/what-we-do/heart-disease-in-australia/overweight-and-obesity-statistics>

<http://www.aihw.gov.au/overweight-and-obesity/>

- As a class, read the following articles regarding Australia's obesity rate:
 - <http://www.abc.net.au/news/2014-05-29/australian-obesity-rates-climbing-fastest-in-the-world/5485724>
 - <http://theconversation.com/fat-nation-why-so-many-australians-are-obese-and-how-to-fix-it-23783>

Discuss the reasons for Australia's growing obesity rates and the ways you think we, as a country, could best tackle this problem.





ACTIVITY: FOCUS ON NUTRITION AND PHYSICAL WELLBEING

- We learn that Professor Proietto prescribes a combination of diet and medication for his patients, and if this fails, surgery is offered as a last resort. It seems that education about basic nutrition is vital in terms of people understanding the way their bodies process food and how to best remain healthy. Working in pairs, your task is to assume the role of a Health Educator and prepare a 20 minute lesson on 'Basic Nutrition and Health' for a Year 7 Health and Physical Education Class. You can present your lesson in any format (including PowerPoint, Google Slides/Classroom, iMovie, Padlet, interactive lesson plan), and you should make at least one assessment task to check your students' learning at the conclusion of your lesson (this can be a worksheet, Kahoot, test, interactive quiz, etc.)
You should include the following information, remembering your target audience are in Year 7, so your material should be easy to understand:
 - What is a calorie? Why are calories important?
 - How does the human body burn calories?
 - How many calories, on average, should be consumed daily? Does this vary between people?
 - What is a person's metabolism and what

role does it play in weight?

- What fats should be in our diet and what should be avoided?
- What are the recommended types of food/standard daily diet for: children, adolescents, adults and the elderly?
- How does physical exercise relate to nutrition? What are the recommended amounts of physical exercise for a healthy child, adult and the elderly?

ACTIVITY: FOCUS ON BARIATRIC SURGERY

We meet Dr Ahmad Aly, a Bariatric Surgeon who is overseeing Huss' operation.

- Research and prepare a digital or hard-copy pamphlet explaining the different types of surgical options available to patients for obesity. Include information on:
 - Intra-Gastric Balloon
 - Laparoscopic Adjustable Gastric Banding
 - Laparoscopic Sleeve Gastrectomy
 - Gastric By-Pass Surgery

As well as providing a succinct overview of each procedure, you should include research on the expected outcomes of each procedure, any potential negative side-effects or risks, and the cost involved in Australia for the procedures.



Episode Two

In Episode Two of *'The Obesity Myth'*, 32-year-old Cara from Mount Gambier starts the clinic's highly restrictive, extremely low carb diet. But Cara has an extra challenge: she suffered a stroke that has left her paralyzed down her right side. Cara is banking on the will power that helped her relearn to walk, talk and think will help her battle her biology and overwhelming hunger to lose weight – otherwise she is looking at a life in assisted care.

Former taxi driver Leanne, who topped the scales at 254kg when she started seeing Professor Proietto, fails to meet her monthly weight loss goal. Devastated, Leanne has an emotional month that

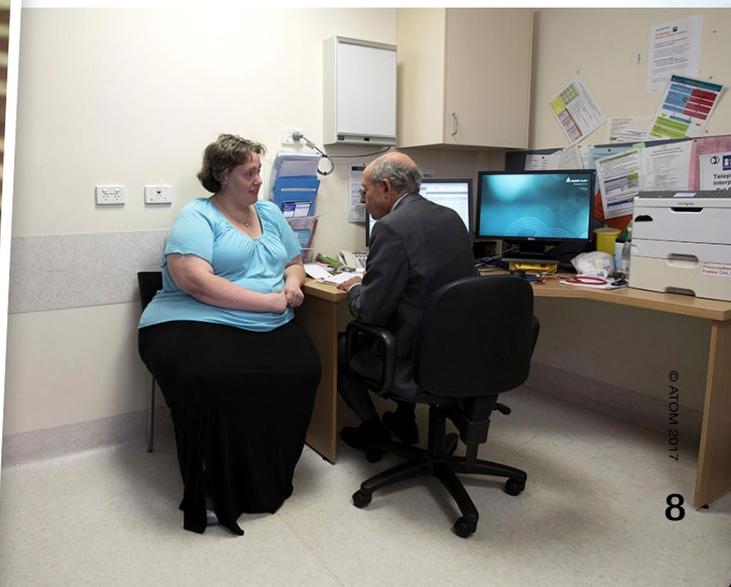
threatens to derail her weight loss.

Former international gridiron player Robert knows all about failure; after 6 years as a patient at the clinic he gained 27kg, bringing his weight to 235kg. He's housebound and reliant on his son and ex-partner for day to day care. He's desperate for surgery but at his weight, it could be too risky.

Tracey is at the other end of the weight loss journey. She's already lost half her body weight to reach her goal of 75kg. But she's about to make a radical decision – to stop taking her appetite suppressing medication. Only 3-5% of people maintain weight loss without the tablets and at this week's weigh will be a test to see if Tracey's determination is any match for her genetic drive to eat.

And we revisit boxer, Huss, who is recovering from his bariatric surgery and preparing for his big charity fight. But his new smaller stomach creates problems for this food loving Lebanese man.

Throughout the episode, take notes to help you complete the **'Character Profile'** table on the following page.



Episode 2

Character Profile

	Relevant background info regarding their current weight	Main motivation for losing weight	Weight Loss Option(s) they are pursuing	Support in their life	Achievements throughout the episode	Challenges throughout the episode
Cara						
Leanne						
Robert						
Tracey						
Huss						





ACTIVITY: FOCUS ON THE ROLE OF KETONES IN WEIGHT LOSS:

The low carb diet prescribed by Professor Joe forces your body into a state called ketosis. When your body has no carbohydrates to burn it is forced to use your excess fat only for energy. When you burn a lot of stored fat your liver produces ketones (waste products of fat burning) and these stop you feeling hungry.

- Working in pairs, produce a flow-chart poster (online or hard copy) that explains the roles of ketones in appetite suppression and weight loss. Your flow-chart should explain the process (via information and images) in the simplest terms, as well as define the following:
 - Ketones
 - Ketosis
 - Glycogenesis
 - Lipogenesis
- Once the posters are completed, share and discuss the process as a class. What are your thoughts on the role of ketones in weight loss? What challenges do you see this diet producing for the patients in *The Obesity Myth* and what motivation does it provide them? Are there any risks associated with this form of extreme dieting when conducted in an unsupervised manner?

ACTIVITY: FOCUS ON PSYCHOLOGICAL FACTORS AND OBESITY:

For many patients, we can see the impact that stress, emotion and various psychological factors have in their ongoing battle with obesity.

- What are Leanne's main triggers for eating?

- What familial and social factors may have led Huss to overeat in his life?
- Tracey no longer wants to take appetite suppressants, which is against Professor Joe's advice. She states: "It is about a mindset. There has to be a motivating factor." What factor seems to be most motivating Tracey to maintain her weight loss? What factors are most motivating Robert? Considering Tracey and the other patients we meet, how important do you think family support is when treating obesity? Share and discuss answers as a class.





surgery. Last time he had a triumphant loss following his temporary weight loss procedure but the question remains whether he'll be able to have full bariatric surgery and restart his life.

Lawvell has lost 35kg after a gastric sleeve but has been left with a massive apron of excess skin and fat. She's undergoing a procedure to remove the 'apron' to transform her new slim body – which has been a source of shame for much of her life – into something she can finally feel proud of.

Throughout the episode, take notes to help you complete the '**Character Profile**' table on the following page.

Episode Three

In Episode Three of *'The Obesity Myth'*, one of the clinic's youngest patients, 26 year old Felicity starts Professor Proietto's diet. After a lifetime of bullying, her weight had risen to 174.9kg and she suffers anxiety and rarely leaves her home.

Like Felicity, Wayne has always struggled with his weight. He was chubby as a toddler and every year his love of chips meant his weight grew and grew. At the age of just 17 he was diagnosed with weight related diabetes and his poor control of the condition means he's faced amputation of his left foot four times in as many years. He's finally seeing success on the clinic's diet but will it all be too little too late to save Wayne's foot?

The diet is not working for former international gridiron player Robert who has had to resort to



ACTIVITY: FOCUS ON OBESITY RELATED HEALTH PROBLEMS

- Wayne's story illustrates the compounding consequences of obesity in terms of health. In fact, it is suggested that our population will be the first that will have a reduction in life expectancy as a direct result of obesity. What health problems does Wayne face and how are they related to his weight?
- Divide students into pairs/small groups and allocate them with one of the following health problems. Students are to produce a presentation that outlines the following:
 - Definition of the health problem and how it is linked to obesity.
 - Rate of the problem currently in Australia, and how this has changed over the past 50 years.
 - Impact of the health problem on sufferers (physical, psychological, social, economic).
 - Ways to treat the problem and the positive impact of weight loss in relation to the issue.



Episode 3

Character Profile



	Relevant background info regarding their current weight	Main motivation for losing weight	Weight Loss Option(s) they are pursuing	Support in their life	Achievements throughout the episode	Challenges throughout the episode
Felicity						
Wayne						
Robert						
Lawwell						
Marie						



if people had increased access to bariatric surgery in Australia? Share your answers as a class and discuss.

ACTIVITY: FOCUS ON LIFE AFTER WEIGHT LOSS

- We meet Lawvell, who underwent bariatric surgery two years ago, with incredible results. What is the next challenge she is facing?
- Research the abdominosplasty and apronec-tomy procedures. What is involved in each procedure, what are the benefits and are there any possible risks? How many are currently performed in Australia each year, and who are usually candidates for such procedures?

Obesity related health problems to allocate for research:

- Diabetes, heart disease, stroke, high blood pressure, some cancers (be specific), gall-bladder disease and gallstones, osteoarthritis, gout, sleep apnea, asthma.

ACTIVITY: FOCUS ON PSYCHOLOGICAL IMPACT OF OBESITY

- Like Wayne, Felicity has struggled with obesity since her childhood. She describes the debilitating psychological and social impact this has had on her sense of self. We learn that 20% of patients at the clinic are on anti-depressants. Research the psychological, social and emotional impact of obesity. Explain the reasons for these, and include reference to patients' personal stories from *The Obesity Myth*.

ACTIVITY: FOCUS ON BARIATRIC SURGERY

- We revisit Robert, who has had 80% of his stomach removed through bariatric surgery. Dr. Aly Ahmad talks about the effectiveness of bariatric procedures in treating chronic obesity; however, less than 2000 bariatric procedures are performed in the public health system a year in Australia. As Dr. Aly states; "It is the most effective surgery we have, yet those who need it the most have the least access to it."
 - What is the approximate cost of bariatric surgery in Australia?
 - How many hospitals in your State/Territory currently offer the procedure? Which of these are private and which are public?
 - Why might governments be reluctant to provide increased funding for bariatric surgery? What would be the short and long term outcomes on individual and community health



ACTIVITY: FINAL REVIEW AND FOCUS ON IMPROVING OBESITY TREATMENT OPTIONS

- One in four Australians are estimated to be currently clinically obese, and many argue that our response to this health crisis is inadequate. Professor Joe views it as a 'justice issue'. What do you think he means by this? Do you agree with his assessment? Discuss as a class, with reference to the patients we have met throughout the series.
- The World Health Organisation now officially recognizes obesity as a chronic disease, and many feel it is time for this recognition to hap-



- pen in Australia as this will 'free up resources to treat it'. What will be the benefits for individuals and the community as a whole from such recognition? Discuss as a class, with reference to the patients we have met throughout the series.
- Throughout *The Obesity Myth* we see the incredible work that Professor Joe, Dr. Aly, Dr. Bhatia and all who work at Austin Health undertake in helping treat patients struggling with obesity. Working in small groups, students are to prepare a pitch to their State/Territory Parliament to increase the number of, and public funding to, such clinics. Pitches should include:
 - Background statistics and research on obesity rates in Australia.
 - The types of services provided by Austin

Health and the positive results achieved.

- The physical, social, psychological and economic benefits of treating obesity as a chronic disease.
- Direct reference to at least 2 patients' stories from *'The Obesity Myth'* with reference to the ways the staff and services provided by Austin Health have positively altered their lives.
- Complete a final written reflection on what you have learned from viewing *The Obesity Myth*. You may include the following:
 - What you expected the series to be about and did it meet these expectations?
 - Three facts you learned from watching the series.
 - What most surprised you and why?
 - What most upset you and why?
 - The three patients whose journey you most connected with and why?

References

- <https://www.australiancurriculum.edu.au/>
- <http://www.obesityaustralia.org/>
- <https://www.heartfoundation.org.au/about-us/what-we-do/heart-disease-in-australia/overweight-and-obesity-statistics>
- <http://www.aihw.gov.au/overweight-and-obesity/>
- <http://www.abc.net.au/news/2014-05-29/australian-obesity-rates-climbing-fastest-in-the-world/5485724>
- <http://theconversation.com/fat-nation-why-so-many-australians-are-obese-and-how-to-fix-it-23783>



This study guide was produced by **ATOM**.

(© ATOM 2017)

ISBN: 978-1-76061-056-2

editor@atom.org.au

To download other study guides,
plus thousands of articles on Film as Text,
Screen Literacy, Multiliteracy and Media Studies,
visit <**<http://theeducationshop.com.au>**>.

Join ATOM's email broadcast list for
invitations to free screenings,
conferences, seminars, etc.

Sign up now at

<**http://www.metromagazine.com.au/email_list/**>.