



VEA

Bringing Learning to Life

Program Support Notes

Diet Related Disorders Type 2 Diabetes, Obesity and Coeliac Disease

26 mins

Program Support Notes by **Gina Galea**, B Ed, Cert II
Hospitality Operations, Cert 1V Workplace
Assessment

Produced by **VEA Pty Ltd**
Commissioning Editor **Sven Shepherd** B.Ed.
Executive Producer **Simon Garner** B.Ed.

© Video Education Australasia Pty Ltd 2010

Reproducing these teacher notes

You may download and print one copy of these teacher notes from our website for your reference. Further copying or printing must be reported to CAL as per the *Copyright Act 1968*.

Suitable for:

Food Technology

To order or inquire please contact VEA:

VEA (Video Education America)

6902 Hawthorn Park Dr
Indianapolis, IN 46220

Tel 1.866.727.0840

Fax 1.866.727.0839

E-mail

orders@veavideo.com

Website

www.veavideo.com

Diet Related Disorders – Type 2 Diabetes, Obesity and Coeliac Disease

For Teachers:

Introduction

Knowledge of nutrition is integral to making healthy food choices. In this program students will examine: the nutritional components of food and, food developments aimed at enhancing health, the impact of food consumption on nutrition, ways of meeting food requirements to maintain optimum health and how to manage malnutrition issues such as Obesity, Type 2 Diabetes and Coeliac disease.

This program demonstrates that food is far more than fuel. It is about appropriate food choices that bring health benefits to consumers far beyond those promoted by food manufacturers. Convenience foods have transformed the way we cook and enjoy food. But all of this convenience has come at a price. Relying on these foods which are frequently high in fat, sugar, salt and additives, and low in other essential nutrients, such as fibre, has led to an increase in diet-related disorders.

Dr Murray Verso and Dr Irene Szymanski are interviewed in a documentary style presentation. This program highlights the importance of maintaining quality food choices with a view to reducing food-related disorders, and also sets a challenge for students to improve what they eat and ultimately influence their food choices and health of those around them.

Program Timeline

00:00:00	Introduction
00:01:29	Overcoming obesity
00:07:08	Type 2 diabetes
00:13:34	Understanding Coeliac disease
00:19:04	Managing diet related disorders
00:22:55	Making better choices
00:24:51	Conclusion
00:25:14	Credits
00:25:48	End program

Website References

- <http://www.health.nsw.gov.au/publichealth/healthpromotion/obesity/background.asp>
- <http://www.diabetesaustralia.com.au/en/Understanding-Diabetes/>
- <http://www.coeliacsociety.com.au/>
- <http://www.nutritionaustralia.org/>

Please visit our website for more relevant programs www.veavideo.com

VEA – Bringing learning to life

Diet Related Disorders – Type 2 Diabetes, Obesity and Coeliac Disease

While Viewing the Program

1. Outline how many people suffer from obesity in the following countries.

- a) Australia _____
- b) United kingdom _____
- c) United States of America _____

2. Identify two health problems associated with obesity.

3. Explain the cause of malnutrition.

4. Explain how malnutrition can cause obesity.

5. List five breakfast foods or drinks that you consider to be high in calories/ kilojoules.

6. What is wrong with replacing breakfast with a cup of coffee, or an energy drink?

Diet Related Disorders – Type 2 Diabetes, Obesity and Coeliac Disease

7. Explain which foods are ideal to consume for breakfast?

8. What drink is recommended in place of carbonated soft-drinks, concentrated fruit juice and sports energy drinks?

9. In the table below, suggest snack foods that are a more nutritious alternative to those listed.

Junk food	More nutritious alternative
Salty, fatty chips	
Biscuits/ cookies	
Sugary confectionery	

10. Why is it important to replace sedentary activity, such as sitting at the computer for too long, with physical activity or sports?

11. Outline how many people are diagnosed with Type 2 Diabetes in the following countries.

- a) Australia _____
- b) United kingdom _____
- c) United States of America _____

12. Type 2 Diabetes is a result of insufficient _____ hormone.

13. If left untreated Type 2 Diabetes can lead to?

Diet Related Disorders – Type 2 Diabetes, Obesity and Coeliac Disease

14. Explain the link between Obesity and Type 2 Diabetes.

15. List the risk factors associated with Type 2 Diabetes.

16. How is Type 2 Diabetes managed?

17. Define coeliac disease

18. Outline the symptoms of coeliac disease.

19. List carbohydrate foods which are gluten-free and therefore suitable for a person with coeliac disease.

20. Outline the strategies recommended to generally improve eating habits.

Diet Related Disorders – Type 2 Diabetes, Obesity and Coeliac Disease

After Viewing the Program

1. Discuss the role of diet in the management of the following disorders.

- a) Obesity
- b) Type 2 Diabetes
- c) Coeliac Disease

2. Explain how the lifestyles of young people have affected their current nutritional status.

3. List the factors that affect your own eating and exercise habits.

4. List foods that you have consumed over the last few days. Classify which foods you consider as high in calories/kilojoules.

5. Design a daily menu for someone with Obesity, Type 2 Diabetes or Coeliac Disease. Give reasons for your food choices.

Diet Related Disorders – Type 2 Diabetes, Obesity and Coeliac Disease

Suggested student responses

While viewing the program

- Outline how many people suffer from Obesity in the following countries.
 - Australia **1 in 5**
 - United kingdom **1 in 4**
 - United States of America **1 in 3**
- Identify two health problems associated with obesity.
Heart Disease
Type 2 Diabetes.
- Explain the cause of malnutrition.
Consuming too little food, or consuming too much of the wrong foods. When poor food choices and eating habits become long term patterns.
- Explain how malnutrition can cause obesity.
People who rely on junk food diets that are often high in carbohydrates and fat (and lacking in other essential nutrients), consume excess calories/ kilojoules which are stored as body fat.
- List five breakfast foods or drinks that you consider to be high in calories/ kilojoules.
Sugary cereals
Highly processed white bread
Butter, jam, cream
Fried bacon, eggs, sausages and hash browns.
Carbonated drinks
- What is wrong with replacing breakfast with a cup of coffee, or an energy drink?
The body is not receiving essential nutrients needed for optimum health.
- Explain which foods are ideal to consume for breakfast?
Dairy products such as milk and cheeses
Yoghurt and fruit
Wholegrain breads and cereals
Protein foods such as eggs
- What drink is recommended in place of carbonated soft-drinks, concentrated fruit juice and sports energy drinks?
Water is the preference
- In the table below, suggest snack foods that are a more nutritious alternative to those listed.

Junk food	More nutritious alternative
Salty, fatty chips	Nuts
Biscuits/ cookies	Celery and carrot sticks
Sugary confectionery	Dried or fresh fruit.

Diet Related Disorders – Type 2 Diabetes, Obesity and Coeliac Disease

10. Why is it important to replace sedentary activity, such as sitting at the computer for too long, with physical activity or sports?
Activity uses up energy. Excessive lack of activity can lead to weight gain.
11. Outline how many people are diagnosed with Type 2 Diabetes in the following countries.
- a) Australia **Over 4% of the population**
It is estimated that ¼ of the population are undiagnosed.
 - b) United kingdom **4% of the population**
 - c) United States of America **Almost 16 million people**
6% of the population
12. Type 2 Diabetes is a result of insufficient **insulin** hormone.
13. If left untreated Type 2 Diabetes can lead to?
Dehydration, fatigue, coma, death.
14. Explain the link between Obesity and Type 2 Diabetes.
Fat cells become insulin resistant, sugar levels increase in the bloodstream.
15. List the risk factors associated with Type 2 Diabetes.
Having high blood pressure, being overweight or obese, being physically inactive, having poor eating habits, being apple-shaped with extra weight carried around the waist region.
16. How is Type 2 Diabetes managed?
Through improved eating habits and regular exercise.
17. Define Coeliac Disease
An auto-immune disorder that damages the lining of the small intestine, triggered by the presence of gluten in foods consumed. Malnutrition can result, as food nutrients are not effectively absorbed.
18. Outline the symptoms of coeliac disease.
Flatulence, irritable bowel symptoms, tiredness from anemia, hair loss.
19. List carbohydrate foods which are gluten-free and therefore suitable for a person with coeliac disease.
Rice, legumes, almond meal, potato, polenta, corn, wheat free bread and pasta
20. Outline the strategies recommended to generally improve eating habits
- **Choose fresh foods over processed foods**
 - **Recipes can be modified to improve nutrition**
 - **Reduce or replace saturated fats by choosing healthier cooking methods such as baking instead of deep frying food in animal fats**
 - **Reduce salt and sugar intake by not adding these to our food and avoid highly processed convenience foods. Include a variety of nutrients in our diet by ensuring that the bulk of the food we eat is fresh.**