



PROGRAM SUPPORT NOTES

Dietary Supplements Health or Hype?

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For Teachers

Introduction

Dietary supplements such as vitamins, minerals and proteins can help a range of people in their everyday diets to maintain health and wellbeing. But what are supplements, who should be taking them and when should they be taken and avoided?

This program looks at the wide range of supplements currently available in the market and highlights groups such as the elderly, high performance athletes and pregnant women who may benefit from taking a supplement. The possible complications that may arise from taking supplements without proper medical advice is also explored.

Timeline

00:00:00	Introduction
00:00:45	Which nutrients and why?
00:03:06	Who takes supplements and why?
00:07:32	Potential problems
00:10:14	Super-nutrient or not?
00:13:51	Overview
00:15:16	Credits
00:15:54	End program

Related Titles

Menu Planning - Toddlers, Pregnancy, the Elderly
No Accounting for Taste - Why We Eat What We Eat
Diet Related Disorders – Type 2 Diabetes, Obesity and Coeliac Disease
All about Nutrients

Recommended Resources

- <http://www.who.int/nutrition/topics/en/>
- <http://www.nhmrc.gov.au/publications/subjects/nutrition.htm>
- http://www.betterhealth.vic.gov.au/bhcv2/bhcarticles.nsf/pages/vitamins_and_mineral_supplements?open
- <http://www.helium.com/items/377768-the-benefits-of-dietary-supplements-for-the-elderly>
- <http://www.nutritionaustralia.org/national/resource/physical-activity-and-supplements>
- <http://nutra-smart.net/supplements.htm>

Student Worksheet

Initiate Prior Learning

1. Survey – Conduct an informal survey of five people (don't choose people in your class) to find out: if they take any supplements, what supplements they take, and the reason for taking supplements. Include the gender and age of the person you interviewed. Compile these results, then as a class discuss trends that you notice in the results.

2. For each of the following essential nutrients identify two main food sources from where these can be obtained.

a) Protein

b) Carbohydrate

c) Vitamins

d) Minerals

e) Fats/oils

Dietary Supplements

Health or Hype?

3. Using question 2 as a guide, research which nutritional diseases may in fact prevent someone from consuming a particular nutrient (e.g., carbohydrates come from breads and cereals and a celiac may not be able to consume those foods).

4. Select a newspaper magazine that focuses on health/body/nutrition issues. Find an advertisement for a supplement and complete the following questions:

a) What supplement is being advertised?

b) What claims are made about the supplement's benefits?

c) Who is the advertisement targeting as their customer?

d) What techniques are used to encourage the consumer to purchase the product?

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Active Viewing Guide

1. Where are supplements currently available?

2. From where do we gain enough of the essential nutrients for our bodily needs?

3. What is meant by the term supplement?

4. Why do you think multivitamins are the most common supplements?

5. Why do people take supplements?

Dietary Supplements

Health or Hype?

6. Which nutrients are important for the mother and child during pregnancy?

7. What common supplements help the elderly maintain bone density and mobility?

8. According to Tony Doherty, what three aspects are essential for any athlete?

9. What is the main reason why more international aid organisations are providing supplements to those in need?

10. Complete the following table on potential problems that can occur with supplements:

Supplement	Potential problem
Excessive use of Vitamin E	
Excessive use of _____	Birth defects, liver, bone, skin and central nervous system disorders
Excessive use of 'slimming' supplements	

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Health or Hype?

11. What is a 'placebo effect'?

12. What is the link between omega-3 and schizophrenia?

13. Complete this sentence:

Supplements should never substitute.....

Dietary Supplements

Health or Hype?

Extension Activities

1. Create a day's menu for one of the people mentioned in the program who might need to take a supplement (elderly, pregnant woman, high performance athlete) – without the use of a supplement. Try to increase the nutrient required by incorporating specific nutrient-rich foods into the meals across the day.
2. Go to a supermarket or health food store website and price some of the supplements. Calculate the cost of taking any three supplements over the course of a year.
3. Class debate – Is it justifiable to spend so much money on something that can, generally speaking, be obtained from food by simply eating healthily? Divide into two groups to prepare notes and your arguments. Stage a debate with your teacher as moderator.
4. Why do you think it is important to maintain an objective view when reading the information given by manufacturers that produce supplements? Discuss what information you believe should be on the packaging of supplements as a way of being as truthful about their effectiveness as possible.
5. Create your own print advertisement for a supplement. Your advertisement should include a product/company name, the supplement name, and what it does to improve health. Include at least one common marketing technique to sell your product (e.g., celebrity endorsement, catchy slogan, medical endorsement/claims, a free offer, etc).

Suggested Student Responses

Initiate Prior Learning

1. Survey – Conduct an informal survey of five people (don't choose people in your class) to find out: if they take any supplements, what supplements they take, and the reason for taking supplements. Include the gender and age of the person you interviewed. Compile these results, then as a class discuss trends that you notice in the results.

Answers will vary

2. For each of the following essential nutrients identify two main food sources from where these can be obtained.

a) Protein
Meat
Fish

b) Carbohydrate
Bread
Cereals

c) Vitamins
Fruits
Vegetables

d) Minerals
Meats
Dairy products

e) Fats/oils
Nuts
Fish

3. Using question 2 as a guide, research which nutritional diseases may in fact prevent someone from consuming a particular nutrient (e.g., carbohydrates come from breads and cereals and a celiac may not be able to consume those foods).

Protein – vegetarians

Carbohydrates – celiac

Fats/oils – people with allergies, such as nut allergies

Vitamins – people with allergies or intolerance

Minerals – people with allergies or intolerance, such as lactose intolerance,

4. Select a newspaper magazine that focuses on health/body/nutrition issues. Find an advertisement for a supplement and complete the following questions:

a) What supplement is being advertised?

b) What claims are made about the benefit of the supplement?

c) Who is the advertisement targeting as their customer?

d) What techniques are used to encourage the consumer to purchase the product?

Answers will vary by class

Active Viewing Guide

1. Where are supplements currently available?
Supermarkets
Health food stores
2. From where do we gain enough of the essential nutrients for bodily needs?
A balanced diet
3. What is meant by the term supplement?
Manmade form of nutrient which come in tablets, powders or liquids
4. Why do you think multivitamins are the most common supplements?
Answers may vary but could include:
General good health
Easiest form to take
Attempt to remain healthy
5. What makes us take supplements?
Aches and pains
Extra energy
People not sleeping well
Get a better performance in sports
6. Which nutrients are important for the mother and child during pregnancy?
Folate
Iron
Calcium
Zinc
Iodine
7. What common supplements help the elderly maintain bone density and mobility?
Vitamin D
Calcium
8. According to Tony Doherty, what three aspects are essential for any athlete?
Training
Nutrition
Rest
9. What is the main reason why more international aid organisations are providing supplements to those in need?
To boost immune levels and supply essential nutrients for malnourished populations

Dietary Supplements

Health or Hype?

10. Complete the following table on potential problems that can occur with supplements:

Supplement	Potential problem
Excessive use of Vitamin E	Increase heart disease
Excessive use of Vitamin A	Birth defects, liver, bone, skin and central nervous system disorders
Excessive use of 'slimming' supplements	High blood pressure, nausea, heart failure

11. What is a 'placebo effect'?

A medication or treatment (even a false or ineffective one) appears to work simply because the recipient believes that it will work

12. What is the link between omega-3 and schizophrenia?

The fatty acids help to lower the metabolic and dietary acids that can cause psychosis such as schizophrenia

13. Complete this sentence:

Supplements should never substitute **a diet rich in essential nutrients.**