

# 6 Food faddism

## Summary

A food fad is an idea about food that has no factual basis and interests people for a short time. It exists because of confusion, fear and a quest for simple solutions to health problems. No one food in isolation has health-promoting properties; it is the combination of foods eaten over a period of time that is important for good health and nutrition.

## Introduction

**Fad:** an idea about food that has no factual basis and interests people for a short time.

People may subscribe to a food fad\* for any one of a number of reasons. Where a food supply system is changing, people may be suspicious about the nutritional value of the new foods. Because so much information about food is available, we may find it difficult to make food choices. Some people believe that they can solve their health problems through following a particular dietary pattern, and there are those who want to improve their performance, whether it is athletic, sexual or mental. Dissatisfaction with our society has led some people to seek alternative life-styles and alternative food styles. The pressures to be slim in our society are great, especially for women. Easy solutions put forward to solve all of these 'problems' engender food fads.

**Fallacy:** a false or mistaken idea or opinion. It arises from ignorance of the science of nutrition, or from faulty interpretation as this science is applied to the daily diet.

Beliefs that grapefruit and lemon juice dissolve fat, that oysters and vitamin E improve sexual potency, that steak is the best food for footballers, and that carbohydrates are fattening are fallacies\* — people believe them despite the lack of evidence. Advertisements advocating the use of certain foods or supplements with health-promoting properties play on problems common to most life-styles. For example, consider the following statement, 'The body's reserves may be drained through stress or the high consumption of sugar and alcohol... then you need product X'. Many of us feel tired and 'drained' on occasions. According to the statement quoted, we should be taking product 'X', to cure symptoms of stress that are unrelated to nutrition.

## Foods with alleged health-promoting properties

### Kelp

Kelp (seaweed) is a rich source of iodine, a trace element required in very small amounts by the thyroid gland. Exces-

sive amounts of iodine are harmful to the body, so it is unwise to take kelp tablets, as they are a concentrated form of iodine. Kelp is often promoted as an aid for weight reduction on the basis that iodine is essential for normal metabolism. It is believed by the takers of kelp that the extra iodine will increase metabolism, which will result in weight loss. As part of the normal dietary pattern, and not as a supplement, seaweed is consumed in Japan and Korea without apparent harm.

**Organically grown foods**

Organic-food merchants claim that foods are poisoned by chemical additives and pesticides, and that only foods grown free from chemicals and processed without additives and chemicals are suitable for human consumption. Careful management of the environment does permit agriculture without the use of pesticides, which may have economic as well as nutritional benefits. However, no government legislation controls the growth or supply to the consumer of organically grown food. Very often this type of food is more expensive than ordinarily grown food, and there may be no evidence that the food purchased is organically grown.

Without the pesticides and preservation methods that are used at present losses of food products would occur. The National Health and Medical Research Council Market Basket (Noxious Substances) Survey in 1976 concluded that 'in respect to the range of foods selected to comprise typical Australian diets, there was no cause for concern at the levels of organochlorine pesticide residues and heavy metals in the Australian diet, and the 1977 survey showed a continuing decline in the levels of these residues'.

**Lecithin**

Lecithin is often promoted as being good for the heart and brain. It is a source of fatty acids and choline. If the lecithin comes from soyabeans, it would be an expensive source of polyunsaturated fatty acids; if from eggs, it is a source of saturated fatty acids. Each has different effects on heart disease. The source of lecithin purchased as tablets is often not stated. Just because choline is necessary for brain function doesn't mean that taking it will make the brain any better.

**Natural vitamins**

'Natural' vitamins are promoted as being better than synthesised ones, but the body cannot tell the difference between the synthesised and natural vitamin.

**Health foods**

'All edible foods, properly used, are conducive to health'. No one food has any health-promoting property. There is no need for an individual to seek out health-promoting foods. Everyone can choose a combination of readily available foods to ensure that he or she is well fed and healthy.

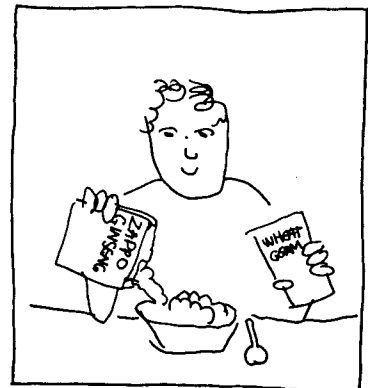




Figure 6.1 Literature about food and its presumed health-promoting properties, about weight reduction diets, and about diets that are said to help or cure particular diseases abound in affluent society.

## Weight-reduction diets

By far the most popular diets in Australia today are weight-reduction regimes. Throughout the media, weight-reduction diets are prominent. About 6–8 per cent of the adult population is obese, using the criterion of a BMI greater than 30, based on the National Heart Foundation of Australia Coronary Risk Factor Prevalence Studies of 1980 and 1983 (see chapter 15, Energy).

A most popular weight-reduction regime is the low carbohydrate diet.

Some diets recommend very low carbohydrate, high fat and moderate protein intake. The composition of such diets encourages excessive consumption of fat and protein and produces an undesirable level of lipids and ketones\* in the blood (see also chapter 18, Lipids).

On the Scarsdale medical diet one is permitted to eat what one wants, as long as it is less than was eaten in the past. Some of the features of this diet are that:

- (a) it does not require choosing or thinking, except about when the dieter should eat;
- (b) it includes high protein consumption; and
- (c) it emphasises polyunsaturated fats and limits saturated fats as it reduces total daily fat intake.

The diet regime covers fourteen days, but to effectively lose weight, and to maintain the weight loss, a person needs a diet for a lifetime.

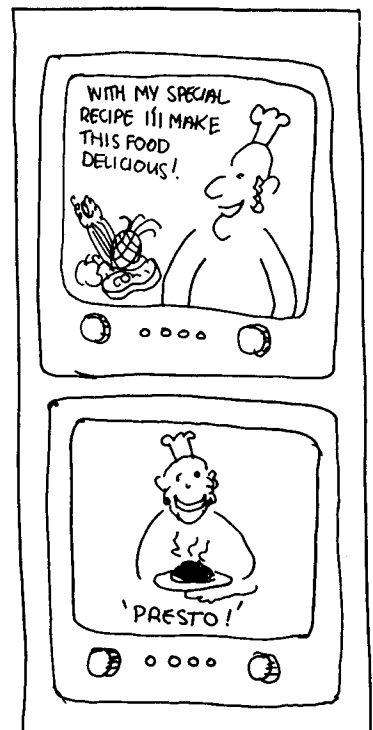
Very low energy diets are usually high in protein, low in energy and very low in carbohydrate. In these products protein is used as the principal or sole source of nutrients. The NH & MRC of Australia has been concerned that the research data on the safety and long term use of these products as the principal or sole source of nutrients are inadequate. It has recommended the following warning statement: 'not to be used as the principal or sole source of diet and preferably to be taken under medical guidance'. Newer formulations may be more complete meal replacements as far as essential nutrients are concerned.

### Guidelines to rate popular diets

1. Is the diet nutritionally adequate? (See chapter 26, Food composition tables and dietary allowances.) An adequate diet is one that includes a variety of foods and nutrients, in the correct amounts and combination for that individual. For an adult the diet should contain:

- (a) a minimum of 60 grams protein of good quality (see chapter 19, Protein);
- (b) a minimum of 60 grams carbohydrate (see chapter 16, Carbohydrates);
- (c) no more than 35 per cent energy from fat (see chapter 18, Lipids).

Ketone: a compound formed during oxidation of fatty acids.



Diets containing less than 4200 kJ (1000 calories) should be medically supervised.

2. Is the person promoting the diet respected and qualified in the field of nutrition?
3. How long has the diet been in use?
4. Is the diet based on some 'secret'?
5. Has the diet been scientifically evaluated and the findings reported in a reputable source?
6. Has the diet been launched for someone to make money from it?

### Further reading

AMERICAN DIETETIC ASSOCIATION. 'Position Paper on the vegetarian approach to eating.' *J. Amer. Diet. Assoc.* 77, 1980, pp. 61-68.

'Weight Loss Programs', *Choice*. March 1987, pp. 29-35.

'High Protein Diet Formulae.' *Choice*. October, 1979, pp. 294-295.

Food Faddish, *Nutrition Review* (Supplement). July, 1974.

FINEBERG, S.K. 'The realities of obesity and fad diets.' *Nutrition Today*, July-August, 1972, p. 23.

LLEWELLYN-JONES, D. *Everybody. A nutritional guide to life*. Oxford University Press, Melbourne, 1980.

STANTON, R. *Food for health*. W.B. Saunders, Sydney, 1979.

STARE, F.J. 'Health foods: Definitions and nutrient values.' *J. Nutr. Ed.* 4, 1972, p. 94.

WHITEMAN, H. 'The function of food in society.' *Nutrition*. 20, 1966, p. 4.

### Questions

1. What could be the basis of these fallacies and what indicates that they *are* fallacies?
  - (a) Toast is not as fattening as bread.
  - (b) Polyunsaturated margarine is better than butter because it does not contain as many kilojoules (calories).
  - (c) Raw sugar is better than white sugar because the latter is pure and white and has no goodness in it.
  - (d) Beetroot is good for your blood.
2. Find examples of advertising of food products from a health food store. Develop a set of criteria with which the food products should comply. Evaluate the statements and establish what they appeal to.
3. How would you define a natural food? Give four examples of natural foods.

# FOOD & NUTRITION IN AUSTRALIA

Edited by Mark L. Wahlqvist

in conjunction with the Department of Human Nutrition, Deakin University

Contributors: David R. Briggs, Jill B. Carey,  
Patricia A. Crotty, Delia M. Flint, Gwyn P. Jones,  
Richard S. D. Read, Ingrid H. E. Rutishauser,  
Boyd J. G. Strauss

Illustrations by Neville Todd



Nelson

First published 1981  
Second edition 1982  
Reprinted 1983  
Reprinted 1984 twice  
Reprinted 1985  
Reprinted 1986  
Third edition 1988  
Reprinted 1989  
Reprinted 1992

Thomas Nelson Australia  
102 Dodds Street South Melbourne 3205

© Cassell Australia Ltd 1981  
© Methuen Australia Ltd 1982  
© Thomas Nelson Australia 1988

Cover design by Green Poles Design  
Illustrated by Neville Todd  
Photographs on pages 20, 27, 28, 37, 46 and 66 by Peter Wilson  
Set in 10/11 Garamond by SRM Productions, Malaysia  
Printed in Singapore by  
Kyodo Printing Co. Pte Ltd

All rights reserved. No part of this publication may be reproduced or transmitted in any form or by any means, electronic or mechanical, including photocopying, recording or by any information storage and retrieval system, without permission in writing from Thomas Nelson Australia.

National Library of Australia  
Cataloguing-in-Publication Data

Food and nutrition in Australia.

3rd rev. ed.  
ISBN 0 17 007343 2.

1. Food. 2. Nutrition. 3. Food — Social aspects.  
— Australia. I. Wahlqvist, Mark L. II. Briggs,  
David R., 1944 - . III. Todd, Neville.

641'.0994

'I'm an Aussie' reproduced by permission of P. Best and  
Monahan Dayman and Adams  
'The Schoolboy's Lament' reproduced by permission of Brenda Ryan  
'A Dip into the Past' reproduced by permission of Phillip Adams

# Contents

## Section One The sociology of food 1

- 1 Nutrition: does it matter? Mark L. Wahlqvist 2
- 2 History of nutrition in Australia Mark L. Wahlqvist 12
- 3 Culture and food choice Patricia A. Crotty 22
- 4 Australian eating patterns Ingrid H. E. Rutishauser and Delia M. Flint 30
- 5 Food and the law David R. Briggs 49
- 6 Food Faddism Delia M. Flint and Mark L. Wahlqvist 64

## Section Two The science of food 69

- 7 Food production Richard S. D. Read 70
- 8 Food processing Gwyn P. Jones 88
- 9 Food microbiology David R. Briggs and Gwyn P. Jones 99
- 10 Food preparation Jill B. Carey and Richard S. D. Read 115
- 11 Food additives David R. Briggs 138

## Section Three Physiology and metabolism 152

- 12 Digestion and absorption Boyd J. G. Strauss 153
- 13 Metabolism Mark L. Wahlqvist 167
- 14 Exercise and nutrition Richard S. D. Read 176

## Section Four Nutrients and their significance 189

- 15 Energy Jill B. Carey and Richard S. D. Read 190
- 16 Carbohydrates Mark L. Wahlqvist 215
- 17 Dietary fibre Gwyn P. Jones 228
- 18 Lipids Mark L. Wahlqvist 243
- 19 Protein Richard S. D. Read 259
- 20 Water Boyd J. G. Strauss and Mark L. Wahlqvist 273
- 21 Vitamins Mark L. Wahlqvist 281
- 22 Major elements Boyd J. G. Strauss 309
- 23 Minor elements Boyd J. G. Strauss 322
- 24 Alcohol Boyd J. G. Strauss 329
- 25 Natural toxicants in food David R. Briggs 340
- 26 Food composition tables and dietary allowances Ingrid H. E. Rutishauser and Delia M. Flint 352

## Section Five Nutritional status 365

- 27 The individual Boyd J. G. Strauss and Delia M. Flint 366



28 The community Ingrid H. E. Rutishauser 373

Section Six Nutrition and the ages of man 383

29 Pregnancy and lactation Ingrid H. E. Rutishauser 384

30 Growing up: infant to adolescent Ingrid H. E. Rutishauser 401

31 The adult and the family unit Mark L. Wahlqvist 430

32 The elderly Delia M. Flint and Mark L. Wahlqvist 433

Section Seven Some issues in nutrition 439

33 Survival nutrition Richard S. D. Read and Gwyn P. Jones 440

34 Nutrition and cancer Mark L. Wahlqvist 449

35 Nutrition and the brain Mark L. Wahlqvist 453

36 Food sensitivities David R. Briggs 457

37 Our neighbours Delia M. Flint and Mark L. Wahlqvist 466

38 Future food supply Richard S. D. Read 472

39 Nutrition education Patricia A. Crotty 485

40 National nutrition policy Mark L. Wahlqvist 498

Section Eight Nutrition resources 507

Index 512