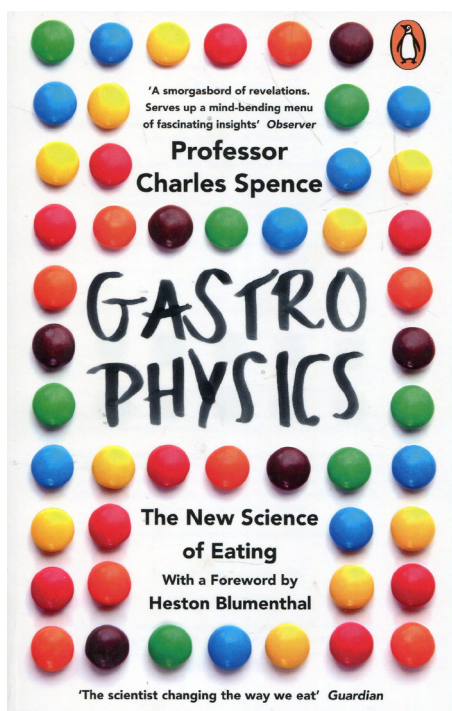


# Book Reviews



**Professor Charles Spence**  
**Foreword: Heston Blumenthal**  
**2017 Viking, Penguin**  
**Paperback £14.99**  
**ISBN 978 0 241 27009 7**

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## GASTROPHYSICS: The New Science of Eating

### Dr Tony Curtis

As with many student Chemists at university, I was rather bemused by thermodynamics. That was until I read the quotation starting the chapter on it in my Physical Chemistry textbook:

'Science [thermodynamics] owes more to the steam engine than the steam engine to science.'

**Lawrence Joseph Henderson**

However, the knowledge and understanding of thermodynamics does give you the capability to build better steam engines!

One might paraphrase this, in the context of Gastrophysics' as 'Food Science owes more to chefs [fine dining] than the chefs to Food Science.' However, the knowledge and understanding of Food Science & Gastrophysics yields the capability to create better dining experiences!

Heston Blumenthal (author of the foreword to this book). Is renowned

for innovative and science based novel eating experiences at the acclaimed The Fat Duck restaurant. I am not certain if my favourite book *The Food Lab: Better Home Cooking Through Science* (J. Kenji López-Alt) has improved my cooking but it has certainly upgraded my understanding of what I am doing or possibly doing wrong. Better understanding has definitely increased my appreciation and enjoyment of dining.

In some ways there is nothing new in this book. Great chefs and restaurateurs have known for millennia that food does not speak for itself, there is more to a great dining experience. This wonderful book is an artful fusion of past knowledge and novel investigation. I am reminded, after all I am a Chemist, that 2019 was the year of the Periodic Table. The imaginative leap was based on existing knowledge but with new insight. This invigorated insight led to new research (e.g. the pursuit of new missing elements) and knowledge. For

me Gastrophysics is a like experience. Existing knowledge is given new perspectives, signposting the pathway to new gastronomic adventures.

Some potential readers may be intimidated by the title 'Gastrophysics'. It does feel a bit like thermodynamics (i.e. difficult and different). Be not afraid Marketers. You are actually on sound and familiar ground. On page xxv of Amuse Bouche we are into Philip Kotler and the difference between the total product and the tangible product. The difference between a great meal and lesser offering is not measured in the number of calories. Marketers should read on without fear. The book is in some ways an exposition of the classical augmented service extended marketing mix (7Ps) in the context of eating.

For a number of years at the University I worked in the department of Marketing & Hospitality Management. Their flagship course was Cruise Management (sorry I could not resist!). The quality of a once in a

lifetime experience on a luxury round the world cruise cannot be measured by the number of sea miles travelled.

Some years ago, I was faced with the need, in an introductory marketing textbook, to explain the complexity of the wide-ranging service extended marketing mix. I used a restaurant case study to do this. One element of the service extended marketing mix is people, one sub-element of this is other people [e.g. other customers]. I was often bemused by student perception this was a new concept. In the context of eating it was nicely summarised a millennia ago

*'To eat without a friend is to devour like the lion or the wolf.*

*We should look for someone to eat and drink with before looking for something to eat and drink.'*

#### **Epicurus**

This book tells us why this and much more yields a better dining experience. I illustrate with just a few examples from this outstanding book.

Chapters 1 to 5 take us through the senses, just as a Marketing textbook will take us through the 7Ps. This is done with humour and perception. The next question is how do you put this together? Chapter 6 takes us on the way. Ansoff matrix aficionados will love the music – wine matrix: French background music 77% selection of French wine (23% German) – German background music 73% selection German wine (27% French). To pursue the music theme, a great meal experience is like an orchestral piece. Each instrument plays its part in a harmonious memorable experience. The art of the restaurateur / host / chef is to orchestrate and then deliver this experience. Different music gives diverse experiences.

Chapter 7 takes this theme further with *Social Dining* with the contrast of solo dining and social dining, Epicurus is rediscovered:

*'[A] good meal tastes better if we eat in the company of friends.'*

**American Psychologist  
Harry Harlow**

Charles Spence then states 'Gastrophysics offers a constructive framework in which to look for solutions to the growing problems associate with solo dining'. The same basic concepts can be applied to social group dining. The impish creativity of the author is illustrated by the section on Tapas-ization; charcuterie boards, tapas and mezze plates. Nibbles are to share and boost the conversation.

If all this appears to be too good to be true Charles does not run away from the ultimate challenge in eating experience: airline food. The impact of low humidity and air recirculated at reduced pressure is not ideal for the inspirational dining experience. Offerings such as coq au vin, beef bourguignon and veal in cream sauce do not dry out when re-heated on the flight.

How does the Author pull off this conjuring trick of producing a good read with immense detail to back-up the theme? The answer is some 148 pages of meticulous notes at the end of the book. The reader can drink-in the flow of the discussion and then retrace the steps to adsorb the detail. The book in effect can be read at two levels. You can use the zoom lens of the notes to amplify detail at will rather than be encumbered with them when unwanted.

I recommend this book to all who prepare or consume food, well that is everyone. Professionals such as chefs, food technologists and flavourists will find it invaluable, as will a host of other specialists such as marketers, restaurateurs and hoteliers. It should be on the recommended reading list of all Hospitality Management and Tourism courses. At my favourite Italian restaurant, the main dish is produced with a flourish and 'Enjoy!'. Do enjoy this outstanding book.