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T E L E F A X

FOR THE ATTENTION OF:

DR. RAY THORNTON

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BRITISH AMERICAN TOBACCO

PAGES TO FOLLOW  
EXCLUDING THIS  
COVER PAGE:

THREE

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FROM:

PROF. D.M. WARBURTON

If you have a problem with transmission please telephone:  
0734 667872

Dear Ray,

This is to confirm the ARISE Meeting in Reading on the 3rd July 1991. The Meeting will be held in K8 in the Psychology Department.

I am also enclosing some working documents giving an idea of our projected meeting in October. It is a list of ideas for speakers not a fixed programme.

I look forward to meeting you.

Yours sincerely,

David M. Warburton

## DETERMINANTS OF PLEASURE

Pleasure is an emotional experience, which occurs over a period of time. Different phases of the process can be distinguished and associated with different mechanisms. A pleasure experience can be subdivided into four phases:- cognitive, sensory, post-intake and post-absorption. However, these processes overlap and their effect is integrated to produce the experience that we describe as pleasure. These phases are presented here in reverse order.

### Post-absorption Effects

Major contributors to the experience of pleasure are the post-absorption factors. The post-absorption factors include the effects pharmacologically active ingredients in the substance and their metabolites after absorption into the blood stream. Tea, coffee and cola drinks have a number of pharmacological ingredients of which the most important is caffeine. Chocolate has theobromine and some caffeine. Cigarette smoke contains nicotine, while beer wines and spirits contain ethyl alcohol.

An important point to be made is that the psychopharmacological effects of nicotine and caffeine are very subtle, in comparison with substances, like heroin and cocaine. As a consequence, they do not produce motivational toxicity. Motivational toxicity is defined as the state in which drug taking completely dominates the user's life and replaces normal behaviours, which are motivated by food, sex objects and safety. Tea drinking, coffee drinking, tobacco smoking and alcohol use do not result in motivational toxicity and the use of these substances is completely compatible with normal living. In fact, they are natural accompaniments to many daily activities.

### Post-intake Factors

The post-intake phase of pleasure includes those mechanisms arising from the action of the substance, on the body prior to absorption, e.g. stomach distension after food. In most circumstances, tea drinking, coffee drinking and alcohol drinking do not depend on post-intake factors, although they are present. Tea, coffee and alcohol drinkers do enjoy the warm feeling in the stomach of the drink in winter and the coolness of a cola or beer in the stomach during the summer. Smoking has relatively small effects of this sort in the chest when compared with the sensory effects in the mouth.

### Sensory

The sensory effects of chocolate, tea, coffee, smoking and alcohol are generated through the sight, smell, taste, texture and temperature of the substance. Some of these factors operate prior to use, some during use and some at both times. All of the sensory factors that are experienced as pleasurable will result in continued use and future use. The pleasure generated by chocolate eating, tea drinking, coffee drinking, tobacco smoking and alcohol use depends very much on stimulation of taste receptors or olfactory receptors. Sensory stimulation is crucial for the pleasurable experience of these substances, in contrast to the "hard" drugs.

### The Cognitive Factors

The cognitive effects represent the beliefs held about the properties of the substance, as a result of culture and previous experience of its effects and the social context in which the substance is enjoyed. A full understanding of an individual's substance use enjoyment cannot be achieved without considering it within its environmental and sociocultural framework. This statement is particularly true for chocolate eating, tea drinking, coffee drinking, smoking and alcohol consumption.

All of these behaviours are used to serve social functions as well as personal functions. It is very interesting that the caffeine, nicotine and alcohol are used in pairs and sometimes all three together. People drink tea and alcohol during a meal and then enjoy a cigarette at the end. In Europe, alcohol would be consumed during the meal and at the end coffee and cigarettes smoked as part of the social activity of the meal. At the end the host would offer chocolates to his guests.

**A PROGRAMME**

This programme is designed to cover the above points. Clearly, many speakers could be considered as possible participants and this list is intended as illustrative of the concepts and any suggestions will be welcomed.

**Introduction to Pleasure**

David Warburton, Bernard Levin or Auberon Waugh!

**Pleasure Systems in the Brain**

The Pleasure Pathways - Edmund Rolls (Oxford) or Michael Bozarth (State University of New York at Buffalo)

Brain Structures and Emotion - Steve van Toller (Warwick)

Pleasure Responses of the Brain - Gert Kobal (Erlangen)

**Everyday Components of Pleasure**

Sensory - Beauchamp (Monell) or Cain (Yale)

Morish Tastes - Gutteridge (Cadbury-Schweppes, Reading)

Psychopharmacology - Hindmarch (Surrey) or Bättig (Zurich)

Bliss Point - McBride (Mosman, Australia)

Social Aspects - Feinhandler (Harvard)

**Pleasures or Problems?**

The Killjoys - Skrabarnak (Trinity College, Dublin)

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*(Legislative)  
Digby Anderson  
Geoff Lowe  
Allen et al*

*14 presentations  
2 days*

*Travel 16,000 Accom 13,000  
29,000  
2,800  
31,800*

*The Bliss Point Factor  
Dr Robert MacBride  
Sun Books  
McMullan Annual 1990  
ISBN 0 7251 0611 5*

*SCR Associates  
Calumet  
Tara Wells*

*32,000  
39-*

*27,000  
10 paying attendees*

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Caffeine metabolism slows down on stopping.

Smoking increases metabolism.

Hotel Danelli, Venice October 1991.