Health and sugar substitutes

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Health and Sugar Substitutes

Editor

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Preface

The International Conference on Sugar Substitutes was organized to commemorate the tenth anniversary of the European Research Group for Oral Biology (ERGOB). During the Basel Congress of the European Organization of Caries Research (ORCA) in 1968, a number of young researchers felt frustrated with the customary ten minutes paper sessions, because they did not leave enough time for the free exchange of scientific information. Immediately after the congress, a small circle of enthusiastic youngsters searched for an alternative. It was evident that such an ambitious task was not to be achieved within the rather inflexible institution of a large established scientific organization. They therefore decided to create a new body. A constitution was written which included the following organizing principles:

To guarantee permanent revitalization and regeneration of the group, permanent membership was excluded. Because a certain continuity was thought to be desirable, an executive committee of four members including a secretary-treasurer with an unlimited term of office was proposed. The term of office of the other committee members was limited to two years. Two meetings were to be held annually. The size of the group was limited to a maximum of twelve participants to allow the free exchange of thoughts and the informal discussion of developments in basic research related to oral biology. Unlike the United States, where the National Institute of Dental Research organized similar meetings, no supranational institution existed in Europe which would have been able to support our activities. Therefore, two companies were invited to sponsor the meetings on a longterm basis. Each sponsoring company was to be granted the privilege of
sending a qualified researcher to the meetings. We are very grateful for the
generous help of Elida Cosmetics Ltd. and Akzo Consumenten Produkten bv,
in providing grants for the regular activities of ERGOB.
During the past ten years in 19 meetings a great number of active
scientists have profited from these friendly gatherings. On the occasion of
the 20th meeting, the executive committee decided to organize an open

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conference to introduce this rather unique group to a wider scientific community.
Besides being of pressing importance at the present time, the
topic "Sugar Substitutes" was chosen as an example of our desire to communicate
interdisciplinarily on matters of broad interest. Following our usual
custom, experts working on related problems outside the field of oral
biology were invited to attend.
Although there are no doubts whatsoever that even the partial
replacement of sucrose by nutritive or non-nutritive sugar substitutes is a
valid means of reducing dental caries, there is no unanimity with regard
to the criteria to be applied for the assessment of the cariogenicity of
sweeteners or foodstuffs. This has created a great deal of confusion, that
has been nourished by a merciless battle for shares of the market. The
struggle for truth about the safety of non-nutritive sweeteners has much
more bearing to the public health than being merely a concern of preventive
dentistry, however important it may be. People in the western hemisphere
are more and more losing faith in the benefits of unlimited technological
progress in general and have become specifically sensitized against
possible side effects of "chemicals", be it drugs or food additives. This
malaise has had consequences on the political level for example in the
rather unfortunate all or nothing approach of the Delaney clause in the
United States. In the field of sugar substitutes, cyclamate and saccharin
have run into massive crossfire because of reports branding these compounds
as bladder carcinogens in rodents.
It is one of the paradoxes of our time that most of the sugar substitutes
are consumed to reduce caloric intake while a large segment of the
world's population is threatened by starvation. Nevertheless, the great
many diabetic patients having a legitimate and vital interest in the regular
use of sugar substitutes were intimidated by such alarming reports.
There is little doubt today that no act of authority will settle this
dilemma. Practical alternatives can only be proposed by tackling these
important problems by competent, honest and ethical research. The necessity
to protect our environment - and at long last ourselves - is one of the
major contemporary demands of our society. However, the way out of this
vicious circle cannot be found by apodictic actions but only by clearheaded, competent benefit/risk assessments.
Within the limited area of sugar substitutes, we hope that the Geneva Conference and the new material presented in this volume will introduce some more clarity into this highly controversial field. If it contributes to the resolution of only a few of the pertinent questions and consequently brings back some of the lost credibility to sugar substitute research, the anniversary conference of ERGOB and this volume will have served their purpose.

August 1, 1978

B. Guggenheim