

Reports on tasks

for scientific cooperation (SCOOP)

Task

7.3 – Collection of data on products intended

for use in very-low-calorie diets.

Report September 2002

Reports

submitted on behalf of the VLCD European Industry Group to the SCOOP working group on very-low calorie diets between 1998 and 2001, consolidated 2001.

Acknowledgement

I want to express my particular thanks to Dr Stephen Kreitzman and Valerie Beeson of Howard Foundation Research Ltd. (Lipotrim), who undertook a substantial proportion of the original research on which Section III, the 'Recent Scientific Studies' is based. Not only did they make available to us copies of the published work, but also shared with us much of the basic data so that we could convince ourselves that their results, which demonstrated substantial misunderstanding in much published metabolic work, could be thoroughly checked. On the basis of this, we were not only able to confirm the validity of the Kreitzman and Beeson studies, but from their bibliographies undertake cross checks of the errors or omission in the earlier work.

We want to make it quite clear that we found no evidence of deliberate distortion or deliberate misinterpretation in the early works. Most of the errors occurred because the biological scientists did not fully understand the assumptions involved, exactly what their indirect methods of determination meant or the extraneous factors that influenced their results and interpretations.

EXECUTIVE SUMMARY & CONCLUSIONS

Preamble

This report presents evidence for VLCDs collected since the Scientific Committee for Foods Report of 1990.

In 1990 the SCF Report was based largely on the experience of one (United States) group and ignored not only reports prepared by European Member States (UK and The Netherlands) but also extensive studies by European nutrition experts.

In addition to work which was not reviewed for the 1990 report, there is a large body of new evidence since 1990 (at least 177 published scientific studies on over 26,000 people) and 10 years of further extensive use in many countries. Most of this new information comes from conditions of free sale and is well documented.

In earlier reports it was suggested that studies of the safety of VLCD should be undertaken under conditions of use in the community. This information is now available from various studies and shows the considerable levels of safety of the modern nutritionally complete very low calorie (energy) diets.

During the SCOOP Committee meetings it was accepted that though the term very low energy diet is scientifically more accurate, the term very low calorie diet (VLCD) is so widely known and used that this is the term that should be adopted for the SCOOP Task 76.3 Report. In consequence we have also adopted this terminology.

Summary

This report reviews over 400 published scientific and clinical studies to early 2000, undertaken on VLCDs, on over 50,000 people. Thus it is likely that VLCDs are the most widely studied of all weight reducing diets. In addition, it records the main findings in a series of audit studies undertaken during the routine use of VLCD.

The vast majority of the studies identify the compositional standards and the length of administration and this document concentrates on those papers. In almost 20,000 people use was for more than four weeks, giving good evidence on safety of long-term use.

In addition current formula VLCDs have been used by well over 25 million people in the international community over a period of over twenty years.

In addition to this critical review of the available safety and efficacy data in clinical use,

there have been a substantial number of recent experimental studies which have shown that some of the earlier research reached erroneous conclusions. This report reviews this data and highlights some important new scientific conclusions which have practical implications.

Overall conclusions

A modern nutrient-complete VLCD provides a highly effective and safe method of weight reduction. The use of VLCD has benefits on excess weight related disorders which appear to be superior to those of LCD or food based plans probably on the basis of the more rapid weight loss.