Methodologies for Determination of Potentially Available Fluoride in Toothpastes

In Memoriam

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Motivation

There are conflicting reports in the literature regarding the total and available fluoride concentration in toothpastes currently on the global market. Of particular concern are toothpastes marketed for populations with reduced and limited economic resources. There are also concerns regarding the clinical relevance of the available methods. Quality control is a way to ensure effectiveness of fluoride toothpaste in the management of the caries process. Analytical techniques in use to determine fluoride in toothpastes are not standardized and procedures for fluoride determination of available fluoride have not been established. The implementation of reference laboratories around the world to perform quality control of fluoride toothpaste would be helpful.

Workshop

On February 4-5, 2015 a group of 28 experts participated in a workshop on methodologies for the determination of potentially available fluoride in toothpastes held in Frankfurt, Germany. The workshop was organized and sponsored by ORCA. During the two day meeting participants (see picture and list below) heard a series of presentations on the strengths and limitations of the methods and standards for determining fluoride in toothpastes. Participants the reviewed and extensively discussed the state of the science on the techniques. After reviewing the evidence for the validity, reliability and feasibility of each alternative technique to determine fluoride in toothpastes, workshop participants identified and summarized the advantages and disadvantages of each technique; provided advice as to whether these techniques are clinically relevant and suitable for use in different types of toothpaste. They additionally identified gaps in knowledge (and research recommendations) to optimize these techniques. There are plans for publication of workshop outcomes in a future issue of Caries Research.
List of participants:

1. Arif Baig (USA)
2. Peter Bottenberg (Belgium)
3. Mark Buijs (Netherlands – Presenter)
4. Cliff Carey (USA – Presenter)
5. Joana Carvalho (Belgium)
6. Alan Ceresa (UK)
7. Jaime Cury (Brazil – Presenter)
8. Roger Ellwood (UK)
9. Kim Ekstrand (Denmark)
10. Carolina Ganss (Germany)
11. Carlos Gonzalez-Cabezas (USA)
12. Christopher Holmgren (France)
13. Michael Knapp (UK)
14. Frank Lippert (USA)
15. Andrew Joiner (UK)
16. Brian Lumley (UK)
17. David Manton (Australia)
18. Stefania Martignon (Colombia)
19. E. Angeles Martinez Mier (USA - Moderator)
20. Steve Mason (UK)
21. Anahita Jablonksi Momeni (Germany)
22. Pratip Phantumvanit (Thailand)
23. Walter Plett (Germany)
24. Chris Rahiotis (Greece)
25. Fabio Sampaio (Brazil)
26. Nadine Schlueter (Germany)
27. Andreas Schulte (Germany)
28. Cor van Loveren (Netherlands – Presenter)
29. Domenick Zero (USA)