

คณะทันตแพทยศาสตร์ มหาวิทยาลัยเชียงใหม่ ร่วมกับ  
 The Borrow Milk Foundation ประเทศสหราชอาณาจักร และ ชมรมทันตสาธารณสุขแห่งประเทศไทย  
 ขอเชิญเข้าร่วมการอบรมเชิงปฏิบัติการนานาชาติ เรื่อง  
 International training workshop on data collection and analysis of the total Fluoride intake  
 and urine excretion of young children in Chiang Mai, Thailand  
 30 สิงหาคม – 8 กันยายน 2553  
 ณ คณะทันตแพทยศาสตร์ มหาวิทยาลัยเชียงใหม่

FLUORIDE URINARY EXCRETION STUDIES: INTERNATIONAL TRAINING WORKSHOP  
 Chiang Mai, August 30<sup>th</sup>-September 8<sup>th</sup> 2010.

Day/time	Theoretical Presentations <sup>1</sup>	Laboratory training	Field training
30/August 9:00-10:15	Urinary excretion studies. Usefulness and limitations. Why are these studies necessary? Why such type of study should be useful in Chiang Mai?		
10:15-10:30	Questions-Comments		
10:30- 10:45 Break			
10:45 – 12:30	Review of previous studies. Suggested literature.		
“Quick Lunch”			
13:30-14:30	Experimental design of urinary fluoride excretion studies. Preparation of this type of studies		
14:30 – 14:45	Questions-Comments		
14:45-15:00 Break			
15:00 – 16:00	Practical recommendations. Typical spreadsheets.		
16:00 – 16:30	Closing discussion		

<sup>1</sup> The attendance of laboratory staff and field coordinators is strongly encouraged.

<b>Day/time</b>	<b>Theoretical Presentations</b>	<b>Laboratory training</b>	<b>Field training</b>
<b>31/August</b> 9:00-10:15	Basic concepts on the Fluoride Selective electrode (FISE). Nernst equation. Why using a TISAB solution? Is it important to determine blank fluoride concentration?		Field coordinators visit the field to meet with parents and caregivers Confirm the meeting time and meeting point
10:15-10:30	Questions-Comments		
10:30- 10:45 Break			
10:45 – 12:15	Direct calibration. Quality control of FISE. Using different number of standards for calibration. Assessment of fluoride concentration in water and urine.		
12:15 – 12:30	Questions-Comments		
“Quick Lunch”			
13:30-14:45	----	Experimental: Calibration curves. Assessment of fluoride in water and urine <sup>2</sup>	
14:45-15:00 Break			
15:00 – 16:30		Experimental work continued	
16:30 – 17:30	Technical discussion on experimental session		

<sup>2</sup> It should be useful to have real water samples from different rural sites near Chiang Mai. Particularly, samples from the community where the pilot study is going to be held should be necessary. Urine samples could be kindly provided by the participants.

<b>Day/time</b>	<b>Theoretical Presentations</b>	<b>Laboratory training</b>	<b>Field training<sup>3</sup></b>
<b>Wed September 1<sup>st</sup></b> 7am – 6 pm	-----	-----	Diurnal Pilot fluoride urinary excretion study.
"Quick Lunch"			
		Urinary pH measurement.	Different samples collection. Children management.
		Urinary and water volume measurement	
		-----	Conditioning and transportation of samples to Chiang Mai laboratory. Samples Freezing

<sup>3</sup> The cooperation of two English speaking laboratory staff is useful and necessary at least in the afternoon.

<b>Day/time</b>	<b>Theoretical Presentations</b>	<b>Laboratory training</b>	<b>Field training</b>
<b>Thurs. September 2<sup>nd</sup>.</b> 9:00 – 10:15	Fluoride concentration assessment in toothpaste and solid foods. Use of the HDMS (diffusion technique)		
10:15-10:30	Questions-Comments		
10:30- 10:45 Break			
10:45 – 12:15		Experimental: preparation of standard solutions and samples for the HDMS technique.	
“Quick Lunch”			
13:30-14:45		Fluoridated milk analysis using HMDS technique	
14:45-15:00 Break			
15:00 – 16:30		Fluoridated milk analysis using HMDS technique	
16:30 – 17:30	Technical discussion on experimental session		

<b>Day/time</b>	<b>Theoretical Presentations</b>	<b>Laboratory training</b>	<b>Field training</b>
<b>Friday September 3rd.</b> 9:00 – 10:30	-----	Measurement of standards and F-milk samples by the HDMS technique	
10:30- 10:45 Break			
10:45 – 12:15		FISE preparation for analysis of F-milk using the direct calibration technique (2-point calibration).	
“Quick Lunch”			
13:30 – 15:00		Experimental work continued	
15:00-15:15Break			
15:15 – 16:30		Using Excel spreadsheets. Preparation of the samples collected in the pilot study for analysis on next Monday Sept 6 <sup>th</sup> .	
16:30 – 17:30	Technical discussion on experimental session		

<b>Day/time</b>	<b>Theoretical Presentations</b>	<b>Laboratory training</b>	<b>Field training</b>
<b>Monday September 6th.</b> 9:00 – 10:15	Update of the experimental work. Questions and discussion		
10:15- 10:30 Break			
10:30 – 12:15		Food homogenate (from the pilot study) and related materials preparation	
“Quick Lunch”			
13:30 – 15:00		Experimental work continued	
15:00-15:15Break			
15:15 – 16:30	.	Experimental work continued	
16:30 – 17:30	Technical discussion on experimental session		

<b>Day/time</b>	<b>Theoretical Presentations</b>	<b>Laboratory training</b>	<b>Field training</b>
<b>Tuesday September 7th.</b> 9:00 – 10:45	-----	Analysis of the previously diffused samples	
10:45- 11:00 Break			
11:00 – 12:30		FISE calibration for the analysis of water and urine samples from the pilot study	
“Quick Lunch”			
13:30 – 15:00		Experimental work continued	
15:00-15:15Break			
15:15 – 16:30	.	Input and calculations of the data from the pilot study. Final assessments.	
16:30 – 17:30	Technical discussion on experimental session		

<b>Day/time</b>	<b>Theoretical Presentations</b>	<b>Laboratory training</b>	<b>Field training</b>
<b>Wednesday September 8th.</b> 9:00 – 10:45	Summing up and final discussion		
10:45- 11:00 Break			
11:00 – 12:00	Summing up and final discussion (cont.)		
“Quick Lunch”			