

## รายการอ้างอิง

### ภาษาไทย

- รุติมา วิสุทธิธรรม. 2518. การเปรียบเทียบการย้อมติดสีของคราบแบคทีเรียบนตัวฟันของ  
สีPonceau 4 R กับสี Basic fuchsin. เอกสารไม่ได้ตีพิมพ์.
- ดวงพร วินิจกุล. 2530. สีผสมอาหาร. พิมพ์ครั้งที่ 2. เชียงใหม่: ศูนย์พิมพ์คณะ  
เภสัชศาสตร์ มหาวิทยาลัยเชียงใหม่.
- ไพพรรณ พิชยานนท์. 2537. เอกสารประกอบการสอนวิชาสถิติ. (อัดสำเนา).
- สุธี เวคะวากยานนท์. 2531. สารปรุ้งแต่งยา. พิมพ์ครั้งที่ 1. กรุงเทพมหานคร:  
สำนักพิมพ์ไทยวัฒนาพานิช.

### ภาษาอังกฤษ

- Arnim, S.S. 1963. The use of disclosing agents for measuring tooth  
cleanliness. J. Periodontol. 34: 227-244.
- Baab, D.A., Broadwell, A.H., and Williams, B.L. 1983. A comparison  
of antimicrobial activity of four disclosant dyes.  
J. Dent. Res. 62: 837-841.
- Barrickman, W.R., and Penhall, O.J. 1973. Graphing indexes reduces  
plaque. J. Am. Dent. Assoc. 87: 1404-1408.
- \_\_\_\_\_, and Penhall, O.J. 1973. How to motivate patients.  
J. Dent. Res.(special issue) 52: 399.

- Begue, W.J., Bard, R.C., and Koehne, G.W. 1966. Microbial inhibition by erythrosin. J. Dent. Res. 45: 1464-1467.
- Bellini, H.T., Anerud, A., and Moustafa, M.H. 1974. Disclosing wafers in oral hygiene instruction program. Odontol. Rev. 25: 247-254.
- Block, P.L., Lobene, R.R., and Derdivanis, J.P. 1972. A two-tone dye test for dental plaque. J. Periodontol. 43: 423-426.
- Borcelleca, J.F., Capen, C.C., and Hallagan, J.B. 1987. Lifetime toxicity /carcinogenicity study of FD&C red #3(erythrosine) in rats. Fd. Chem. Toxic. 25(10): 723-733.
- \_\_\_\_\_, and Hallagan, J.B. 1987. Lifetime toxicity/carcinogenicity study of FD&C red #3(erythrosine) in mice. Fd. Chem. Toxic. 25(10):735-737.
- Branen, A.L., Davidson, P.M., and Saliminen, S. 1990. Food additives. New York: Marcel Dekker.
- Brantom, P.G., Stevenson, B.I., and Ingram, A.J. 1987. A three-generation reproduction study of Ponceau 4R in rat. Fd. Chem. Toxic. 25(12): 963-968.
- \_\_\_\_\_, Stevenson, B.I., and Wright, M.G. 1988. Long-term toxicity study of Ponceau 4R in rats using animals exposed in utero. Fd. Chem. Toxic. 25(12): 955-962.
- Butterworth, K.R., Gaunt, I.F., Grasso, P., and Gangolli, S.D. 1976. Acute and short-term toxicity study on erythrosine BS in rodents. Fd. Cosmet. Toxicol. 14:525-531.
- Caldwell, R.C., and Hunt, D.E. 1969. A comparison of the antimicrobial activity of disclosing agents. J. Dent. Res.

48: 913-915.

\_\_\_\_\_, Sandham, H.J., Man, W.V., Fin, S.B., and Fomicola, A.J.

1971. The effect of a dextranase mouthwash on plaque in young adults and children. J. Am. Dent. Assoc. 82: 124-131.

Cohen, D.W., et al. 1972. A comparison of bacterial plaque disclosants in periodontal disease. J. Periodontol. 43: 333-338.

Eaton, K.A., Kieser, J.B., and Baker, R. 1985. Assesment of plaque by image analysis. J. Clin. Periodontol. 12: 135-140.

Eaton, K.A., Kieser, J.B., and Davies, R.M. 1985. The removal of root surface deposits. J. Clin. Periodontol. 12: 141-152.

Finkelstiein, P., and Grossman, E. 1984. The clinical quantitative assessment of the mechanical cleaning efficiency of toothbrushes. Clin. Prev. Dent. 6: 7-12.

Fischman, S.L. 1986. Current status of indices of plaque. J. Clin. Periodontol. 13: 371-374.

Gallagher, I.H.C., Fussell, S.J., and Cutress, T.W. 1977. Mechanism of action of a two-tone plaque disclosing agent. J. Periodontol. 48: 395-396.

Gazi, M.I. 1988. Photographic assesment of the antiplaque properties of sanguinarine and chlohexidine. J. Clin. Periodontol. 15: 106-109.

Gibbons, R.J., and Houte, J.V. 1973. On the formation of dental plaque. J. Periodontol. 44: 347-360.

\_\_\_\_\_, and Houte, V.J. 1975. Bacterial adherence in oral microbial ecology. Ann. Rev. Microbiol. 29: 19-44.

- Gillings, B.R.D. 1977. Recent developments in dental plaque disclosants. Aust. Dent. J. 22(4): 260-266.
- Glavind, L., and Attstrom, R. 1979. Periodontal self-examination a motivational tool in periodontics. J. Clin. Periodontol. 6: 238-251.
- Goldman, R.S., Abelson, D.C., Mandel, I.D., and Chilton, N.W. 1974. The effect of various disclosants on plaque accumulation in human subjects. J. Periodontal. Res. 9: 381-385.
- Hansen, W.H., Davis, K.J., Graham, S.L., Perry, C.H., and Jacobson, K.H. 1973. Long-term toxicity studies of erythrosine. II. Effects on haematology and thyroxine and protein-bound iodine in rats. Fd. Cosmet. Toxicol. 11: 535-545.
- Hansen, W.H., Zwickey, R.E., Brouwer, J.B., and Fitzhugh, O.G. 1973. Long-term toxicity studies of erythrosine. I. Effects in rats and dogs. Fd. Cosmet. Toxicol. 11: 527-534.
- Hefferren, J.J., Cooley, R.O., Hall, J.B., Oisen, N.H., and Lyon, H.W. 1971. Use of ultraviolet illumination in oral diagnosis. J. Am. Dent. Assoc. 82: 1353-1360.
- Hiasa, Y., et al. 1988. The promoting effects of food dyes, erythrosine(red 3) and rose bengal B(red 105), on thyroid tumors in partially thyroidectomized N-Bis(2-hydroxypropyl) nitrosamine-treated rats. Jpn. J. cancer Res.(Gann). 79: 314-319.
- Joint FAO/WHO Expert Committee on Food Additives. 1975. Toxicological Evaluation of Some Food Colours, Enzymes and Flavour Enhancers, Thickening Agents and Certain Food Additives. Tech. Rep. Ser. Wld Hlth Org. 80-88, 109-112.

- Jones, B.E. 1984. Presentation of medicines. Pharm. J. 28: 117.
- Joseph, E.K. 1951. Staining of the teeth by para-aminosalicylic acid. Br. Dent. J. 6: 241-242.
- Kieser, J.B., and Wade, A.B. 1976. Use of food colourants as plaque disclosing agents. J. Clin. Periodontol. 3: 200-207.
- Lang, N.P., Ostergaard, E., and Loe, H. 1972. A fluorescent plaque disclosing agent. J. Periodontol. Res. 7: 59-67.
- Lange, D.E. 1988. The practical approach to improve oral hygiene. Int. Dent. J. 38: 154-162.
- Leknes, K.N., and Lie, T. 1988. Erythrosin staining in clinical disclosure of plaque. Quintessence Int. 19: 199-204.
- Lindhe, J. 1933. Textbook of Clinical Periodontology. 2nd ed. Copenhagen.
- Listgarten, M.A. 1994. The structure of dental plaque. Periodontology 2000. 52-68.
- Loe, H. 1967. The gingival index, the plaque index and the retention index systems. J. Periodontol. 38: 610-616.
- Loe, H., Theilade, E., and Jensen, S.B. 1965. Experimental gingivitis in man. J. Periodontol. 136: 177-187.
- Loesche, W., and Green, E. 1972. Comparison of various plaque parameters in individual with poor oral hygiene. J. Periodontal. Res. 7: 173-179.
- Mandel, I.D. 1974. Indices for measurement of soft accumulations in clinical studies of oral hygiene and periodontal disease. J. Periodontal. Res. 14: 7-30.
- Manly, R.S. 1943. A structureless recurrent deposit on teeth. J. Dent. Res. 22: 479-486.



- Marsh, P.D., et al. 1989. Antibacterial activity of some plaque disclosing agents and dyes. Caries Res. 23: 348-350.
- O'Brien, W.J., and Fanian, F. 1984. Use of a dual filter-mirror device with a fluorescent plaque disclosant. Clin. Prev. Dent. 6: 13-16.
- Pilot, T. 1968. A reproducible method of evaluating oral hygiene. J. Periodontal. Res. 2: 121-128.
- Quigley, G., and Hein, J. 1962. Comparative cleansing efficacy of manual and power brushing. J. Am. Dent. Assoc. 65: 26-29.
- Ramjford, S.P. 1959. Indices for prevalence and incidence of periodontal disease. J. Periodontol. 30: 51-59.
- Reynolds, J.E.F., ed. 1989. Martindale The Extra Pharmacopoeia. 29<sup>th</sup> ed. London: The Pharmaceutical Press.
- Ruiz, M., and Ingbar, S.H. 1982. Effect of erythrosine (2',4',5',7'-tetraiodofluorescein) on the metabolism of thyroxine in rat liver. Endocrinology. 110 (5): 1613-1617.
- Scheie, A.A. 1994. Mechanism of dental plaque formation. Adv. dent. res. 8 (2): 246-253.
- Shick, R.A. and Ash, M.M. 1961. Evaluation of the vertical method of toothbrushing. J. Periodontol. 32: 346-353.
- Stallard, R.D., Volpe, A.R., Orban, J.E. and King, W.J. 1969. The effect of an antimicrobial mouth rinse on dental plaque, calculus and gingivitis. J. Periodontol. 40: 683.
- Theilade, E., and Theilade, J. 1970. Bacteriological and ultrastructural studies of developing dental plaque. Dental Plaque. McHugh, W.D., ed. Edinburge.

Turesky, S., Gilmore, N.D., and Glickman, I. 1970. Reduced plaque formation by the chloromethyl analogue of Vitamin C.

J. Periodontol. 41: 41-43.

Van de Rijke, J.W. 1991. Use of dye in cariology. Int. Dent. J.

41: 111-116.

Volpe, A.R., Kupczak, L.J., Brant, J.H., King, W.J., Kestenbaum, R.C.,

Schlissel, H.J. 1969. Antimicrobial control of bacterial plaque and calculus and the effect of these agents on oral

flora. J. Dent. Res. 48: 832.

Yankell, S.L., and Loux, J.J. 1977. Acute toxicity testing of erythrosine and sodium fluorescein in mice and rats.

J. Periodontol. 48: 228-231.



ภาคผนวก



## แสดงข้อมูลทางสถิติของ Pearson Moment Correlation

P<sub>1</sub>

Correlations:	PRE	POST
PRE	1.0000 ( 160) P= .	.9773 ( 160) P= .000
POST	.9773 ( 160) P= .000	1.0000 ( 160) P= .

(Coefficient / (Cases) / 2-tailed Significance)

P<sub>2</sub>

Correlations:	PRE	POST
PRE	1.0000 ( 160) P= .	.9689 ( 160) P= .000
POST	.9689 ( 160) P= .000	1.0000 ( 160) P= .

(Coefficient / (Cases) / 2-tailed Significance)

E

Correlations:	PRE	POST
PRE	1.0000 ( 160) P= .	.9654 ( 160) P= .000
POST	.9654 ( 160) P= .000	1.0000 ( 160) P= .

(Coefficient / (Cases) / 2-tailed Significance)

## แสดงข้อมูลทางสถิติของดัชนีความรุนแรง

	PLP1	PLP2	PLE
N OF CASES	160	160	160
MINIMUM	1.000	1.000	1.000
MAXIMUM	5.000	5.000	5.000
RANGE	4.000	4.000	4.000
MEAN	3.119	3.156	3.188
VARIANCE	1.464	1.504	1.638
STANDARD DEV	1.210	1.226	1.280
STD. ERROR	0.096	0.097	0.101
SKEWNESS (G1)	0.199	0.131	0.116
KURTOSIS (G2)	-1.166	-1.175	-1.324
SUM	499.000	505.000	510.000
C.V.	0.388	0.389	0.401

PAIRED SAMPLES T-TEST ON PLP1 VS PLP2 WITH 160 CASES

MEAN DIFFERENCE = -0.038  
 SD DIFFERENCE = 0.513  
 T = -0.925 DF = 159 PROB = 0.356

PAIRED SAMPLES T-TEST ON PLP1 VS PLE WITH 160 CASES

MEAN DIFFERENCE = -0.069  
 SD DIFFERENCE = 0.515  
 T = -1.687 DF = 159 PROB = 0.094

PAIRED SAMPLES T-TEST ON PLP2 VS PLE WITH 160 CASES

MEAN DIFFERENCE = -0.031  
 SD DIFFERENCE = 0.587  
 T = -0.673 DF = 159 PROB = 0.502

แสดงข้อมูลทางสถิติของร้อยละพื้นที่ที่ติดสึกราบจุลินทรีย์

	P1	P2	E
N OF CASES	160	160	160
MINIMUM	2.250	2.250	2.350
MAXIMUM	87.400	89.500	86.900
RANGE	85.150	87.250	84.550
MEAN	35.698	36.800	35.595
VARIANCE	518.569	516.507	478.370
STANDARD DEV	22.772	22.727	21.872
STD. ERROR	1.800	1.797	1.729
SKEWNESS (G1)	0.565	0.518	0.531
KURTOSIS (G2)	-0.793	-0.844	-0.632
SUM	5711.700	5887.950	5695.150
C.V.	0.638	0.618	0.614

PAIRED SAMPLES T-TEST ON P1 VS P2 WITH 160 CASES

MEAN DIFFERENCE = -1.102  
 SD DIFFERENCE = 8.575  
 T = -1.625 DF = 159 PROB = 0.106

PAIRED SAMPLES T-TEST ON P2 VS E WITH 160 CASES

MEAN DIFFERENCE = 1.205  
 SD DIFFERENCE = 8.122  
 T = 1.877 DF = 159 PROB = 0.062

PAIRED SAMPLES T-TEST ON P1 VS E WITH 160 CASES

MEAN DIFFERENCE = 0.103  
 SD DIFFERENCE = 10.216  
 T = 0.128 DF = 159 PROB = 0.898

## แสดงข้อมูลทางสถิติของเวลาในการจางหายไปของสี

	TP1	TP2	TE
N OF CASES	20	20	20
MINIMUM	10.000	8.000	120.000
MAXIMUM	38.000	34.000	120.000
RANGE	28.000	26.000	0.000
MEAN	20.700	20.750	120.000
VARIANCE	47.484	41.987	0.000
STANDARD DEV	6.891	6.480	0.000
STD. ERROR	1.541	1.449	0.000
SKEWNESS (G1)	0.661	0.469	0.000
KURTOSIS (G2)	0.268	-0.063	0.000
SUM	414.000	415.000	2400.000
C.V.	0.333	0.312	0.000

PAIRED SAMPLES T-TEST ON TP1 VS TP2 WITH 20 CASES

MEAN DIFFERENCE = -0.050  
 SD DIFFERENCE = 5.083  
 T = -0.044 DF = 19 PROB = 0.965

PAIRED SAMPLES T-TEST ON TP1 VS TE WITH 20 CASES

MEAN DIFFERENCE = -99.300  
 SD DIFFERENCE = 6.891  
 T = -64.445 DF = 19 PROB = 0.000

PAIRED SAMPLES T-TEST ON TP2 VS TE WITH 20 CASES

MEAN DIFFERENCE = -99.250  
 SD DIFFERENCE = 6.480  
 T = -68.500 DF = 19 PROB = 0.000

## ประวัติผู้เขียน

นางสาว เกศสุดา เงินประเสริฐศิริ เกิดวันที่ 26 เมษายน พ.ศ. 2509  
ที่จังหวัดกาญจนบุรี สำเร็จการศึกษาทันตแพทยศาสตรบัณฑิต จากคณะทันตแพทยศาสตร์  
จุฬาลงกรณ์มหาวิทยาลัย ในปีการศึกษา 2532 ได้เข้าศึกษาต่อในหลักสูตรวิทยาศาสตรมหาบัณฑิต  
สาขาวิชา ปรัชญาบัณฑิต ภาควิชา ปรัชญาบัณฑิตวิทยาลัย จุฬาลงกรณ์มหาวิทยาลัย  
ในปีการศึกษา 2536 ปัจจุบันรับราชการในตำแหน่งทันตแพทย์ 5 กลุ่มงานทันตกรรม  
โรงพยาบาลพลพลพยุหเสนา จังหวัดกาญจนบุรี