



Good Morning

INDICIES USED IN DENTAL EPIDEMIOLOGY



DEFINITION

📖 **RUSSEL A.L:** “Numerical value describing the relative status of a population on a graduated scale with definite upper and lower limits, which is designed to permit and facilitate comparison with other populations classified by the same criteria and methods”



OBJECTIVES

- 📖 To increase understanding of the disease process
- 📖 To discover population at high and low risk and to define the specific problem under investigation



IDEAL REQUISITES

- 📖 Clarity, simplicity and objectivity
- 📖 Validity
- 📖 Reliability
- 📖 Quantifiability
- 📖 Sensitivity
- 📖 Acceptability



CRITERIA FOR SELECTING AN INDEX

- 📖 Simple to use & calculate.
- 📖 Should permit the examination of many people in a short period of time.
- 📖 Should require minimum armamentarium & expenditure.
- 📖 Should be as free as possible from subjective interpretation.
- 📖 Should be highly reproducible.
- 📖 Should be amenable to statistical analysis; have validity, reproducibility.
- 📖 Should not cause discomfort to patient.



PURPOSES AND USES OF AN INDEX

For individual patient:

- provide individual assessment to help a patient recognize an oral problem
- Reveal the degree of effectiveness of present oral hygiene practices
- Motivate the individual
- Evaluate the success of individual & professional treatment
- Provide a means for personal assessment

In Research:

- Determine baseline data before experimental factors are introduced





In Research:

- Measure the effectiveness of specific agents for the prevention, control or treatment of oral condition
- Measure the effectiveness of mechanical devices for personal care



In Community health:

- Show the prevalence and trends of incidence of a particular condition
- Provide baseline data to show existing dental health practices
- Assess the needs of a community
- Compare the effects of a community program and evaluate the results



CLASSIFICATION OF INDICES

Based on the **direction** in which the scores can fluctuate:

📖 Irreversible Index:

- Index that measures conditions that will not change
eg: Dental caries index

📖 Reversible Index:

- Index that measures conditions that can be changed
eg: PDL indices

Depending on the **extent** to which areas of oral cavity are measured

📖 Full Mouth Indices:

- Indices measure the patient's entire periodontium or dentition. Eg: Russel's Periodontal Index (PI)



Simplified Indices:

- Indices measure only a representative sample of the dental apparatus. Eg: Green & Vermilion's (OHIS)

According to the entity which they measure like:

- Disease index
- Symptom index
- Treatment index

Indices under special Categories :

Simple index:

- that measures the presence or absence of a condition

Cumulative index:

- that measures all the evidence of a condition, past & present



INDICES USED FOR ORAL HYGIENE ASSESSEMENT

📖 ORAL HYGIENE INDEX:

Green and Vermillion 1960.

📖 SIMPLIFIED ORAL HYGIENE INDEX:

Green and Vermillion 1964.

📖 PATIENT HYGIENE PERFORMANCE INDEX:

Podshadley and Haley 1968.



INDICES USED FOR ORAL HYGIENE ASSESSEMENT

📁 ORAL HYGIENE INDEX (OHI):

John C. Greene and Jack R. Vermillion (1960)

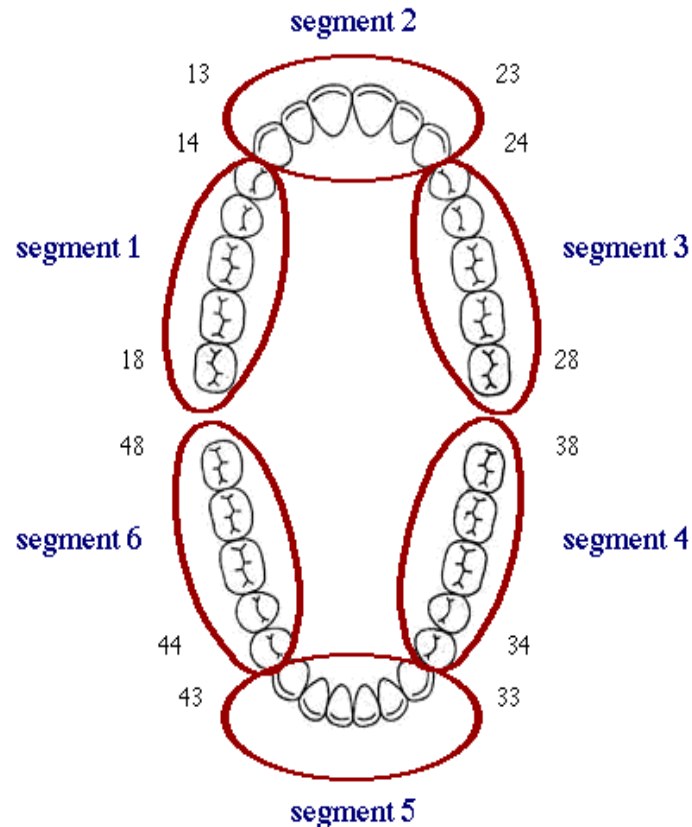
- “ Sensitive, simple method for assessing group or individual oral hygiene quantitatively”
- requires the user to make more decisions, spend more time

📁 Methodology:

Oral Hygiene Index

Debris Index

Calculus index



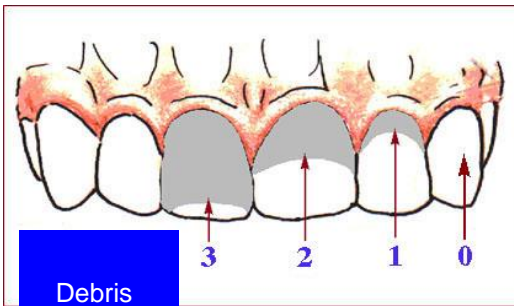
ORAL HYGIENE INDEX (OHI):



RULES:

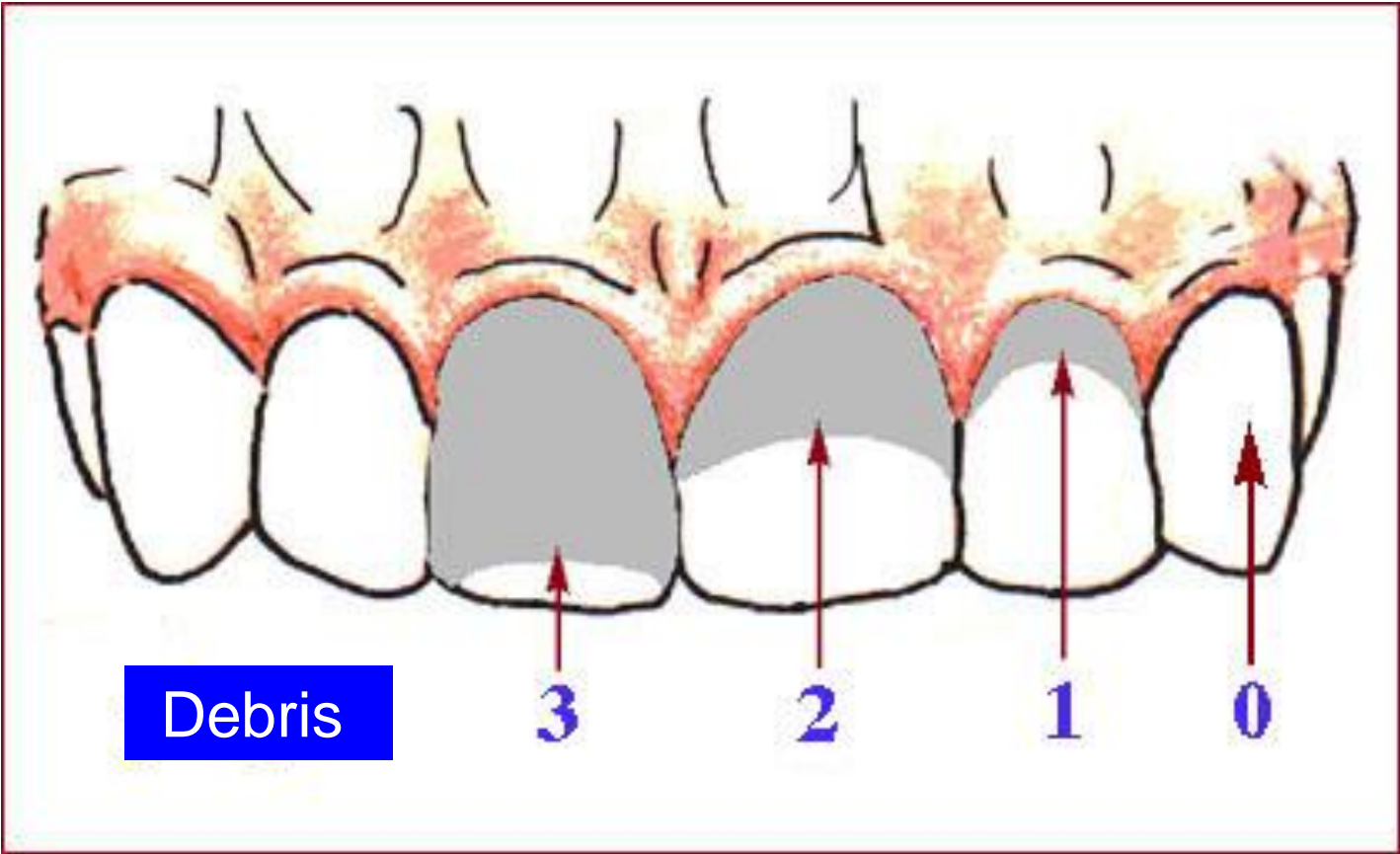
- Fully erupted permanent teeth.
- Third molars and incompletely erupted teeth are not scored.
- The buccal & Lingual debris scores are both taken on the tooth in a segment having the greatest surface area covered by debris.
- The buccal & Lingual calculus scores are both taken on the tooth in a segment having the greatest surface area covered by calculus.





Debris Index

Score	Criteria
0	No debris or stain present
1	Soft debris covering not more than one third of the tooth surface, or presence of extrinsic stains without other debris regardless of surface area covered
2	Soft debris covering more than one third, but not more than two thirds, of the exposed tooth surface.
3	Soft debris covering more than two thirds of the exposed tooth surface.



Oral Hygiene Index - Greene and Vermillion, 1960

Calculus Index

Scores	Criteria
0	No calculus present
1	Supragingival calculus covering not more than third of the exposed tooth surface.
2	Supragingival calculus covering more than one third but not more than two thirds of the exposed tooth surface or the presence of individual flecks of subgingival calculus around the cervical portion of the tooth or both.
3	Supragingival calculus covering more than two third of the exposed tooth surface or a continuous heavy band of subgingival calculus around the cervical portion of the tooth or both.



ORAL HYGIENE INDEX (OHI):

📖 **Debris Index** = (The total of the upper and lower buccal-scores) + (The total of the upper and lower lingual-scores) / (The number of segments scored).

📖 **Calculus Index** = (The total of the upper and lower buccal-scores) + (The total of the upper and lower lingual-scores) / (The number of segments scored).

📖 **OHI = DI + CI**



A vertical green leafy branch is positioned on the right side of the slide, extending from the top to the bottom. The leaves are small, oval-shaped, and densely packed along a thin stem.

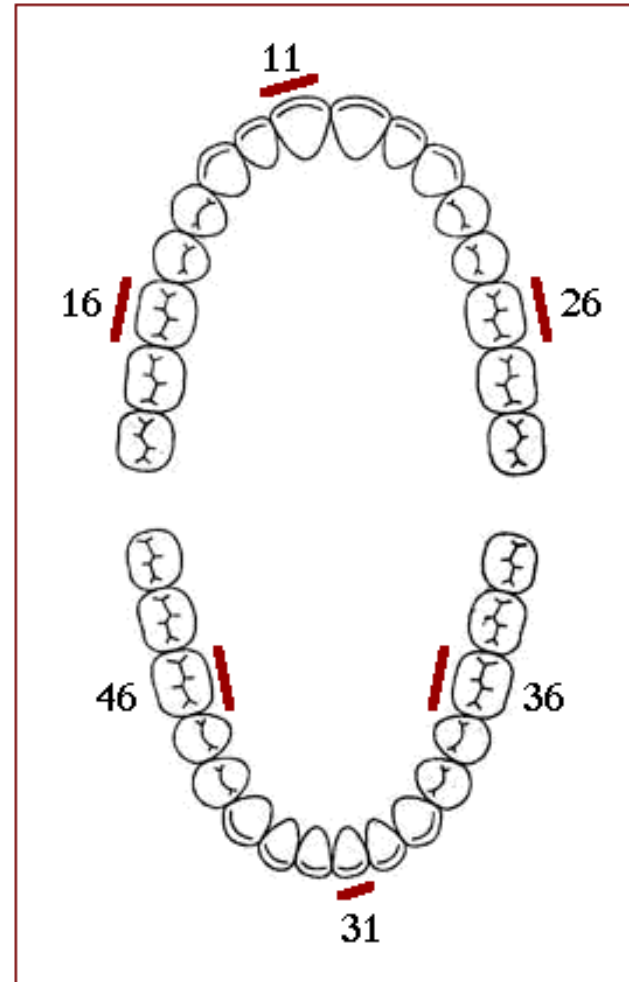
 Simplified oral hygiene index (OHI – S)

John C. Greene and Jack R. Vermillion (1964)

Simplified oral hygiene index (OHI – S)

- Simplified Debris index(DI-S)
- Simplified Calculus index (CI-S)

Selection of tooth surfaces:



Simplified oral hygiene index (OHI – S)

Debris Index – Simplified (DI – S):

'0' – No debris or stains present.

'1' – Soft debris covering not more than 1/3rd of the tooth surface being examined or the presence of extrinsic stains without debris regardless of surface area covered.

'2' – Soft debris covering more than 1/3rd but not more than 2/3rd of the exposed tooth surface.

'3' – Soft debris covering more than 2/3rds of the exposed tooth surface.



Calculus Index-Simplified (CI – S):

'0'- No Calculus present.

'1'- Supragingival calculus covering not more than $1/3^{\text{rd}}$ of the exposed tooth surface being examined.

'2'- Supragingival Calculus covering more than $1/3^{\text{rd}}$ but not more than $2/3^{\text{rd}}$ or the presence of individual flecks of subgingival calculus around the cervical portion of the tooth.

'3'- Supragingival Calculus covering more than $2/3^{\text{rds}}$ or a continuous heavy band of subgingival calculus around the cervical portion of the tooth.



📖 Calculation of the index:

$$DI-S = \frac{\text{Total score}}{\text{Number of surfaces scored}}$$

$$CI-S = \frac{\text{Total score}}{\text{Number of surfaces scored}}$$

DI & CI-S Value ranges

from 0 to 3.

Good – 0.0 to 0.6

Fair – 0.7 to 1.8

Poor – 1.9 to 3.0

$$OHI-S = DI-S + CI-S$$

OHI-S Value ranges from 0 to 6.

Good – 0.0 to 1.2

Fair – 1.3 to 3.0

Poor – 3.1 to 6.0





USES :

- Studies of the Epidemiology of periodontal diseases.
- In Evaluation of dental health education programmes in public school systems.
- Evaluating the cleansing efficiency of tooth brushes.
- To evaluate an individual's level of oral cleanliness and, to a more limited extent in clinical trials.
- Easy to use, quick, and a high level of reproducibility is possible.



II. INDICES USED TO MEASURE PLAQUE & DEBRIS

- 📖 Plaque Index (PI): Silness and Loe 1964
- 📖 Turskey – Gilmore – Glickman modification of the Quigley – Hein Plaque Index : 1970
- 📖 Shick & Ash modification of plaque criteria: 1961
- 📖 Navy Plaque Index (NPI) : Grossman 1970
- 📖 Glass Index : Glass 1965



PLAQUE INDEX (PI)

SILNESS P. & LOE H. (1964, 1967)

- Assesses only the thickness of plaque at the gingival area of the tooth

❖ Method :

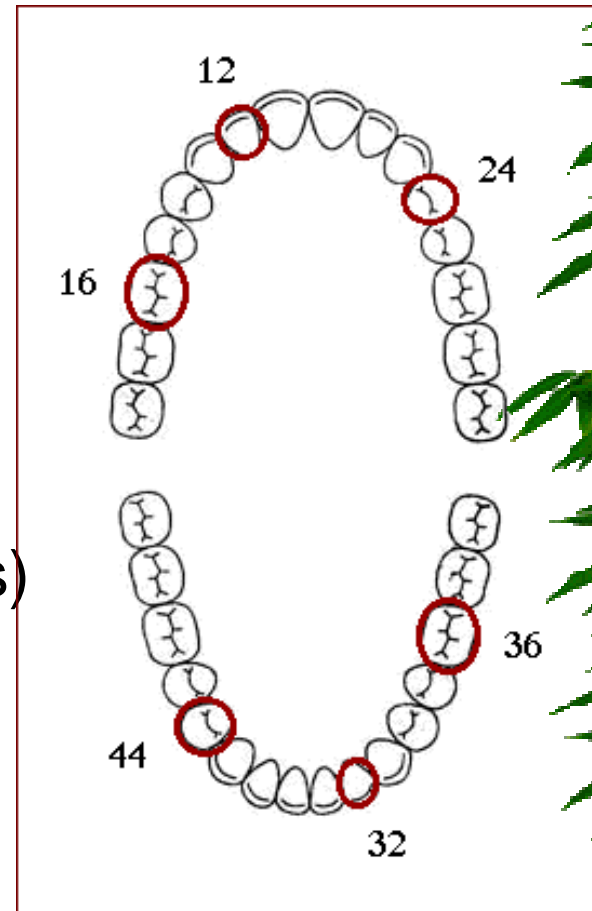
- Whole mouth basis
- Selected mouth basis (Six teeth)

16, 12, 24, 36, 32, 44

Surfaces examined: (Gingival areas)

- Distal-facial, Facial

Mesial-facial & Lingual surface

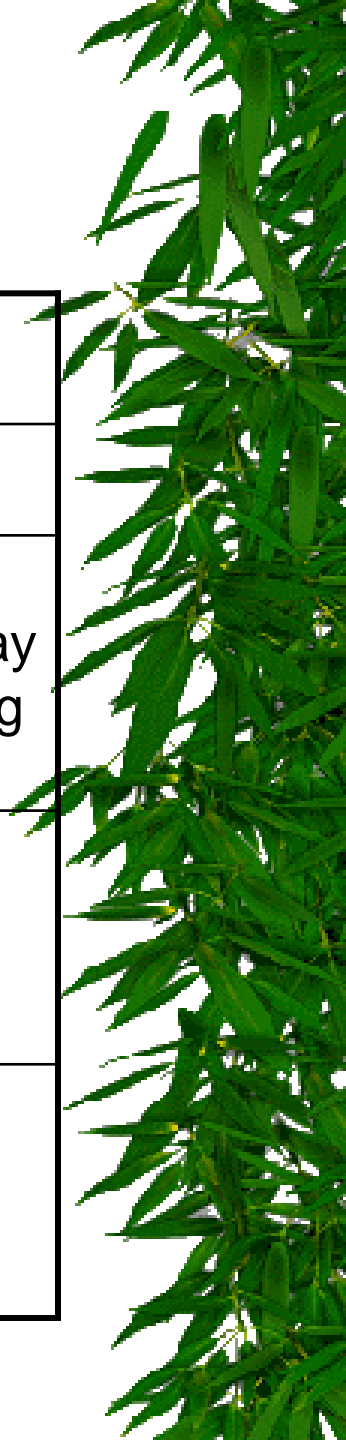


PLAQUE INDEX (PI)

SILNESS P. & LOE H. (1964, 1967)

📖 Scoring criteria: (Sillness & Loe 1964)

SCORE	CRITERIA
0	No Plaque
1	A film of plaque adhering to the free gingival margin & adjacent area of tooth. The plaque may be seen insitu only after application of disclosing solution or by using probe on tooth surface
2	Moderate accumulation of soft deposits within the gingival pocket, or the tooth & gingival margin which can be seen with the naked eye
3	Abundance of soft matter within the gingival pocket &/or on the tooth & gingival margin



MODIFICATION OF PLAQUE INDEX

LOE 1967

- Entire dentition is examined instead of six teeth
- Starts with upper right second molar & continues over the midline to the upper left second molar
 - Right side teeth – distal, buccal (labial), & mesial
 - Left side teeth – mesial, buccal (labial), & distal
- For the lower arch** – lower left second molar through to the right second molar
 - Left side teeth – distal, buccal (labial), & mesial
 - Right side teeth – mesial, buccal (labial), & distal
 - All lingual surfaces are scored beginning with left second molar

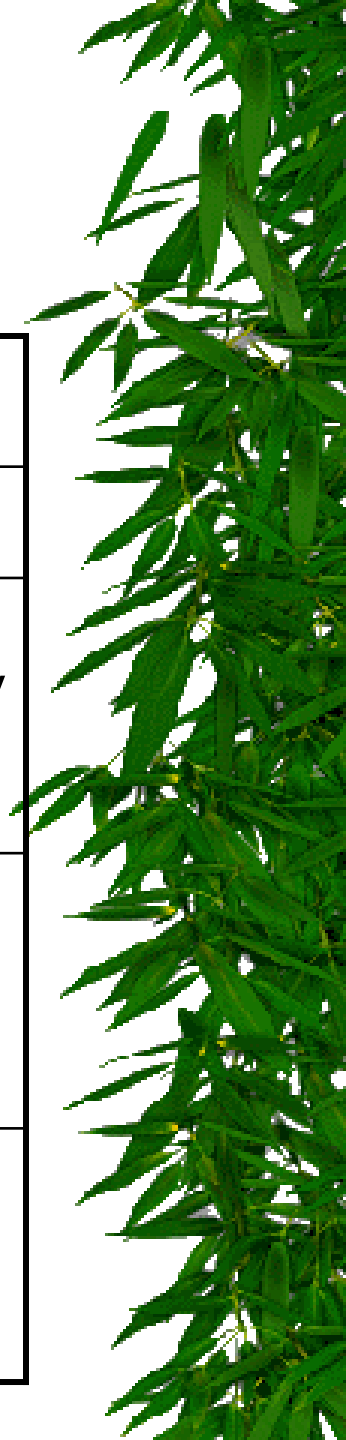


MODIFIED PLAQUE INDEX (PI)

LOE H. 1967

Scoring Criteria

SCORE	CRITERIA
0	No Plaque
1	A film of plaque adhering to the free gingival margin & adjacent area of tooth. The plaque may be recognized only by running a probe across tooth surface
2	Moderate accumulation of soft deposits within the gingival pocket, on the gingival margin &/or the adjacent tooth surface, which can be seen with the naked eye
3	Abundance of soft matter within the gingival pocket &/or on the tooth & gingival margin



MODIFIED PLAQUE INDEX (PI)

LOE H. 1967



Calculation of plaque index:

Plaque index for area:

- Each area (distal-facial, facial, mesial-facial, lingual) is assigned a score from 0-3

Plaque index for a tooth:

- Scores from the four areas of the tooth are added and then divided by four

Plaque index for group of teeth:

- Scores for individual teeth may be grouped & totalled and divided by the number of teeth

Plaque index for the individual:

- Indices for each of the teeth are added & then divided by the total number of teeth examined

Plaque index for a group:

- Indices for each member of a group or population is added up & then divided by the total number of individuals in the group or population



MODIFIED PLAQUE INDEX (PI)

LOE H. 1967

📄 Nominal scale for patient evaluation:

RATING	SCORES
EXCELLENT	0
GOOD	0.1 – 0.9
FAIR	1.0 – 1.9
POOR	2.0 – 3.0



TURSKY – GILMORE – GLICKMAN MODIFICATION OF THE QUIGLEY – HEIN PLAQUE INDEX

QUIGLEY G. & HEIN J. (1962)

- Gingival third of facial surfaces of anterior teeth
- Basic Fuschin
- Scoring (0 – 5)

Turskey S., Gilmore N.D. & Glickman I. (1970)

- Labial, Buccal & Lingual surfaces
- Redefined the scores, estimate the area of tooth covered by plaque



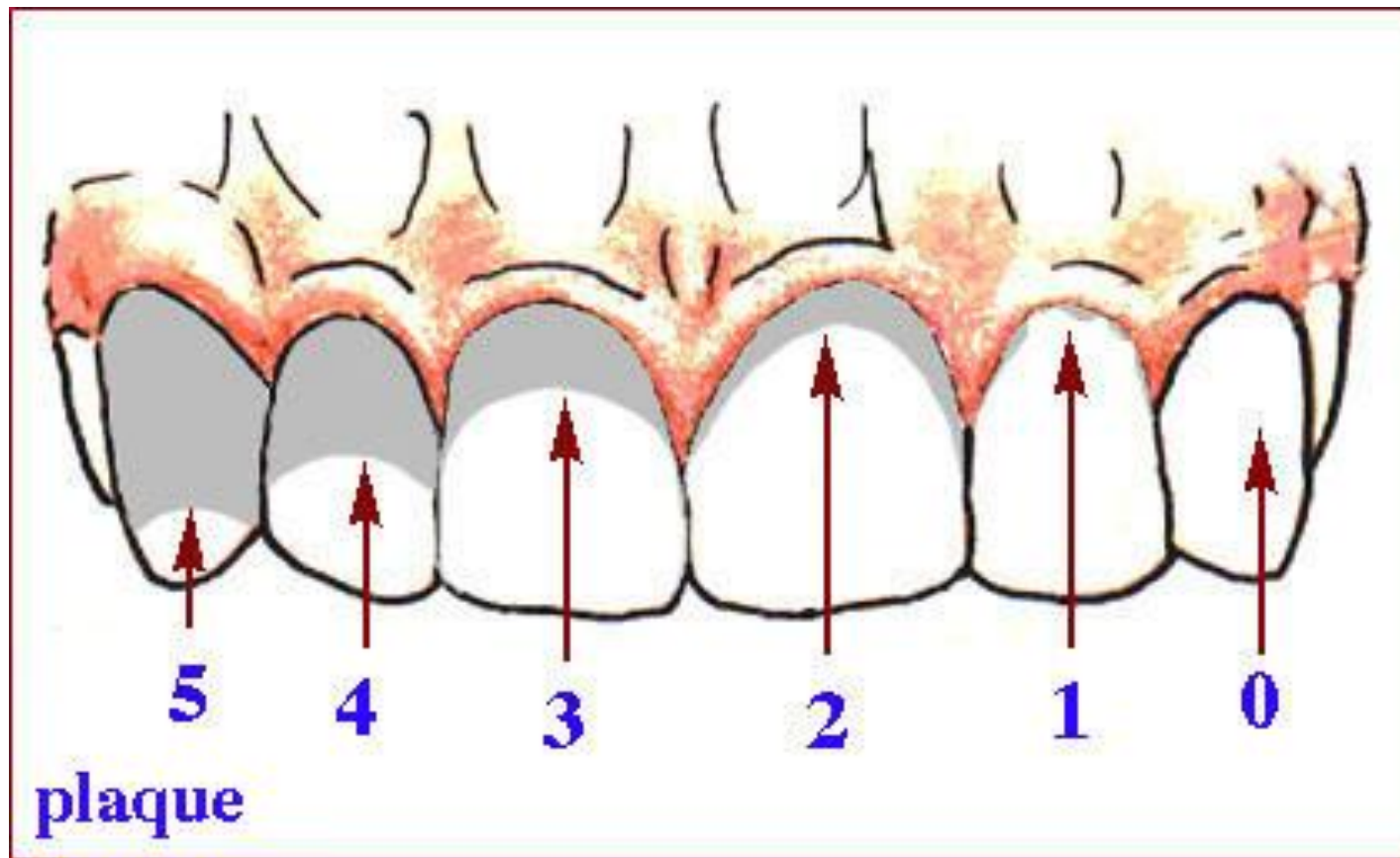
TURSKEY – GILMORE – GLICKMAN MODIFICATION OF THE QUIGLEY – HEIN PLAQUE INDEX

📄 Scoring Criteria:

SCORE	CRITERIA
0	No Plaque
1	Separate flecks of plaque at the cervical margin
2	A thin continuous band of plaque (upto 1 mm) at the cervical margin
3	A band of plaque wider than 1 mm but covering less than 1/3 rd of the crown
4	Plaque covering at least 1/3 rd but less than 2/3 rd s of the crown
5	Plaque covering 2/3 rd s or more of the crown surface



TURSKY – GILMORE – GLICKMAN MODIFICATION OF THE QUIGLEY – HEIN PLAQUE INDEX



TURSKEY – GILMORE – GLICKMAN MODIFICATION OF THE QUIGLEY – HEIN PLAQUE INDEX

📖 Calculation:

Index = Total score / The No. of surfaces examined



INDICES USED FOR ASSESSMENT OF CALCULUS

📖 CALCULUS SURFACE INDEX (CSI) :

Ennever 1961.

📖 CALCULUS SURFACE SEVERITY INDEX (CSSI):

Ennever 1961.

📖 MARGINAL LINE CALCULUS INDEX (MLCI):

Muhlemann 1967.

📖 VOLPE-MANHOLD INDEX (VMI):

Volpe Manhold 1962.



MARGINAL LINE CALCULUS INDEX (MLCI)

Muhlemann H.R. & Villa P. (1967)

- 📖 To assess the accumulation of supragingival calculus on the gingival 3rd of the tooth.
- 📖 Cervical areas on the lingual surfaces of mandibular incisors.
- 📖 Lingual surface is divided into : Distal half & Mesial half.
- 📖 Score: 0%, 12.5%, 25%, 75%, 100%.
- 📖 Score per tooth is determined by averaging the two units for each tooth.
- 📖 MLCI per person is determined by totaling the scores per tooth & dividing by the number of teeth examined.



INDICES USED FOR ASSESSMENT OF GINGIVAL DISEASES

I. INDICES USED TO ASSESS GINGIVAL INFLAMMATION

- 📖 Papillary – Marginal – Attachment index (PMA):
Massler and Schour 1944.
- 📖 Papillary – Marginal index: Muhlemann 1958.
- 📖 Gingival index: Loe and Silness 1963.
- 📖 Modified gingival index : Lobene 1986.

II. INDICES USED FOR ASSESSMENT OF GINGIVAL BLEEDING

- 📖 Sulcus bleeding index (SBI): Muhlemann 1971
- 📖 Papillary bleeding index (PBI): Muhlemann 1977
- 📖 Gingival bleeding index (GBI)
- 📖 Modified sulcular bleeding index (mSBI)
- 📖 Eastman interdental bleeding index (EIBI)



INDICES USED TO ASSESS GINGIVAL INFLAMMATION

📖 Papillary – Marginal – Attachment index (PMA INDEX)

Maury Massler & Schour I. (1944)

A gingival unit was divided into three components

: **Papillary Gingivae (P)** – the gingival portion b/n teeth

: **Marginal Gingivae (M)** – the marginal collar surrounding the teeth

: **Attached Gingivae (A)** – the gingival portion overlying the bony alveolar process

P – Involvement of the papillary gingiva & its severity expressed in scores from 0 – 5.

M – Involvement of the marginal gingiva & its severity expressed in scores from 0 – 5.

A – Involvement of the attached gingiva & its severity to 3.



Papillary – Marginal – Attachment index (PMA INDEX)

📖 Scoring criteria:

'P' 0 - Normal; no inflammation

1+ - Mild papillary engorgement; slight ↑ in size

2+ - Obvious ↑ in size of papilla; bleeding on pressure

3+ - Excessive ↑ in size with spontaneous bleeding

4+ - Necrotic papilla

5+ - Atrophy & loss of papilla

'M' 0 - Normal; no inflammation visible

1+ - Engorgement; slight ↑ in size; no bleeding

2+ - Obvious engorgement; bleeding on pressure

3+ - Swollen collar; spontaneous bleeding; beginning
infiltration into attached gingiva

4+ - Necrotic gingivitis

5+ - Recession of the free gingival margin below CEJ



Papillary – Marginal – Attachment index (PMA INDEX)

- 'A' 0 - Normal; pale rose, stippled
- 1+ - Slight engorgement with loss of stippling; change of color may or may not be present
- 2+ - Obvious engorgement of attached gingivae with marked ↑ in redness. Pocket formation present.
- 3+ - Advanced periodontitis. Deep pockets evident



Calculation of the index:

- No. of affected papillary, marginal & attached units are counted & the P, M & A numerical values are totaled separately, then added together and expressed as PMA index score per person.



GINGIVAL INDEX

Loe H & Silness J. 1963

📖 Examines only the qualitative changes (severity of the lesion)

📖 Method : Teeth and Gingiva dried by cotton.

Teeth selected : 16, 12, 24, 36, 32, 44

Gingival scoring units: Distal-facial papilla, Facial margin, Mesial-facial papilla, Entire lingual gingival margin

Score	Criteria
0	Absence of inflammation/normal gingiva
1	Mild inflammation, slight change in color, slight edema; no bleeding on probing
2	Moderate inflammation; moderate glazing, redness, edema & hypertrophy. Bleeding
3	Severe inflammation; marked redness & hypertrophy ulceration. Spontaneous bleeding



Calculation of index:

Score per tooth = $\frac{\text{total score around each tooth}}{4}$

Score per person = $\frac{\text{score per tooth}}{\text{no. of teeth examined}}$



GINGIVAL INDEX

Loe H & Silness J. 1963



Calculation of the index:

Gingival scores	Condition
0.1-1.0	Mild gingivitis
1.1 – 2.0	Moderate gingivitis
2.1 – 3.0	Severe gingivitis



INDICES USED FOR MEASUREMENT OF PERIODONTAL DISEASES

- 📖 Periodontal Index (PI): Russell 1956.
- 📖 Periodontal Disease Index (PDI) : Ramfjord 1959.
- 📖 Gingival Periodontal Index (GPI): O'Leary 1963.
- 📖 Community Periodontal Index of Treatment Needs (CPITN):
Ainamo 1982.



PERIODONTAL INDEX (PI)

RUSSEL A.L. 1956

 Method :

- all of the gingival tissue circumscribing each tooth is considered a scoring or gingival unit.

- scoring criteria:

- 0, 1, 2, 6, 8 to relate the stages of the disease.





PERIODONTAL INDEX (PI) RUSSEL A.L. 1956

📖 Russel's rule: “ when in doubt assign the lower score”

📖 Calculation of the index:

$$\text{PI Score} = \frac{\text{Sum of individual scores}}{\text{No. of teeth present}}$$

- Drawbacks:

- underestimates the true level of PDL disease
- underestimates PDL pockets with obvious supragingival calculus

- USES:

- Epidemiologic surveys
- More data can be assembled
- Used in National Health Survey (NHS)



Group Periodontal Index (PI) Score and Clinical Manifestations:

Clinical condition	Group PI scores	Stage of disease
Clinically normal supportive tissues	0 to 0.2	
Simple gingivitis	0.3 to 0.9	
Beginning destructive periodontal disease	0.7 to 1.9	Reversible
Established destructive periodontal disease	1.6 to 5.0	Irreversible
Terminal disease	3.8 to 8.0	Irreversible

Individual Periodontal Index (PI) Score and Clinical Conditions:

Clinical condition	Individual PI scores
Clinically normal supportive tissues	0 to 0.2
Simple gingivitis	0.3 to 0.9
Beginning destructive periodontal disease	1.0 to 1.9
Established destructive periodontal disease	2.0 to 4.9
Terminal disease	5.0 to 8.0

PERIODONTAL DISEASE INDEX (PDI) SIGURD P. RAMFJORD 1959



Components of PDI:

1. Plaque component
2. Calculus component
3. Gingival & periodontal component



Scoring methods:

- 16, 21, 24, 36, 41, 44
- **Gingival status: Scored First after drying.**
 - Changes in color
 - Changes in form
 - Change in consistency
- **Crevicular measurements:**
 - University of Michigan No. '0' probe is used
 - Distance from free gingival margin to CEJ & the distance from free gingival margin to bottom of the gingival crevice



Score	Criteria
0	Absence of inflammation
1	Mild to moderate inflammatory changes not extending all around the tooth
2	Mild to moderate gingivitis extending all around the tooth
3	Severe gingivitis, characterized by marked redness, tendency to bleed and ulceration
4	Gingival crevice (mesial,distal,buccal,lingual) extending apically to CEJ but not more than 3 mm
5	Gingival crevice extending apically to CEJ 3-6 mm
6	Gingival crevice extending apically more than 6 mm from the CEJ



PERIODONTAL DISEASE INDEX (PDI)

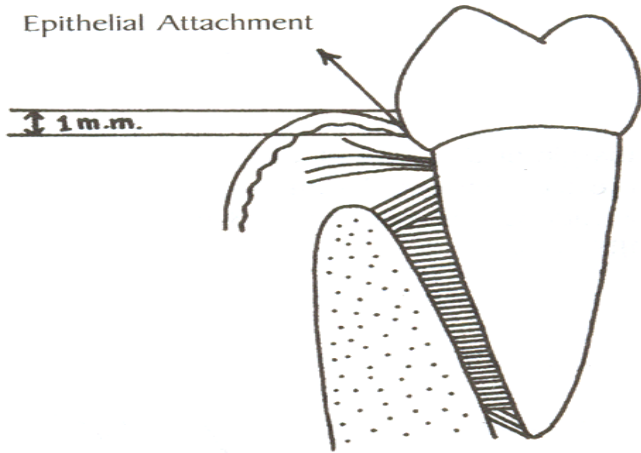
SIGURD P. RAMFJORD 1959

📄 Calculation of PDI score:

$$\text{PDI} = \frac{\text{Total of Individual Tooth Scores}}{\text{No. of Teeth Examined}}$$

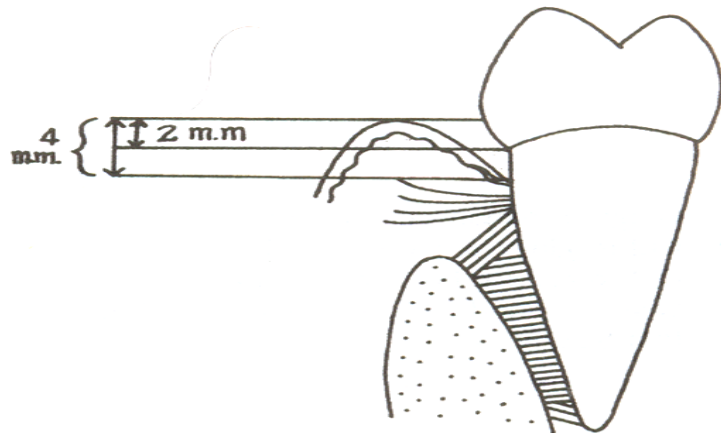
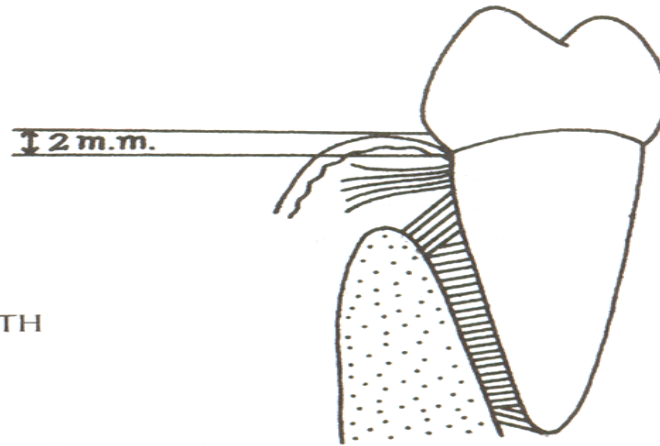


Periodontal Disease Index (PDI) Criteria For Survey



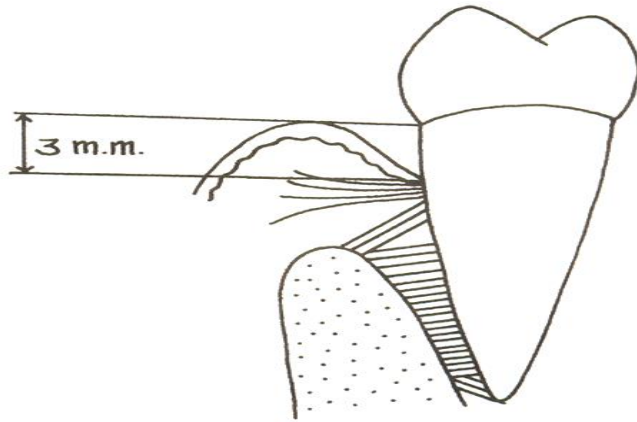
Gingival margin on the crown
 Gingival crevice depth = 1 mm
 No loss of periodontal attachment
 (Epithelial attachment on the crown)
PDI SCORE = GINGIVAL SCORE FOR THE TOOTH

Gingival margin on the crown
 No loss of periodontal attachment
 (Epithelial attachment at CEJ)
 Gingival margin to CEJ = 2 mm
PDI SCORE = GINGIVAL SCORE FOR THE TOOTH



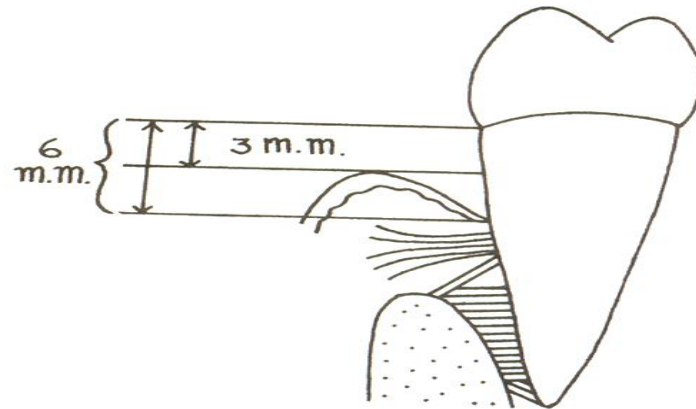
Gingival margin on the crown
 Gingival crevice depth = 4 mm
 Loss of periodontal attachment : $4 - 2 = 2$ mm
 Gingival margin to CEJ = 2 mm
PDI SCORE = 4



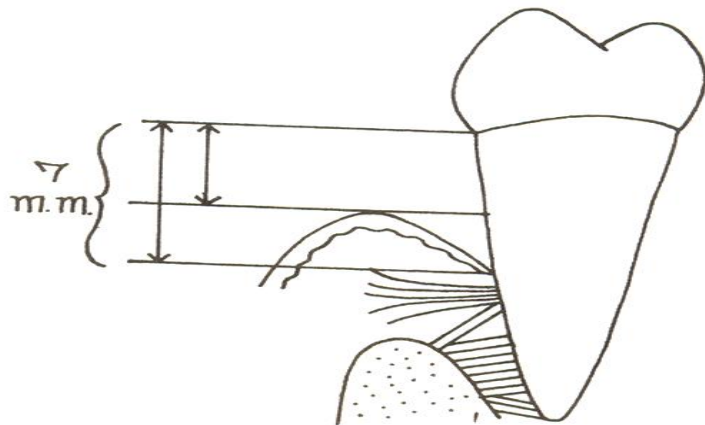


Gingival margin at the level of CEJ
 Gingival crevice depth = 3 mm
 Loss of periodontal attachment = 3 mm
 PDI SCORE = 4

Gingival margin on cementum
 CEJ to gingival margin = 3 mm
 CEJ to crevice bottom = 6 mm
 Loss of periodontal attachment = 6 mm
 PDI SCORE = 5



Gingival margin on cementum
 CEJ to gingival margin = 3 mm
 CEJ to crevice bottom = 7 mm
 Loss of periodontal attachment = 7 mm
 PDI SCORE = 6



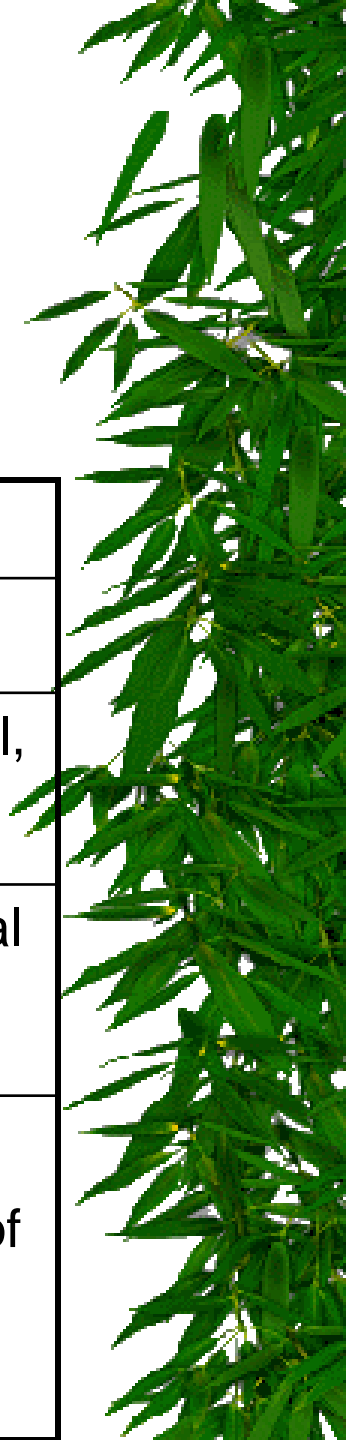
PERIODONTAL DISEASE INDEX (PDI) SIGURD P. RAMFJORD 1959



PLAQUE COMPONENT:

- 16, 21, 24, 36, 41, 44
- Facial, Lingual, Mesial, Distal
- Bismarck Brown Solution

Score	Criteria
'0'	No Plaque present
'1'	Plaque present on some but not on all interproximal, buccal, and lingual surfaces of the tooth
'2'	Plaque present on all interproximal, buccal & lingual surfaces, but covering less than one half of these surfaces
'3'	Plaque extending over all interproximal, buccal & lingual surfaces, and covering more than one half of these surfaces



PERIODONTAL DISEASE INDEX (PDI) SIGURD P. RAMFJORD 1959

📄 PLAQUE COMPONENT:

📄 Calculations :

$$\text{Plaque score} = \frac{\text{Total score}}{\text{No. of teeth examined}}$$

• USES :

- longitudinal studies of PDL disease
- Total assessment of periodontal status
- In epidemiological surveys
- Clinical trials of preventive or therapeutic agents



PERIODONTAL DISEASE INDEX (PDI) SIGURD P. RAMFJORD 1959

📄 CALCULUS COMPONENT OF PDI :

Score	Criteria
'0'	Absence of calculus
'1'	Supragingival calculus extending only slightly below the free gingival margin (not more than 1 mm)
'2'	Moderate amount of supragingival and sub gingival calculus or subgingival calculus alone
'3'	An abundance of supragingival & subgingival calculus



PERIODONTAL DISEASE INDEX (PDI) SIGURD P. RAMFJORD 1959

📄 Calculation of the index:

$$\text{Calculus score} = \frac{\text{Total score}}{\text{No. of teeth examined}}$$

USES:

- Epidemiologic surveys
- Longitudinal studies of periodontal disease



COMMUNITY PERIODONTAL INDEX OF TREATMENT NEEDS (WHO/FDI)

📖 Jukko Ainamo, David Barmes, George Beagrie, Terry Cutress, Jean Martin, Jennifer Sardo-Infirri 1982

📖 **Scope & Purpose:**

- Epidemiologic surveys of periodontal health
- Provides guidance on the planning and monitoring of effectiveness of periodontal care programmes and the dental personnel required
- Records the common treatable conditions (pockets, gingival inflammation, calculus & other plaque retentive factors)

📖 **Advantages :**

- Simplicity
- Speed and
- International uniformity

📖 **Limitations:**

- Partial recording
- Exclusion of some important signs of past periodontal breakdown – notably – attachment loss and absence of any marker of disease activity or susceptibility
- Not a diagnostic tool and should not be used for planning of specific clinical treatment



COMMUNITY PERIODONTAL INDEX OF TREATMENT NEEDS (WHO/FDI)

📖 “Treatment needs”:

- intended as a guide to the level or magnitude of need for care using accepted periodontal criteria
- provides an indication of the level of complexity of care needed if the periodontal conditions are to improve

📖 Procedure :

- No need for care (score 0)
- Bleeding gingivae on gentle probing (score 1)
- Presence of calculus & other plaque retentive factors (score 2)
- Presence of 4 or 5 mm pockets (score 3)
- Presence of 6 mm or deeper pockets (score 4)



COMMUNITY PERIODONTAL INDEX OF TREATMENT NEEDS (WHO/FDI)

📄 Sextants :

17 – 14	13 – 23	24 – 27
47 – 44	43 – 33	34 – 37

Index Teeth: (Adults aged 20 years or more)

17	16	11	26	27
47	46	31	36	37

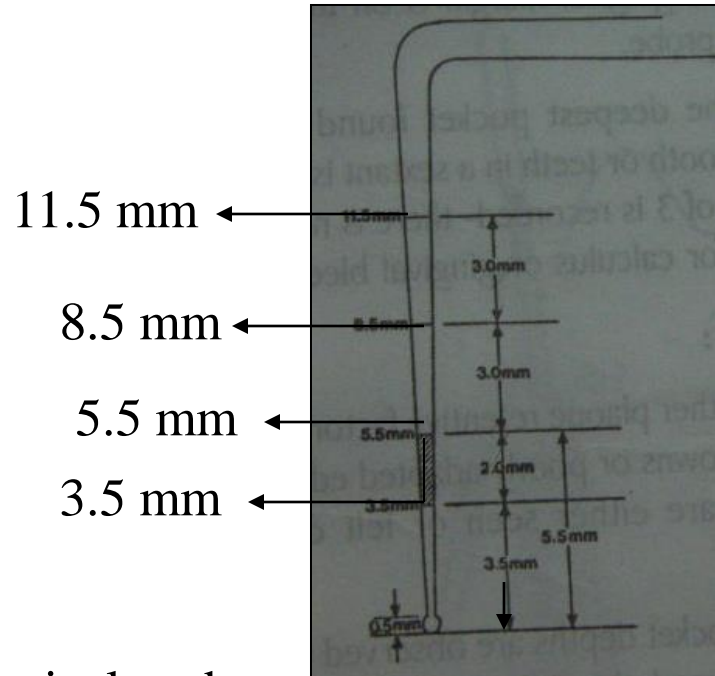
For young people upto 19 years

16	11	26
46	31	36



COMMUNITY PERIODONTAL INDEX OF TREATMENT NEEDS (WHO/FDI)

- 📖 The WHO Periodontal Examination Probe – CPITN Probe :
 - Measurement of pocket depth & detection of subgingival calculus



‘CPITN-E’ – for Epidemiological probe

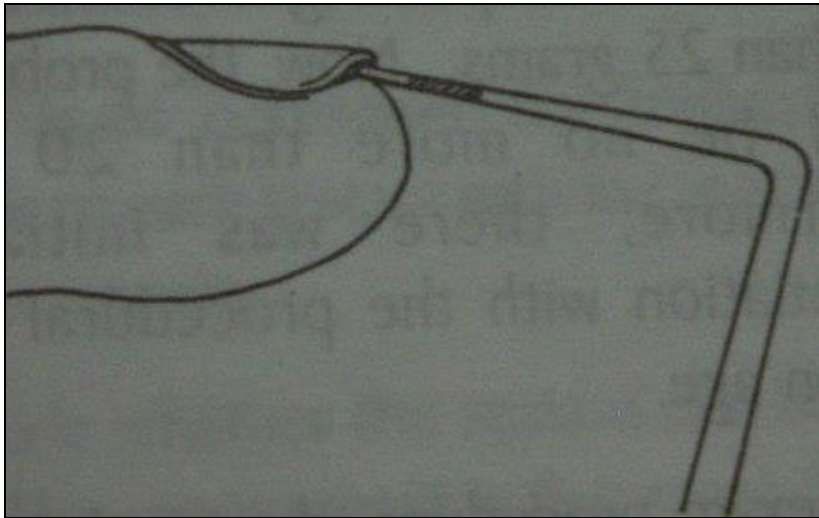
‘CPITN-C’ – for clinical probe (8.5, 11.5 markings)

COMMUNITY PERIODONTAL INDEX OF TREATMENT NEEDS (WHO/FDI)



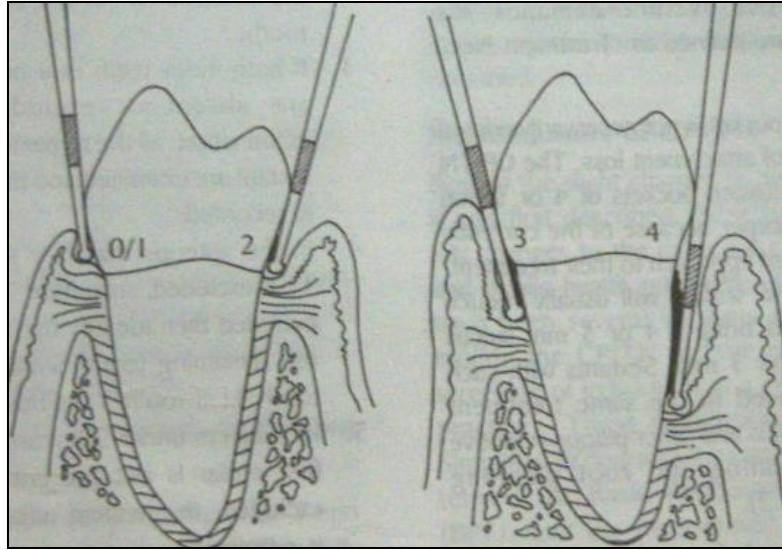
Probing procedures :

- 'working component'
- 'sensing component'
- **Force**: Not more than 0.75N.



COMMUNITY PERIODONTAL INDEX OF TREATMENT NEEDS (WHO/FDI)

📄 Codes & criteria :



Code – 0 = No periodontal Disease

Code – 1 = Bleeding observed during or after probing

Code – 2 = Calculus or plaque retentive factors either seen or felt during probing

Code – 3 = Pathological pocket 4 or 5 mm in depth. Gingival margin situated on black band of the probe

Code – 4 = Pathological pocket 6 mm or more in depth. Black band of the probe not visible

COMMUNITY PERIODONTAL INDEX OF TREATMENT NEEDS (WHO/FDI)

📄 Classification of Treatment Needs:

TN – 0	Code 0 (healthy) or code y (missing) – indicates no need for treatment
TN – 1	A code of 1 or higher indicates a need for improving personal oral hygiene of that individual
TN – 2	a. A code of 2 or higher – Need for professional cleaning of teeth & removal of plaque retentive factors b. Shallow to moderate pocketing (4 or 5 mm-code 3)
TN – 3	A sextant scoring code 4 (6mm or deeper pockets) may or may not be successfully treated by deep scaling Code 4 is therefore assigned as 'Complex Treatment'





THANK YOU ...

