INDEX

A
abutment teeth, 173
   preset of, 175
acquired or congenital maxillofacial defects, 27
acrylic prosthetic denture teeth, 6
acrylic teeth, 152
acrylic varnish, 124
adaptol, 181
   border-molded custom tray, 182
adjunctive diagnostic procedures, 53–54
adjunctive diagnostic techniques, 52–53
Aggregatibacter actinomycetemcomitans, 60, 89, 90, 92, 93,
   95, 96
aging, 9, 33, 44, 49, 58, 67, 84, 129, 172, 207, 243
albumin, 68, 70, 71
alcohol, 49
aligned artificial tooth (ISA) system, 153
   digital design, 153
alternative medicines, 135
Alzheimer’s Disease, 43
amphotericin B, 107, 108, 131, 135, 144, 146
antibacterial agents, 58
antifungal agent, 60, 131, 135, 144, 146
   combination therapy of, 135
antifungal therapy, 81, 99, 107, 108, 135, 140, 142
antimicrobial treatment, 81, 108
antisepctic agent, 129
AOP, see artificial occlusal plane (AOP)
artificial canines, 256
artificial food, chewed
   mean weight and standard deviation (SD) of, 208
   period granulation, 209
artificial occlusal plane (AOP), 195, 197
   Camper’s I, II, and III, 195, 196
   dentate group, 195
artificial teeth, 24, 153, 160, 174, 196, 197, 207, 256–259, 262
   aspiration pneumonia (AP), 6, 41
   risk factors, 81
autopolymerizing resin, 222

B
Bacillus subtilis, 131
bacterial endocarditis, 6, 60
bacterial species, in healthy patients, 6
barium sulfate creamy mix, 195
bilateral balanced occlusion
   buccal view of, 222
   fully, 222
   lingual view, 222
biochemical assessment, 67, 68

conventional complete dentures (CCDs), 181, 183, 184, 200, 207, 212, 221, 230
Cronbach’s alpha value, 214
culture-based methodology, 84

D
data evaluation, 91
3D digital edentulous models, 174
3D digital models, 173
definitive prosthesis
  delivered, 166
    with 1SA CAD/CAM, 154
    with 1SA RP, 154
dementia, 33, 34, 38, 43
dental esthetics, 259
dental examination, 51, 67
dental floss, 256
  measured with the sliding caliper, 257
  sectioned by blade at the mark location, 257
  sliding caliper positioned, 257
dental waste, 157
dentate participants, 200
dentogenic theory, 246, 262
denture adhesives, 5, 8, 185, 212
  advantages of using, 9
  application and removal of, 10–11
  clinical implications of Candida colonization of, 126
  contraindications, 186
  correct application of, 11
  functional changes associated with, 9
  maxillary denture, 186
  potential benefits of, 124
  precautions using, 10
  toxicity of zinc-containing adhesives, 10
denture base, design, 173
denture biofilm, 6, 60
  coverage area, 130
denture care
  and management, 8–12
  products, 129
denture cleaning, 6, 7–8
  alternative denture cleansing methods, 8
  brushing with denture creams and pastes, 7
  precautions associated with, 8
  soaking and brushing with commercially available, 7–8
  ultrasonic cleaning, 8
denture cleansers, precautions associated with use of, 8
denture construction, 263
denture-contacting mucosa (type 2), 134
denture fabrication
  definitive impressions, historical approach, 181–183
  process, 222
denture fitting, 119
  role of Candida, 119–120
denture hygiene, 6, 109, 146
  improvements, 60
  methods, 129
denture-induced stomatitis, 146
denture plaque, 6, 60, 82
denture problems, 235
denture quality
  expert-based assessment of, 201
denture recall interval, 12
denture-related biofilm, 134
denture-related lesions
  NHANES III report, 59
denture replacement, 208
denture satisfaction, 200–203
denture-supporting tissues, 203
  expert-based measures, 202
  exploratory variables, and perceived overall satisfaction, 202
  maxillary rocking movement, in clinical examination, 203
  study outcome/measures/instruments, 200–201
denture stomatitis (DS), 6, 12, 58, 81, 85, 100, 129, 133
  clinical photographs, based on Newton classification, 105
  epidemiology of, 101–103
  etiological associations, 59, 104–105
    Candida infection, 107–108
    denture hygiene, 105–107
    denture-induced trauma, 105
    multiple etiological factors, 113
    role of denture materials in, 108–109
    exfoliative cytology findings in, 120
    inclusion and exclusion criteria, 121
    recurrence, 108
denture success, 230, 231, 233, 234
depression, 62, 231, 234
designed
  maxillary teeth, 153
  SLM metal palate framework for maxillary denture, 167
  splinted zirconia onlays, 166
diabetes, 40
diagnostic classification, 135
diagnostic criteria, 135
dietary assessment, 67
dietary guidance, 67
dietary intake, 67
digital impression
  accuracy of, 158–159, 162
  instructions used to prompt tracing with, 161
digitally scanned maxillary wax rim, and acrylic base, 153
digital preliminary impression, 157
digital technology, 157
disinfectants, 85, 106, 129, 131, 135, 145
distal extension prosthesis (RPDD), 68, 71, 72
DNA–DNA hybridization, 91
DNA extraction, 82
3-D printing, 160, 161, 164, 177
dry mouth, 113, 115–117, 181
DS. see denture stomatitis (DS)
dysesthesia, 21, 27
dysplasia, 50, 51, 53, 54
  lesions, 51
edentulism, 5, 19, 58, 67, 180–187
ACP classification, 181
and cancer, 37, 42
and cardiovascular disease, 36, 39, 40
checklist for classification of, 21
classification system for, 24
class I-IV, 24–29
guidelines for use of, 27
and cognitive impairment, 38, 43
and COPD, 37, 41
denture fabrication-definitive impressions, historical approach, 181–183
diabetes, 36, 40
diagnostic criteria for, 20
and interocclusal record using specialized trays, 158
and respiratory diseases, 37, 41
and rheumatoid arthritis, 36, 41
tissue conditioning, 184–185
endodontic treatment, 129
endosseous oral implants, 62, 63
for treatment of edentulism, 62–63
erythema image, demonstrates partial resolution, 184
erythroleukoplakia, 51
erthroplakia, 51–52
Escherichia coli, 131
esthetic dentistry, 246, 251
evidence-based guidelines, 3
exfoliative examination, 116
extraoral and intraoral examination, 52
facial beauty, 240
FBBO maxillary teeth, 222
final impression, 157, 160, 172
and interocclusal record using specialized trays, 158
final maxillary prosthesis, 168
final tooth setup, for mandibular implant-assisted overdenture, 166
Fisher’s exact test, 241
fixed partial dentures (FPDs), 66–68, 157, 161, 172, 174, 177
fluconazole, 60, 107, 108, 131, 136–138, 140–142, 144
FPDs. see fixed partial dentures (FPDs)
fracture resistance, 164
Friedman test, 216, 217
p-values, 226
fully bilateral balanced occlusion (FBBO), 221, 222, 225–227
Cronbach’s alpha values, 224
dentures, 221
functional assessment of dentures (FAD) instrument, 201, 203
fungal infection, 133, 136
Fusobacterium nucleatum, 90–95
gagging, 59
gastrointestinal infection, 60
geriatric alcoholism, 52
geriatric oral health assessment index (GOHAI), 212, 217
glutaraldehyde, 131
G’Power software, 212
gum line, 264
health care, improvements in, 84
healthy patients
  treatment, complete denture stomatitis in, 136–143
heat-polymerized acrylic resin, 129
HIV/AIDS patients, 114
human papillomavirus (HPV), 50
hydrogen peroxide, 131
hygiene, 58, 62, 129, 131, 134, 135, 139, 143–146, 231
hyperactive gag reflex, 27
hypochlorites, 5, 7, 85, 106, 108, 129, 131, 143
ideal denture cleanser, characteristics of, 7
immune response impaired, secondary to systemic conditions, 113
immuno-compromised patients, 134, 135
  treatment, complete denture stomatitis in, 144
implant-supported or -retained removable prostheses, 62
implant-supported overdenture, 62
impression techniques
  closed-mouth technique, 183
  modeling plastic compound, 183
  rubber base secondary, 183
  tissue surface of, 184
impression time, 161
inflammatory fibrous hyperplasia, 59
interfering points, detection of
  and subsequent removal of interfering points, 178
intraclass correlation coefficient (ICC), 213
irritation-induced hyperplasia, 58
Iso Functional® border-molded custom tray, 182
itraconazole, 107, 137, 138, 140, 144, 146
J-305 monopoly syrup, 185
Kappa/Chi-squared tests, 246
Kapur Index (KID), 114, 212, 213, 214
  high quality, 213
  null hypothesis, 218
OHIP-14 total scores of gender, 214
  slope, trend, and coefficient of determination, 216
keratinized mucosa, 60
Klebsiella pneumoniae, 82–84
Kruskal-Wallis test, 130
INDEX

L
laser treatment, 135
Law of Harmony, 261
*Legionella pneumophila*, 82
leukoplakia, 50–51
lingualized occlusion (LO), 221–223, 225
buccal view of, 222
lingual view of, 223
LO, see lingualized occlusion (LO)
logistic regression, 234
analysis, 233–234
luminescence, 53
M
magnetic resonance imaging (MRI), 154
maladaptation, 60–62
conventional denture patients, 212
to dentures, 60–62
malnutrition, 35, 67, 69
mandibular, 20
anatomy, 61
arch, 25, 26, 28, 29
dentures, 23
dissatisfaction with, 61
stability, 61
models, 152
muscle attachments, 23
type A-E, 23–24
mylohyoid ridge, 173
residual alveolar ridges, 61
wax rim, 177
Mann-Whitney tests, 214, 215
mastication, 9, 34, 69, 124, 194, 207, 209
efficiency, 225
tests, 207
Tukey’s student range, 208
maxillary anterior teeth, 251
arrangement, 264–265
phonetics, 251
placement, 263–264
vertical, 264
position
canine to lip—male, 253
central incisor
to lip—female, 253
to lip—male, 253
qualitative/quantitative guides, 261–265
selection, 261–263
maxillomandibular relations, 263
maxillary arch, 28, 29
maxillary canine exposure, 253
maxillary complete denture, 251
anterior teeth
nasal width, 258
selection, 255–259
errors, 258
with metal palate opposing mandibular implant, 166–168
with milled posterior zirconia onlays, 164–166
maxillary denture, 22, 129
retention, 61
maxillary incisal edge position, 250, 251
anterior tooth position central incisor to lip—female, 252
central incisor exposure, 251, 252
maxillary anterior lip, 252
vertical position, 252
maxillary incisors, 264
maxillary interocclusal rim, 264
maxillary wax occlusal rim, 265
maxillary working model, 152
with acrylic base and wax rim, 152
maxillo-mandibular ataxia, 27
maxillo-mandibular relationship, 24
class I-III, 24
methicillin-resistant *Staphylococcus aureus* (MRSA), 8, 82–85, 198
methyl methacrylate (MMA), 152
microbial analysis of samples, 91
microbial cells, on surface of denture, microscopic representation, 105
microbial complexity, 90
microbial culture, 82
and DNA extraction, 82
microbiota
do denture biofilm samples, 92–93
hard palate, 93
polished (exterior) denture palate, 93
saliva samples, 93, 96
soft tissue, 93, 96
tongue dorsum, 93
microseal, 185
microwave irradiation, 8
minimal inhibitory concentration (MIC)
fluconazole, 131
miconazole, 131
mininutritional assessment values, 70
mobile tissues, 184
*Moraxella catarrhalis*, 82–84
mortality, 43–44, 67
mouth moisture, 231
mucosal
biopsy, 116
lesions, 12
wetness, 115–116
yeast cultures, 144
mucositis, excessive pressure
patient treated for, 184
mucostatic technique, 182
muscle attachments, 23

N
narrow-emission tissue fluorescence, 53
nasal index, 256
nasal width
dimensions, 258
and intercanine distance, 257
natural occlusal plane, 197
Neisseria pharynges, 124
neuroticism, 62
Newton classification system, 102, 103, 105, 114, 117, 134
classification II and III stomatitis, 115
nQueryAdviser, 241
nutrient intake, 71
nutrition, 35, 67, 69
assessment, 68
changes, in aging patients, 67
status, 67
nystatin, 60, 107, 108

O
obesity, 39, 40
annual cost associated with, 39
self-reported among U.S. adults, 40
trends, 39
occlusal plane, in natural/artificial dentitions, 194–197
ala-tragus line, 194, 195
angle between occlusal plane, 195
artificial occlusal plane (AOP) orientation, 195–197
clear denture, 185
significant difference between Camper’s I, II, and III, 196
tragus, 195
occlusal vertical dimension (OVD)
clinical evaluations, 207
with complete dentures, 207
maxillary cast, 207
reestablishment, 208
OHIP-20 scores, 76
older teeth, incisal/interproximal wear, 262
oncogenic viruses, 50
onlay preparations, on posterior acrylic resin teeth, 165
onychomycosis, 60
Optocal ATF, 207
oral bacteria, 6, 60, 81, 84, 100, 124, 125
oral cancer screening devices, 52–53
oral candidiasis, 113, 114, 118, 120, 129, 134, 135, 144
oral health, 5, 60
care, 132
conditions, 67
program, 144
promotion, 58
oral health impact profile for edentulous patients
(OHIP-EDENT)
frequencies, mean values, and standard deviations, 226
p-values from Friedman test, 226
questionnaire, 224
weighted median values, 227
oral health implant profile-14 (OHIP-14) scale
on denture wearers using adhesives, 211–218
Friedman’s test, 217
Mann-Whitney and Spearman’s rho test results, 215
mean OHIP-14 total scores, 214, 215
trend lines, 216–217
oral health quality of life (OHQoL), 213, 217
participants, 212–213
reliability analysis of OHIP-14, 214
scale reliability, 214
scale validity, 214–216
statistical analysis, 213–214
Wilcoxon test, 217
oral health quality of life (OHQoL), 212
oral health-related quality of life (OHR-QOL), 9–10
oral health status indicators
oral health impact profile-14 (OHIP-14), 215, 216, 217, 218
oral health impact profile-49 (OHIP-49), 212
oral hygiene, 11, 13, 41, 62, 81, 84, 113, 135, 144, 145, 248, 249
education, 135
poor, 11, 43, 49, 51, 58, 81
oral implant, 62
placement, 59
therapy, 63
treatment for mandibular edentulism, 63
oral microbe distribution, cataloged by state of health, 106
oral mucosa, 60
inflammation, 60
lesions, 59–60
OVD. see occlusal vertical dimension (OVD)

P
papillary (granular) hyperplasia, 134
Pap smears, 54
paresthesia, 27
part-digitizing system, 157, 158
description of, 160
partially edentulous (PE), 67, 68, 71, 72
PAS-cytology assessments, 116, 117
PAS exfoliative cytology, for palatal and vestibular area and
tongue, 118
patients
demographics, 82
wear dentures, guidelines, 7
periodontal pathogens, 96, 97
plaque pellet, 82
plastic lip retractors, 246
plastic modeling compound
border-molded impression tray, 183
pneumonia, 41, 60, 81
poisson multivariate regression, 202, 203
polyether impression material
secondary wash impression, 182
poly (methyl methacrylate) (PMMA), 152, 185
porcelain teeth, 152
Porphyromonas gingivalis, 60, 90, 96
post-insertion, with prosthesis delivered, 168
premalignant lesions, 50
Prevotella intermedia, 91
Prevotella melaninogenica, 90, 92–95
Prevotella nigrescens, 91
INDEX

prosthesis, 8, 12, 13, 32, 49, 59, 61, 67, 68, 70–72, 146, 164, 165
definitive, 153, 154, 166, 168
diagnostic prosthesis aids, 183
fixed, 173
immediate/transitional, 124
post-insertion with prosthesis delivered, 168
targeted approach, with/without pharmacological antifungal agents, 146
prosthetic materials, 129
psychosocial conditions, 207
moderate, 27
pterygomaxillary notches, 173
Q
QoL. see quality of life (QoL)
quality of life (QoL), 5, 6, 8, 49, 58, 67, 75, 78, 212
quality of supporting tissues, 212
quantitative PCR, 82
questionnaire, 231
R
rapid prototyping (RP), 152, 153
rebase of dentures, 12, 13
refractory patient, 27
rehabilitation, 62
dentate person using dentures, 62
relapse, 134
relines, 12
materials, 129
removable dental prosthesis (RDP) framework, 164
removable partial denture (RPD), 66
research diagnostic criteria (RDC) questionnaire, 207
residual bone height measurement, radiographic survey of, 20, 22
patient classified as, 20
residual ridge morphology, 22
for maxilla
classification system, 22
type A–E, 23–24
residual ridge resorption (RRR), 11–13, 59
respiratory infections, 41
pathogens colonizing dentures, prevalence and quantity of, 83
detection of, 82
prevalence in plaque of with healthy palatal mucosa and, 84
primers used for qPCR, 83
roughness average (Ra) value, 6
RPDT. see tooth-supported prosthesis (RPDT)
S
ISA CAD/CAM maxillary and mandibular models, 153
ISA CAD/CAM with wax modelling, 153
saliva
flow, impaired, 113
flow rate, 114
flow rates, 116
immunoglobulins, 119
protein, altered, 113
reservoir of biofilm-derived pathogens, 146
role of, 117
samples, 91
secretory IgA level, 113
stimulated saliva collection, 115
dsampling size, 67, 114, 119, 120, 212, 218, 227, 241, 253, 254
ISA RP maxillary and mandibular models, 154
selective laser melting (SLM) technology, 164, 169
framework, fitted to final cast, 167
metal framework, tried on mandibular cast, 167
self-esteem, 62
semiadjustable articulator
intermaxillary relations, 265
serum biochemical assessment, 67
Shapiro-Wilk test, 68
short portable mental status questionnaire, 67
smile line, aesthetic impact of, 239–243
smoking cessation, 58
sociodemographic variables, 70
sodium hypochlorite (NaOCl), 7, 131
sodium perborate, 131
based tabs, 131
soft tissue samples, 91
space verification using SSF before processing, 168
Spearman’s rho test, 215
split stone flask index, for space analysis, 167
split stone flaking technique (SSFT), 166
squamous cell carcinoma, 49
epidemiology, 49
risk factors associated with, 49
S. salivarius, 97
Staphylococcus aureus, 131
stone, type III, 222
Streptococcus mitis, 124
Streptococcus mutans, 90, 120, 131
Streptococcus oralis, 6
Streptococcus pyogenes, 82
surface roughness, 6
systemic health, 5
T
tooth position, arranged in relation to occlusal plane, 174
temperamental theory, 262
temporomandibular disorders (TMD), 207
tissue conditioning, 184–185
tissue reflectance with chemiluminescence, 53
with luminescence, 53
tobacco, 49
stains, 129
tooth extraction, in mandible, 59
tooth loss, and comorbid disease, 33
tooth shape, 246
INDEX

tooth-supported prosthesis (RPDT), 68, 69, 71, 72
total denture microbiome, 84
total tooth loss, 58
total viable counts (TVC), 124–125
  statistical analysis, 125–126
toxicity, 129, 155
  zinc-containing adhesives, 10
trauma, 113
ulcers, 58
treatment
  categories, 135
  evaluated by strategies
    healthy patients, 145
    immunocompromised patients, 145
  related morbidity, 59
Tukey test, 257
TVC. see total viable counts (TVC)

U
ultrasonic cleaning, 8
unstimulated saliva collection, 115

V
VELscope, 53
vinegar, 131
vinylpolysiloxane material
  secondary wash impression, 182
  virtual
    baseplates, design of, 173, 175
    complete denture, design of, 172–173
    dentitions, design, 174
    maxillary dentition, 177
visual analog scale (VAS), 200, 241, 243
vital dye marking, 53

W
wax impression technique, 157
wax rim, 264
wear resistance, 164
Wilcoxon signed rank test, 125, 126, 139, 214, 216, 217, 224, 226, 227

X
xerostomia, 113, 134
  questionnaire, 115, 121
  symptoms, 114, 116

Z
zinc, 70
  containing denture adhesives, 5
  zirconia
    onlay bonded to maxillary denture resin teeth, 166
    onlay preparations on premolars/molars, 165