Subject Index

Acquired immunodeficiency syndrome, Mini Nutritional Assessment of outpatients 171, 183, 184
Activities of daily living
nutrition impact 81, 83, 124–127, 170, 171
scoring standards 177
African Americans, nutritional assessment of inner city populations 72–75, 79–86
Albumin, serum concentration
correlation with cancer diagnosis 98
inverse correlation with cost of care and hospital stay 145, 146
Alzheimer disease
energy expenditure of patients 87, 92
mean mini-mental state 87–89
Mini Nutritional Assessment
caregiver answering of questions 90, 91
ELSA study 87–89
inpatients 89, 90
tube feeding of patients 92
weight loss in patients 87
American Society of Anesthesiologists
physical status score, nutrition impact 118, 120
Anorexia of aging, pathophysiological mechanisms 67–69
Anthropometry, see also specific measures difficulty in Mini Nutritional Assessment 39
items in Mini Nutritional Assessment 157
subjectivity 129, 179
Aorto-coronary bypass, Mini Nutritional Assessment following surgery 172, 173
Arm muscle area corrected for bone, derivation 44
Arm muscle circumference
derivation 44
Mini Nutritional Assessment correlation 48
Body fat, see Percent body fat, Total body fat
Body mass index
Mini Nutritional Assessment correlation 14–16, 18, 47, 48, 73, 182, 183
SCALES correlation 73
Cancer
albumin, serum concentration correlation with diagnosis 98
characteristics of elderly patients 95, 96
dietary influences 93
Mini Nutritional Assessment
administrators of assessment 97, 99, 100
cancer vs noncancer patient scores 95, 97–99
location and timing of assessment 97, 99
patients and methods 94, 95
time required for administration 97
risk factors and prevention 93
Cholecystokinin, satiation effects in elderly subjects 68
Comprehensive geriatric assessment
assessment domains 101, 102
benefits 103, 104
clinical applications 102, 103
Mini Nutritional Assessment – Short Form
comparison with nutritional screening index 115
diagnostic characteristics of individual Mini Nutritional Assessment items 109, 110
guidelines for development 107–109
patient characteristics for study 108
precautions for use 114
rationale for development 107
threshold values 109, 112
time requirement for administration 113, 115, 116
validation against Mini Nutritional Assessment 109–114
overview 101–103
targeting of patients 104–106
Convalescent patients, Mini Nutritional Assessment 124–127, 164, 165
Copper, aging effects on blood levels 163, 164
Corticotropin-releasing factor, anorexia induction 69
Cost of care
albumin concentration, inverse correlation 145, 146
Mini Nutritional Assessment correlation 143, 144, 146
Dehydration, Mini Nutritional Assessment in African Americans
blood urea nitrogen/creatinine as dehydration indicator 81, 82, 85
comparison of participants and nonparticipants 82
frailty-dependent variables 81–83
modifications of Mini Nutritional Assessment 80, 81
non-correlation 83–86
participants in study 79, 80, 82
statistical analysis 82
Depression, malnutrition association in the elderly 75
Dieting, effects in elderly 21, 22
Fat-free mass, Mini Nutritional Assessment correlation 14–16, 18–20
Femoral neck fracture patients, Mini Nutritional Assessment 166, 179, 180
Flavor perception
aging effects 54
amplification of flavor
food systems for study 54, 55
preference and consumption measurements 55
rationale in malnutrition prevention 54, 57
Mini Nutritional Assessment correlation 55–57
zinc role 59, 60
Home nursing patients, Mini Nutritional Assessment 162
Hospital, length of stay
albumin concentration, inverse correlation 145, 146
Mini Nutritional Assessment correlation 143–146, 178
Immune response, Mini Nutritional Assessment correlations in the elderly
aging effects on immune system 23
immunoglobulin levels in serum 24, 26, 28, 33
lymphocytes
cytokine production 25
interleukin–2 messenger RNA expression 25, 30–32
proliferation and activation 24, 25, 30, 31
subsets in peripheral blood 24, 26, 32–34, 168, 169, 180, 181
subject selection 24
Immunoglobulins, Mini Nutritional Assessment and levels in serum 24, 26, 28, 33
Influenza vaccine, determinants of response in institutionalized elderly people 165
Interleukin-2, nutrition effects on messenger RNA expression in lymphocytes 25, 30–32
LA/Ntul//-cp rat
  aging and obesity compared to humans 149, 150
  body weight and metabolic variables of aging rats 151–154
development 150
growth curves 150, 151
insulin resistance 153
metabolic and thermic responses 173
overview of characteristics 149
thyroid hormone metabolism 151, 153, 154

Leg ulcer patients, Mini Nutritional Assessment 175
Leptin
  aging effects on concentration 71, 75
  Mini Nutritional Assessment correlation 71, 72
  sex differences 71
Lymphocytes, Mini Nutritional Assessment correlations
cytokine production 25
interleukin-2 messenger RNA expression 25, 30–32
proliferation and activation 24, 25, 30, 31
subsets in peripheral blood 24, 26, 32–34, 168, 169
Magnesium, aging effects on blood levels 163, 164
MEALS-ON-WHEELS, mnemonic for causes of protein-energy malnutrition 69, 70
Mean mini-mental state, Alzheimer patients and weight loss 87–89
Mental Outcome Study score
concepts 43, 44
general health measurement 53
Mini Nutritional Assessment correlation 46, 47
Mini Mental State Index, model for Mini Nutritional Assessment 187
Mini Nutritional Assessment
Alzheimer disease patients
caregiver answering of questions 90, 91
ELSA study 87–89
inpatients 89, 90
cancer patients 93–100
diagnostic characteristics of individual items 109, 110
flavor perception amplification 54–57
immunological marker correlations in the elderly 23–34, 168, 169, 180, 181
items in assessment
  overview 5, 94, 108, 123, 128
  table 157
leptin correlation 71, 72
multilanguage use 40, 124, 167
nursing home admission, prediction 165, 166
nutritional intervention effects 135–137, 139, 188
nutritional risk assessment scale comparison 35–40
odor perception correlation 41–53, 59, 60
postdischarge mortality prediction 6, 9, 11, 12
preoperative nutritional evaluation 117–121
rationale for development 175, 176, 187
screening of various populations 9, 10
  African Americans 72–75, 79–86
  AIDS outpatients 171, 183, 184
  aorto-coronary bypass patients 172, 173
  community groups 125–127, 161
  convalescent patients 124–127, 164, 165
  femoral neck fracture patients 166, 179, 180
  healthy adults
    body composition correlation 13–22
    successfully aged subjects 61–66
  home nursing patients 162
  hospital admissions 142, 143, 145, 146, 167, 168
  leg ulcer patients 175
  nursing home residents 125–127, 159, 160, 169, 170, 177
  outpatients 163
  sensitivity 109, 110, 182
  specificity 5
threshold values 6, 80, 81, 94, 108, 132, 157, 176, 188
validation 5, 10, 12, 19, 21, 34, 61, 141, 167
Subject Index

Mini Nutritional Assessment – Short Form
comparison with nutritional screening index 115
diagnostic characteristics of individual Mini Nutritional Assessment items 109, 110
guidelines for development 107–109
patient characteristics for study 108
precautions for use 114
rationale for development 107
threshold values 109, 112
time requirement for administration 113, 115, 116
validation against Mini Nutritional Assessment 109–114

New Mexico Aging Process Study, see Successful aging

Nitric oxide, aging effects on stomach production 77

Nursing home residents, Mini Nutritional Assessment 125–127, 159, 160, 169, 170, 177

Nutritional intervention
administration routes 137
effect on nutrition parameters
biological markers 136, 138, 139
compliance with oral supplements 135, 137, 139
Mini Nutritional Assessment scores 135–137, 139
patients in study 133
protein intake 139, 140
statistical analysis 133
study design 132, 133, 136, 137
total energy daily intakes 133, 135, 137
weight changes 136, 137
oral supplements
rationale for use 131
types 133

Nutritional risk assessment scale
Mini Nutritional Assessment comparison
ease of use 36, 38, 39
methodology 35, 36
nutritional intervention identification 38
survey questions 35, 36

Nutritional screening initiative checklist, comparison to Mini Nutritional Assessment 161, 162
Nutritional Strategic Business Division, overview 1

Obesity
animal model, see LA/Ntul/−cp rat
mortality risk in elderly 22, 149
prevalence 149

Odor perception
aging effects 41, 68
cost and morbidity, nutritional 174, 184, 185

Oral health, nutritional impact 41, 42, 51, 53

Oral supplements, see Nutritional intervention

Percent body fat, Mini Nutritional Assessment correlation 14–16, 18

Preoperative nutritional evaluation
American Society of Anesthesiologists
physical status score 118, 120
malnutrition and aging as surgical risk factors 117, 174
Mini Nutritional Assessment administration by anesthesiologist 118
cost and morbidity, nutritional impact 174, 184, 185
patients in study 117, 120
scores of preoperative patients 118–120

Protein-energy malnutrition
causes 69, 70
prevalence in elderly 3, 106, 123, 131, 141, 189
risk factor for postdischarge mortality 6, 35, 123
Rationale for development
  Mini Nutritional Assessment 175, 176, 187
  Short Form 107

Satiety, aging effects 67, 68

SCALES nutritional index
  components 72, 74
  inner city African American evaluation 73–75
  Mini Nutritional Assessment correlation 73–75, 77

Sensitivity, Mini Nutritional Assessment

Specificity, Mini Nutritional Assessment 5

Successful aging
  definition 61, 64, 66
  Mini Nutritional Assessment scores breakdown of scores 65, 66

Surgery, see Aorto-coronary bypass, Pre-operative nutritional evaluation

Threshold values, Mini Nutritional Assessment 6, 80, 81, 94, 108, 132, 157, 176, 188

Thyroid hormone, metabolism in obesity 151, 153, 154

Total body fat, Mini Nutritional Assessment correlation 14–16, 18

Validation, Mini Nutritional Assessment 5, 10, 12, 19, 21, 34, 61, 141, 167

Zinc, aging effects on blood levels 163, 164

correlations with health status 63, 64
  health classification 62, 63
  New Mexico Aging Process Study 61–64