

CONTENTS

Figures and Tables.....	ix
Photo Gallery.....	x
Definitions.....	xi
Preface.....	xxv
Introduction.....	xxvii

CHAPTERS

1. ARTHRITIS AND ITS TREATMENTS	1
Two Main Types of Arthritis.....	3
Rheumatoid Arthritis (RA).....	4
Osteoarthritis (OA).....	11
Cartilage Degeneration.....	12
Prolotherapy.....	17
Bone Health.....	18
Bone Marrow.....	20
Common Conventional Treatments.....	20
Prescription Drugs.....	22
Sulfasalazine.....	24
Gold Salts.....	25
Arthroscopic Surgery.....	26
Non-prescription Drugs.....	27
Stem Cell Therapy.....	27
Common Alternative Treatments.....	28
Homeopathic Remedies.....	30
Chinese Herbal Medicine.....	32
Ayurvedic Medicine.....	33
DMSO.....	33
Ultraviolet Light Treatment (Photopheresis)...	35
The WD-40 Myth.....	38
Oxygen Therapies.....	39
Hyperbaric Oxygen Therapy (HBOT).....	39
Migraine Headaches.....	41
Ozone Therapy.....	41
H ₂ O ₂ Treatments.....	41

*Arthritis and Autoimmune Disease:
The Infection Connection*

2. HOW THE IMMUNE SYSTEM WORKS	43
The Lymphatic System.....	45
Primary Organs.....	46
Secondary Organs.....	47
Cells & Molecules of the	
Innate Immune System.....	48
Mast Cells and Basophils.....	49
Phagocytes (Leucocytes).....	49
Neutrophils.....	50
Macrophages.....	50
Dendritic Cells.....	51
Eosinophils.....	52
Natural Killer (NK) Cells.....	52
Complement.....	53
Proteins and Enzymes.....	54
Cells & Molecules of the	
Adaptive Immune System.....	55
Antigens.....	56
Lymphocytes.....	56
T-cells.....	56
B-cells.....	60
Antibodies.....	61
Immunoglobulins (Ig).....	62
Cytokines.....	63
Interleukins.....	64
Interferons.....	64
Colony-Stimulating Factor (CSF).....	65
Tumor Necrosis Factor (TNF).....	65
Autoimmunity.....	65
The Endocrine System: Hormones.....	66
Emotions Affect the Immune System.....	68
3. HOW INFECTION WORKS	69
Causes of Inflammation.....	69
The Pathogen-Cortisol Loop.....	72
Lack of Sleep Influences Cortisol Production.	75
Dental Infections.....	75
Slow-Growing Infections Over a Lifetime.....	77
Chlamydial Infections.....	77

HSV1 and Alzheimer's.....	79
The Role of Mycoplasmas.....	81
Shape-Changing Organisms.....	84
Souvenirs of Childhood Illnesses.....	86
Mycoplasmas and Autoimmune Diseases.....	88
Suppressing Mycoplasmas and	
Cell Wall-Deficient (CWD) Microbes.....	89
Quinine.....	90
Bee Venom.....	91
Dr. Brown's Antibiotic Protocol.....	91
Tetracyclines.....	92
Minocycline.....	94
The Puzzle of RA Flare-ups.....	95
The Jarisch-Herxheimer Effect.....	97
Achieving Mucosal (Gut) Balance.....	100
Long Term Effects of Antibiotics.....	101
Reintroducing Beneficial Bacteria.....	102
Detoxing the Colon.....	104
Prebiotics and Probiotics.....	104
Enzyme Therapy.....	106
Natural Antimicrobial Oils.....	111
Toxin Buildup.....	111
Neutralizing Harmful Toxins and Enzymes	
With Antibiotics.....	113
Allergic Reactions.....	114
Control Theory Applied to Allergic Reactions..	115
Naturopathic Remedies.....	117
Homeopathic Remedies.....	118
4. OPPORTUNISTIC PATHOGENS.....	119
The Widespread Use of Prescription Drugs.....	120
Antibiotics.....	121
Agricultural Antimicrobial Additives.....	122
Survival Strategies of Microbes.....	125
Streptococcus pyogenes.....	126
Streptococcus pneumoniae.....	127
T-Cell Infiltration and Molecular Mimicry.....	128
How Microbes Spread.....	130
Adaptation Strategies of Microbes.....	131

*Arthritis and Autoimmune Disease:
The Infection Connection*

Pneumonia epidemics.....	132
Pneumonia Mutations.....	133
Persister Cells.....	134
Possible Links With Other Diseases.....	134
Gulf War Illness/Gulf War Syndrome.....	137
Multiple Sclerosis (MS).....	140
5. EMERGING EPIDEMICS	143
Lyme Disease (LD).....	145
Lyme Disease Carriers.....	146
Tests for Lyme Disease.....	149
Treatment for Lyme Disease.....	150
An Anti-toxin Treatment for LD.....	153
Tuberculosis (TB).....	153
Fibromyalgia Syndrome (FMS).....	154
Autism Spectrum Disorder (ASD).....	156
Ultrasound and ASD.....	160
Fungal Infections.....	161
Candida.....	162
Mold and Mycotoxins.....	163
Mold and the Mummy's Curse.....	165
Amoebic Infections.....	166
Blood-Borne Viruses and Bacteria.....	170
Sepsis (Bacteremia).....	170
HIV and AIDS.....	171
Autoimmune Hepatitis.....	173
Blood Supply Concerns.....	176
Vaccines.....	178
6. DIAGNOSTIC TESTS.....	181
Allergy Testing.....	183
ELISA Tests.....	183
Self-testing for Allergy Factors.....	185
Tests for Microbial Infection.....	187
Erythrocyte Sedimentation Rate (ESR) Test.....	188
Tetracycline as a Probe.....	188
Interferons.....	189
C-reactive Protein (CRP) Test.....	189
The Rheumatoid Factor (R-factor).....	190

Joint Scan.....	191
Anti-cyclic Citrullinated Peptide (CCP) Test...	191
Neutrophil Testing.....	191
PCR Test.....	192
Genetic Marker Testing.....	193
Antibody Tests.....	195
Antinuclear Antibody (ANA) test.....	196
51Chromium Release Assay.....	196
Eosinophil Testing.....	197
Thyroid Testing.....	198
Juvenile Rheumatoid Arthritis.....	198
Unconventional Testing Methods.....	200
Darkfield Microscopy.....	200
Phase-Contrast Microscopy.....	201
Applied Kinesiology.....	202
Hair Analysis.....	203
Visual Contrast Sensitivity (VCS) Test.....	204
 7. NATURAL METHODS TO REVITALIZE THE IMMUNE SYSTEM	 205
Aerobic Exercise.....	205
Stress Reduction and Pain Management.....	207
Meditation and Self-Hypnosis.....	209
Energy Psychology.....	211
Massage.....	211
Massage for Post-polio Syndrome (PPS).....	212
Neurostructural Therapy (NST).....	213
Tai Chi.....	214
Pilates Method.....	214
Minimal Movement Therapies.....	214
Diet Adjustments.....	215
Importance of Water in the Diet.....	218
Fiber.....	218
Arterial Plaque.....	220
Metals: Benefits and Drawbacks.....	220
Metalloenzymes.....	221
Dental Fillings.....	222
Copper, Gold, Zinc, and Iron.....	222
Dangers in Foods and Drugs.....	223

*Arthritis and Autoimmune Disease:
The Infection Connection*

Processed (Cured, Smoked) Meats.....	224
Pickles, Anchovies, and Other Salt-cured Foods.....	224
Food Coloring.....	225
Canned Fruit Juices.....	225
Milk.....	226
Sugar.....	229
Salt.....	233
Antacids and Heartburn Drugs.....	234
Aspirin.....	234
Ibuprofen.....	236
Fats and Oils.....	236
Rapeseed (Canola) Oil and Cholesterol.....	237
The Misleading HDL/LDL Ratio.....	239
Natural Methods to Eliminate Toxins.....	244
Vitamin and Mineral Supplements.....	247
Immune System Boosters.....	250
Glucosamine and Chondroitin.....	256
Choosing a Nutritionist/Dietician.....	257
 8. TRENDS IN INFECTION RESEARCH.....	 259
The Human Genome Project.....	259
The Immune System and Inflammation.....	261
The Role of Vitamin A.....	262
New Immunology Models.....	264
Cancer.....	266
Diagnosis Challenges.....	268
Biofilms as Microbiomes.....	270
Mining Microbes.....	273
Microchip Technology.....	274
Biochip Testing.....	275
Microarrays.....	276
Microbeads and Nanobarcodes.....	277
Protein Chips.....	278
Microchip Implants.....	279
The Dark Side of Biotechnology.....	280
Nutrition Trends.....	281
Nutrition and Diet Guidelines.....	281
Ketosis.....	283

Carbohydrate Intake and Chronic Illness....	284
Ketosis and Alzheimer's.....	284
9. REFLECTIONS ON METHODOLOGY.....	287
How We Think.....	287
Koch's Postulates.....	292
Research Resources.....	292
The Quest for a Cure.....	295
The Pathway to Restoring Health.....	298
Foreign Medical Systems.....	302
The U.S. Medical System.....	304
Persecution of "Maverick" Doctors.....	307
Obstacles to Antibiotic Treatment.....	310
Research Tools are Incomplete.....	310
A Suggested Testing Approach.....	312
10. CONCLUSIONS.....	315
New Paradigms for a New Millennium.....	317
Iatrogenic Health Problems.....	317
Diagnosis of Multiple Infections.....	318
Treatment of Multiple Infections.....	320
Government Action.....	321
Funding for Chronic Illness Research.....	321
Fixing a Broken Health Care System.....	323
Health Care Industry's Role.....	328
The Near Technological Horizon.....	329
Advantages of a Holistic Approach.....	330
Patient's Responsibility.....	331
The Road to Remission.....	333
BIBLIOGRAPHY.....	335
APPENDICES:	
I: Common Herbal Treatments.....	341
Alfalfa.....	343
Astragalus.....	344
Barberry.....	344
Blackstrap Molasses.....	344
Boneset.....	345

*Arthritis and Autoimmune Disease:
The Infection Connection*

Boswellia.....	345
Bromelain.....	345
Burdock Root.....	345
Capsaicin.....	345
Cider Vinegar.....	346
Cod Liver Oil.....	346
Curcumin (see Turmeric).....	347
Devil's Claw.....	347
Echinacea.....	348
Eleuthero.....	348
Garlic.....	349
Ginger.....	350
Ginkgo.....	350
Olive Leaf Extract.....	350
Pau d'arco.....	351
Pectin.....	351
Propolis.....	352
Reishi.....	352
Saint John's Wort.....	353
Stinging Nettle.....	353
Thyme.....	353
Tiger Balm.....	354
Turmeric.....	354
White Willow Bark	355
Yucca.....	355
II: Physician's Protocol for Treating Rheumatic Disease (by Dr. Mercola, D.O.).....	357
III: Considerations When Undergoing Treatment For Chronic Illnesses and Autoimmune Diseases (by Professor Garth Nicolson).....	391
IV: Websites for Health-Related Research.....	405
V: Benefits of Vitamin C (Ascorbic Acid).....	419
VI: Natural Sources of Vitamins and Minerals...	429
INDEX.....	431

FIGURES AND TABLES

Figures

1. Joint Capsule.....	6
2. Synovial Tissue in the Hand.....	7
3. Human Body Cartilage.....	13
4. The Pathogen-Cortisol Loop.....	74
5. Histamine Reaction Cycle.....	116
6. Tick Life Cycle.....	147
7. Hypothetical Pareto Chart of RA Causative Agents.....	313
8. Fibromyalgia Trigger Points.....	387

Tables

1. Recognized (Named) Autoimmune Diseases....	9
2. Dr. Ash's Recommendations.....	60
3. FDA-Approved Farm Use Antimicrobials.....	123
4. Bb Forms and Corresponding Antibiotics.....	152
5. Area Infected vs. Resulting Condition.....	167
6. Ways of Thinking About the Natural World....	290
7. Research-related Websites.....	407
8. Resource-related Websites.....	413