Nutrition and Physical Degeneration

A Comparison of Primitive and Modern Diets and Their Effects

BY

WESTON A. PRICE, MS., D.D.S., F.A.G.D.
Member Research Commission, American Dental Association
Member American Association of Physical Anthropologists
Author, "Dental Infections, Oral and Systemic"

WITH 134 FIGURES

TO THAT KINDRED SOUL

My Wife

who has assisted me so greatly on these difficult expeditions, this book is lovingly dedicated.

CONTENTS

List of Illustrations
Preface
Introduction
I. Why Seek Wisdom from Primitive Races
II. The Progressive Decline of Modern Civilization
III. Isolated and Modernized Swiss
IV. Isolated and Modernized Gaelics
V. Isolated and Modernized Eskimos
VI. Primitive and Modernized North American Indians
VII. Isolated and Modernized Melanesians
VIII. Isolated and Modernized Polynesians
IX. Isolated and Modernized African Tribes
X. Isolated and Modernized Australian Aborigines
XI. Isolated and Modernized Torres Strait Islanders
XII. Isolated and Modernized New Zealand Maori
XIII. Ancient Civilizations of Peru
XIV. Isolated and Modernized Peruvian Indians
XV. Characteristics of Primitive and Modernized Dietaries
XVI. Primitive Control of Dental Caries
XVII. One Origin of Physical Deformities
XVIII. Prenatal Nutritional Deformities and Disease Types
XIX. Physical, Mental and Moral Deterioration
XX. Soil Depletion and Plant and Animal Deterioration
XXI. Practical Applications of Primitive Wisdom

TABLE OF CONTENTS

LIST OF ILLUSTRATIONS

1. LOENTSCHENTAL VALLEY IN SWITZERLAND
2. HAND-MILL USED BY NATIVES IN LOENTSCHENTAL VALLEY
3. NATIVES OF MODERN SWISS VALLEY SHOWING NORMAL DESIGN OF FACE AND DENTAL ARCHES WHEN ADEQUATE NUTRITION IS PROVIDED
4. NATIVES OF LOENTSCHENTAL VALLEY SHOWING TOOTH DECAY AND DEFORMED DENTAL ARCHES TYPICAL OF THOSE LIVING ON MODERN FOODS
5. A TYPICAL BLACK-“HOUSE” ON THE ISLE OF LEWIS. NATIVES OF THE ISLE OF LEWIS
6. TOOTH DECAY IN NATIVE OF ISLE OF HARRIS LIVING ON MODERN FOODS AND EXCELLENT TEETH OF NATIVES LIVING ON PRIMITIVE FOODS
7. GAELIC CHILDREN LIVING ON NATIVE FOODS. GAELIC CHILDREN LIVING ON MODERN FOODS
8. VARIATIONS IN GROWTH OF OATS FERTILIZED WITH VARYING QUANTITIES OF SMOKE-THATCH
9. PRIMITIVE ALASKAN ESKIMOS SHOWING EXCELLENT FACIAL AND DENTAL ARCH FORMATION
10. PRIMITIVE ALASKAN MOTHERS
11. ALASKAN ESKIMOS SHOWING EFFECT ON TEETH OF MODERN FOODS
12. DEFECTIVE TEETH AND DENTAL ARCHES IN ESKIMO CHILDREN LIVING ON MODERN FOODS
13. DRIED EGGS OF SALMON ARE AN IMPORTANT ITEM OF NUTRITION
14. FACIAL AND DENTAL ARCH DEFORMITY IN WHITE BOY BORN IN ALASKA AND LIVING ON MODERN FOODS
15. FAMILY OF FOREST INDIANS OF NORTHERN CANADA
16. MODERNIZED INDIAN CHILDREN WITH TUBERCULOSIS
17. INDIAN WOMEN AND GIRLS TYPICAL OF THOSE LIVING ON PRIMITIVE FOODS
18. INDIAN WOMEN TYPICAL OF THOSE LIVING ON MODERN FOODS
19. DEFORMED FACIAL FORMATION IN CHILDREN OF FIRST GENERATION AFTER ADOPTION OF MODERN FOODS BY PARENTS
20. PRIMITIVE INDIANS OF CENTRAL CANADA: PARENTS DEVELOPED ON NATIVE FOODS, CHILDREN ON MODERN FOODS
21. TYPICAL CRIPPLED CHILDREN FOUND AMONG INDIANS LIVING ON MODERN FOODS
22. SKULLS OF PRIMITIVE INDIANS SHOWING SUPERB DENTAL ARCHES
23. SKULLS OF PRIMITIVE INDIANS SHOWING EXCELLENT BONE FORMATION
24. SEMINOLE INDIANS, TYPICAL OF THOSE LIVING ON NATIVE FOODS
25. DENTAL CARIES IN SEMINOLE INDIANS LIVING ON MODERN FOODS
26. SEMINOLE INDIAN CHILDREN SHOWING CHANGES IN FACIAL AND DENTAL ARCH FORM WHICH RESULT FROM MODERN FOODS
27. SKULLS OF PRE-COLUMBIAN INDIANS OF FLORIDA
28. MELANESEANS TYPICAL OF THOSE LIVING UNDER NATIVE CONDITIONS
29. FACIAL BONE FORMATION IN MELANESEANS LIVING ON NATIVE FOODS
30. FIJI COUNCIL HOUSE AND HEREDITARY FIJI MONARCH
31. TOOTH DECAY IN NATIVES OF FIJI ISLANDS LIVING ON IMPORTED FOOD
32. TOOTH DECAY AND CHANGES IN ARCH FORMATION IN FIRST GENERATION AFTER ADOPTION OF MODERN FOODS
33. PERFECT DENTAL ARCHES OF POLYNESIANS LIVING UNDER NATIVE CONDITIONS
34. TAHITIANS SHOWING DENTAL CARIES DUE TO IMPORTED FOODS
35. CHANGES IN TEETH AND IN DENTAL ARCH FORMATION OF POLYNESIANS LIVING ON MODERN FOODS
36. SAMOANS TYPICAL OF EXCELLENT FACIAL AND DENTAL ARCH FORMATION WHEN LIVING ON NATIVE FOODS. CHILDREN WITH FORMATION TYPICAL OF THOSE BORN OF UNDER-NOURED PARENTS
37. HAWAIIAN FAMILY SHOWING CHANGES IN FACIAL FORM IN YOUNGER CHILDREN OF SAME FAMILY
38. TOOTH DECAY AND TUBERCULOSIS AS A RESULT OF UNDER-NUTRITION IN A POLYNESIAN GIRL
39. MEMBERS OF MASAI TRIBE ILLUSTRATING EXCELLENT RESULTS OF DIET OF MEAT, MILK AND BLOOD
40. METHOD BY WHICH BLOOD IS DRAWN FROM STEER
41. FACIAL AND DENTAL ARCH DEVELOPMENT IN AFRICAN TRIBES LIVING ON NATIVE FOODS
42. FACIAL AND DENTAL ARCH DEVELOPMENT IN MEMBERS OF BELGIAN CONGO TRIBE LIVING ON NATIVE FOODS
43. PYGMIES OF BELGIAN CONGO
44. DENTAL CARIES IN AFRICANS WHO HAVE ADOPTED MODERN FOODS
45. CHANGES IN FACIAL AND DENTAL ARCH DEVELOPMENT IN CHILDREN OF FIRST GENERATION AFTER ADOPTION BY PARENTS OF MODERN FOODS
46. AFRICANS SHOWING FACIAL DEFORMITIES DUE TO DIET OF MODERN FOODS
47. AFRICANS SHOWING FACIAL DEFORMITIES IN FIRST GENERATION AFTER ADOPTION BY PARENTS OF MODERN FOODS
48. AFRICAN CHILDREN SHOWING A MARKED DEPRESSION OF MIDDLE THIRD OF FACE DUE TO MALNUTRITION OF PARENTS
49. CAMELS' MILK IS AN IMPORTANT ITEM OF NUTRITION IN ASIA AND AFRICA
50. FACIAL DEFORMITIES FOUND IN BOYS AND GIRLS LIVING IN CAIRO UNDER MODERN CONDITIONS
51. AFRICAN CHILDREN WALKING ON "ALL FOURS"
52. TYPICAL ABORIGINES OF AUSTRALIA
53. MAGNIFICENT DENTAL ARCHES AND TEETH FOUND IN ABORIGINES
54. DENTAL CARIES IN ABORIGINES LIVING ON MODERN FOODS
55. CHANGES IN TEETH AND ARCH FORMATION IN MODERNIZED ABORIGINES
56. DISTURBANCE IN FACIAL GROWTH IN MODERNIZED ABORIGINES
57. DEFORMITY PATTERNS PRODUCED IN ABORIGINES BY MODERN FOOD
58. EFFECTS OF MALNUTRITION IN AUSTRALIAN ABORIGINES LIVING ON A RESERVATION
59. TYPICAL ABORIGINE MOTHERS WITH THEIR CHILDREN
60. COMPARISON OF SKULL OF TYPICAL ABORIGINE WITH THAT OF PEKING MAN
61. INHABITANTS OF ISLANDS NORTH OF AUSTRALIA HAVE SPLENDIDLY BUILT BODIES WITH FINE FACIAL AND DENTAL ARCH FORM
62. COMPARISON OF FACIAL AND DENTAL ARCH FORMATION IN NATIVE AND IN WHITE CHILDREN ON THURSDAY ISLAND
63. GOOD PHYSICAL DEVELOPMENT OF NATIVES OF HAMMOND ISLAND
64. DENTAL ARCHES IN NATIVES ON THE ISLANDS OF THE GREAT BARRIER REEF
65. CONTRAST IN FACIAL AND DENTAL ARCH FORM BETWEEN PRIMITIVE AND MODERNIZED NATIVES
66. DEFORMED DENTAL ARCHES IN WHITE CHILDREN ON THURSDAY ISLAND
67. TOOTH DECAY IN WHITE CHILDREN IN TORRES STRAIT ISLANDS
68. DENTAL CLINIC MAINTAINED BY NEW ZEALAND GOVERNMENT
69. THE MAORI HAD THE REPUTATION OF HAVING THE FINEST TEETH AND BODIES OF ANY RACE IN THE WORLD
70. TOOTH DECAY IS FOUND IN MODERNIZED MAORI
71. THE WHITES LIVING IN NEW ZEALAND HAVE POOR TEETH
72. FACIAL DEFORMITIES IN MAORI BORN AFTER ADOPTION OF MODERN FOODS
73. MAORI SKULLS SHOWING FINE PHYSICAL DEVELOPMENT
74. MAORI DEMONSTRATING SOME OF THE ACCESSORY ESSENTIALS OBTAINED FROM THE SEA
75. TREPINE SKULLS OF ANCIENT PEOPLES OF PERU
76. TREPINE SKULLS WITH GOLD PLATES IN POSITION
77. POTTERY JAR DEPICTING ANCIENT PERUVIAN SURGERY. BONE SHOWING HEALING OF FRACTURE
78. SKULLS OF FISHERMEN OF CHIMU CULTURE
79. ANCIENT AQUEDUCT OF PERU
80. DESCENDANTS OF ANCIENT CHIMUS SHOWING FLATTENING OF BACK OF HEAD
81. SOME DESCENDANTS OF THE ANCIENT CHIMUS ARE STILL LIVING IN A FEW FISHING VILLAGES IN THE NORTH OF PERU
82. STONE FORTRESS BUILT BY PRIMITIVE PEOPLE OF ANDEAN SIERRA
83. TYPICAL SKULLS OF HIGH SIERRA INDIANS
84. DESCENDANTS OF THE TAUHUANOCAN INDIANS OF PERU
85. THE QUICHUA INDIANS LIVING IN THE HIGH ANDES ARE DESCENDANTS OF THE INCAS
86. INDIANS OF THE HIGH ANDES HAVE MAGNIFICENT PHYSIQUES
87. INDIANS OF THE HIGH ANDES HAVE SUPERB FACIAL AND DENTAL ARCH DEVELOPMENT
88. INTRODUCTION OF MODERN FOODS TO SIERRA INDIANS PRODUCED WRECKAGE OF PHYSIQUES
89. JUNGLE INDIANS OF THE AMAZON BASIN
90. FACIAL AND DENTAL ARCH DEVELOPMENT OF THE JUNGLE INDIANS IS SUPERB
91. EXCELLENCE OF SKELETAL DEVELOPMENT OF JUNGLE INDIANS AS EXPRESSED IN FACES AND DENTAL ARCHES
92. A MARKED CHANGE IN FACIAL FORM WITH CROWDING OF TEETH OCCURS IN JUNGLE INDIANS BORN AFTER ADOPTION OF MODERN FOODS
93. RAPID HEALING OF FRACTURED FEMUR IN BOY SUFFERING FROM MALNUTRITION, AFTER INSTITUTION OF PROPER NUTRITION
94. IMPROVEMENT ACCOMPLISHED BY PROPER NUTRITION IN BOY SUFFERING FROM INFLAMMATORY RHEUMATISM
95. EFFECT OF DIFFERENT WHEAT PRODUCTS ON RATS
96. TEETH SHOWING PERMEABILITY OF DECAYED DENTIN TO SILVER NITRATE
97. THREE CASES ILLUSTRATING HOW NATURE CAN CLOSE AN EXPOSURE OF PULP DUE TO DENTAL CARIES
98. FOUR MELANESIANS BORN ON FOUR DIFFERENT ISLANDS LOOK LIKE BROTHERS BUT ARE NOT BLOOD RELATIONS
99. FOUR POLYNESIAN GIRLS LIVING ON DIFFERENT ISLANDS ARE NOT RELATED THOUGH THEY LOOK LIKE SISTERS
100. DISTURBED HEREDITY: TWO PERUVIAN INDIAN FATHERS WITH GOOD PHYSICAL DEVELOPMENT AND THEIR SONS WHO SHOW DEFECTS
101. DISTURBED HEREDITY ILLUSTRATED BY FATHER AND SON OF WAKAMBA TRIBE OF CENTRAL AFRICA
102. DISTURBED HEREDITY IN QUICHA INDIANS
103. DISTURBED HEREDITY IN AUSTRALIAN ABORIGINES
104. TWO MAORI SISTERS, AND TWO WHITE SISTERS IN PERU, SHOWING FACIAL CHANGES THAT MAY OCCUR IN SAME GENERATION WITH CHANGE FROM PRIMITIVE TO MODERN DIET BY PARENTS
105. SIX BROTHERS SHOWING FACIAL CHANGES IN SAME GENERATION DUE TO CHANGE FROM PRIMITIVE TO MODERN FOODS BY PARENTS
106. CHANGE IN FACIAL FORM IN TWO YOUNGER BROTHERS, CORRESPONDING TO CHANGE IN DIET BY PARENTS
107. NATIVES FROM ISLANDS NORTH OF AUSTRALIA SHOWING PROGRESSIVE FACIAL CHANGE IN SAME FAMILY DUE TO CHANGE IN FOODS
108. WHITE GIRLS IN NEW ZEALAND ILLUSTRATE PROGRESSIVE LENGTHENING AND NARROWING OF FACE AND HIPS
109. NEW ZEALAND MAORI ILLUSTRATING PROGRESSIVE CHANGE IN FACIAL FORM OF TWO YOUNGER BOYS
110. NEW ZEALAND MAORI ILLUSTRATING MARKED UNDERSIZE AND DEFORMITY OF FEET IN SECOND CHILD IN FAMILY
111. MODERNIZED PERUVIAN INDIAN BOY SHOWING DISTURBED DEVELOPMENT OF FACE AND FOOT
112. MODERNIZED COASTAL INDIAN OF ECUADOR SHOWING SERIOUS PHYSICAL DEFORMITIES
113. ESKIMO CHILDREN ILL IN TUBERCULOSIS WARD OF THE GOVERNMENT HOSPITAL AT JUNEAU
114. PATIENTS IN THE MAORI HOSPITAL IN NEW ZEALAND SHOWING MARKED FACIAL UNDER-DEVELOPMENT
115. GIRLS IN TUBERCULOSIS WARD OF NEW ZEALAND HOSPITAL FOR MAORI SHOW MARKED FACIAL AND DENTAL ARCH DISTURBANCES
116. NATIVE HAWAIIAN CHILDREN WITH TUBERCULOSIS, SHOWING MARKED DISTURBANCES OF FACIAL FORM AND DENTAL ARCH DEVELOPMENT
117. DEFORMITIES OF PIG DUE TO LACK OF VITAMIN A IN MOTHERS DIET
118. DEFORMITIES DUE TO LACK OF ADEQUATE VITAMIN A IN MOTHERS DIET
119. MANY YOUNG OF MODERN DOMESTIC ANIMALS ARE BORN WITH DEFORMITIES
120. PUPPIES BORN WITH PHYSICAL DEFECTS DUE TO DEFICIENCY OF VITAMIN A IN FATHER
121. TYPICAL DEFORMITIES IN DOMESTIC ANIMALS
122. CRIMINALS. WERE THEIR UNSOCIAL TRAITS RELATED TO INCOMPLETE BRAIN ORGANIZATION ASSOCIATED WITH PRENATAL INJURY
123. MARKED LACK OF NORMAL FACIAL DEVELOPMENT IN NOTORIOUS YOUNG CRIMINALS
124. TYPICAL MONGOLOID DEFECTIVE
125. PHYSICAL CHANGES IN MONGOLOID TYPE DUE TO MOVEMENT OF MAXILLARY BONES TO STIMULATE PITUITARY GLAND IN BASE OF BRAIN
126. X-RAY PICTURES SHOWING POSITION OF TEETH BEFORE AND DURING OPERATION TO MOVE MAXILLARY BONES
127. TWIN BOYS WITH SAME DEFORMITY OF DENTAL ARCH
128. BOYS TYPICAL OF GROUP IN SPECIAL SCHOOL FOR BACKWARD CHILDREN
129. FIJI WOMAN WHO HAS GONE LONG DISTANCE TO GATHER SPECIAL FOOD NEEDED FOR PRODUCTION OF HEALTHY CHILDREN
130. AFRICAN WOMAN WHO HAS COME DOWN THE MOUNTAINS TO GATHER SPECIAL PLANTS OF WHICH THE ASHES PREVENT GOITER
131. X-RAYS OF TEETH OF THREE CHILDREN IN ONE FAMILY SHOW PROGRESSIVE INJURY IN YOUNGER CHILDREN
132. X-RAYS ILLUSTRATING PROGRESSIVE INJURY IN TWO YOUNGER CHILDREN IN FAMILY
133. X-RAYS COMPARING DEFORMITIES OF FACIAL FORM IN CHILD BORN AFTER LONG LABOR WITH BETTER FACIAL FORM IN SISTER BORN AFTER SHORT LABOR
134. GIRL SHOWING RELATIONSHIP BETWEEN LACK OF PELVIC DEVELOPMENT AND DEFORMITY OF FACE

Please visit http://gutenberg.net.au/ebooks02/0200251h.html#toc for complete ebook.