Index

A

Aspartic acid 72

Abdominal (“belly”) fat 31, 109

Academy of Nutrition & Dietetics 11

Accutane 197

Acesulfame-K 48

Acetaldehyde 126

Acetic acid 150, 276, 278

Acetone 38, 276

Acetyl CoA 144-145

Acidophilus milk 132

Acidosis 147

Acne 197, and zinc 225

Adequate Intake (AI) 232
Adipose cells 15

Adoption studies and obesity 25

Aerobic metabolism 142, 143

Aflatoxin 285, 286

African-Americans and metabolic syndrome 109

Afterbirth 242

Agar 53, 276, 278

Aging, and vitamin E 202
    and atherosclerosis 108

Agricultural productivity 270

Agriculture beginning 258

Alanine 72

Albumin 90

Alcohol 180, absorption 121, 126
    and blood pressure 5, 110
    and breast cancer 114
    and breastfeeding 247
    and B-vitamins 169
    and calories 56
    and carbohydrate 55
    and dehydration 155
    and flushing 126
    and folate 185
    and HDL levels 112
    and nutrient absorption 213
    breakdown 126
    distillation 55
    during pregnancy 242

Alcohol dehydrogenase 126

Alcoholics/Alcoholism, and iron 224
    genetic tendency 59

Aldehyde dehydrogenase 126
Alexander the Great’s dinner 70

Algae 72

Algin 53

All-Bran 276

Allergies, reduced by breastfeeding 246

Almonds 182,
and cyanide 265

Aluminum hydroxide 214

American Academy of Pediatrics’s Committee on Nutrition 248

American Cancer Society 236, 237

American Heart Association 236, 237
and supplements 113

American Heart Association Diet 37

Ames, Bruce 280

Amines 284

Amino acids 38, 62, 69, 150, 183, 258, 264
and DNA 81
and energy metabolism 145
and pellagra 138,
chains 73
essential 75,
from plants 259
in protein 72

Ammonia (NH₃) 72, 150, 259
and amino acids 145
for plants 264,
toxic levels 88

Ammonium citrate 278

Ammonium phosphates for plants 260

Amylopectin 50, 51
Amylose 50, 51, 52
Anabolism 139
Anaerobic, definition 141
Anecdotal evidence 8
Anemia 177, 184
   and copper, iron, lead 220-222
   and energy 19,
   and liver 5
   during pregnancy 243
   hemolytic, and vitamin E 193
   pernicious 186
Aneurin 177
Angina pectoris 79, 106
Animal, quality/quantity of protein 75
Animal tests of food additives 279
Anatto 278
Anorexia 42, 43
Anorexia nervosa 34, 40-43
   and menstruation 221
Antibiotics 165
   and vitamin K deficiency 204
Antibodies 72
Antioxidant 177, 178, 193, 277
   and selenium 221
   and vitamin E 201
Antivitamin 179, 189
Antlers, source of calcium 209
Anus 132
Aphids, in food 261
Apollonius of Tyana 79

Appetite 33, 38
  and Ghrelin, Leptin 5
  and older people 251

Apples, and pectin 52,
  and water 157

Apricots 193,
  and pests 262

Arctic Indians 94

Arginine 72

Aristotle, theory of disease 3

Arsenic 229

Arteries 106

Arthritis 165, and iron 224

Aru Island 3

Ascorbic acid, Ascorbate (see also Vitamin C) 177, 224, 277, 278
  anti-scorbutic 178
  as antioxidant 277, 278 (see also Vitamin C)

Ash, definition 5, 136

Asians and lactase 132

Asparagine 72

Asparagus, and fiber 52
  and grain 77,
  and urine 162

Aspartame 47, 48

Aspartate 72

Aspartic acid 47

Aspirin (acetylsalicylic acid) 165, 265
  during pregnancy 242
Athabascans and vitamin A 196
Atherosclerosis 106, 108, 110, 116
Athletic performance 145, 156
Atkins diet 37
ATP 19, 20, 140, 141, 208, 259
Autoimmune disease 59, 187
Avidin 189

B
Bacon 98, 283
Bacteria 164,
    and diarrhea 133
    and food borne illness 280
    and tooth decay 61
    and vitamin K 193, 203
Bagels 37
Bagoong 209
Bakalai, idea about food 3
Baked beans and bread 76
Baking soda 278
Baldness 181
Bananas 51, 96, 269
Bariatric surgery 130
Barley 76, 270,
    for beer 55
Basal metabolic rate (BMR) 14, 28
Basal metabolism 22, 29
Base pairing, bases, in DNA 83, 84
Beans and fiber 53, 111
  source of molybdenum 221

Bears, polar, source of vitamin D 200

Beaumont, William 121

Beef grades 293

Beer 70, 272,
  alcohol content 55
  and chromium 221, 229
  and malt 49,
  and scurvy 176
  and water 155

Beet greens 77

Beeturia 162

Behavior modification/weight loss 39

Belly fat 109

Benzoic acid, Benzoyl peroxide 278

Beriberi 5, 136, 138, 164, 169, 179, 190

Berries 177

Beta-carotene 171, 173, 220, 276

Beyer, Peter 267

BHA (butylated hydroxyanisole) 277, 278

BHT (butylated hydroxytoluene) 277, 278

BIA (bioelectric impedance analysis) 31

Bicarbonate 128

Bieler, Henry 7, 8

Big Gulp 48

Big Mac calories 97
Bile 64, 128
   and pectin 52,
   composition 129

Bile acids 103, 111, 129, 130
   and HDL 107

Bile duct 128, 134

Bill & Melinda Gates Foundation 270

Biodiversity 269

Biotechnology 5, 257, 267, 268
   and insulin 59,
   and pests 262 and rice-tofu 77,
   in agriculture 263
   using bacteria 87

Biotin 11, 177, 189, 190
   recommended intake 301-302

Birds, energy for migration 97

Birth-control pills 114

Birth defects and vitamin A 193

Birth weight and survival 244

Bisphosphonates 214

Bladder 161

Blanch 274

Blanching, vegetables 74

Bleeding, and vitamin E 193

Blindness, night and vitamin A 192

Blind staggers and selenium 227

Blood, and glucose 58
   calcium for clotting 208
   clotting 108, 193, 203
pressure 210
white cells and vitamin A 195

Blood-cholesterol 107, 108

Blood plasma 215

Blood pressure 108, 109, 115
and salt 216,
and weight loss 38

Blood vessels and diabetes 59

Blood volume and water 154

Blueberries 298

BMR (basal metabolic rate) 14, 28, 29

Body heat 14, 20, 221

Body Mass Index (BMI) 30

Body type 22

Body weight regulation 26

Body Weight Planner 28

Bomb calorimeter 17

Bone marrow and vitamin B12 188

Bones 208

Boron 229

Boston Marathon and water use 157

Bottled water 160

Bottle mouth and tooth decay 62

Botulinum, Botulism 281, 283-285

Bourbon 272

Bowel movement 132
Brain, and ATP 146,
   and oxygen 106
   and stroke 106,
   energy needs 14
   formation 243

Bran and cellulose 52

Brazil 272,
   and ethanol production 56

BRCA-1 and 2 and breast cancer 114

Breast cancer 113-114

Breastfeeding 114
   and fat 16,
   and immunities 246
   importance 90, 247
   weight loss advantage 245

Breast milk 77, 214,
   and iron 223
   and vitamin D 200

Breast pump 247

Brewer's yeast & chromium 221, 229

Brine 216

Broccoli 77, 171, 173, 177, 210, 236

Browning of sliced apples 277

Brown rice 54,
   and beriberi 136

Brussels sprouts 77, 177

Buchanan, Bob 270

Bulimarexia 40

Bulimia 40, 41, 251

Bureau of Alcohol, Tobacco, and Firearms, and labeling 295
Burp 127
Buru Island 3
Bush, George HW 155
Butanol 276
Butter 95
Butylated hydroxytoluene 276
B-vitamins 165,
  additive 275
  and coenzymes 139,
  eight types 139
C
Cabbage 52,171, 204, 285
Caffeine 265, 276
  and breastfeeding 247
  during pregnancy 242
Calciferol 193
Calcitonin 211
Calcium 11, 193, 208-211
  absorption and vitamin D 199
  alginate, -bromate, -lactate, -phosphate, -propionate, -silicate, -sorbate 278
  and colon cancer 64
  and high blood pressure 110
  and vegan diet 79, 244
  and vitamin C 190
  carbonate, citrate, gluconate 210
  for plants 260
  in blood 208
  in hard water 159
  in milk 89
  intake for girls 213
  -phosphates, -sulfate, for plants 260
  recommended intake 301-302
Calgene, Inc. 263

https://med.libretexts.org/Bookshelves/Nutrition/Realities_of_Nutrition_(Morrill)/zz%3A_Back_Matter/Index
Updated: Thu, 22 Sep 2022 08:34:57 GMT
Powered by
California 272, 282
and wasps 262
soils 260

Calories 13,
content of foods 97
definition 16,
dense foods 36
for various activities 18, 29
for vegans 80
RDA during pregnancy 244

Calorimeter 17

Campbell Soup Company 263

Canada & folic acid fortification 292

Cancer 109, 112-114

Caproic acid 95

Caramel 278

Carbohydrate 5, 47, 177
daily intake 60
energy-providing nutrient 46

Carbohydrate loading, athletes 65-68

Carbohydrates 5, 47, 58, 69, 95, 177
and health 57,
and metabolism 144
for diabetics 60

Carbon 95
and cell energy 143,
for plants 259

Carbon dioxide (CO2) 51, 150, 285
for plants 259,
from burning 46

Carbon monoxide 109

Carcinogens 64, 265, 284, 285
Cardiac sphincter 125
Cardiovascular disease 299
Carob bean gum 278
Carotemia 162
Carotene, Beta-carotene 194, 278
Carotenoids 193, 194
    cooking helps absorption 196
Carp 180
Carpenter, Karen 40
Carrageenan 52, 97, 276, 278
Carrot oil 278
Carrots 36, 50, 193, 272
    and pectin 52,
    and urine 162
    and vision 192,
    and vitamin A 195
Cassava 51, 53, 54, 285
Castle, William 186
Catabolism 139
Catalysts 49, 139
Cataracts 181
CAT (computerized axial tomography) 212
Cats and vitamin A 194
Cattle, pasture raised 261
Caucasians, and lactase 132
Cauliflower 77, 204 Caveman
    and fat 15
CCK (cholecystokinin) 124

CDRR (Chronic Disease Risk Reduction Intake) 216, 232, 301

C. difficile 131

Celery 52, 262

Celery juice 284

Cell membranes 94, 102
    and LDL 107

Cells 258,
    and energy use 140
    as separate lives 82
    energy needs 14
    life's basic unit 82

Cellulite 15

Cellulose 48, 49, 51, 52, 56, 278

Centurion, British ship 176

Cereals 210
    solid food for babies 248
    source of iron 221

Ceviche 74, 75

Chateau Margaux 1976 123

Cheese 196, 272, 294

Cheilosis 167

Chelates 224

Cheops 70

Chernobyl 225, 261

Chewing gum 52

Chicken, grades 293

Chicle and fiber 52
Childbearing problems 197, 220

China 269, 271
    and selenium 227
Ho the Physician 3

Chinese diet 91

Chitin 53

Chloride 11, 208, 210, 215, 217

Chlorophyll 47, 194, 258
    and magnesium 214
    as color additive 276

Chocolate 95, 96, 238

Cholecystokinin (CCK) 124

Cholera 75, 154

Cholesterol 101, 103, 107-112, 165, 182
    and gallstones 129
    and pectin 52
    and vitamin D 198

Choline 102

ChooseMyPlate 234

Chromium 11, 221, 229

Chronic Disease Risk Reduction Intake (CDRR) 216, 232, 301

Chyme 127, 130

Cimetidine/Tagamet 128

Cirrhosis and iron 224

Citrates 224

Citric acid 277, 278

Citrus 177

Citrus fruits 210
Citrus red no. 2 278
Clams 180
Clostridium botulinum 283, 284
Club soda 160
Coal tar dyes as food additives 276
Cobalamin 10, 177, 186
Cobalt 186, for plants 261
Coca-Cola 62
Cocaine during pregnancy 242
Coconut oil 95, 99, 101
Cod-liver oil and vitamin D 198
Coenzymes 139, 164, 176, 177, 181, 182, 185
   and niacin, riboflavin 144
   and vitamins, as carriers 139
Coenzyme A 189, 190
   and pantothenic acid 144
Cofactor in metabolism 210
Coffee 183, 276
Coleman, Ellen 66
Collagen 221
Collard greens 77, 210
Colon (large intestine) 63, 124, 130
   and bacterial life 131
   and cancer 58, 63, 64, 210, 288
   and cholesterol 111
   and water absorption 130
Common cold 166
Complementary Plant Proteins 77
Complex carbohydrates 49

Compost 259

Condiments and fat 97

Constipation 132, 173
   and fiber 63, 64
   and iron supplements 224

Convenience foods 235, 273

Cook, James (Captain) 178

Copper 11, 221, 227-228
   and hemoglobin 227
   deficiency and zinc 225
   plumbing, utensils 228

Corn 50, 51, 74, 76, 77, 183, 269, 283
   for alcohol 55,
   syrup 48

Corn blight 266

Corned beef 272

Corn meal 51

Corn oil 51, 98

Cornstarch 51

Corn syrup 51, 61

Coronary arteries 103, 106

Cotton 52

Coumadin, Coumarin 203

Couscous 91

Cow’s milk 248

Cramps 210, 221

Cream of tartar 278
Creatine 141
Creatine phosphate 19
Criminality and sugar 62
CRISPR-Cas gene editing 263
Croissant 95
Crop yields 266
Crossbreeding and pests 262
Crusades and nutrition 3
Cyanide 265
Cyclamate 48, 280
Cysteine 72
Cystic fibrosis and vitamin E 201
Cytoplasm 83, 140

D
Daily Value (DV) 290, 301
Dairy products 115, 221
Dam, Hendrik 202
Dean Ornish Diet 37
Death rates as population ages 108
Defecation 132
Defibrillators 113
Dehydrated beets 278
Dehydration 153, and diarrhea 133
Delaney Clause 279, 284
Denaturing of proteins 74
Dental disease and vegan diets 79
Deoxyribose 85
Dept. of Agriculture and labeling 295
Dept. of the Interior and labeling 295
Depression 71, 177, 251
Dermatitis 177
Detergents and fat 128
DEXA (dual energy x-ray absorptiometry) 212
Dextrose (glucose) 48, 51, 55
Diabetes 58, 106, 115, 153, 165
  and artherosclerosis 108
  and obesity 6,
  and weight loss 38
  definition 58,
  gestational 60
  prevalence 58,
  treatment 60
  type 1, type 2 58, 59
Dialysis 154
Diamond, Harvey 11
Diaphragm 128
Diarrhea 94, 133, 153, 177, 186, 210, 217, 282, 284
  and copper, iron, zinc 221
  and emotions 133
  and infant formula 247
  and lactose 132,
  and vitamin A 193
Diet, and colon cancer 64
  effects on weight 21
  for diabetics 59, 60
Dietary fat and heart disease 5

Dietary Guidelines 65

Advisory Committee 110

Dietary Guidelines for Americans (DGAs) 110, 111, 235, 236, 239-240

Dietary Reference Intakes (DRIs) 232, 239-240

Dietary Supplement Health and Education Act (DSHEA) 166

Dietary supplements 166

Dietitians 231

Diet plans, foods 28

Diet soft drinks 273

Digestion 120-122, and emotions 133

Digestive enzymes 126

Digestive tract/chambers 122

Digitalis 164, and foxglove 265

Diglycerides 276, 278

Dimethyl sulfide 276

Disaccharides 49, 56, 122

Disodium guanylate 278

Distilled water 160

Diuretics 40, 152, 218

Diverticulosis 58, 63, 173

DiVine Ripe tomato 264

DNA (deoxyribonucleic acid) 48, 83 and folate 185
Dogs 3, 153
Doisy, Edward 203
Dolomite, source of calcium 210
Double-blind study 9, 62
Double helix, DNA structure 84
Dowager’s hump 211
Downy mildew 269
Drought 285
DSHEA (Dietary Supplement Health and Education Act) 166
Duodenum 126, 127
Durian 123
Dutch Crown and beriberi 136

E
Eber’s Papyrus 192
E. coli (Escherichia coli) 281, 282
Ecology 257, 266, 270
Economy Class Syndrome 203
Ectomorph 22, 33
Edema 162, 216
EDTA (ethylenediamine tetraacetic acid) 278
Egg lecithin 102
Eggs 111, 210, 252
size and grades 293
source of iron 221
Egg whites 111
Egg yolks, and cholesterol 111
and vitamin E 193
and vitamin K 204

Egypt 70, 272
and zinc deficiency 225

Eijkman, Christiaan 136, 139

Einstein 8

Electrolytes 154, 208, 215, 218
and bulimia 40

Embryo 242

Emotions and appetite 34

Emulsifier 52, 102, 128

Endometrial cancer 213

Endomorph 22, 33

Endurance events 65

England, 1840s depression 70

Enriched refined grain 292

Environment and obesity 24

Environmental clean up by plants 261

Environmental Protection Agency (EPA) 160, 258

Enzymes 50, 55, 74, 180
and amino acids 72
and digestion 49, 121
and food deterioration 274
and zinc 225
biological catalysts 49, 139
of soil bacteria 259

Epidemiology, definition 9

Epiglottis 124

Epithelial tissues, and vitamin A 195
Equal 47, 48

Eskimos 94, 112

Esophagus 124, 125
    and cancer 284,
    and heartburn 126

Essential amino acids 88

Essential fats 94

Essential nutrient defined 9

Estimated Average Requirement (EAR) 232

Estrogen 108, 114, 211, 212
    and breast cancer 114

Estrogen-replacement therapy 213

Ethanol 56, 276,
    from corn 55

Evaporation of water 153

Evolution 176,
    and fat 23

Exercise 117,
    and HDL levels 112
    and weight loss 32,
    habits 249
    importance for the elderly 252

Ex-Lax 162

Experimental group 9

Extracellular water 151, 215

Eyes 122, 193

F

Fabricated foods 273

Falafel 76
Families and obesity 24

Fasting and digestion 134

Fat 105,
and calories 115
and moisture illusion 158
content calculations 116
energy content 96
saturated vs. unsaturated 111

Fat cells (adipose cells) 15

Fatigue 284,
and iron 221

Fatness, measurement 31

Fats 5, 93
and energy metabolism 144, 145
and LDL levels 110
fatty acid composition 100
time in stomach 128

Fat-soluble vitamins 95

Fat substitutes 97

Fatty acids 94, 95, 100, 111, 201
and biotin coenzymes 189

Fava beans and urine color 162

FDA (Food and Drug Administration) 101, 278

FD & C blue #1, red #40, yellow #5 278

Fecal contamination 282

Fecal transplants 131

Feces 153

Fermentation, and alcohol 55
and food preservation 272

Ferrous sulfate 224
Fertility and breastfeeding 245

Fertilizer 8, 258

Fetal alcohol syndrome 242

Fetus 242

Fever 221, 284

Fiber 17, 52, 53, 60, 63, 73, 111, 115, 275
  and constipation 133
  and feces water 153
  and LDL levels 111
  Daily Value 290

Fibrillate 112

Fibrin, Fibrinogen 203

Fig Newtons 296

Filth and food regulation 261

Fingernails and selenium 221, 227

Fish 99, 210,
  and fatty acids 99
  and vitamin D 193
  benefit in the diet 112;
  oil 94, 95

Fish and chips 123

Fit for Life 11, 18

Fitzgibbons, Judy 298

Flatulence, Flatus 131

Flavr Savr tomato 264, 275

Fleas 265

Florida 260, 272, 273

Flour, enriched 289
Fluoride 11, 221, 228-229
   and tooth decay 228
   for plants 261;
   in water 159
   recommended intake 301-302

Fluorosis 228

Folate (folic acid, folacin) 11, 95, 173, 177, 184-186, 190
   and orange juice 234
   and pregnancy 185, 243
   fortification (folic acid) 292
   recommended intake 301-302
   synthetic folate (folic acid) 185

Folic Acid (see Folate)

Fonda, Jane 40

Food additives 276

Food Additives Amendment 278

Food and Drug Act 261

Food and Drug Administration (FDA) 183, 258, 262
   and labeling 295

Food and Nutrition Board (FNB) 89, 232, 239-240

Food composition tables 8

Food First 268

Food label 288, 299

Food processing 273

Formaldehyde 150

Fosamax 214

Foxglove 164

Frankfurters 115, 116, 216
   and botulism 283
French fries 95
French Revolution 4
Frito-Lay and trans fat 101
Fructose 48
Fruit Loops 54
Fruits, and fiber 111,
dried 210
solid food for babies 248
Fulani tribe 132
Fumarates 224
Fungicide from plants 264
Funk, Casimir 137
Furan diacetyl 276
Future of Food Symposium 270
G
Gag reflex 125
Galactose 48, 54, 132,
and pectin 52
Galesburg, Illinois, and fluoride 228
Gallbladder, gallstones 124, 128, 129
Garbanzo beans 76
Garlic 162, 227
Gasoline 19, 47
Gastric bypass 130
Gastrin 124
Gelatin 278
Genes 24, 84, 268
and atherosclerosis 108
in plants 260

Genetically Modified Foods 268

Genetically modified organism (GMO) 263

Genetic code 84 Genetic diversity 266

Genetic engineering 269

Genomics 268

GERD (Gastroesophageal Reflux Disease) 126

Ghrelin 5, 33, 124

Gin 110

GIP (Glucose-dependent insulinotrophic peptide) 124

Global warming 47

Glucagon 58, 128

Glucose 48, 55, 58, 95, 132, 151, 176
and appetite 33,
and metabolism 140
and the brain 38,
and yeast 55

Glutamate, glutamic acid, glutamine 72

Gluttony 20

Glycemic Index 54

Glycerin 95

Glycerol 95, 151, 278

Glycine 72

Glycogen 38, 48, 49, 51, 58, 147
storage and the athlete 65-68

Glycolysis 140, 141
Goblet cells 83
Goiter 289,
and iodine 221, 226, 285
Goitrogens 285
Goldberger, Joseph 137, 138, 141
Gout and molybdenum 221
Grades of food 292
Grains, source of chromium, copper, iron, manganese, molybdenum, selenium 220-221
Grapefruit enzymes 74
Grapefruit Diet 37
Grape Nuts 276
Grapes, and pests 262
for wine 55,
sugar content 21
GRAS (Generally Recognized as Safe) 279
Great Plains 272
Greek peasant diet 70
Greek Regimen in Health 3
Green beans 77, 283
Greenhouse gas 47
Green leafy vegetables 168, 182, 209, 210,
and vitamin K 204
source of iron 220
Greens 193 Greyhounds 146
Grits in the South 70
Ground squirrel, golden-mantled 26
Group Support for weight loss 39
Guar gum 53, 276, 278
Guatemala and vitamin A 194
Gulf War 272
Gum arabic 53, 278
Gum ghatti 278
Gums and fiber 52
Gut microbiome 131

H
Hair and selenium 221, 227
Halvah 209
Ham 216,
  and botulism 283
Hangover 169
Hawaii 272
HbA1c (Hemoglobin A1c) 58
HDL (see high-density lipoprotein) 107-108, 111-112, 117-118
Headache 94, 177, 284
Health Canada 232, 239
Health Claims that Meet Significant Scientific Agreement 291
Health foods 273
Health Regimen of Salerno (Italy) 4
Heart 182, and selenium 221
Heart attack 106, 108, 109
  and high blood pressure 108
Heartbeat 210,
  and potassium 217
Heartburn 126

Heart disease 109, 113, 114
  and dietary fat 106
  and obesity 6
  and trans fat 101

Heart failure and iron 221

Heat stroke 155

Heme iron 222-223

Hemicellulose 52

Hemochromatosis 221, 224

Hemoglobin 146, 184, 220, 221, 222
  and amino acids 73,
  and bile 129
  breakdown product 162

Hemoglobin A1c (HbA1c) 58

Hemophilia 203

Hemorrhagic disease 265

Hemorrhagic stroke 108
  and alcohol 110

Hemorrhoids 63, 64

Hepatitis A virus 284

Herbal supplements 166

Heredity, and fatness 21
  and fat 14,
  and vitamin B12 188

Herring 180

Hershey chocolate 23, 299

Heterozygotes 224

High blood pressure and atherosclerosis 108
and sodium 215-216
definition 108

High-density lipoprotein (HDL) 107

High-fructose corn syrup 48, 51, 54

Hippocrates 3, 71, 120

Histidine 72

HIV/AIDS and breastfeeding 247

Hoarding behavior 26

Hodgkins, Dorothy 186

Hollandaise 102

Homogenization of milk 128

Homozygotes 224

Honey 48, 61;
    and infants 285

Hong Kong and methionine 76

Hopkins, Frederick 5

Hormone-replacement therapy 114

Hormones 189
    and amino acids 72
    chemical messangers 122 d
    efinition 58

H. pylori bacteria 126, 128

Hubei Province, China 227

Hudson’s Bay Company 94

Human genome 84

Human microbiome 131

Hummingbird, ruby-throated 26
Hummus 76

Hybrid corn 266

Hydrated carbon 47

Hydrochloric acid 40, 126, 217

Hydrogen 95,
   and cell energy 143
   for plants 259

Hydrogenated Fats 100, 101

Hydrogen peroxide 278

Hydrolyzed vegetable protein 278

Hyena as food 3

Hyperactivity 58, 62

Hyperlipidemias and vegan diets 79

Hypoglycemia 61

Hypothalamus and appetite 33

Ice cream and calcium and fat 291

Idaho 272, 282

Impossible Burger 223

Impotence 109

Indian diet 91

Indigestion & contaminated food 134

Indirect calorimetry 18

Indoles 173

Indonesia 136

Infant botulism 285
Infant death and water 154
Infant Formula Act 183
Infections and iron 221
Infertility and lead 222
Ingenhousz, Jan 46
Inositol 48
Insect parts in food 261
Insulin 58, 59, 73, 128, 165
and chromium 221
and the kidneys 162
and tryptophan 63
Integrated Pest Management (IPM) 262
Intestines 120, 121
Intracellular water 151, 215
Intrinsic factor 126, 186
Iodine 11, 221, 225-227
and goiter 285
excess 226,
for plants 261
recommended intake 301-302
Ions 215
Iran, and wasps 262
and zinc deficiency 225
Ireland, potato diet 70
Iron 11, 220-225
absorption 178
additive 275,
amounts in food 222
and vegan diet 79, 90, 244
and vitamin C 190
deficiency 79, 184, 220
for babies 248,
for plants 260
fortification and supplements 224
in drinking water 159
non-heme 222, 223
pots and pans 224
recommended intake 208, 223, 243, 301-302;
toxicity 224

Ironman Triathlon 68

Irradiation for microbe control 282, 286

Isoleucine 72

Isoprene 276

Isotretinoin 197

Italy and pellagra 137

J

Jack-in-the-Box hamburgers 282

Japan 114, 179, 282
and breast cancer 114

Jaundice 284,
and vitamin K 193

Java 136

Jell-O 74

Jenny Craig 37

Jet lag and dehydration 155

Jixian, China and iodine 226

John, Elton 40

Junk food and children 250

K

Kale and legumes 77
Kellogg All-Bran cereal 288

Keshan’s disease & selenium 227

Ketones 38, 147
  and starvation 147

Ketosis 35, 37, 147

Kidney 153, 162, 182, 216
  and excess protein 88
  and high blood pressure 109
  and vitamin D 199
  damage and lead 222
  damage, and vitamin D 193
  disease 161, 218,
  stones 166, 210

Kidney failure 282,
  and diabetes 59

Kidney beans 76

Kiebsiella and vitamin B12 80

Kilocalorie (kcal), definition 16

Kim chee 216

Krebs, Hans 143

Kwashiorkor 90, 245

L

Labeling 287,
  definitions 294

Lactase 50, 132,
  and microvilli 130

Lactation and folate 185,
  and vegan diet 244
  increased RDAs 246

Lactic acid 278
  and energy supply 142
and muscle 75,
in athletes 75

Lactobacillus acidophilus 132

Lacto-ovo vegetarian 89

Lactose 48, 49, 62, 209

Lactose intolerance 132, 133

Laetrile 10

Lasorda, Tommy 14

Lavoisier, Antoine 4, 9, 46, 71

Laws of energy conservation 31

Laxatives 40, 98, 133

LDL-cholesterol 107, 110-111, 117

Lead in drinking water, in paint 159
   in soil 261,
   toxic effects 159, 222

Lean body mass 117

Lecithin 102

Leghemoglobin 223

Legumes 76, 210,
   and nitrogen 259
      source of iron, zinc 221

Lemaux, Peggy C. 268

Lemon and acidity 122

Leptin 5, 31

Leucine 72

Leukemia 83, 265

Lightning and nitrogen 259
Lignin 52

Lima beans 76, 77
and cyanide 265, 285

Lime juice for scurvy 178

Lime water 209

Lincoln, Abraham, son Willie 129

Lind, James, cure for scurvy 177

Linoleic acid 94, 99
and stearic acid 100

Linolenic acid 94, 99, 100

Lion as food 3

Lipid definition 102

Lipoproteins 107, 117

Listeria monocytogenes 284

Lister Institute 137

Liver 128, 182, 192, 193
and glucose 58,
and glycogen 51
and HDL 107
and pernicious anemia 5, 186
and sugar 55
and Vitamin A, K 192, 193
and vitamin D 199
damage 166, 193
digestive secretions 128
extract 184
source of B vitamins 177
source of chromium, copper 221
source of iron 220, 221
source of vitamin A 195

Liver damage and copper 221

Locust bean gum 53, 278
Love and food 34
Low-calorie diet 117
Low-carbohydrate diet 35, 37
Low-density lipoprotein (LDL) 107
Lung cancer 108, 109, 112-114
Lutein 197
Lycopene 197,
    and prostate cancer 114
Lynen, Feodor 145
Lysine 72, 89, 270
    and corn 138,
    in wheat 76
M
Macedonia 70
MacKinac Island, Michigan 121
Macquer 71
Macrobiotic 178
Magnesium 11, 95, 208, 210, 214-215
    in hard water 159
    recommended intake 301-302
Magnesium carbonate 278
Malnutrition 54, 91, 95, 236, 266
Malt 49
Maltol 278
Maltose 48, 49
    and yeast 55,
    from cornstarch 55
Manganese 11, 221, 228
Mannitol 48, 133
Manure 259
Maple syrup 61
Marasmus 90
Marathon 19, 20
Margarine 274,
and vitamin E 193
Market identification, penetration 273
Marrow and iron 223
Masa harina, 209
Mayer, Julius 46
Mayonnaise 294
and fat 97,
ingredients 102
McDonald’s burgers 97, 282
Mead, Margaret 20
Measles and vitamin A 193
Meat, and vitamin K 193
in the American diet 71
source of selenium 221
source of zinc 221
Medicines from plants 265
Melanin and tyrosine 90
Membrane 215,
cell 83
Menkes’ steely hair disease, and copper 228
Menopause 114, 211, 213
and breast cancer 114
Menstruation absence from anorexia 41
   and breast cancer 114
   and nutrition 251,
   loss of iron 220

Mercaptan 162

Meringue 71

Mesomorph 22, 33

Messenger RNA 85, 86

Metabolic Syndrome 109

Metabolism 19, 210, 248, 285
   amino acid 177, 183
   and Leptin 5,
   biotin 189
   carbohydrate, fat, protein 177
   cofactor 221,
   definition 139
   energy 180

Methane 150

Methanol 276

Methionine 72
   limiting amino acid in legumes 76

Methotrexate and folate 185

Methyl acetate, butanol, formate 276

Methylene blue 162

Methylfuran 276

Methylparaben 278

Mexican-Americans and gallstones 129
   and metabolic syndrome 110

Microorganisms 258, 272, 274, 280
   and cellulose 52
   make vitamin B12 186
Microvilli 130
Middle Eastern diet 91
Midtown Manhattan Study 24
Migraine 180

Milk 62, 111, 115, 181, 210
  and lactose 132,
  and vitamin K 193
  as a source of nutrients 89
  mother’s 182
  source of selenium, zinc 221
  vitamin-D-fortified 289
  water and fat content 158

Minerals 10, 60, 207,
  absorption 121
  amount in human body 208
  for plants 260,
  trace 219

Mineral water 160

Minnesota starvation study 26

Minot, George 186

Mint in Priestley experiment 46

Miscarriage 284

Miso, for vitamin B12 80
  source of zinc 225

Mississippi River 272

Mites in food 261

Mitochondria 83, 142, 143

Modified food starch 278

Molasses 70
  for rum 55,
  source of iron 220
Molds 281, 285
Molotov cocktail 17
Molybdenum 11, 221, 229
Monocalcium phosphate 278
Monoglycerides 278
Monosaccharides 48, 56, 122
Monounsaturated fatty acid 99
Moroccan ideas about food 3
Morphine 164
Mosquito abatement 262
Mouth and digestion 122
MSG (monosodium glutamate) 123, 216, 278
Mucin, lubricant for food 122
Mucus 126
Muffins 37
Murphy, Suzanne P. 239
Murphy, William 186
Muscle 89
  cramps 209,
  glycogen 51
Muscle cells 83
  fast and slow twitch 146
Mushrooms 177
  source of chromium 221
Mustard greens 77
Myoglobin 146,
  source of iron 222
MyPlate eating guide 234-236, 239

**N**

Napoleon 272

National Academy of Science’s National Research Council 232-233

National Organic Program 296

National Seed Storage Laboratory 266

Native Americans and gallstones 129, and lactase 132

Natto 80

Nausea 133, 177, 210, 284 and manganese, zinc 221

Neotame 48

Nephrons 161

Nerve cells 83

Nerve gases, poison 265, 283

Neural tube, and folate 243 defect in the fetus 185 Neurobiology 5

Newborns and iron 223

Niacin, Nicotinic acid, Nicotinamide, Niacinamide 11, 111, 112, 138, 141, 165, 166, 190, 165, 177, 182-183, 190 and energy metabolism 141 and LDL 111; and pellagra 138 recommended intake 301-302

Nicholas Appert 272

Nickel 229

Nicotine 109, 112, 182

Nigeria 132

Night-eating syndrome 26
Nightshade 2

Nitrate (NO3) 259

Nitrite, and botulism 283
    as a food additive 284

Nitrogen, and amino acids 145
    disposal in urine 88,
    for plants 259
    gaseous 259,
    in air 46
    in ammonia 72

Nitrosamines,
    and tobacco 284

Nobel Prize 5, 143, 145, 178, 186, 193, 203,
    No-effect dose of food additive 278

Non-caloric, definition 17

Non-heme iron, food sources 223

Norovirus 281, 284

Nose and eating 122

Nosebleeds 112

Nucleic acid and folate 185

Nucleus of the cell 83

NuSun 101

NutraSweet 47, 48

Nutrient fortification 275

Nutrient loss with food processing 275

Nutri-System 37

Nutrition blending of Oriental and Greek 4
    information law 288,
    of plants 258
Nutritionists 10, 232

Nutrition Labeling & Education Act 288

Nutritive value, food preparation 274

Nuts: source of chromium, copper, manganese, molybdenum 221
    source of phosphorus 210

O

Oat bran 298

Obesity 5, 20, 21, 24, 28, 39, 40, 114, 115, 299;
    and diabetes 59, 110
    and HDL 112,
    definition 16
    metabolic syndrome 109, 110

Obestatin 124

Odwalla juice 282

Oil lamps 96

Okra 77

Oleic acid 98

Olestra 97

Olive oil 98, 99

Olives and pests 262

Omega-3 fatty acids 99
    in the Eskimo diet 112

Omega-6 fatty acids 99

Opaque-2 gene 267

Optifast 35

Oranges 171
    and pectin 52,
    and water 157
Oreo cookies 295

Organic farming 259

Organic foods 296

Oscar Mayer 284

Osteomalacia 197
    and vitamin D 193, 199

Osteoporosis 210, 211-214
    and alcohol 213
    and calcium 213, 291
    and gender, genes 212
    and vegans 80,
    and vitamin D 193

Ovarian cancer 265

Overweight 117

Ovulation and temperature 251

Oxalic acid 210,
    and iron 223

Oxygen 95, 184,
    and burning 17, 46
    and cell energy 143
    and plants 259, 260
    carried by hemoglobin 220
    damage to food 274,
    discovery 4

Oysters, source of zinc 225

P

Paint and lead 222

Palate 124

Palm oil 95, 99, 101

Palmitate 195
Pancreas 58, 124, 128, 165
digestive secretions 128

Pangamic acid 10

Pantothenic acid 11, 177, 188-189, 190
recommended intake 301-302

Papaya 193, 269

Parathormone 211

Pasteurized milk 74, 282

Peaches 51

Peanut allergy 265

Peanut butter 98, 100

Peanut butter sandwich 76

Peanuts 76,
and cellulose 52

Pearl millet hybrid 269

Peas 50,
and grain 77,
and nitrogen 259

Pectin 52, 278,
as food additive 276

Peer review 8, 9

Pellagra 137, 138, 164, 168, 181, 182, 190, 289, 292

Penicillin 83

Peppers 177

Pepsin 124

Peristalsis 124

Periwinkle and cancer drugs 265
Persian Gulf War 265

Personality disorder 24

Perspiration 153, 216

Peru, alcohol production 55
   and cholera 75

Pesticides 258, 261, 262, 269
   natural and synthetic 265

Pests 269

Phenothiazines 162

Phenylalanine 47, 72

Philippino farmers 269

Philo of Alexandria 79

Phosphate, DNA component 83

Phosphates 278

Phosphocreatine and ATP 141

Phospholipids 101, 102, 214

Phosphoric acid 278

Phosphorus 11, 193, 208, 210, 213-4
   absorption and vitamin D 199
   for plants 260
   recommended intake 301-302

Photosynthesis 46, 140, 204, 259

Physical activity 32, 117, 118
   and appetite 33,
   and calories 29

Phytic acid,
   and iron 223
   and zinc deficiency 225

Pickles 216
Pigeons and beriberi 137
Pinch test to measure body fat 31
Pineapple, denaturing 74
Pinto beans 76
Pizza 235, 238
Placebo effect 9, 172, 173
and appetite 34
Placenta 242
Plant foods 115
Plant proteins in combination 76
Plumbing, source of copper 221
Plums and pests 262
Polymerase Chain Reaction (PCR) 269
Polyneuritis 136
Polysaccharides 49,
in beans 131
Polysorbate 278
Polyunsaturated fat 99, 201
Pomegranates 298
Popcorn 37
Pop Warner football 44
Pork and trichinella 284
source of thiamin 179
Potassium 11, 40, 95, 173, 208, 210, 215, 217-218, 275
for plants 260
recommended intake 301-302
Potassium alginate, bitartrate, bromate, sorbate 278
Potassium chloride for plants 260

Potato 51, 96, 168, 177, 210, 269
  blight 70, 263,
  chips 275
  energy content 96,
  toxic leaves 2

Potrykus, Igor 267

Prebiotic 131

Precambrian Era 150

Predators instead of pesticides 262

Preservation of food 274

Priestley, Joseph 46

Primeval atmosphere 259

Probiotic 131

Progestogen 213

Proline 72

Proof, measure of alcohol content 55

Propionaldehyde 276

Propionic acid 278

Propylene glycol 278

Propyl gallate, paraben 278

Prostate cancer 113

Protein 69, 96, 181
  amount needed 88,
  and vegans 80
  chain of amino acids 84
  combining grain and legume 76
  digestion 122,
  energy content 97
from eggs 76
from grain and roots 53
Greek word origin 72
identification 5,
in egg white 71
meats, milk, cheeses, and eggs 70
needs for athletes 89
plant sources 70
RDA during pregnancy 244
shapes 73,
source of nitrogen 259
synthesis 82, 182

Protein deficiency and poverty 90

Proteins 38
and energy metabolism 145
and iron 221,
from plants 259
from plants and animals 77
time in stomach 128

Protein-sparing diet 35

Provitamin A 193, 194

Prudent diet 236

Prunes, and cellulose 52
source of iron 220

Psychiatry and obesity 26

Psychological stress and high blood pressure 110

Psychotherapy and weight loss 39

Pulmonary embolism 203

Pumpkin seeds 76

Pyridium 162

Pyridoxine 177

Pyruvate 141, 142
and oxygen debt 142
and thiamin 144

Pythagorus 79

PYY (Peptide YY) 124

Q

Quarter horses 146

Quincy, Illinois and fluoride 228

R

Rabbit as food 3

Radioactive iodine 226

Radish sprouts 282

Raisins 62,
  source of iron 220

Rancid oil and fat 274

RDA (Recommended Dietary Allowance) 10, 164, 169, 232, 233, 272, 290, (see individual nutrients)

Reaumur, Rene de 120

Rectum 132

Red meat, source of iron 221

Refrigeration 274

Registered Dietitian Nutritionist (RDN), Registered Dietitian (RD) 11

Rehydration 154

Respirometer 18

Retinoids, Retinol 193

Retinol Activity Equivalents (RAE) 195

Retinyl palmitate 195

Rheumatism 180
Rhodopsin 192, 205
   and vitamin A 194

Rhubarb,
   and fiber 52
   and urine color 162,
   unsafe leaves 2

Riboflavin 48, 167, 177, 181-182, 190
   in milk 89
   recommended intake 301-302

Ribose 48, 85

Ribosomes 83, 85, 86

Rice 50, 76,
   and beriberi 136
   food for poor 54
   Golden and vitamin A 196
   polished 179,
   virus resistant 264

Rice water 247

Rickets 5, 197, 205, 214, 289 and vitamin D 193

Rifampin 162

RNA (ribonucleic acid) 48, 85 and folate 185

Rockefeller Foundation 267

Rolls, Barbara 36

Roman peasant diet 70

Roman Empire and lead 222

Roman gladiators and meat 89

Rose hips 171

Rosset, Peter 268

Rum 110
Rumen 52, 186
  and hydrogenation 100

Ruminants and cellulose 52

Running 117

S

Saccharin 17, 48, 280

Safety, definition 277

Safrole 265

Salad dressing, vinegar and salt 123

Saliva 50, 55, 61, 122

Salivary amylase 50, 122

Salmonella 281, 284

Salt 8, 110, 115, 210, 215
  and high blood pressure 110
  and urine 153, 162
  as food additive 277
  for microbe control 282
  iodized 289,
  source of iodine 221

Salted pork 70

Sanders, T. A. B. 79

Sapodilla tree and fiber 52

Sardines 210

Satter, Ellyn 254

Saturated fat 110, 113, 115
  Daily Value 290

Saturated vs. Unsaturated Fats 98

Sauerbraten 74
Sausages and botulism 283

Schlesinger, Nicole and Debra 42

Science, Scientific method 2, 7, 8

Scurvy 5, 164, 167, 177, 190,
   discovery of cure 178

Seafood, and iodine 226
   denatured by lime juice 74
   source of copper, fluoride, iodine, selenium 221

Seal oil 94

Seals, source of vitamin D 200

Seaweed and fiber 52

Secretin 124

Seeds, source of copper 221

Selenium 11, 221, 227
   for plants 261

Seltzer 160

Semen 71

Senility and fat 106

Serine 72

Serotonin 62, 63, 183, 184

Serving size 290

Sesame seeds 97,
   and legumes 76
   rich in calcium 209

Set Point 31,
   theory of obesity 26

Sex hormones 103,
   and LDL 107
Sexual desire and iron 221
Sheep, and cobalt 186
  pasture raised 261
Shellfish source of zinc 221
Shigella 284
Shoyu (soy sauce) 80
Shrimp 180, 210
Sickle cell anemia 73
Silicon 229
Silicon dioxide 278
Simplesse, Simple Pleasures 97
Skeleton 208
Skin 169,
  orange color 194
Skin cells 83
Skinner, B. F. 39
Slimfast 37
Slug 215
Small intestine 124, 129, 130
Smell, and zinc 221
  receptors in the nose 123
Smoking 109, 213, 242, 284
  and atherosclerosis, heart attack, lung cancer 108
Socioeconomic groups and birth weight 245,
  and obesity 24
Sodium 8, 11, 208, 210, 215-217, 218
  and high blood pressure 110
Daily Value 290,
  deficiency 217
  in soft water 159,
  recommended intake 301-302
  retention 162

Sodium acetate, alginate, aluminum phosphate, citrate 278

Sodium bicarbonate ("baking soda") 128, 162, 278

Sodium chloride 110, (see Salt)

Sodium propionate 277

Solutes 161

Solvent, water 150

Sorbitol 48, 133, 278

Sorghum 54, 70, 268, 270

South Africa 269

Soy milk 80, 209

Soybeans 76, 273,
  and nitrogen 259
  and potatoes 77,
  and vitamin K 204
  in Japanese diet 114,
  protein 76

Soy lecithin 102

Soy sauce (shoyu) 210

Spaghetti sauce and iron 285

Sparkling water 160

Sparta 79

Spartanburg, South Carolina and pellagra 138

Spenda 48

Sphincter, definition 126
Spices and cancer 265

Spider mites in cotton 262

Spinach 77, 193, 209, 210, 283
  source of iron 221
  source of lutein 197

Spoilage 274

Sports drink 65, 156, 157

Spring water 160

Squash, winter 193, 210

Stabilizers and fiber 52

Staphylococcus 281, 284

Starch 47, 48, 49, 50, 55
  digestion 122, 270
  energy for plant reproduction 50

Starvation 35, 38, 94
  and energy sources 147
  St. Bernard dog and smell 123

Stearic acid 98

Stefansson, Vohjalmur 94

St. Martin, Alexis 121

Stomach 120, 125, 129
  and appetite 33,
  contraction 121
  glands, muscles 126

Stool 64

Strawberries 168, 262

Strength-and-power athletes 65

Stroke 106, 109
  and high blood pressure 108
Stunkard, Albert 24
Stunted growth 246
Subcutaneous fat 15
Sucralose 48
Sucrase 50,
and microvilli 130
Sucrose 48, 49, 156, 172
Sucrose intolerance 132
Sucrose polyester 98
Suffocation 283
Sugar 61, 172
and moisture illusion 158
and mood 62,
as food additive 277
DNA component 83
for microbe control 282
in carbohydrates 47, 55
on labels 292
Sugar beet, Sugar cane 49
Sulfur for plants 260
Sun sustains all life 45
Sunette 48
Sunflower oil 101
Sunflower seeds 76, 89
Sunkist 273
Sunshine 164
and vitamin D 193, 198, 199
Swallowing 124,
Swallowing air 127
Sweat 153, 156
Sweetness 50
Sweet One 48
Sweet potato 54, 77
Sweets as rewards for children 248
Swenson, Robert 161
Swiss chard...77
Switchgrass 56
Symbiotic relationship 259
Szent-Gyorgyi, Albert 178

T
Taboos about food 3, 267
Takaki, K. 179
Tang 273
Tannins and iron 223
Tap water 159
Taro 269
Tartaric acid 278
Taste 123-124
and nutrition 275,
and zinc 221
Taste buds 50, 123
Tastes, basic five 123
Taxol 265
Tea, source of fluoride 221
Teeth, and fluoride 221
for cutting and grinding 122

Tempeh for vitamin B12 80

Temperature and bacteria control 281
   and ovulation 251

Termites and cellulose 53

Testosterone 108, 212

Tetany 209

Tetracycline 228

Thalassemia 224

Thales 79

Thanksgiving turkey and water 158

Thiamin 5, 11, 169, 177, 179-180, 190
   and beriberi 138,
   and pork 234
   recommended intake 301-302

Thiaminase 180

Thiamin pyrophosphate 144

Thickeners and fiber 52

Thirst 154, 156, 251

Threonine 72

Thrombin 204

Thyroid 165
   and iodine 221, 225, 261
   hormone 226

Tissue culture 269

Tobacco 113, 284

Tocopherols 193, 201, 278
Toddler and nutrition education 249

Tofu 209, 210,  
and rice 76

Tolerable Upper Intake Value (UL) 232

Tomatoes 193, 210  
source of lycopene 197

Tongue 47, 122, 123

Tooth decay 58, 61, 62  
and fluoride 221,  
and sugar 61

Toothpaste and fluoride 228

Torregrossa, Richard 43

Tortillas 183, 209,  
and beans 76

Total breakfast cereal 292

Total fat, Daily Value 290

Tour de France 66

Toxins 154  
from plants 265,  
in plants 262

Tragacanth gum 278

Trans fat 101, 110  
and LDL levels 110

Transfer RNA 86, 87

Trichinella 282, 284

Triglycerides 95, 111, 151  
and energy metabolism 144  
and energy storage 146

Tropical oils 101
Tryptophan 48, 62, 63, 181-183, 190 and niacin, and pellagra 138

Tunisia and lysine 76

Turkey and animal domestication 79

Turnips 54

Twin studies 25

Typhoid 129

Tyrosine 72

U

Ulcer and anemia 222

UL (Tolerable Upper Limit) 183

Ultraviolet light 181
  and vitamin D 10

Umami, definition 123

United Nations and pesticides 262

United Nations report 268

Urea, and amino acids 145
  and ammonia 88

Uremia, Uremic toxicity 162

Ureter 161

Urinary tract infection 162

Urine 17, 48, 153, 162, 178, 217
  and amonia 88,
  and glucose 58
  and ketones 38,
  and urea 145
  excreting vitamins 176

Urochrome 162
USDA (US Dept. of Agriculture) 8, 110, 234, 239, 258, 296
   and food grades 293
   Organic seal 296

U.S. Dept. of Health and Human Services (HHS) 110, 239

U.S. Pellagra Hospital 138

U.S. Public Health Service and pellagra 137

USP (United States Pharmacopeia) 210

Utah and locusts 262

Uterus 242

V

Valine 72

Valley Girls 40

Vanadium 229

Variety of foods, importance of 285

Vegan burgers 223

Vegan diet, and health 79
   and vitamin B12 90, 188
   and zinc 225,
   during pregnancy 244

Vegetable Group 234

Vegetable oil, and vitamin E 193

Vegetables green leafy and vitamin K 193
   solid food for babies 248

Vegetarian diet 64, 70, 78, 89
   and proteins 76
   and vitamin A 196

Vermont prison study 26

Vichyssoisse 283
Vigor and energy 19

Villi in the small intestine 130

Vinblastine, Vincristine 265

Vinegar acetic acid 144  
- as food additive 277  
- for microbe control 282

Viruses 264, 269  
- and diabetes 59  
- during pregnancy 242

Vitamins (see individual vitamins) deficiency, definition 164  
- fat-soluble 191  
- myths 171  
- names 10  
- overdoses 192  
- supplements 172  
- synthetic 171  
- water soluble 177

Vitamin A (retinol, retinal, retinoic acid) 11, 164, 171, 172, 192-197  
- and birth defects 279  
- and blindness 5  
- and vision 5  
- deficiency worldwide 193  
- during pregnancy 196, 244  
- poisoning symptoms 196  
- recommended intake 246, 301-302

Vitamin B1 (see Thiamin) Vitamin B2 (see Riboflavin) Vitamin B6 (pyridoxine, pyridoxal, pyridoxamine) 11, 166, 177, 181, 183-184  
- and amino acids 145  
- and protein synthesis 183  
- in infant formula 183  
- recommended intake 183, 301-302  
- toxic dose 166

Vitamin B12 (cobalamin) 5, 11, 126, 169, 173, 177, 186-188, 190  
- absorption 130  
- advice for the elderly 252  
- in milk 89  
- and cobalt 261
and folate 187
and vegan diets 79
deficiency and nerve damage 187
discovery 186
during pregnancy 244
in milk 89
recommended intake 187, 301-302

“Vitamin B15, B17” 10

Vitamin C (ascorbic acid, ascorbate) 11, 94, 166, 168, 176-178, 273, 285
and common cold 166
and iron 223,
and scurvy 176
deficiency 178,
for smokers 168
recommended intake 178, 246, 301-302

Vitamin D (ergocalciferol, cholecalciferol) 10, 11, 164, 192, 193, 197-200
age dependent needs 200
and blood calcium 209
and the kidneys 162
danger of excess 200
recommended intake 246, 301-302

Vitamin E (tocopherol, tocotrienol) 11, 192, 193, 200-202
as food additive, antioxidant 277
myths about 200
recommended intake 201, 301-302
toxicity 202

Vitamin K (phylloquinone, menaquinones, menadione) 11, 131, 192, 193, 202-204
and bacteria 10
recommended intake 301-302
shots for newborns 204

Vitamin pill for vegans 80

Vitamins (see individual vitamins) categories 10,
    fat soluble 136, 192
    “lab-made” vs. “natural” 170
    made by plants 260
    water soluble 136

Vodka 110
Vomiting 127, 154, 217, 284
   and bulimia 41
   and copper, iron, manganese 221

Vomitoria, Roman 120

W

Waist size/circumference 109

Wald, George 193

Walter, Richard 176

Washington 282

Water 149, 150, 151, 153
   and athletic performance 156
   and the structure of food 157
   balance 154,
   in food 157, 158
   intoxication 155,
   overload 157
   required intake 155

Watermelon and salt 123

Weed control, pests 262

Weevils in food 261

Weight and high blood pressure 109

Weight gain during pregnancy 244

Weight loss 117,
   and water 16
   diets, schemes 23, 35, 38

Weight Watcher's 37

Wernicke-Korsakoff Syndrome 190,

Whale oil 94

Wheat 50, 76,
   stone ground 74
Wheat allergenicity 270
Wheat germ 274, source of zinc 221
Whisky 110, from corn 272
White blood cells 83, and zinc 221
White bread 274
Whole wheat and fiber 275
Wiley, Harvey 278
Willow bark and aspirin 265
Wilson's disease and copper 228
Windpipe 124
Wine, alcohol content, from sugar 55
Wine, red, source of chromium 221
Winter squash 77
Wolf, Stewart 125
Women's Health Initiative 213
World Health Organization (WHO) 193
World War II 71, 272
Worms in food 261
Wright brothers 266
X
Xerophthalmia, Xerox 193
Y
Yams 77
Yeast 184, 189, and alcohol 55
Yersinia enterocolitica 284
Yew bark and taxol 265
Yin, Yang, definition 3
Yogurt 132, 181, 252
Yolk, fat and cholesterol 71
Yo-yo dieting 36

Z
Zilberman, David 269
Zinc 11, 221, 225
and puberty delay 225
and vegan diet 244,
deficiency 225
for plants 261,
toxicity 225
recommended intake 301-302

Zucchini 8
Zygote 242