

Index for *Food Technology First*

Brett Lockwood, tel: (03) 9343 6088; brett@melbpc.org.au;
www.WordBytes.com.au

Italic text is tagged with character style named 'italic'

Bold text is tagged with character style named 'bold'

Index

Page numbers set in **bold** refer to keywords in the main text. Main text keywords are set in bold and are accompanied by boxes containing their definitions.

Aborigines *see* Australian Aborigines

abundant **118**

active non-nutrients 176–8

described 176

active packaging

described 31

additives *see* food additives

adolescent dietary guidelines 57, 62, 94, 160, 174

see also nutrition

adult nutrition needs 62, 160, 215

advertising *see* food selection

aged persons

and food inequity 104

Meals on Wheels 182

nutrition guidelines 217

see also nutrition

aid *see* developmental aid; food aid; voluntary agencies

a la carte 197

described 27, 193

alcohol 57, 60

abuse and food inequity 106

and pregnancy 210

historically high intake 79

alcoholism 221

allergies *see* food allergies

amino acids 36, 155, 156, 225

anaemia **159**, 166, **210**, 221

described 48

symptoms of 49

anorexia 51–2

causes of 52

described 51

see also anorexia nervosa

- anorexia nervosa **166**, 221
- antibodies **211**
- anti-caking agents 23
- antioxidants 10
 - described 176
- appetite
 - contrasted to hunger 86
- aroma 14, 22, 143, 144, 250
 - see also* food
- aromatic **126**
- artificial sweeteners 23
- Australian Aborigines 68–74, 242
 - and food inequity 105
 - and undernutrition 94, 105, 116, 119
- Australian dietary guidelines 57, 94, 174
- Australian food consumption 53–6, 65–6
 - early European influence 75–81
 - modern varied nature 82, 84
 - multicultural influences on 81–4, 93
 - traditional form 266
 - trends listed 53, 95, 266–7
 - see also* diet/s; food presentation; food selection; food trends

- baby
 - diet/nutrition 211–12
- bacteria 2, 12
 - and food poisoning 5–6
 - and probiotics 44
 - ‘friendly’ 177
 - growth of 5, 10, 12
 - lactic acid 44
 - optimum conditions for 5
- bain marie* **3**
- balanced diet **215**
- barrier packaging
 - described 30
- biodegradable **31**
- biscuit-making
 - described 24
- bistro **180**
 - case study 206
- blanch **12**, 22
- blood cholesterol *see* cholesterol
- blood pressure 49
- blood sugar 43, 59
- bone mass 48

- bowel cancer *see* colon cancer
- bread 61, 272
 - case study 238–9
 - see also* damper
- breakfast
 - beverages and bars 271
 - cereals 124–5, 272
- breast milk/breast feeding 62, 121, 211, 212
 - and nutrition education 100
- buffet
 - described 27
- bulimia 51, 221
 - described 52
- bush tucker **68**
 - see also* native Australian foods
- butter
 - making 40

- caffeine 272
- calcium 39, 58, 156
 - and pregnancy 60
 - and osteoporosis 48, 158–9
 - in bread 61
 - sources of 49, 156
- canapés **241**
- cancer 50
- canned food 8, 29, 66
- canola 110
- caramelisation
 - defined 16
- carbohydrates 18, 152
 - and athletes 224
 - and diabetes 47
 - and digestion 155
 - and fibre 42
 - characteristics of 156
 - described 16, 37
 - food sources of 156
 - functions of 156
 - vs proteins 65–6
- careers *see* food industry employment
- cash cropping 118
- cassava 108
- catering *see* food service/catering
- cattle farming 110
- celebratory food *see* special occasion food

celebrity chefs 283, 287
cell growth 152
cereals *see* breakfast cereals
chemicals 10
 and nutrients 36
child dietary guidelines *see* adolescent dietary guidelines
chinois **20**
Choice magazine 60
cholesterol 37–8, 43, 58, 61, 66, 156, **159**, 176
chronic **48**
chronic illness
 and food inequity 106
climate
 and food availability 108, 114, 163
clostridium perfringens 5
coeliac disease 47, 218–9
coffee shop
 case study 208
colon cancer 42, 50, 137
colostrum **211**
colour *see* food
commercial (business) **256**
complex carbohydrates *see* carbohydrates
condiment **133**, **278**
confectionery 16, 24
constipation 42
constraint **139**
consumer **124**
consumer demand 127–8, 138, 139, 144
consumer rights/responsibilities 191–3
consumption patterns *see* food consumption patterns
contamination 2, 4, 7
 environmental factors in 9
 product tampering 128
 types of 5–6
 see also cross-contamination
convalescence **220**
convenience foods 134, 135, 147, 254, 262–3
cookbooks 283
cooking appliances 20
cooking food
 reasons for 14–15
cooking methods 18–19, 81
cooking temperature 2–3
cookware 20
coolamon 71

- co-operative (farming) **113**
- coronary heart disease 37, 42, 47, 53, 58, 59, 61, 93, 166, 221
 - described 49
 - risk factors for 49, 137
- criteria **139**
- crops *see* staple food crops
- cross-contamination 2, 5, 6, 8, **246**
- crouton **27**
- crudités **241**
- crystallisation
 - defined 16
- cuisine **270**
 - evolution of Australian 83–4
- cultural cuisine/s 18–19, 81–4, 133, 143, 241, 285, 286
- cutting utensils 20
- cyclic menu
 - described 195

- dairy farming 110
- damper 77–8
- decorating *see* garnishes
- deficiency **153**
- dehydration **39**
- dementia **106**
- denaturation
 - and coagulation 16–17
 - defined 16
- dental caries 221
- developing nation **97**
- developmental aid 121
- dextrinisation
 - defined 16
- diabetes 42, 49, 53, 58, 59, 93, 106, 137, 166, 221
 - see also* Type 1 diabetes; Type 2 diabetes
- diet/s
 - and coeliac disease 47, 218–9
 - and fibre 42–3
 - and lifestyle choices 223–6
 - and restrained eating 52
 - and special needs 231–6
 - athletes 223
 - Australian, changes in 65–6
 - influence of advertising 91
 - native Australian 68–74
 - vegetarian 225–6
 - see also* Australian food consumption; fibre; food selection; lifecycle; life stages

- dietary fibre *see* fibre
- dietary guidelines *see* national dietary guidelines
- dietary supplements 132
- diet patterns
 - current 54
 - early European 77
- diet-related disorders 47–52, 53, 57, 62, 87, 137, 171, 221
 - and income levels 92–3
- digestion 42–3, 45, 152, 177
 - described 153–5
- dining *see* food presentation; food trends
- disabled persons
 - and food inequity 104
- disease 177
- diverticulitis **42, 166**
- DNA 137
- dough 24
- du jour menu
 - described 196

- eating patterns *see* food habits
- education
 - and nutrition 111, 116
- emaciated **166**
- employer rights/responsibilities 188–90
- employment *see* food industry employment
- emulsification 18
 - defined 17
- energy **37**, 152, 156
- enhance **176**
- enrich **45**
- environment 25, 31, 94, 136, 138
 - see also* food selection
- enzymes 12, 156
 - defined 7
- escherichia coli (E. coli) 6
- eyesight 156
- exercise 172
 - electrolyte drinks 272
- export **118**
- expresso **125**

- fast **243**
- fast food 117, 147, 169
- fat/s 17, 22, 37, 59, 62, 156, 232
 - and coronary heart disease 49

- and diabetes 47
- historically high intake 79
- see also* polyunsaturated fats; saturated fats; unsaturated fats
- fatty acids 37, 38, 49, 50, 61, 62, 155
- fermentation **6**, 12
- fermented milk/s 44–6
- fibre 16, 22–3, 42–3, 49, 58, 65, 77, 156, 177, 234
 - in bread 61
 - insoluble 43
 - sources of 43
 - soluble 42–3
 - sources of 43
- finger foods **202**, 286
- finite **98**
- flavour 15, 22, 23, 37, 250
- folate 60, 61
- food
 - airline 131, 231
 - affordability 93, 100
 - and an ageing population 132
 - and cultures 227, 241
 - camping 130, 229
 - colour 14, 22, 23, 24, 27, 250, 280, 282
 - early European influence 75–7
 - for medical conditions 131–2, 229
 - for special occasions *see* special occasion food
 - functions *see* food functions
 - sensory properties 14, 126, 142, 144, 240, 269
 - social nature of use 88, 238, 241
 - space 130
 - texture 14, 27, 251, 280
- food aid 115, 121–2
 - emergency 120
 - long-term 120
- food additives 23, 24
 - types of 23
- food allergies 106, **218**
- food availability
 - influences on 108–18
- food consumption *see* Australian food consumption
- food consumption patterns 166, 266–7
 - implications of 166–73
- food contamination *see* contamination
- food distribution
 - influences on 108–18
- food dehydration 9–10

- food deterioration *see* food spoilage
- food equity/inequity
 - reasons for 98–100
 - social groups subject to 102–7
- food freshness 14
- food functions
 - cell repair 152
 - energy 152
 - growth 152
- food guides 174–5
- food habits **79**, 87, **266**
 - influences on 81, 86–94, 162–5
 - see also* cultural cuisine/s; food selection; food trends
- food hygiene 2–4, 191–2, 202
 - the three principles of 2
- food industry
 - developments over last two centuries 96
- food industry employment 184–90
 - career pathways 185
 - employee rights/responsibilities 188–90
- food inequity *see* food equity/inequity
- food intolerance **218**
- food labelling 24, 37, 124, 192
 - illustrated 33
 - legal requirements 32–3, 58
 - nutritional 57–60, 137, 170
 - organic 268
- food nutrient groups
 - carbohydrates 37, 152, 155–6
 - lipids 37, 152, 155–6
 - minerals 39, 152, 155–6
 - proteins 36, 152, 155–6
 - vitamins 38, 152, 155–6
 - water 39, 152, 155
- food oxidising 11, 12, 31
- food packaging 25, 30, 94, 136, 141
 - biodegradable 31
 - illustrated example of 28
 - pollution 31
 - technology 30–31
 - types 29, 30, 149
 - advantages/disadvantages of 29, 128
 - listing of properties 29
- food plating *see* plating food
- food poisoning 3, 5–8, 131
- food preparation 21, 22–5, 200

- techniques 81
 - see also* special occasion food
- food preparation terms/descriptions 21
- food presentation 27, 204–5, 260, 262, 274–7, 278–81
 - styles of 27, 204–5, 278–81, 281–4
- food preservation 9
 - and oxidising 12
 - bottling 12
 - chemical 10
 - pickling 12
 - salting 10
 - smoking 10
 - sugar in 10
- food processing 24
 - industrial, stages of 23, 24
 - mechanisation of 95
- food product development 124–33
 - steps in 138–44
- food product innovation 149–50
 - main types of 126–7
 - impacts on society 133–7
- food production practices 118
- food safety *see* food hygiene
- Food Safety Standards 4
- food security 113, 115
- food selection
 - and health 54–8
 - current influences upon
 - economic 92, 116, 117
 - environmental 94, 116, 136
 - nutritional 94
 - social 92, 116, 162
 - general influences upon
 - economic 88, 163
 - geographical 87, 117, 163
 - media/advertising 91, 124, 147–8, 164–5, 282, 287
 - physiological 86
 - psychological 87
 - religious 90, 111, 112, 162, 227–8, 243
 - social 88
 - technological 89, 163–4
 - list of factors in 54–5, 86–94, 111
 - see also* Australian food consumption; diet/s; food habits
- food service/catering 180–83, 204–7
 - see also* food presentation
- food spoilage 5–6, 9, 11, 12, 31, 89, 141

- food storage 2, 7–8
- food styling 281–4
 - and photography 281–3
 - case study 283
 - see also* food presentation
- food technology 66, 89
 - genetically modified food 269
- food temperature 3, 5, 7, 8, 12
- food trends 266–90
 - and food service 274–7
 - dining out 275
 - genetically modified food 269
 - heat-and-serve meals 270–71
 - marketing 287–90
 - meal replacement foods 271–2
 - media in 287
 - organic 268
 - presentation 278–81
 - styling 281–4
 - table setting 275–6
- food wastage 25, 89, 202
- free-range chickens **268**
- freezer burn 8
- freezing
 - described 12
- freshness *see* food freshness
- frozen food 3, 8, 12
- function (catering) **180**
- functional foods 45, 176, 178
 - described 272
 - examples of 45, 176, 272
- function menu
 - described 195
- fungi 6
- fusion cooking 82

- garnishes 28, 204, 260
 - illustrated 278–9
 - listing of 27
- gastro-intestinal tract 153
- GDP *see* Gross Domestic Product
- gelatinisation
 - defined 16
- genetically modified food 136, 137, 149, 269
- geography
 - and food availability 108

- germs 2, 154
- GI *see* Glycemic Index
- GI tract *see* gastro-intestinal tract
- glass packaging 29
- global **98**
- globalisation
 - and food availability 112–13
 - defined 112
- glucose 37, 47, **222**
 - and digestion 155, 156
- gluten 47
- gluten intolerance
 - case study 218–19
- Glycemic Index (GI) 59, 64
- government nutrition strategy 57, 94, 170–71
- Gross Domestic Product (GDP) 120
 - defined 100

- health
 - and active non-nutrients 176
 - and breakfast 169
 - and diet 94
 - and food selection 54–8
 - and income level 93
 - and nutrition labelling 58
 - and overconsumption 166–8
 - and social responsibility 169
 - and taxing foods 167, 170, 171
 - foods developed to enhance 44–6
 - labelling symbols 59
 - requires clean water 98
 - responsibility for improving 170, 171, 172
- health care costs 178
 - and over-eating 120
- Healthy Eating Pyramid 65, 174
- heart attack 49
- heart disease *see* coronary heart disease
- haemoglobin 48
- haemorrhoid **42**
- herbs/spices **270**
 - as garnishes 27
 - examples of 18
 - listing 270
 - substituting for salt 49
- homeless persons 122, 181
 - and food inequity 107

- hormone **176**
- humectants 23, 24
- hunger 158
 - vs appetite 86
 - see also* malnutrition
- hygiene 98, 275
 - see also* food hygiene
- hypertension 53, **176**, 272
 - described 49

- illicit **107**
- illness/injury
 - recovery from 220
- immune system 218, 234
- immunity **177**
- indigenous Australian foods **68**
 - see also* native Australian foods
- indigenous Australians *see* Australian Aborigines
- industrial agriculture 118
- industrial food preparation
 - economic effects 26
 - environmental effects 25
 - social effects 25
 - see also* food processing
- inequity *see* food inequity
- infant diet needs 159, 211–12
- infrastructure **115**
- innovation *see* food product innovation
- insoluble fibre *see* fibre
- insulin 47, **222**
- intestine
 - illustrated 154
 - see also* large intestine; small intestine
- iron 39, 48, 58
 - and menstruation 158
 - and pregnancy 60
 - infant needs 62
 - sources of 156
- irrigation 98
- irritable bowel syndrome **42**

- julienne **260**
- junk food 91, 171

- kilojoule **37**

- lactation 60, 161, **211**
- leavened bread **239**
- legislation **171**, 173, 189
- lifecycle **210**
 - and diet needs 159
- life stages
 - and dietary intakes 159–60
 - stages of 210–17
- linseed 61
- lipids 16, 17, 152
 - conversion into fatty acids 155
 - described 37, 156
 - food examples 18, 156
 - functions of 37, 156
 - testing for presence 40
- listeria 6
- logistics **228**
- low income
 - and food inequity 102
 - and nutrition 111, 116
- lymphatic system 154, 155

- maize 108
- magnesium
 - sources of 156
- malnutrition **47**, 116, 117, **217**
 - physical/social costs 119–20
- mandolin **20**
- manufacturer **170**
- margarine 272
- marketing 144, 164–5, 192, 287–90
 - case study 288
 - ethics 172, 192
- market research 138–9, 144
- mashing/grating utensils 20
- meat
 - historically high intake 79
- media **192**
- Meals on Wheels
 - case study 182
- menu planning 193–8
 - sample, illustrated 198
 - special occasion food 250–55
- metabolism 155
 - described 155
- metal packaging

- properties of 29
- micro-organisms 12, **177**
 - and preservatives 23
 - defined 5
 - growth rate 9, 10
- milk 42, 62, 66
- millet 108
- minerals 119, 152
 - described 39
 - functions of 156
 - types of 39, 156
- mixing utensils 20
- modified **124**
- modified atmosphere packaging (MAP)
 - described 30
- modified gas packaging
 - described 31
- monounsaturated fats *see* unsaturated fats
- mould/s 7, 10, 12
 - defined 6
 - described 6
- mouli **20**
- multicultural **81**
- multinational corporations 165
 - and food availability 117

- natural disasters
 - and food availability 114–15
- national dietary guidelines 56–7
- native Australian foods 68–74
 - animal and plant sources, illustrated 70
 - animal and plant sources, listed 72, 73
 - cooking processes 72
 - hunting/gathering basis of 69, 71
 - ignorance of convicts about 77
 - preparation of 72
 - seasonal influence upon 72–3
 - tools for getting 71
 - use in wider society 74
- neural tube defect **60**
- new product development *see* food product development
- new product promotion 145–8, 287
- nori **19**
- nuclear family **244**
- nutrient/s 36–40, 87
 - and Australian food consumption 53–6

- absorption of 154–5
- food sources of 156
- functions of 155–6
- in digestive process 152–3
- listing of needs for life stages 159–60
- nutrition 22–5, 94, 99, 136
 - and pregnancy 60, 210–11
 - and low income 111
 - and the lifecycle 60–63, 159, 210–17
 - in adolescence 62, 214
 - in adulthood 62
 - in childhood 62, 212
 - in infancy 62, 212
 - in old age 62, 63, 158, 217
 - labelling 57–60
 - components of 58
 - symbols 59
 - needs 158–60
 - see also* food nutrient groups
- nutrition education 100
- nutrition levels
 - responses to 169–73
- obesity 42, 49, 53, 62, 87, 137, 152, 160, 222
 - case studies 167, 213
 - childhood 167, 171, 212
 - described 47–8
 - preventive steps 48, 172
- occupational health and safety 188–90
- oesophagus 153
- oestrogen 176
- oil/s 17, 23, 37
- older persons *see* aged persons
- organic food 66, 136, 268
- osteoporosis 62, **154**, 159, 166
 - described 48
- overweight 167, 213
 - see also* obesity
- packaging *see* food packaging
- paper/cardboard packaging
 - properties of 29
- pasteurisation 6
- perishable **228**
- pH 12
- phosphorus 62
- photosynthesis **37**

- phytochemicals 176
- phytoestrogens 61
 - food sources 176
- physical properties
 - altered by cooking 22–5
- pickling 12
- pig farming 110
- pizza
 - case study 274
- plastic packaging 31
 - properties of 29
- plating food 204, 278
- polyunsaturated fats *see* unsaturated fats
- poor countries *see* underdeveloped countries
- policy **171**
- portion **252**, 280
- portion size **192**, 200
- potassium
 - sources of 156
- pregnancy 60
 - diet/nutrient needs in 159, 160, 210
- preparation *see* food preparation
- preservatives 10, 23, 66
- preserving *see* food preservation
- primary processing
 - described 23
 - examples of 23
- probiotics 44
 - described 177
 - food sources 177
- processed food/s 25, **37**, 65, 66, 89, 147
 - taxing 170, 171
- product contamination *see* contamination
- product development
 - cost 141
 - design 138
 - evaluation 142
 - market research 144
 - price 145
 - prototypes 140, 142
 - sensory assessment 142, 144
- product distribution 146
- product promotion *see* new product promotion
- protein/s 16, 62, 119, 234
 - and haemoglobin 48
 - characteristics of 156

- complete vs incomplete 36
- conversion into amino acids 155
- denatured 16
- food examples/sources of 18, 37, 156
- functions of 36, 152, 156
- gluten intolerance 218–19
- historically high intake of 79
 - vs carbohydrates 65–6
- purchasing systems 202–3

rancid **12**

ration **75**

raw foods 23

RDI *see* recommended dietary intake

recipe/s 283

- development 199–202

- terminology 20–21

recommended dietary intake (RDI)

- described 159

recommended food serves 54

- see also* national dietary guidelines

recycling 25, 31

refrigerated food 8

- and product innovation 133

- see also* frozen food

refugees **107**, 115

reheated food 8

religious food practices 90

research and development 138–9

resistant starch/es 43, 177

- sources of 43

responsibility

- workplace 188–90

- see also* health

restrained eating

- described 52

rice 108

Risotto **134**

rural/isolated

- and food inequity 102

safety *see* food safety

sago 108

salmonella 5

salt 49, 59, 66, 232

- see also* sodium

- salting food 10
- sanitise **9**
- satiety **86**
- saturated fats 37, 59, 156, 159, 234
 - list of food sources of 38
- scurvy 77
- secondary processing
 - described 23
 - examples of 23
- sedentary **49**
- self-sufficiency **118**
- sensory **142**
- service *see* food presentation
- serviette folding
 - illustrated 205
- sheep farming 110
- silver service
 - described 27
- simple carbohydrates *see* carbohydrates
- social responsibility 170
- socio-economic status
 - and nutrition 111, 116
- sodium 39, 59, 156, 272
 - see also* salt
- soluble fibre *see* fibre
- small business ventures 207–8
- small intestine
 - illustrated 154
- smoking 49, 60
- smorgasbord **5**
- snack bars 271
- special occasion food 237–64
 - and catering 247–9
 - and convenience food 254, 262–3
 - Christmas 286
 - equipment guidelines 247, 254
 - menu planning 250–55
 - presentation 260, 262
 - religious 242–3
 - selection guidelines 246–7
 - workflow plan 256–8
- spices *see* herbs/spices
- spoilage *see* food spoilage
- spore/s **6**
- staphylococcus 5
- staple food **108, 238**

- staple food crops 108–10
- starch/es 16, 37, 39
 - food examples of 37
 - see also* resistant starch
- starvation 119
 - see also* malnutrition
- stock control **202**
- stomach 153
 - functions of 154
- storage *see* food storage
- stroke/s 49, 59, 137
- stunted **152**
- subsidise **171**
- subsistence farmers **98**
- subsistence farming 118
- sucrose 59
- sugar 10, 16, 57, 59, 65, 66
- sugars 36, 37, 59, 62, 156
 - listing of 37
- supermarkets 133
- supplement **38**
- sushi 19
- sustainable food production 136
- sustained **98**
- sustenance **159**
- syneresis
 - described 17

- table d'hôte menu 197
 - described 195
- takeaway food 274–5
- tamper **128**
- tamper-evidence devices 128
- tapioca 108
- tariff **112**
- taste 14–15
- taxes *see* health
- technology 30, 53, 89
 - developments and food availability 117, 125
- temperature *see* cooking temperature, food temperature
- tetrapak **32**
- texture *see* food
- thawing *see* frozen food
- toxin/s **5**
- trade restrictions
 - and food availability 112

- tumour 50
- Type 1 diabetes 47
 - see also* diabetes
- Type 2 diabetes 47
 - see also* diabetes

- underdeveloped countries 98, 98–101, 103, 112, 115, 117, 118–20, 121
 - and World Bank 120
- undernutrition 94, 166
- underweight 52, 166
- United Nations 120, 191
- unleavened bread **239**
- unprocessed foods 66, 89
- unsaturated fats 38
 - list of food sources of 38
- utensils
 - listing of 20

- vacuum packaging 12
 - described 31
- van-dyke **27**
- vegetarian **36**, 136, 160, 225–6
- vinegar 12
- vitamins 22, 44, 119, 152, 156
 - and pregnancy 60
 - described 38
 - fat-soluble 38, 156
 - list of food sources of 38
 - roles in body of 38
 - sources of 156
 - water-soluble 38
- volatile **126**
- voluntary agencies 121–22

- war
 - and food availability 115–16, 163
- water 43, 62, 108, 117, 152
 - body functions of 39
 - effects of lack of 98, 103
 - finite resource 98
 - importance of in poor countries 100
- weaning **212**
- weight control products 271
- weight gain 58
 - see also* obesity
- wheat 108

wheat bran 61
work practices
 safe, rules of 3
workplace safety 188–90

yeast/s 10, 12
 defined 6
yoghurt/s 44–6, 272
 making 46

zinc
 sources of 156