Index

accumulation model of long-term health 120
addictive behaviours 128-9
adiposity 59, 61, 107-9
advertising see food advertising regulation; self-regulation of food advertising
age, and obesity 17, 65-7, 68, 81-2, 119-20
see also children
age-period-cohort (APC) analysis 65-7
Aghion, P. 52
alcohol abuse 24, 50-51, 83
Allais, O. 203
ANGELO framework (Analysis Grid for Environments Linked to Obesity) 171
Arendt, J.N. 86
asymmetric paternalism 233-4
Australia
child overweight 108, 112
community interventions 168
data sources 238
education and obesity 84, 85, 93, 241-2
future trends 68, 69, 70
gender and obesity 80
obesity rates 58, 59, 60, 62, 63, 64
self-regulation of food advertising 218
social disparities and obesity 92
socio-economic status and obesity 94, 239-40
Austria
child overweight 108
data sources 238
education and obesity 92, 93, 241-2
future trends 68, 70
obesity rates 60, 62, 63, 64
socio-economic status and obesity 94, 239-40
Avery, R. 142
bans on unhealthy behaviours 152-3, 156
Becker, G.S. 129, 130
behavioural economics 126, 127
Belgium 60, 100, 108
Bhattacharya, J. 124
body mass index (BMI) formula 75
trends in 16, 25, 44, 67-9, 75
use in measuring obesity 59-61
Bogalusa Heart study 110
Branca, Francesco 43, 264
Brazil 58, 60, 108, 161, 218
Brunello, G. 86, 102, 123, 125
Buller, D.B. 180
business 41, 228
see also food industry
Canada
age and obesity 82
child overweight 108
cohort patterns 65-7
community interventions 166
cost-effectiveness of interventions 256, 257, 259
cost of interventions 249
data sources 238, 243, 244
distributional impacts of interventions 202
education and obesity 84, 85, 93, 241-2
effectiveness of interventions 191, 193, 195, 197, 250, 251, 253, 255
future trends 68, 70
gender and obesity 80
multiple-intervention strategies 200, 201
obesity rates 60, 62, 63, 64, 65
self-regulation of food advertising 218
socio-economic status and obesity 94, 95, 239-40
Cargill 230
Case, A. 83
Cawley, J. 124, 142, 144, 184
Cecchini, Michele 263-4
Cervellati, M. 52
Chen, L. 141
children
community interventions 165-71
cost of preventative interventions 41
definition of child obesity 75
distributional impacts of interventions 202
education and obesity 84-8
effectiveness of interventions 190-91, 196, 205, 206
food advertising regulation 150, 182, 183-4, 211-15, 231
government policies in OECD countries 157
malnutrition in childhood 83
obesity, trends in 42, 43, 69-74, 76, 107-13
overweight 90, 91, 107-10, 112-13
persistence of behaviour changes 203-4
social disparities and obesity 89-91, 102
social multiplier effect 131-4
socio-economic status and obesity 111-12
see also school-based interventions
Chile 60, 108
China 29, 58, 60, 108, 161
CHOICE (CHOosing Interventions that are Cost Effective) project 187
choices see lifestyle choices
Chou, S. 81, 183
Christakis, N.A. 226
Chronic Disease Prevention (CDP) model 188-9, 243-7
chronic diseases in China 58
effectiveness of interventions 190-94
increases in 24-5
and lifestyle choices 117
and mortality 26-7
and obesity 15-16, 25-6, 28, 44, 111
social welfare gains from reduction in 49-50
Clark, D. 86
Coca-Cola 161, 212
cohort patterns 65-7
community interventions 165-71
Corporate social responsibility 160-61, 232
cost-effectiveness
analysis of 176, 186-7
of interventions 194-8, 205, 206, 248, 253-4, 256-61
multiple-intervention strategies 248, 256
costs
economic costs of obesity 15-16, 23, 28-30, 36, 44, 51-2
external costs 36
of interventions 41, 52, 151, 193, 194-8, 206, 248, 249
multiple-intervention strategies 201
counselling by physicians
cost-effectiveness of 206, 257-61
cost of interventions 249
distributional impacts of 202
effectiveness of 176-7, 191, 192, 193, 195, 196, 197, 250, 251-2, 253-4
as individual approach 224
as intervention 182, 185-6
multiple-intervention strategies 199
Cutler, D.M. 88, 96, 118, 125, 143
Czech Republic 58, 60, 108
Dahlgren, G. 116
De Onis, M. 75
default option in consumer choice 150, 205, 234
Denmark 27, 60, 80, 86, 99-100, 101, 108
Devaux, Marion 264
developing countries 51
diabetes 58
  see also chronic diseases
diet 156-61, 165-71
Dietz, W.H. 111
disability 15-16, 26-8, 101, 102
  see also morbidity
disability-adjusted life years (DALYs) 190–94, 200, 248, 251–2, 255
discarding future risks 126–7
economic approach 32–8, 44, 50–52
education
  government policies to increase information 149–51, 153, 156, 161–2
  life-course perspective 120
  and lifestyle choices 143
  and obesity 17, 39, 80, 84–8, 92, 93, 240–42
OECD countries 93, 157
  see also school-based interventions
Emmons, K.M. 180
employment and obesity 83, 97–102
England
  age and obesity 82
  child obesity 69, 70, 73, 89, 90
  child overweight 108, 110, 112
  cohort patterns 65–7
  cost-effectiveness of interventions 256, 257, 260
  cost of interventions 249
data sources 238, 244
distributional impacts of interventions 202
economic costs of obesity 29
  education and obesity 84, 85, 86, 93, 241–2
  effectiveness of interventions 191, 195, 197, 250, 251, 253, 255
ethnic origin and obesity 95, 96, 97, 102
  future trends 68, 69, 71, 73
  health and obesity 24
  life expectancy 28
  multiple-intervention strategies 199, 200
  obesity rates 62, 63, 64
social disparities and obesity 92
social multiplier effect 131, 132, 133
socio-economic status and obesity 94, 239–40
  see also United Kingdom (UK)
environment and health determinants 116–20
EPODE project (Europe) 169
Estonia 60
ethnic origin and obesity 95–7, 102, 111, 155
Europe
  child overweight 110, 112
  chronic diseases 15–16, 26–7
  community interventions 166–7
  disability 15–16, 26–7
  interventions 156, 157
  obesity rates 58, 74–5, 92
  smoking 125
European Directive on Audiovisual Media Services 217–18
European Social Norms Repository 225
European Union (EU) 218
exercise
  community interventions 165–71
  government policies 149, 157, 158
  private sector role 158–61
  and socio-economic status 83
externalitys 36, 39, 122–4, 129–34, 152–3
financial incentives 158
Finland
  child overweight 108
  community interventions 166, 168
  disability 101
  gender and obesity 80
  health and obesity 25
  obesity rates 60
  productivity and obesity 101
  wages and obesity 99–100
fiscal interventions
  cost-effectiveness of 205, 257–61
cost of interventions 249
effectiveness of 176–7, 191, 192, 193, 195, 196, 197, 206, 250, 251–2, 253–4
  nature of 180–82, 183
and socio-economic status 201-2
welfare reduction resulting from 234
Fogel, Robert 61
food
government policies in OECD countries 158
information, role of 142, 144
production, as driver of obesity epidemic 118, 121, 122
regulation 160
food advertising regulation
children 150, 182, 183-4, 211-15, 231
cost-effectiveness of 205, 257-61
cost of interventions 249
distributional impacts of 202
effectiveness of 191, 192, 193, 195, 196, 197, 250, 251-2, 253-4
health claims 142
as intervention 182, 183-4
multiple-intervention strategies 199
threat of 231
United Kingdom (UK) experience 211-15
see also self-regulation of food advertising
food industry 228, 229-31, 235
food labelling
cost-effectiveness of 257-61
cost of interventions 249
distributional impacts of 202
effectiveness of 144, 191, 192, 193, 195, 197, 250, 251-2, 253-4
effectiveness of interventions 176-7
as intervention 182, 184
multiple-intervention strategies 199
nutritional content 228
Fowler, J.H. 226
France
age and obesity 82
body mass index (BMI) trends 61
child obesity 69, 73, 76, 89, 90
child overweight 108, 110, 112-13
cohort patterns 65-7
community interventions 167
data sources 238
education and obesity 86, 87, 92, 93, 241-2
future trends 68, 69, 71, 73
government role in improving choices 161
obesity rates 58, 60, 62, 63, 64
social multiplier effect 131, 132, 133
socio-economic status and obesity 94, 239-40
Garcia Villar, J. 92
gender
child obesity 89
education and obesity 240-42
and obesity 17, 39, 80-81
social disparities and obesity 92, 102
socio-economic status 83-4, 239-40
trends in obesity 62, 63, 64, 65
Generalised cost-effectiveness analysis (GCEA) 187
Germany 60, 108, 131, 168
Glaeser, E.L. 118, 125, 127, 227
government
community interventions 165-71
externalities of obesity 124
and the food industry 228, 229-30, 235
and individual choice 232-4
information role 124-5, 149-51, 153, 155, 156, 161-2, 227
OECD area intervention policies 40, 43, 154-8, 162, 175, 176-86
policy as determinant of obesity 37, 121-2
policy options 19-20, 43, 148-54, 161-2, 175, 176-86, 234-5
role of 147
strategy consensus 39-40
see also regulation
Grabner, M. 86
Greece 58, 60, 108
Grossman, Michael 86-7
habitual behaviours 128-9
hard paternalism 227
INDEX

health
   determinants of 116–20, 134–5
   economic costs of poor health 50–52
   as human goal 31–2
   obesity, impact of 15–16, 23, 24, 110–11
   social welfare gains from improvements in 49–50

health care
   cost-effectiveness of interventions 194–8
   costs, and improving health 52, 193
   economic costs of obesity 28–30, 36, 44
   effectiveness of interventions 248, 253–4, 255
   as externality of obesity 123–4
   impact of obesity 16

health education and promotion
   cost-effectiveness of 205
   effectiveness of 176–7, 191, 192, 193, 195, 196, 197
   nature of 177–80
   and socio-economic status 201

Heart Health Nova Scotia 166

height, trends in 61, 75

households, social multiplier effect 129–34

Hungary
   child overweight 108
   data sources 238
   education and obesity 93
   obesity rates 58, 60, 62, 63, 64
   social disparities and obesity 92
   socio-economic status and obesity 94

Hurst, J. 181

hyperbolic discounting 127

Iceland 58, 59, 60, 108, 167

India 60, 108, 218

individuals
   choices 33–4, 232–4, 235
   and interventions 223–5
   self-control 34

Indonesia 58, 60, 108

inequality, and child obesity 112

information
   failures, and lifestyle choices 125–6, 135

government policy 124–5, 149–51, 153, 155, 156, 161–2, 227
   as an intervention strategy 227
   and lifestyle choices 141–4
   and obesity 39

International Food and Beverage Alliance (IFBA) 218

interventions
   community interventions 165–71
   cost-effectiveness of 194–8, 256–61
   data limitations 203–4
   design of 221, 222–3
   distributional impacts 201–3, 206
   economic analysis of 43
   effectiveness of 20–21, 40, 41–2, 44, 189–94, 204–6, 248, 249–56
   and individual choice 37–8, 232–4, 235
   multi-stakeholder approach 21–2, 228–32, 235
   multiple-intervention strategies 198–201, 206, 248, 249, 250, 255–6
   OECD area intervention policies 40, 43, 154–8, 162, 175, 176–86
   paying for 40–41
   population vs. individual approach 223–5
   and social norms 225–8, 235
   strategy consensus 39–40

Ippolito, P. 142, 160

Ireland 24, 58, 60, 108

Israel 60, 108

Italy
   age and obesity 82
   child overweight 108
   cohort patterns 65–7
   cost-effectiveness of interventions 256, 258, 260
   cost of interventions 249
   data sources 238, 244
   education and obesity 92, 93, 241–2
   effectiveness of interventions 191, 193, 195, 197, 250, 252, 254, 255
future trends 68, 71
gender and obesity 80
multiple-intervention strategies 200
obesity rates 60, 62, 63, 64, 65
social multiplier effect 131, 133
socio-economic status and obesity 94, 239–40

Japan
child overweight 108
chronic diseases 27
cost-effectiveness of interventions 256, 258, 261
cost of interventions 249
data sources 243, 245
effectiveness of interventions 191, 195, 198, 250, 252, 254, 255
financial incentives to improve lifestyle choices 158
gender and obesity 80
multiple-intervention strategies 200, 201
obesity rates 58, 60
Kellog’s 212
Kenkel, Donald S. 43, 125, 141, 143, 264–5
Keys, Ancel 59
Korea
age and obesity 82
child obesity 69, 74, 89, 91
child overweight 108
cohort patterns 65–7
data sources 238
education and obesity 84, 85, 92, 93, 241–2
future trends 68, 69, 72, 74
obesity rates 58, 60, 62, 63, 64, 65
social multiplier effect 131, 132, 133
socio-economic status and obesity 94, 95, 239–40
Kraft Foods 161
labour markets 17–18, 122, 124
labour productivity 97–8, 100–102
Lalonde report 116
life-course perspective 119–20
life expectancy 15–16, 23, 24–8, 44
life years (LYs) 190–94, 200
lifestyle choices
and chronic diseases 117
community interventions 165–71
determinants of 33–4
distributional impacts of interventions 201–3, 206
and education 143
effectiveness of interventions 189–94, 204–6
government policy options 19–20, 43, 148–54, 156, 161–2
and health determinants 116–20, 134–5
and information 141–4
market failures as determinants of 122–9, 134
multiple-intervention strategies 198–201, 206, 248, 250, 255–6
OECD area intervention policies 40, 43, 154–8, 162, 175, 176–86
and prevention 37–8, 232–4, 235
private sector role 158–61
social multiplier effect 129–34, 135
and socio-economic status 83
Link, B.G. 143
Lleras-Muney, A. 88, 96, 143
Lobstein, Tim 75–6, 265
longevity see life expectancy; mortality
Luxembourg 58, 59, 60, 108
Mackenbach, J.P. 92
macroeconomic costs 50–52
malnutrition in childhood 83
markets, role of 34, 122–9, 134, 158–61, 162
Marmot, M. 117
marriage 83
marshmallow experiment 34
mass media campaigns
cost-effectiveness of 257–61
cost of interventions 249
effectiveness of 176–7, 191, 192, 193, 195, 196, 197, 250, 251–2, 253–4
as interventions 179, 229
nature of 177–8
Mathios, A.D. 142, 144, 160
McKeown, Thomas 116
media campaigns see mass media campaigns
men
education and obesity 240–42
obesity in 80–81
social disparities and obesity 92
socio-economic status 83, 239–40
trends in obesity 62, 63, 64, 65
Menendez, A. 83
Mexico
child overweight 108
cost-effectiveness of interventions 256, 259, 261
cost of interventions 249
data sources 245
effectiveness of interventions 191, 195, 198, 250, 252, 254, 255
multiple-intervention strategies 199–200
obesity rates 58, 60, 74
self-regulation of food advertising 218
microeconomic costs 50–52
ModGen 188
Monasta, L. 75
morbidity 27, 190–94, 201–3
see also disability
mortality
and body mass index (BMI) 61
and chronic diseases 26–7
distributional impacts of interventions 201–3
effectiveness of interventions 190–94
and obesity 15–16, 24–6, 27–8, 44
multi-stakeholder approach 21–2, 228–32, 235
multiple-intervention strategies 198–201, 206, 248, 249, 250, 255–6
Murphy, K.M. 129, 130
Mytton, O. 202
Netherlands 60, 108, 167–8
New Zealand 58, 60, 108
North Karelia project 25, 166
Norway 60, 61, 108
Nutrition Labeling and Education Act (NLEA) 144
nutritional content labelling of food 144, 182, 184
obesity
and chronic diseases 25–6, 28, 44
cohort patterns 65–7
costs of 15–16, 23, 28–30, 36, 51–2
definition of 59
determinants of 37–8
and disability 28
drivers of obesity epidemic 18, 115, 121–2
economic analysis, contribution of 32–8, 44, 50–52
effectiveness of interventions 20–21, 40, 41–2, 44, 189–94, 204–6, 248, 250
future trends 67–74
and individual choice 33–4, 232–4, 235
and life expectancy 15–16, 23, 24–8, 44
measurement of 59–61
and mortality 15–16, 24–6, 27–8, 44
multi-stakeholder approach 21–2, 228–32, 235
obesity paradox 27, 59
and overweight 17
population vs. individual approach 223–5, 235
positive aspects of 31
prevention strategies, design of 221, 222–3, 234–5
rates in OECD countries 16, 17, 25, 58–9, 60, 74–5
social impacts 17–18
see also trends in obesity
O’Donoghue, T. 34, 234
OECD (Organisation for Economic Co-operation and Development) countries
aging populations 27
chronic disease in 24, 26
community interventions 166–8
INDEX

gender and obesity 80–81
government policies 40, 43, 
154–8, 162, 175, 176–86
obesity rates 16, 17, 25, 58–9, 
60, 74–5
Ofcom (UK) 211–15
overweight
and age 81–2
children 90, 91, 107–10, 112
cohort patterns 65–7
economic costs of 29
and education 84–8, 93, 242
and ethnic origin 95–6
extent of 16, 24, 25, 58
future trends 67–74, 75
measurement of 59–61
and mortality 15, 27–8, 44
and obesity 17
OECD area 60
population vs. individual
approach 223–5, 235
prevention strategies, design of
221, 222–3, 234–5
and social disparities 92–5
social factors 39
and socio-economic status 82–4, 
94, 240
trends in 57, 61–5

Pacific OPIC Project (Australasia) 
169
paternalism 227, 233–4
peer groups 129–34, 225–8
persuasion 149–51, 161–2
Peru 218
Phelan, J. 143
Philippines 161
Phillipson, T. 31, 124
physical activity see exercise
physician counselling see primary-
care based interventions
pledge programmes 218, 231
Poland 60, 108
Popkin, Barry 58
population approach to
interventions 223–5
Portugal 58, 60, 101, 108
Posner, R. 31, 124
pre-obesity 62
preferences, attempts to influence
149–51, 153, 156
see also lifestyle choices
prevention
community interventions 165–71
design of strategies 221, 222–3, 
234–5
distributional impacts of 201–3,
206
effectiveness of 20–21, 40, 41–2,
44, 189–94, 204–6, 248, 250
and individual choices 37–8,
232–4, 235
multi-stakeholder approach
228–32, 235
multiple-intervention strategies
198–201, 206
OECD area intervention policies
154–8, 162, 175, 176–86
paying for 40–41
policy options 148–54, 161–2,
175, 176–86
population vs. individual
approach 223–5, 235
role of 30–32
and social norms 225–8, 235
strategy consensus 39–40
prices
as deterrent to unhealthy
choices 151–2, 153–4, 156, 
162
effectiveness as intervention 
176–7, 191, 192, 193, 195, 
196, 197
as intervention 180–82, 183
and socio-economic status 201–2
primary-care based interventions
cost-effectiveness 206, 257–61
cost of 249
distributional impacts 202
effectiveness of 176–7, 191, 192, 
193, 195, 196, 197, 250, 
251–2, 253–4
as individual approach 224
multiple-intervention strategies 
199
nature of 182, 185–6
private sector, role of 158–61, 162
procrastination 34, 127
productivity and obesity 97–8,
100–102
Programme for Nutrition, 
Prevention and Health of 
Children and Adolescents 
(France) 169
quasi-externalities 124
Quetelet, Adolphe 59
Quintana-Domeque, C. 92
Raben, Robert 231
Rabin, M. 34, 234
race and obesity 95–7, 111
rational addiction 129
rational choice 34, 126, 127
regulation
bans on unhealthy behaviours 152–3, 156
costs of 151
effectiveness of 176–7
food industry response to threat of 229, 230–31
and information 126
as intervention 19
and lifestyle choices 142, 148–9, 159–60, 162
see also food advertising regulation; self-regulation of food advertising
Robert Wood Johnson Foundation (RWJF) 231–2
Roehling, M. V. 98
Rose, Geoffrey 223, 224–5, 232–3
Royer, H. 86
Russia 58, 60, 108
safety 152–3
salt 229–30
Sassi, Franco 181, 263
school-based interventions
cost-effectiveness of 257–61
cost of interventions 249
distributional impacts of 202
effectiveness of 176–7, 191, 192, 193, 195, 197, 250, 251–2, 253–4
multiple-intervention strategies 199
nature of 178, 179
Scotland 108
sectoral cost-effectiveness 186–7
self-control 34, 39, 126–7
self-regulation of food advertising
arguments for 159–60, 217–19
cost-effectiveness of 257–61
cost of interventions 249
effectiveness of 176–7, 191, 192,
gender and obesity 80
obesity rates 58, 60, 62, 63, 64, 65
productivity and obesity 101
socio-economic status and obesity 94, 239-40
Spasojevic, J. 86
Speakman, J.R. 87
stakeholders
community interventions 165-71
involvement of 159
multi-stakeholder approach 21-2, 228-32, 235
Stanford GEMS (Girls Health Enrichment Multi-site Studies) (USA) 169
Stanford Three Community Study 166
Strange, Tracey 265
subsidies 180-82
sugar 229
Suhrcke, Marc 124
Sunde, U. 52
supply-side factors 37
Sweden
child overweight 108, 112, 113
data sources 238
disability 101
education and obesity 86, 92, 93
obesity rates 60, 62, 63, 64
productivity and obesity 101
socio-economic status and obesity 94, 120
wages and obesity 99
Switzerland 58, 60, 80, 108, 112, 218
trends in obesity
cohort patterns 65-7
future trends 67-74
historical trends 16, 24-6, 42, 57, 61-5
measuring obesity 59-61
obesity rates in OECD countries 58-9, 74-5
tunnel vision 128
Turkey 60, 108
United Kingdom (UK)
body mass index (BMI) trends 61
child overweight 108, 110, 112
community interventions 167
food advertising regulation 211-15
food labelling 228
gender and obesity 80
height, trends in 61
obesity rates 58, 59, 60, 75
self-regulation of food advertising 212
smoking ban 153
socio-economic status and health 118
see also England
United States of America (USA)
age and obesity 82
body mass index (BMI) trends 61
child obesity 69, 70, 71, 74, 89, 91, 107
child overweight 108, 110, 112
chronic diseases 27, 28
cohort patterns 65-7
community interventions 166
data sources 238
disability 101
economic costs of obesity 29
education and obesity 84, 86, 93, 241-2
employment and obesity 99
ethnic origin and obesity 95, 96, 97, 102
financial incentives to improve lifestyle choices 158
food consumption patterns 142
food labelling 144
future trends 68, 69, 72, 74
gender and obesity 80
health care 123
height, trends in 61
mortality 24, 26, 28
obesity rates 58, 59, 60, 62, 63, 64, 65, 74
private sector role 161
productivity and obesity 100, 101
salt intake 229–30
self-regulation of food advertising 218
smoking 125, 141
social disparities and obesity 92
socio-economic status and obesity 94, 239–40
wages and obesity 100
weight loss market 228

Variyam, J.N. 144, 184

Waaler curves 61
wages and obesity 83, 97–8, 99–100, 102
Wales 167
see also United Kingdom (UK)
Wang, G. 111
weight, trends in 61, 75
welfare maximization 34
Whitaker, R. 111
Whitehall II study 120
Whitehead, M. 116
Wilkinson, R.G. 117
women
education and obesity 240–42
employment 98, 99
obesity in 62, 63, 64, 65, 80–81

social disparities and obesity 92
socio-economic status 83–4, 239–40
wages and obesity 100
working conditions 37
workplace interventions
corporate social responsibility 232
cost-effectiveness of 257–61
cost of 249
distributional impacts of 202
effectiveness of 176–7, 191, 192, 193, 195, 196, 197, 250, 251–2, 253–4
multiple-intervention strategies 199
nature of 178, 180
World Federation of Advertisers (WFA) 217
World Health Organization (WHO)
Chronic Disease Prevention (CDP) model 188–9, 243–7
Commission on Macroeconomics and Health 51
Commission on the Social Determinants of Health 117, 118
community interventions 169
cost-effectiveness analysis 176, 187
epidemic of obesity 59
Health Behaviour in School-aged children 89
and the sugar industry 229