
Consumer Oxygen Equipment: Market Shares, Strategies, and Forecasts, Worldwide, 2017 to 2023

Consumer Oxygen Equipment target market is professional athletes. Funding sources are immediately from CMS Medicare, governments, and the insurance companies.

Table of Contents

Consumer Oxygen Executive Summary	17
Consumer Oxygen Market Driving Forces	17
Supplemental Oxygen Use By Sports Figures and Athletes	17
Consumer / Recreational Oxygen Equipment Market Driving Forces	19
Using Oxygen to Lose Weight	20
Consumer and Recreational Oxygen Market Shares	26
Consumer and Recreational Oxygen Forecasts	27
Consumer Oxygen Equipment Market Forecasts	27
OHS Patient Symptoms	29
OHS Treatments with Oxygen	29
OHS Indicates that Blood Oxygen Saturation and Shortness of Breath Are Separate	30

Football Players, Basket Ball players, and Hockey Players Use Oxygen to Support Performance When Exhausted.	31
Supplemental Oxygen Placebo Effect	32
Obesity Hypoventilation Syndrome Co2 Loading And Unloading	34
1. Consumer Oxygen Equipment: Market Description and Market Dynamics	35
1.1 Value of Exercise	35
1.2 Protecting the Brain	38
1.3 Respiration	39
1.3.1 Supplemental Oxygen Good for People Exercising After They Begin to Have Difficulty Breathing	42
1.4 Oxygen Equipment Separates Oxygen From Air	42
1.4.1 Portable Oxygen Concentrator Functions	43
1.5 Oxygen / Ozone Therapy to Strengthen Immune System	44
1.6 Long History of Supplemental Oxygen Improving Sports Performance	45
1.7 Supplemental Oxygen to Improve Brain Functioning	47
1.7.1 Mountaineering Use of Supplemental Oxygen	50
1.7.2 Summit Oxygen ALTOX Personal Oxygen System	52
1.8 Oxygen Concentrator Uses	53
1.8.1 Stationary Oxygen Concentrator Functions	53
1.8.2 Separation Of Oxygen From Air	54
1.8.3 Technical Trade-Offs Necessary To Design An Oxygen Concentrator	55
1.9 Fatigue and Oxygen	55
2. Consumer Oxygen Market Shares and Forecasts	58

Consumer Oxygen Equipment: Table of Contents and List of Figures

2.1	Consumer Oxygen Market Driving Forces	58
2.1.1	Supplemental Oxygen Use By Sports Figures and Athletes	58
2.1.2	Consumer / Recreational Oxygen Equipment Market Driving Forces	60
2.1.3	Using Oxygen to Lose Weight	61
2.2	Consumer and Recreational Oxygen Market Shares	67
2.2.1	Supplemental Oxygen in a Can	69
2.2.2	Boost Recreational Canned Oxygen	72
2.2.3	Chart / AirSep	72
2.2.4	Chart / AirSep NewLife Elite	73
2.2.5	Oxygen Experience In A Bar	73
2.2.6	Oxygen Bar Machines	74
2.3	Consumer and Recreational Oxygen Forecasts	80
2.3.1	Consumer Oxygen Equipment Market Forecasts	81
2.3.2	Market Segment Forecasts for Consumer Oxygen Equipment	83
2.3.3	Professional Sports Oxygen Equipment Forecasts	84
2.3.4	Consumer Recreational Semi Professional and Amateur Athlete Oxygen Market Shipments Forecasts, Dollars, Worldwide, 2017-2023	87
2.3.5	Consumer Recreational Corporate Gym Oxygen Market Shipments Forecasts, Dollars, Worldwide, 2017-2023	88
2.3.6	Consumer Recreational Sports Club Oxygen Equipment	90
2.3.7	Market for Consumer Oxygen Equipment Among Aging Population Forecasts	93
2.3.8	Oxygen Bar Machines	96
2.3.9	Federal Food, Drug, and Cosmetic Act Position on Oxygen	98
2.3.10	Worldwide Patients on Oxygen Market Forecasts, Worldwide, 2017-2023	99
2.3.11	Healthy or Hype	100
2.3.12	Consumer Supplemental Oxygen Nay Sayers	101
2.3.13	People Who Can Be Injured by Consumer Supplemental Oxygen	102
2.3.14	FDA Concern About "Flavored" Oxygen In Oxygen Bars	102
2.3.15	Oxygen and Sports	104

2.3.16	Use of Medical Oxygen With CPAP Devices	104
2.4	Exercise With Oxygen Therapy, Hypoxia, Elevation & Altitude Training.	105
2.4.1	Supplemental Oxygen Therapy:	105
2.4.2	Possible To Increase Oxygen In Blood Even When Pulse Oximetry Shows Full Oxygenation	106
2.4.3	Hyperoxygenation	108
2.4.4	Hyperbaric Oxygen Therapy (HBOT).	108
2.4.5	Hyperbaric Oxygen Therapy For Athletes: Concussions and Tissue Healing	109
2.4.6	Football Players, Basket Ball players, and Hockey Players Use Oxygen to Support Performance When Exhausted.	110
2.4.7	Supplemental Oxygen Placebo Effect	111
2.4.1	Home Consumer Oxygen Equipment Market Forecasts	114
2.4.2	Wearables Market for Consumer Oxygen Equipment	117
2.4.3	Zoom Virtual Reality on an Exercise Bicycle	119
2.4.4	Consumer Oxygen Applications	120
2.5	Hyperbaric Oxygen Therapy	121
2.5.1	Hyperbaric Oxygen Therapy HBOT Testimonials	122
2.6	Consumer Oxygen Prices	124
2.6.1	Oxygen Bar Prices	128
2.7	Consumer Oxygen Regional Segment Analysis	132
3.	Consumer Oxygen Product Description	135
3.1	Boost Sports and Consumer Oxygen	135
3.1.1	Using Boost After Strenuous Physical Activity	136
3.1.2	Boost Recreational Canned Oxygen	137
3.1.3	Boost Supplemental Oxygen for Pro Athletes	139
3.1.4	Boost Number One Sports Oxygen Tank in Europe	144
3.1.5	Boost Supplemental Oxygen Treats Symptoms Of Altitude Sickness	145

3.1.6	Boost Oxygen for Muscle & Fitness Training	145
3.1.7	Boost Oxygen Supplemental Oxygen for Relaxation	146
3.2	AirSep Focus Portable Oxygen Concentrator	146
3.3	Summit Oxygen	149
3.3.1	Summit Oxygen ALTOX Personal Oxygen System	149
3.4	Zadro Health Solutions	151
3.4.1	Zadro Benefits of the Oxygen Bar Operation	151
3.5	Oxygen Plus	158
3.5.1	Oxygen Plus Travel Oxygen	161
3.5.2	Oxygen Plus Office Oxygen	161
3.5.3	Oxygen Plus Elevation Oxygen	161
3.5.4	Oxygen Plus Play Oxygen	162
3.5.5	Oxygen Plus Recovery Oxygen	162
3.6	GoOxygen	164
3.6.1	Go Oxygen Benefits:	166
3.6.2	GoOxygen System Hyperoxic Training	167
3.7	Weyergans High Care AG Vacumed Hyperbaric Oxygen Pods	168
3.8	Live O2 Oxygen Reservoir	170
3.8.1	Firefighters Use Oxygen Concentrators To Detox Carbon Monoxide In The Body After Fighting A Fire	170
3.9	NTK	171
3.10	www.dhgate.com Home Oxygen Concentrators for Emergencies	173
3.11	Inogen Portable Oxygen Concentrator Family	174
3.11.1	Inogen One G4 System	178
3.11.2	Inogen One G3	182

3.11.3	Inogen One G3 Portable Oxygen Concentrators	183
3.11.4	Inogen One G2 Portable Oxygen Concentrators	184
3.12	DeVilbiss Healthcare iGo Portable Oxygen Concentrator	186
3.12.1	DeVilbiss Battery Charger	187
4.	Selected Consumer Oxygen Research and Technology	188
4.1	FDA Oxygen Alert	188
4.1.1	List of firms and their products subject to Detention without Physical Examination (DWPE) under this Import Alert (a.k.a. Red List)	191
4.2	Harvard Medical School Study on Energy	193
4.2.1	Energy and Oxygen	193
4.3	Sports Oxygen	194
4.3.1	Placebo Effect	194
4.3.2	Examples of Measuring the Placebo Effect	196
4.4	Blood Color	197
4.4.1	Bohr effect	198
4.5	OHS Patient Symptoms	204
4.5.1	OHS Treatments with Oxygen	205
4.5.2	OHS Indicates that Blood Oxygen Saturation and Shortness of Breath Are Separate	205
4.6	Oxygen Useful for Post-Concussion Syndrome	207
4.7	Blood Doping: Lance Armstrong	207
4.7.1	Blood Transfusions Used By Athletes To Engage In Blood Doping.	208
4.7.2	Seven-Year Study of Lance Armstrong	208
4.8	Oxygen Research Directions	209
4.9	Co2 In Air	210

4.9.1	Chemistry of the Body	211
4.10	Need for Oxygen at Higher Altitudes	211
4.10.1	Difficulty That Physicians Have In Detecting Hypoxemia	213
4.10.2	Dyspnea, Shortness of Breath	214
4.11	Maximum Rate Of Oxygen (O2) Consumption By The Body During Exercise	215
4.11.1	Patients with OHS	217
4.11.2	Definition Of Obesity Hypoventilation Syndrome	218
4.11.3	Placebo Effect	220
4.12	Managing Hypoxia And Hypercapnia	222
4.12.1	Mountaineering Use of Supplemental Oxygen	223
4.13	Yoga and Breathing	225
4.14	Cardiac Stress Testing	226
4.15	Exercise as a Drug - Pharmacological Benefits Of Exercise	227
4.16	Medical Use of Oxygen	228
4.17	Hypoxia	229
4.18	Muscle fatigue	230
4.19	World Economy	231
5.	Consumer Oxygen Company Profiles	232
5.1	Boost Oxygen	232
5.2	Chart Industries	236
5.2.1	Chart Caire / AirSep / Sequal	236
4	Chart Industries	237
4	Chart Industries Revenue	238

Consumer Oxygen Equipment: Table of Contents and List of Figures

4	Chart Industries Respiratory Sales	239
4	Chart Industries / AirSep	240
5.3	Drive Medical / DeVilbiss Healthcare	241
4	Drive Medical Product Line	242
4	DeVilbiss Healthcare Moves Production Back to the USA	242
5.4	Foshan Keyhub Electronic Industries Co., Ltd.	243
5.5	Inogen	248
5.5.1	Inogen One G3 Versatile Portable Oxygen Concentrator	249
5.5.2	Inogen Is Reliable, Trusted, And Proven	251
5.5.3	Inogen Expands Manufacturing Capacity to Accommodate Growth	253
5.6	Jiuxin Medical	253
5.6.1	Jiuxin Medical Jogger Portable Ventilator	254
5.6.2	Jiuxin Medical ICU Ventilator Detachable 10.4" TFT Color Screen	255
5.7	Leistung Engineering	256
5.7.1	Leistung Key Strategy	257
5.8	Live O2 Oxygen	257
5.9	Longfian Scitech	260
5.9.1	Longfian Scitech JAY-20 Industry Oxygen	261
5.9.2	Longfian Scitech JAY-20 Industry Oxygen	261
5.10	NTK	262
5.11	Oxygen Plus	262
5.11.1	Oxygen Key Ingredient In Production Of Energy for Humans	263
5.11.2	Oxygen Plus / Summit Oxygen	268
5.12	Philips Healthcare	269
5.12.1	Philips Respironics Enables Consumer Lifestyle	271

5.13	POD Oxygen	278
5.14	Weyergans High Care AG	280
5.15	Yuwell	281
5.16	Zadro Health Solutions	282
5.17	Zorvo Portable O2 Generator	284
5.18	Zoom	289
5.19	2nd Wind Distributors	290
5.20	Oxygen Concentrator Companies	291
	WinterGreen Research,	313
	WinterGreen Research Research Methodology	314
	Figure 1. Boost Sports and Consumer Oxygen	17
	Football Players Using Oxygen	18
	Figure 2. Value of Consumer Oxygen	21
	Figure 3. Issues With Consumer Oxygen	22
	Figure 4. Consumer Oxygen Equipment Market Driving Forces	23
(Image)	Figure 5. Consumer Recreational Oxygen Concentrator Market Shares, Dollars, Worldwide, 2016	26
	Figure 6. Consumer Recreational Oxygen Forecasts, Dollars, Worldwide, 2017-2023	28
	Figure 7. Obesity Hypoventilation Syndrome Description	33

	Figure 8. Oxygen Transport Inside the Human Body	40
	Figure 9. Oxygen And Ozone Therapies Benefits	45
	Figure 10. Judge Wesley E. Brown of Wichita, Kansas, 105	48
	Figure 11. Summit Oxygen Tanks and Carrying Case	52
	Figure 12. Common causes of fatigue	55
	Figure 13. Various Diseases That Cause Fatigue	56
	Figure 14. Boost Sports and Consumer Oxygen	58
	Figure 15. Football Players Using Oxygen	59
	Figure 16. Value of Consumer Oxygen	62
	Figure 17. Issues With Consumer Oxygen	63
	Figure 18. Consumer Oxygen Equipment Market Driving Forces	64
	Figure 19. Consumer Recreational Oxygen Concentrator Market Shares, Dollars, Worldwide, 2016	67
(Image)		
	Figure 20. Consumer Recreational Oxygen Concentrator Market Shares, Dollars, Worldwide, 2016	68
	Figure 21. Consumer Recreational Oxygen Concentrator Market Shares, Units and Dollars, Worldwide, 2016	69
	Figure 22. BOOST Pure Oxygen	70
	Figure 23. Consumer Oxygen Equipment Market Leaders, Worldwide, 2016	72
	Figure 24. Oxygen Bar Machines	74
	Figure 25. Enshey Oxygen Bar Machines 1L/min—5L/min Portable Oxygen Concentrator Air Purifier	75
Oxygen		
	Figure 26. Selected Consumer and Recreational Oxygen Market Participants	76
	Figure 27. Selected Consumer Oxygen Market Participants	77
	Figure 28. Consumer Recreational Oxygen Forecasts, Dollars, Worldwide, 2017-2023	82
	Figure 29. Consumer Oxygen Systems Market Forecasts, Dollars, Worldwide, 2016-2022	83
	Figure 30. Consumer Recreational Oxygen Shipment Market Segment Forecasts Percent, Worldwide, 2017-2023	84
	Figure 31. Professional Sports Oxygen Equipment Forecasts, Dollars, Worldwide, 2017-2023	85
	Figure 32. Consumer Recreational Semi Professional and Amateur Athlete Oxygen Market Shipments Forecasts, Dollars, Worldwide, 2017-2023	87
	Figure 33. Consumer Recreational Corporate Gym Oxygen Market Shipments Forecasts, Dollars, Worldwide, 2017-2023	89

Figure 34. Consumer Recreational Sports Gym Oxygen Market Shipments Forecasts, Dollars, Worldwide, 2017-2023	91
Figure 35. Oxygen Concentrator Regulator	93
Figure 36. Aging Population Consumer Oxygen Equipment Forecasts, Dollars, Worldwide, 2017-2023	94
Figure 37. Enshey Oxygen Bar Machines 1L/min—5L/min Portable Oxygen Concentrator Air Purifier Oxygen	97
Figure 38. Oxygen Air Purifiers on Amazon	98
Figure 39. Worldwide Patients on Oxygen Market Forecasts, Worldwide, 2017-2023	99
Figure 40. Obesity Hypoventilation Syndrome Description	112
Figure 41. Aging of the Population, Percent of Total Population By Country US, Japan, Europe, China, Regional Analysis, 2016 and 2020	114
Figure 42. Consumer Oxygen Services by Sector, Obese and People Using Wearable Consumer Devices, Market Forecasts, Dollars, Worldwide, 2016-2022	117
Figure 43. Wearables Market for Consumer Oxygen Equipment	118
Figure 44. Wearable Oxygen Metabolism Measurement App Market Forecasts, Dollars and Units Worldwide, 2016-2022	118
Figure 45. Zoom Virtual Reality Exercise Bike	120
Figure 46. Consumer Oxygen Applications	121
Figure 47. UK Hyperbaricoxygentherapy/com	123
Figure 48. Hybaricoxygentherapy Chamber Risks	124
Figure 49. Oxygen Plus Canisters	127
Figure 50. Oxygen Plus Canisters on Google	127
Figure 51. Consumer Oxygen and Air Purifiers on Google	128
Figure 52. Consumer Oxygen on Google	128
Figure 53. Merilive Portable	129
Figure 54. Merilive Oxygen Concentrator Functions	130
Figure 55. Amazon Consumer Oxygen	131
Figure 56. Consumer Oxygen Equipment Regional Market Segments, 2016	132
Figure 57. Consumer Oxygen Equipment Regional Market Segments, 2016	133
Figure 58. Football Players Using Oxygen	135
Figure 59. Boost Prohibits Enhancement Of Oxygen Transfer	137

Figure 60.	BOOST Pure Oxygen	138
Figure 61.	Boost Oxygen Users	140
Figure 62.	AirSep Focus Consumer Oxygen Concentrator Weighs a 1.75 Pounds	147
Figure 63.	AirSep Focus Consumer Oxygen	148
Figure 64.	Summit Oxygen Tanks and Carrying Case	149
Figure 65.	Summit Oxygen Carrying Case	150
Figure 66.	Zadro Diagram of Oxygen Bar and Control Panel	151
Figure 67.	Zadro Operation Instructions	152
Figure 68.	Zadro Oxygen Bar	153
Figure 69.	Zadro Oxygen Generation	154
Figure 70.	Zadro Oxygen Bar Operation	155
Figure 71.	Zadro Oxygen Bar Timer Operations	156
Figure 72.	Zadro Identification of Benefits of Supplemental Oxygen	157
Figure 73.	Oxygen Plus Canisters	159
Figure 74.	Oxygen Plus O+ Oxygen Products	160
Figure 75.	Oxygen Plus Applications	160
Figure 76.	Oxygenplus Canister of Oxygen	163
Figure 77.	Go Oxygen System:	165
Figure 78.	Go Oxygen Benefits:	166
Figure 79.	Go Oxygen System Specifications	167
Figure 80.	Weyergans High Care AG Vacumed Hyperbaric Oxygen Pods	168
Figure 81.	NTK Original Equipment Oxygen Sensors	171
Figure 82.	NTK Oxygen Concentrator Description	172
Figure 83.	www.dhgate.com Home Oxygen Concentrators for Emergencies	173
Figure 84.	Inogen Portable Oxygen Concentrator Family	174
Figure 85.	Inogen Portable Oxygen Concentrator Strategy	175
Figure 86.	Inogen Portable Oxygen Concentrator Portable Product Offerings	175
Figure 87.	Inogen Portable Oxygen Concentrator Portable Product Benefits	176
Figure 88.	Inogen One G4 System	178
Figure 89.	Ingen One System Features:	179
Figure 90.	Inogen Key Product Specifications	181

Figure 91.	Inogen One G3 Portable Oxygen Concentrators	183
Figure 92.	Inogen One G2 Portable Oxygen Concentrators	184
Figure 93.	Schematic Diagram Of The Flow Of Blood Through The Circulatory System, Showing O ₂ /Co ₂ Exchange In The Body	200
Figure 94.	Obesity Hypoventilation Syndrome CO ₂ Loading And Unloading During Respiratory Events 202	
Figure 95.	Increasing CO ₂ Levels In The Atmosphere	210
Figure 96.	Obesity Hypoventilation Syndrome Description	219
Figure 97.	Boost Oxygen Target Applications	233
Figure 98.	Boost Oxygen Canisters	233
Figure 99.	Boost Oxygen Athlete Endorsements	234
Figure 100.	Boost Oxygen Sports Supported	235
Figure 101.	Chart Industries Regional Presence	238
Figure 102.	DeVilbiss Healthcare Regional Market Presence	241
Figure 103.	Jiuxin Medical Jogger Portable Ventilator	254
Figure 104.	Jiuxin Medical ICU Ventilator Features	255
Figure 105.	Live Oxygen Therapy	258
Figure 106.	Longfian Scitech JAY-20 Industry Oxygen	261
Figure 107.	Oxygen Plus Conditions That Can Reduce Oxygen Levels	264
Figure 108.	Oxygen Plus Use Before Meditating	266
Figure 109.	Oxygen Plus Selected Customers	267
Figure 110.	Summit Altox Personal Oxygen System	268
Figure 111.	Philips Global Trends And Challenges	272
Figure 112.	Philips Positions To Simplify Global Healthcare Delivery For The Long Term	274
Figure 113.	Philips Healthcare Delivery Product Positioning	275
Figure 114.	Philips Delivering Margin Improvement and Decreasing Manufacturing Overhead	277
Figure 115.	Pod Oxygen Canister	279
Figure 116.	Weyergans High Care AG Vacumed Hpyperbolic Oxygen Therapy	280
Figure 117.	Yuwell YU300 Homecare Portable Oxygen Concentrator	281
Figure 118.	Zadro Health Solutions	282
Figure 119.	Zadro Tranquil Sounds Oxygen Bar Features:	283

Figure 120.	Zorvo Portable O2 Generator Features	284
Figure 121.	Zorvo Portable O2 Generator Effect	285
Figure 122.	Zorvo Portable O2 Generator Tranquil Sounds Oxygen Bar - MODEL: OXY01	286
Figure 123.	Zadro's Tranquil Sounds Oxygen Bar Benefits	287
Figure 124.	Zorvo Portable O2 Generator Tranquil Sounds Oxygen Bar Operation:	288
Figure 125.	Zoom Game Cycle	289