

RESULTS

TABLES

Table-1. Showing Standard Anthropometric Measurements

	Control (N=30)		Obese (N=30)	
Parameters	Mean	S.D.	Mean	S.D.
Age(yrs)	15 9	1 4	15 8	1 37
Height (cms)	164 6	6 43	166 77	9 49
Weight(kg)	51 92	4 53	81 3***	13 9
Waist (cms)	65 6	7 51	89 5**	13 35
Hip(cms)	72 23	5 68	96 63**	11 48
Waist/Hip	0 91	0 05	0 96	0 09
Body Surface Area (Sq.m.)	1 53	0 09	1.99***	0 18
Body Mass Index (kg/m2)	19 51	1 23	29 4***	4 12
Skinfold Thicknesses				
Triceps (cm)	2 34	0 96	4 34***	0 85
Subscapular(cm)	2 7	0 79	5 48***	1 55
Chest(cm)	2 02	0 63	4 43***	1 47
Sup Iliac (cm)	4 95	1 37	9 15***	1 92

* p<0.05

** p<0 01

*** p<0 001

Table-2: Showing Measurements of Pulmonary Function Tests (Expiratory & Inspiratory Vital Capacities & Related Parameters) in Control & Obese Adolescents

		Control (N=30)		Obese (N=30)	
Parameters		Mean	S.D.	Mean	S.D.
FVC	(O)	3 43	0 52	3 66	0 65
(I)	(%)	105 7	13 73	102 4	15 88
FEV ₁	(O)	3 2	0 42	3 01	0 57
(I)	(%)	107 5	12 51	93 27**	15 74
FEV ₁ /FVC	(O)	93 6	5.96	81 74***	10 92
(%)	(%)	102 77	7 5	92 03***	12 25
FIV ₁	(O)	2 38	0.79	1.93	0.63
(I)					
FIVC	(O)	2 09	0 41	2 38	0 44
(I)					
FIV ₁ /FIVC	(O)	87 7	4 6	81 58**	12 81
(%)	(%)	87.7	4.6	81 53**	12 77
PEFR	(O)	6 82	1.53	6 87	1.56
(l/s)	(%)	89	24 92	83 77	16.36
PIFR	(O)	4 03	0 96	3 6	1 39
(l/s)					
FEF _{25-75%}	(O)	4 76	1 35	3 56	1.02
(l/s)	(%)	124 9	41 55	90	23.58
FEF _{50%}	(O)	5 03	1 48	4 07**	1 07
(l/s)	(%)				
FEF _{75%}	(O)	3 12	1 07	2 03**	0 71
(l/s)	(%)				
MVV	(O)	148 96	29 04	108 45***	22 6
(lts)	(%)	131 53	26 2	95 07***	17.1

FVC	=	Forced Vital Capacity (litres)
FEV ₁	=	Forced Expiratory Volume in the 1 st second (litres)
FIV ₁	=	Forced Inspiratory Volume in the 1 st second (litres)
FIVC	=	Forced Inspiratory Vital Capacity (litres)
PEFR	=	Peak Expiratory Flow Rate (in litres/second)
PIFR	=	Peak Inspiratory Flow Rate (in litres/second)
MVV	=	Maximum Voluntary Ventilation (in litres)
FEF _{25-75%}	=	Forced expiratory flow between 25-75 % of FVC (formerly known as Maximum Mid expiratory Flow rate or MMEFR) (in litres/second)
FEF _{50%}	=	Forced Expiratory Flow at 50% of FVC (in litres/second)
FEF _{75%}	=	Forced Expiratory Flow at 75% of FVC (in litres/second)

O = Observed Values

P = Predicted Values

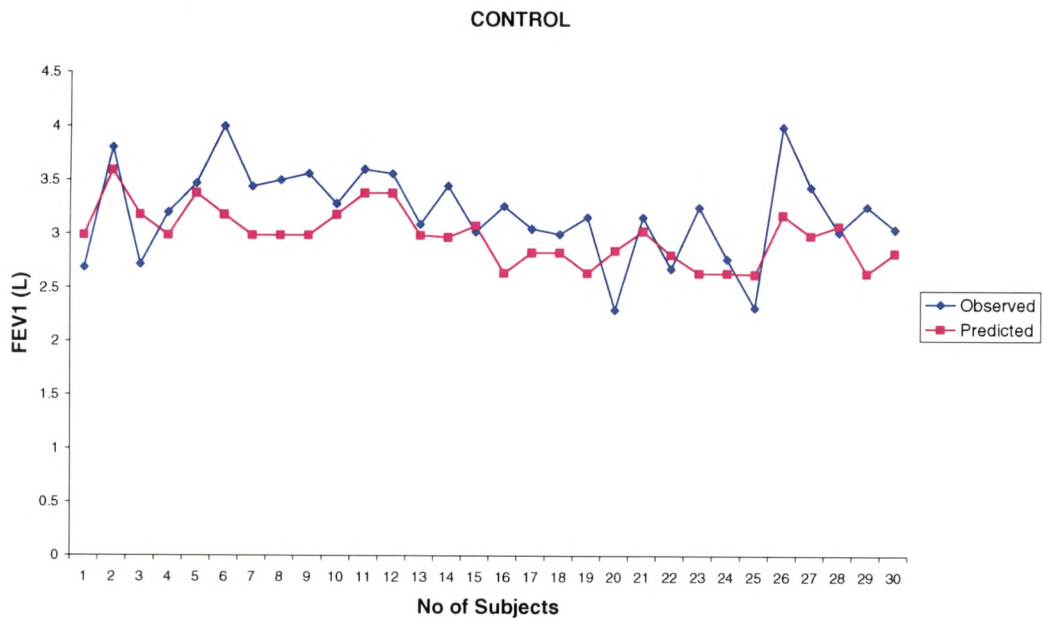
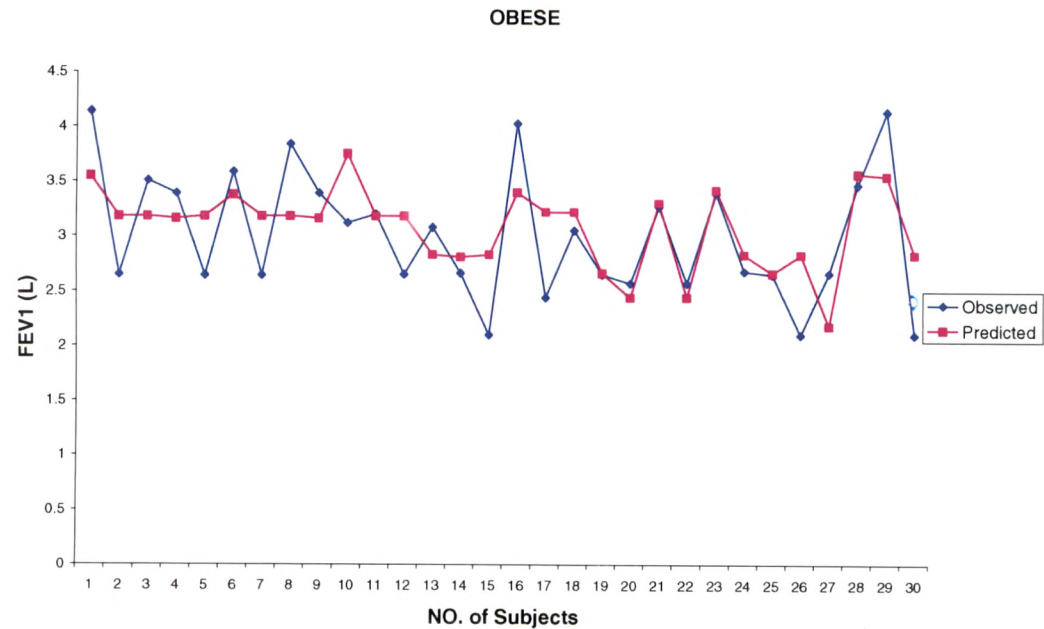
* p<0.05

** p<0.01

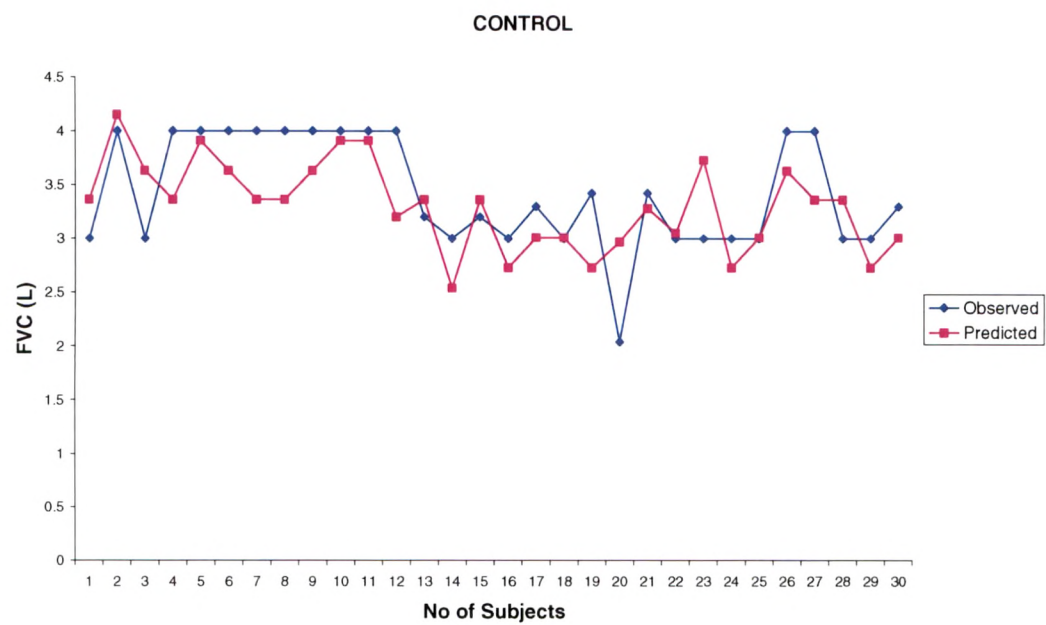
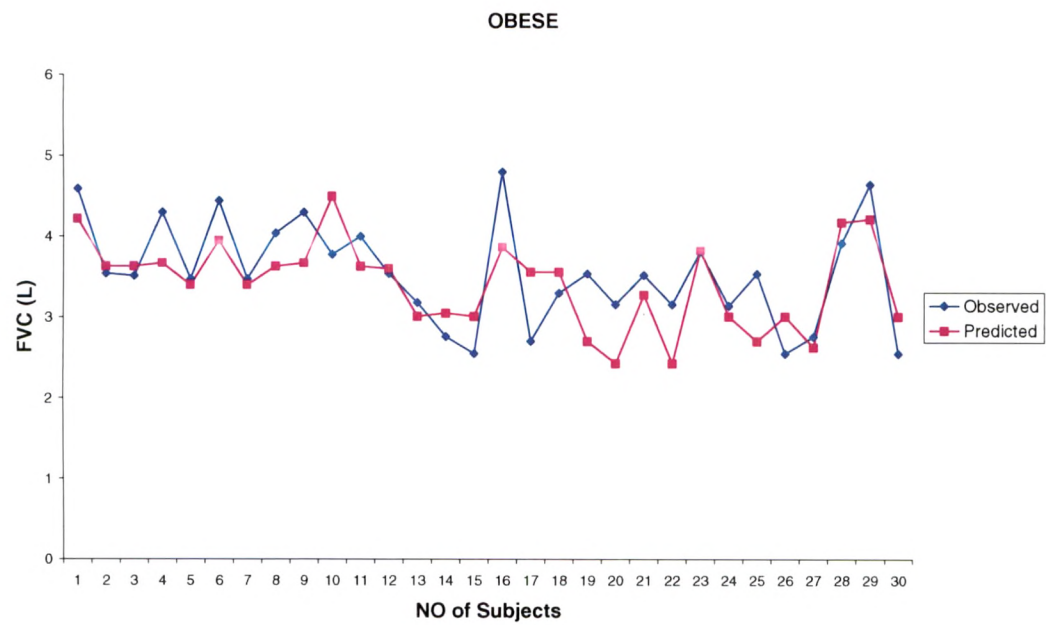
***p<0.001

GRAPH SHOWING THE RELATIONSHIP BETWEEN OBSERVED AND PREDICTED VALUES OF SOME PULMONARY FUNCTION PARAMETERS OF OBESE GROUP & CONTROL GROUP.

FEV₁ (L)

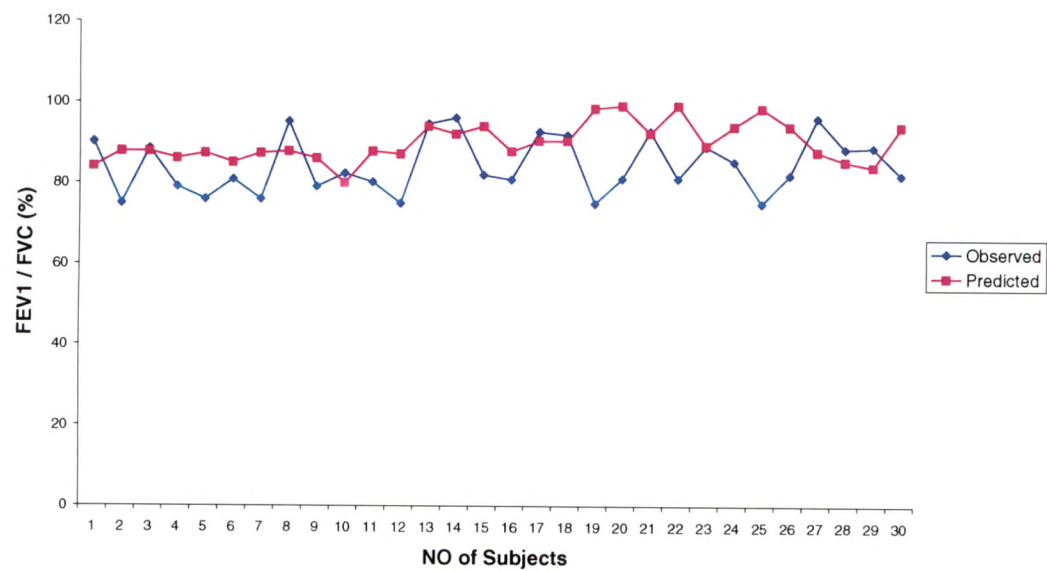


FVC (L)

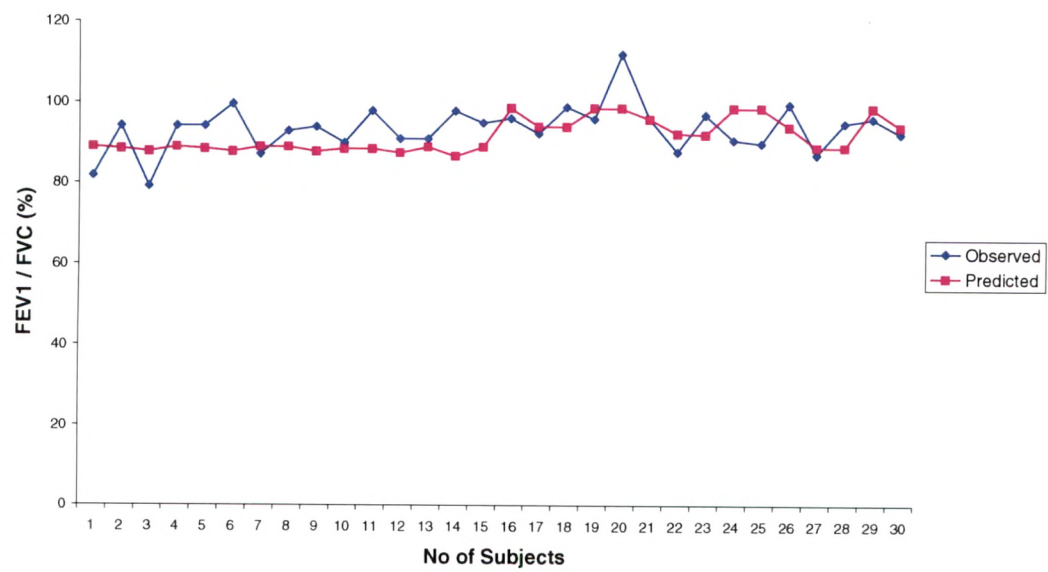


FEV₁/FVC (%)

OBESE

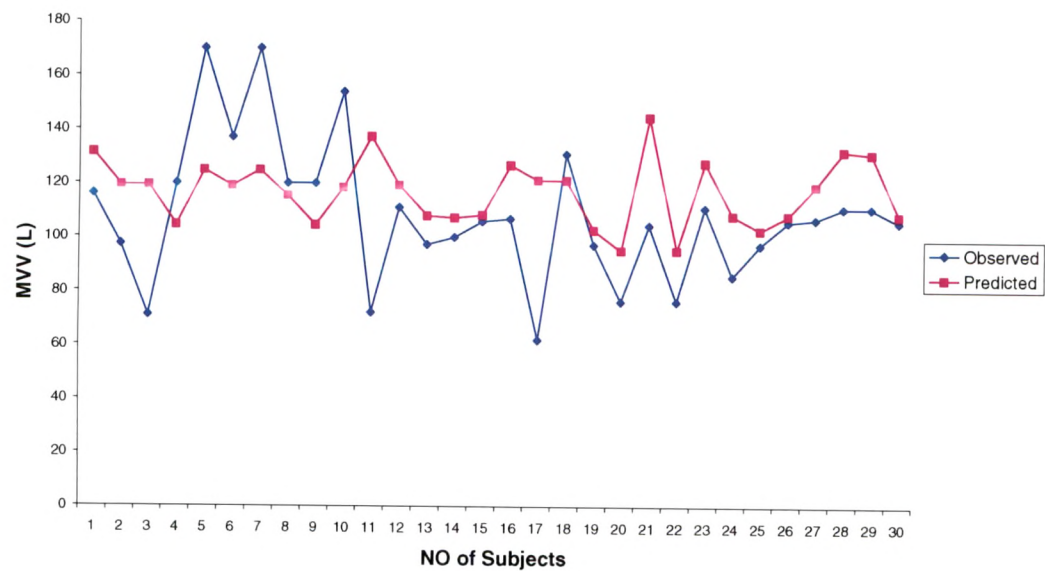


CONTROL

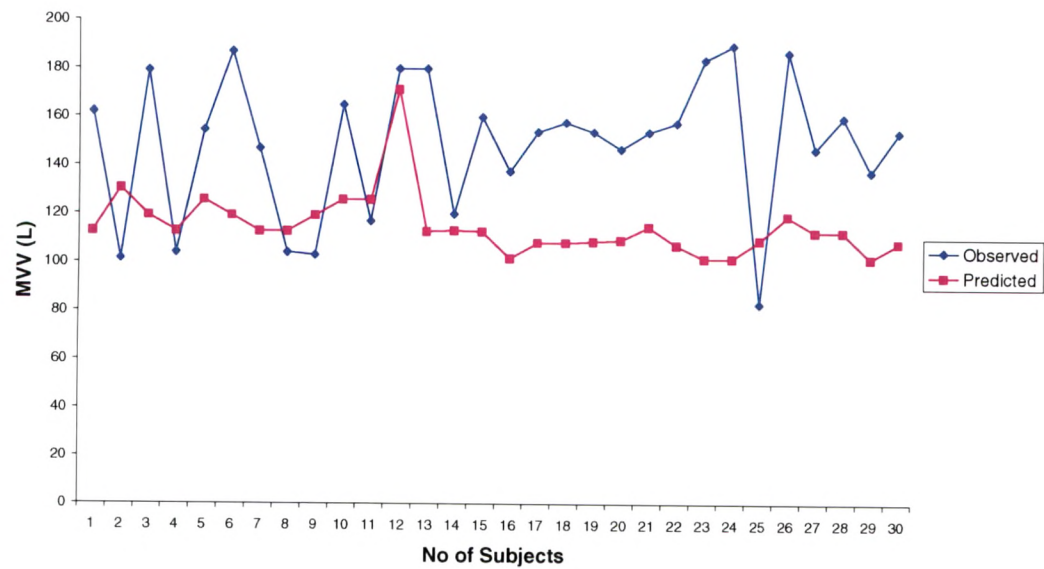


MVV (L)

OBESE

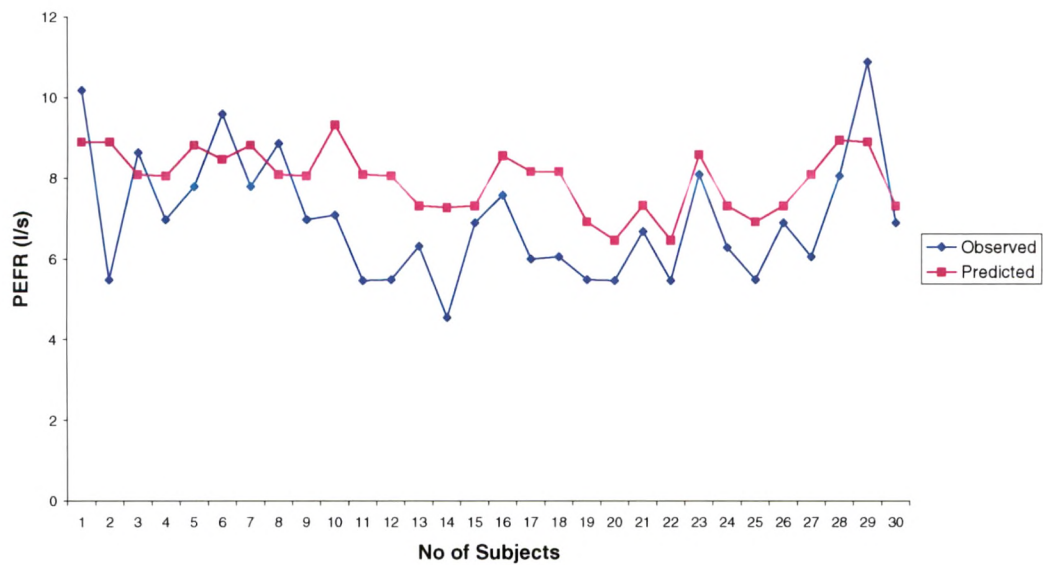


CONTROL

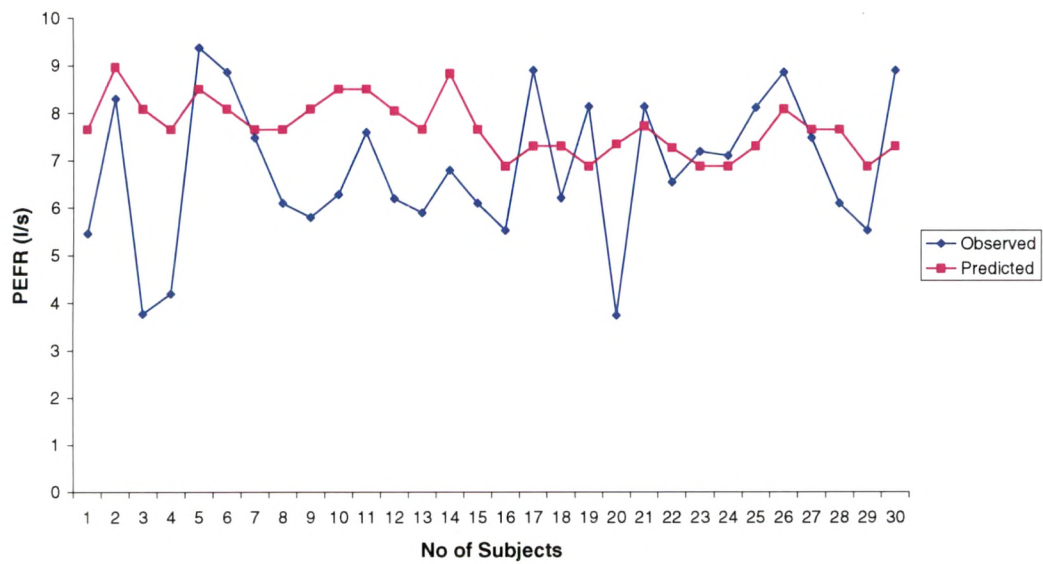


PEFR (l/s)

OBESE

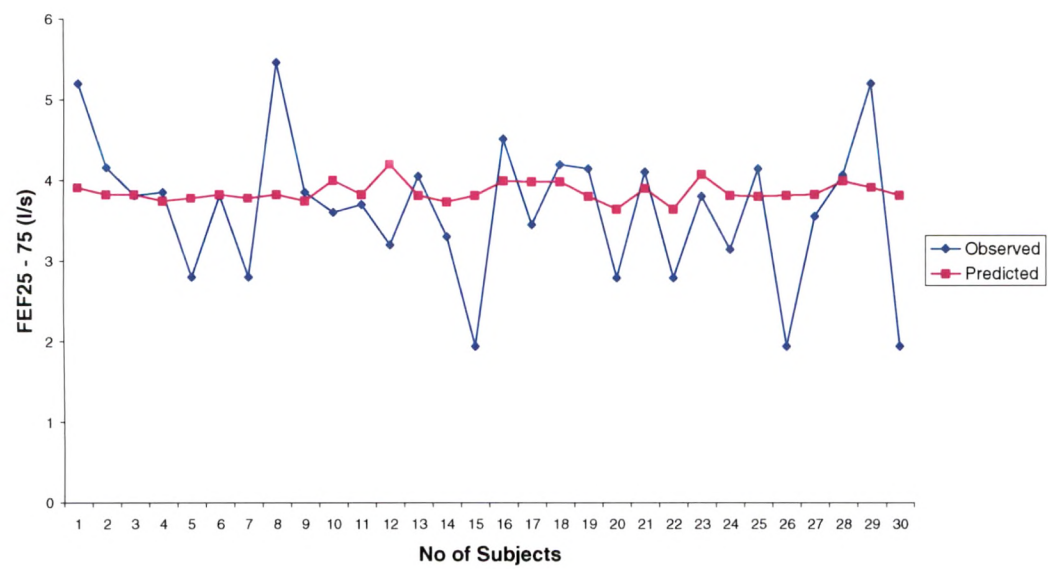


CONTROL



FEF₂₅₋₇₅ (l/s)

OBESE



CONTROL

