

## Hechmann test

Ronni Naser  
23-05-1982  
187 cm

Andersen  
84.0 kg

Ergometer:  
Protocol:  
Date:  
Start time:

Treadmill  
9 kmt 1km\_2,5mi  
28.11.2016

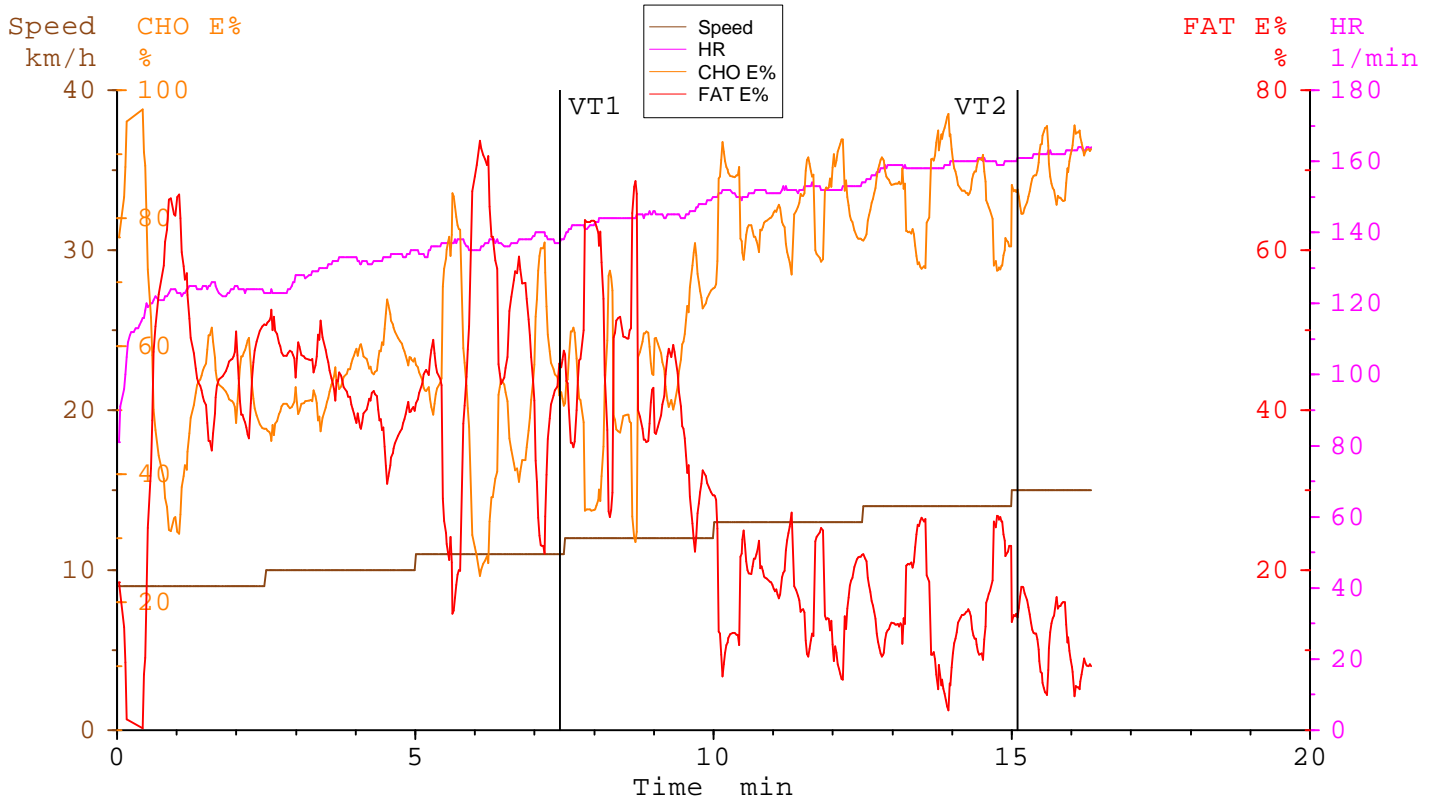
## Maksimalt målte værdier

	Ventilatory threshol...	Ventilatory threshol...	Peak VO2	Peak [speed]
Time [min]	07:30	15:00	16:00	16:27
Speed [km/h]	11.0	14.0	15.0	15.0
HR [1/min]	138	159	162	163
V'E [L/min]	74	121	121	115
EqCO2	24.2	29.1	27.8	26.7
EqO2	19.7	27.0	26.3	25.6
BF [1/min]	35.6	53.1	51.5	46.1
V'O2 [mL/min]	3511	4205	4318	4226
RER	0.81	0.93	0.95	0.96
EE/h [kcal/h]	1019	1252	1291	1268
CHO E/h [kcal/h]	386	949	1064	1097
CHO [g/h]	92	-	-	-
CHO E% [%]	38	76	82	87
FAT E/h [kcal/h]	614	286	211	154
FAT [g/h]	65	30	22	16
FAT E% [%]	60	23	16	12

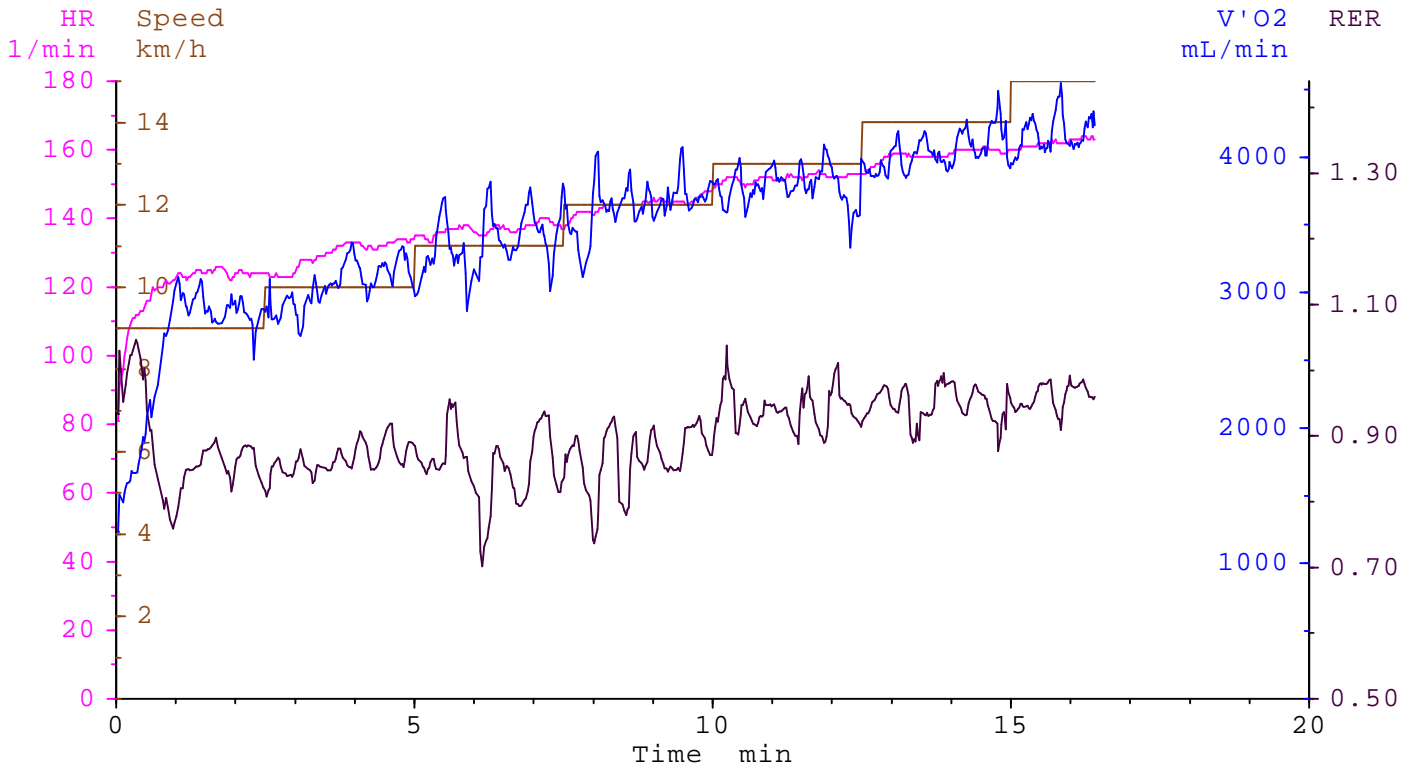
The respiratory exchange ratio (RER, formerly RQ) is the ratio of carbon dioxide output (VCO<sub>2</sub>) and oxygen uptake (VO<sub>2</sub>  $RER = VCO_2 / VO_2$ ). Values between 0.95 and 1:00 show the achievement of the anaerobic transition at (VT<sub>2</sub>). At maximum load, the values can reach about 1.1 to 1.2, and a maximum of about 1.3 can be reached.

The breathing equivalent is a measure of the economics of breathing. The breathing equivalent for oxygen (EQO<sub>2</sub>) describes the amount of ventilation required to take up a liter of oxygen. At low to middle loads the breathing equivalent is in healthy 20-25. After VT<sub>2</sub> the value increases, values of 30 or more indicate in healthy volunteers a maximal physical exertion.

### Substratomsætning



### Performance Graf



## Tabel over substratomsætningen

Time [min]	Speed [km/h]	HR [1/min]	RER	EE/h [kcal/h]	CHO E/h [kcal/h]	FAT E/h [kcal/h]	FAT [g/h]	CHO [g/h]	FAT E% [%]	CHO E% [%]
00:00 Warmup										
00:00 Test										
00:15	9.0	102	0.98	470	433	21	2	104	4	92
00:30	9.0	113	1.02	535	«-...	«-...	«-...	«-...		
00:45	9.0	118	0.89	615	397	200	21	95	33	65
01:00	9.0	121	0.78	806	195	591	62	47	73	24
01:15	9.0	123	0.83	848	362	467	49	87	55	43
01:30	9.0	125	0.86	900	473	408	43	113	45	53
01:45	9.0	125	0.89	829	524	287	30	125	35	63
02:00	9.0	122	0.84	842	379	444	47	91	53	45
02:15	9.0	124	0.88	850	504	328	35	120	39	59
02:30	10.0	124	0.84	819	377	423	45	90	52	46
02:45	10.0	123	0.85	846	412	416	44	98	49	49
03:00	10.0	123	0.84	864	411	434	46	98	50	48
03:15	10.0	128	0.86	807	443	346	37	106	43	55
03:30	10.0	129	0.85	886	437	430	45	105	49	49
03:45	10.0	131	0.86	895	475	402	42	114	45	53
04:00	10.0	133	0.86	953	515	419	44	123	44	54
04:15	10.0	132	0.90	922	603	302	32	144	33	65
04:30	10.0	132	0.87	925	510	396	42	122	43	55
04:45	10.0	133	0.91	906	628	261	28	150	29	69
05:00	10.0	133	0.88	937	559	360	38	134	38	60
05:15	11.0	134	0.86	924	479	427	45	115	46	52
05:30	11.0	136	0.85	1022	510	493	52	122	48	50
05:45	11.0	137	0.94	986	794	175	19	190	18	81
06:00	11.0	138	0.86	834	449	367	39	107	44	54
06:15	11.0	135	0.73	1030	90	918	97»	21	89	9
06:30	11.0	138	0.88	1027	608	401	42	145	39	59
06:45	11.0	136	0.82	970	389	561	59	93	58	40
07:00	11.0	138	0.83	1059	445	594	63	106	56	42
07:15	11.0	140	0.93	1012	785	211	22	188	21	78
07:25 VT1										
07:30	11.0	138	0.81	1019	386	614	65	92	60	38
07:45	12.0	141	0.89	1019	641	360	38	153	35	63
08:00	12.0	142	0.81	932	339	573	61	81	61	36
08:15	12.0	144	0.85	1091	556	516	54	133	47	51
08:30	12.0	144	0.92	1036	754	265	28	180	26	73
08:45	12.0	144	0.86	1101	598	484	51	143	44	54
09:00	12.0	144	0.87	1085	621	446	47	149	41	57
09:15	12.0	146	0.86	1084	599	467	49	143	43	55
09:30	12.0	145	0.85	1098	568	511	54	136	47	52
09:45	12.0	145	0.92	1090	792	282	30	189	26	73
10:00	12.0	148	0.89	1085	701	366	39	168	34	65
10:15	13.0	151	0.95	1122	951	155	16	227»	14	85
10:30	13.0	151	0.92	1148	828	303	32	198	26	72
10:45	13.0	150	0.93	1113	870	226	24	208	20	78
11:00	13.0	152	0.94	1137	928	193	20	222»	17	82
11:15	13.0	151	0.94	1158	918	224	24	220»	19	79
11:30	13.0	152	0.90	1123	760	345	37	182	31	68
11:45	13.0	153	0.98	1149	1083	51	5	259»	4	94
12:00	13.0	152	0.90	1188	805	366	39	193	31	68
12:15	13.0	152	0.99	1131	1088	27	3	260»	2	96
12:30	13.0	153	0.93	1078	832	229	24	199	21	77
12:45	14.0	155	0.94	1139	920	202	21	220»	18	81

Time [min]	Speed [km/h]	HR [1/min]	RER	EE/h [kcal/h]	CHO E/h [kcal/h]	FAT E/h [kcal/h]	FAT [g/h]	CHO [g/h]	FAT E% [%]	CHO E% [%]
13:00	14.0	158	0.97	1177	1064	98	10	255»	8	90
13:15	14.0	159	0.95	1212	1028	169	18	246»	14	85
13:30	14.0	158	0.91	1194	856	320	34	205	27	72
13:45	14.0	158	0.93	1211	948	247	26	227»	20	78
14:00	14.0	158	0.99	1193	1133	44	5	271»	4	95
14:15	14.0	160	0.95	1237	1038	183	19	248»	15	84
14:30	14.0	160	0.97	1219	1081	123	13	259»	10	89
14:45	14.0	160	0.93	1255	976	262	28	234»	21	78
15:00	14.0	159	0.93	1252	949	286	30	227»	23	76
15:06 VT2										
15:15	15.0	160	0.95	1198	986	196	21	236»	16	82
15:30	15.0	162	0.96	1264	1082	166	18	259»	13	86
15:45	15.0	162	0.98	1224	1152	57	6	275»	5	94
16:00	15.0	162	0.95	1291	1064	211	22	254»	16	82
16:15	15.0	164	0.98	1238	1158	65	7	277»	5	94
16:27	15.0	163	0.96	1268	1097	154	16	263»	12	87
16:29 Recovery										

Hechmann Sport  
Bredegade 14  
4200 Slagelse



	Pulszone	Tempo	Økonomi
An4	179 -	03:24 -	<b>Jaerger</b>
An3	172 - 178	03:48 - 03:25	
An2	168 - 171	03:58 - 03:49	
An1	164 - 167	04:10 - 03:59	
AT	160 - 163	04:15 - 04:11	
Ae3	154 - 159	04:28 - 04:16	
Ae2	142 - 153	04:50 - 04:29	
Ae1	130 - 141	05:27 - 04:51	
Jog	112 - 129	05:54 - 05:28	

Estimeret konkurrence tid	
5 km	03:58
10 km	04:10
AT	04:15
MT	04:50

