



Rheumors Hydroxychloroquine Dosing Chart

1. Use the tables below to find the approximate lean body weight

Height			Estimated (Hume formula) lean body weight in male patients calculated by height and weight																		
ft/in	in	m																			
6'6"	78	1.98	54.05	55.69	57.33	58.97	60.61	62.25	63.89	65.53	67.17	68.82	70.46	72.10	73.74	75.38	77.02	78.66	80.30	81.94	83.58
6'4"	76	1.93	52.35	53.99	55.64	57.28	58.92	60.56	62.20	63.84	65.48	67.12	68.76	70.40	72.04	73.68	75.32	76.96	78.60	80.24	81.88
6'2"	74	1.88	50.66	52.30	53.94	55.58	57.22	58.86	60.50	62.14	63.78	65.42	67.06	68.70	70.34	71.98	73.62	75.27	76.91	78.55	80.19
6'	72	1.83	48.96	50.60	52.24	53.88	55.52	57.16	58.80	60.44	62.09	63.73	65.37	67.01	68.65	70.29	71.93	73.57	75.21	76.85	78.49
5'10"	70	1.78	46.59	48.23	49.87	51.51	53.15	54.79	56.43	58.07	59.71	61.35	62.99	64.63	66.27	67.91	69.55	71.19	72.83	74.47	76.12
5'8"	68	1.73	45.57	47.21	48.85	50.49	52.13	53.77	55.41	57.05	58.69	60.33	61.97	63.61	65.25	66.90	68.54	70.18	71.82	73.46	75.10
5'6"	66	1.68	43.87	45.51	47.15	48.79	50.43	52.07	53.72	55.36	57.00	58.64	60.28	61.92	63.56	65.20	66.84	68.48	70.12	71.76	73.40
5'4"	64	1.63	42.18	43.82	45.46	47.10	48.74	50.38	52.02	53.66	55.30	56.94	58.58	60.22	61.86	63.50	65.14	66.78	68.42	70.06	71.70
5'2"	62	1.57	40.14	41.78	43.42	45.06	46.70	48.34	49.98	51.62	53.26	54.90	56.54	58.19	59.83	61.47	63.11	64.75	66.39	68.03	69.67
5'	60	1.52	38.44	40.08	41.72	43.36	45.01	46.65	48.29	49.93	51.57	53.21	54.85	56.49	58.13	59.77	61.41	63.05	64.69	66.33	67.97
			50	55	60	65	70	75	80	85	90	95	100	105	110	115	120	125	130	135	140
			Weight (kg)																		

Height			Estimated (Hume formula) lean body weight in female patients calculated by height and weight																		
ft/in	in	cm																			
6'6"	78	198	54.28	55.76	57.24	58.72	60.19	61.67	63.15	64.63	66.11	67.59	69.07	70.54	72.02	73.50	74.98	76.46	77.94	79.41	80.89
6'4"	76	193	52.19	53.67	55.15	56.63	58.10	59.58	61.06	62.54	64.02	65.50	66.97	68.45	69.93	71.41	72.89	74.37	75.85	77.32	78.80
6'2"	74	188	50.10	51.58	53.06	54.53	56.01	57.49	58.97	60.45	61.93	63.41	64.88	66.36	67.84	69.32	70.80	72.28	73.75	75.23	76.71
6'	72	183	48.01	49.49	50.97	52.44	53.92	55.40	56.88	58.36	59.84	61.32	62.79	64.27	65.75	67.23	68.71	70.19	71.66	73.14	74.62
5'10"	70	176	45.08	46.56	48.04	49.52	51.00	52.47	53.95	55.43	56.91	58.39	59.87	61.35	62.82	64.30	65.78	67.26	68.74	70.22	71.69
5'8"	68	173	43.83	45.31	46.78	48.26	49.74	51.22	52.70	54.18	55.66	57.13	58.61	60.09	61.57	63.05	64.53	66.00	67.48	68.96	70.44
5'6"	66	168	41.74	43.22	44.69	46.17	47.65	49.13	50.61	52.09	53.56	55.04	56.52	58.00	59.48	60.96	62.44	63.91	65.39	66.87	68.35
5'4"	64	163	39.65	41.12	42.60	44.08	45.56	47.04	48.52	50.00	51.47	52.95	54.43	55.91	57.39	58.87	60.34	61.82	63.30	64.78	66.26
5'2"	62	157	37.14	38.62	40.09	41.57	43.05	44.53	46.01	47.49	48.97	50.44	51.92	53.40	54.88	56.36	57.84	59.31	60.79	62.27	63.75
5'	60	152	35.05	36.53	38.00	39.48	40.96	42.44	43.92	45.40	46.87	48.35	49.83	51.31	52.79	54.27	55.75	57.22	58.70	60.18	61.66
			50	55	60	65	70	75	80	85	90	95	100	105	110	115	120	125	130	135	140
			Weight (kg)																		

2. Use the two tables below to work out the recommended daily dose of OH chloroquine with an example of how this could be prescribed

Based on 6.5 mg per kg lean body weight										
LBW	35	40	45	50	55	60	65	70	75	80
Dose	227	260	293	325	357	390	423	455	488	520

Example dosing regimen for approx equivalent daily dose	
200 mg bid	400mg
200 mg bid omit one day	342mg
200 and 400 mg alt days	315mg
200 mg bid Monday to Friday	285mg

Comments:

1. There are a number of different ways to estimate LBW. Some perform less well in obese subjects and that is why we chose the Hume formula for the table

Men: $eLBM = 0.32810 \text{weight}(\text{kg}) + 0.33929 \text{height}(\text{cm}) - 29.5336$

Women: $eLBM = 0.29569 \text{weight}(\text{kg}) + 0.41813 \text{height}(\text{cm}) - 43.2933$

2. A risk factor for Plaquenil (hydroxychloroquine) retinotoxicity is a daily dose that exceeds 6.5 mg/kg (or 3.0 mg/kg for chloroquine). Some question the reliability of this figure, but it does seem reasonable to review the dose in shorter or heavier patients, and particularly if they fall in the “red zone” on the table.

3. Additional risk factors:

- Obesity
- Cumulative dose (see below)
- Renal or hepatic dysfunction lead to increased drug accumulation
- Age > 60
- Existing retinal disease

4. The risk rises after a cumulative dose of 1000g – 7 years of a dose of 200 mg bid, and 9 years at 400 / 200 mg alternate days.

References

1. Marmor, M. F., et al. "Revised Recommendations on Screening for Chloroquine and Hydroxychloroquine Retinopathy." *Ophthalmology*, Vol. 118, No. 2, February, 2011
2. Hume, R "Prediction of lean body mass from height and weight." *J Clin Pathol*. 1966 Jul; 19(4):389-91