MELD/PELD Calculator Documentation

The MELD/PELD Calculator is a utility that allows you to enter hypothetical or actual parameters and calculate a MELD or PELD score for an individual patient.

The MELD/PELD Calculator provided on this site uses the specific formulas approved by the OPTN/UNOS Board of Directors and used for the allocation of livers by the OPTN match system.

The MELD score calculation uses:

- Serum Creatinine (mg/dl) **
- Bilirubin (mg/dl)
- INR

**For adult patients who have had dialysis twice within the last week, the creatinine value will be automatically set to 4 mg/dl.

The MELD Calculator is used for patients who are 18 years and older. After entering the laboratory values, you may calculate the score by clicking **Calculate**. The MELD score displays in the **MELD Score** field. You can also calculate a score by simply tabbing into the **MELD Score** field.

The PELD score calculation uses:

- Albumin (g/dl)
- Bilirubin (mg/dl)
- INR
- Growth failure (based on gender, height and weight)
- Age at listing

The PELD Calculator is used for patients who are under 18 years old. After entering the laboratory values, you may calculate the score by clicking **Calculate**. The PELD score displays in the **PELD Lab Value** field. You can also calculate a score by simply tabbing into the **PELD Lab Value** field.

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MELD Formula

The MELD score is calculated using the following formula:

MELD Score = 0.957 x Log_e(creatinine mg/dL)
+ 0.378 x Log_e(bilirubin mg/dL)
+ 1.120 x Log_e(INR)
+ 0.643*

Multiply the score by 10 and round to the nearest whole number.

Laboratory values less than 1.0 are set to 1.0 for the purposes of the MELD score calculation.

The maximum serum creatinine considered within the MELD score equation is 4.0 mg/dl (e.g. if you enter 4.3 for serum creatinine the formula will calculate 0.957 x Log_e(4.0) for the serum creatinine portion of the MELD formula).

If you answer **Yes** to the question: "Had dialysis twice within a week prior to Serum Creatinine test?" then the MELD score will be calculated with a serum creatinine value of 4.0 mg/dl. For example, if you enter 3.0 for serum creatinine and answer **Yes** to the dialysis question, then the formula will calculate 0.957 x Log_e(4.0) for the serum creatinine portion of the MELD formula.

PELD Formula

The PELD score is calculated using the following formula:

PELD Score = 0.480 x Log_e(bilirubin mg/dL)
+ 1.857 x Log_e(INR)
- 0.687 x Log_e(albumin g/dL)
+ 0.436 if patient is less than 1 year old (scores for patients listed for liver transplantation before the patient's first birthday continue to include the value assigned for age (< 1 Year) until the patient reaches the age of 24 months)
+ 0.667 if the patient has growth failure (<-2 Standard deviation)

Multiply the score by 10 and round to the nearest whole number.

Laboratory values less than 1.0 are set to 1.0 for the purposes of the PELD score calculation.

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* At the July 2001 meeting of the Liver and Intestinal Organ Transplantation Committee, the Committee agreed to add the 0.643 points for etiology to all patients in order to make the MELD score comparable to previously published data.

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Growth failure is determined using the chart listed below. A patient has growth failure (<-2 standard deviation) if either the patient's height is less than or equal to the low height value or the patient's weight is less than or equal to the low weight value.

Male Patients Have Growth Failure (< -2 standard deviations)			
If Age In Months is		And Either	OR
At least	But less than	Height (cm) is less than or equal to:	Weight (kg) is less than or equal to:
0	3	46.0200	2.4800
3	6	55.8000	4.1000
6	9	62.4000	5.8400
9	12	67.0200	7.2600
12	15	70.7000	8.1600
15	18	73.7000	8.7200
18	21	76.3200	9.1400
21	24	78.6400	9.4800
24	27	79.2400	9.6400
27	30	81.3800	10.1000
30	33	83.3600	10.5800
33	36	85.3600	11.0800
36	39	87.2800	11.4000
39	42	89.1400	11.8200
42	45	91.0000	12.1600
45	48	92.6800	12.5200
48	51	94.3800	12.9000
51	54	96.0800	13.2800
54	57	97.7200	13.6800
57	60	99.2600	14.0600
60	63	100.7000	14.4600
63	66	102.1600	14.8600
66	69	103.6200	15.2600
69	72	105.0000	15.6600
72	75	106.3800	16.0400
75	78	107.6600	16.4000
78	81	109.0400	16.7600
81	84	110.2200	17.2200
84	87	111.5000	17.6400
87	90	112.6800	17.9400
90	93	113.9600	18.3200
93	96	115.1400	18.7800
96	99	116.3000	19.1000
99	102	117.4600	19.5000
102	105	118.6000	19.8600
105	108	119.7200	20.2000
108	111	120.8400	20.5200
111	114	121.9600	20.9000
114	117	123.0400	21.2800
117	120	124.1200	21.7400
120	123	125.2800	22.1000
123	126	126.4000	22.6400
126	129	127.5200	23.0800
129	132	128.7200	23.6000
132	135	129.8800	24.1400
135	138	131.0200	24.7800
138	141	132.2400	25.4000
141	144	133.4200	26.0600
144	147	134.6800	26.8200
147	150	135.8600	27.5800
150	153	137.1600	28.4600
153	156	138.5800	29.3800
156	159	139.9400	30.4000
159	162	141.3600	31.4400
162	165	142.8800	32.5200

Female Patients Have Growth Failure (< -2 standard deviations)			
If Age In Months is		And Either	OR
At least	But less than	Height (cm) is less than or equal to:	Weight (kg) is less than or equal to:
0	3	45.5600	2.2000
3	6	54.5200	3.9200
6	9	60.6200	5.4600
9	12	64.9400	6.6600
12	15	68.6200	7.4000
15	18	71.9000	7.9600
18	21	74.7600	8.4600
21	24	77.4400	8.9800
24	27	78.0000	9.4600
27	30	80.2800	9.8800
30	33	82.4200	10.3200
33	36	84.5200	10.7800
36	39	86.4800	11.1400
39	42	88.3200	11.5200
42	45	90.1200	11.9200
45	48	91.9000	12.2000
48	51	93.5600	12.6000
51	54	95.1000	12.8800
54	57	96.6000	13.1800
57	60	98.1000	13.4600
60	63	99.5800	13.8400
63	66	100.9400	14.1000
66	69	102.2800	14.4400
69	72	103.5200	14.6800
72	75	104.7600	14.9800
75	78	106.0800	15.2800
78	81	107.2000	15.6400
81	84	108.4000	15.9800
84	87	109.6200	16.3000
87	90	110.8400	16.6800
90	93	111.9600	17.1200
93	96	113.0800	17.4400
96	99	114.3200	17.8400
99	102	115.4600	18.3200
102	105	116.7200	18.7800
105	108	118.0000	19.2400
108	111	119.1800	19.7600
111	114	120.4800	20.2000
114	117	121.8200	20.8200
117	120	123.2600	21.3400
120	123	124.6400	21.8600
123	126	126.1400	22.4800
126	129	127.6600	23.1200
129	132	129.2200	23.7600
132	135	130.9200	24.5000
135	138	132.6400	25.1800
138	141	134.4000	25.8600
141	144	136.1800	26.6600
144	147	137.8600	27.4000
147	150	139.5400	28.2600
150	153	141.1200	29.0200
153	156	142.5000	29.9600
156	159	143.7400	30.8000
159	162	144.8600	31.6800
162	165	145.6600	32.5800

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Male Patients Have Growth Failure (< -2 standard deviations)					Female Patients Have Growth Failure (< -2 standard deviations)			
If Age In Months is					If Age In Months is			
165	168	144.3600	33.7200		165	168	146.4600	33.4000
168	171	145.9800	34.9400		168	171	147.0200	34.2600
171	174	147.6800	36.1800		171	174	147.4000	35.0400
174	177	149.4000	37.4400		174	177	147.7600	35.8800
177	180	151.1200	38.6200		177	180	148.0400	36.6200
180	183	152.8800	39.9400		180	183	148.3200	37.4000
183	186	154.6000	41.1600		183	186	148.5200	38.1200
186	189	156.2400	42.4000		186	189	148.6400	38.7600
189	192	157.7800	43.5400		189	192	148.7600	39.3400
192	195	159.1200	44.7200		192	195	149.0800	39.8600
195	198	160.4200	45.8000		195	198	149.4000	40.3000
198	201	161.5800	46.8000		198	201	149.6600	40.6600
201	204	162.4600	47.7200		201	204	150.0200	41.0600
204	207	163.0600	48.5400		204	207	150.3000	41.3600
207	210	163.4600	49.2800		207	210	150.7200	41.5600
210	213	163.6600	49.9400		210	213	151.1200	41.7800
213	216	163.7200	50.4800		213	216	151.5000	41.9800
216	219	163.6000	50.9400		216	219	151.7800	42.0800