

琉球大学学術リポジトリ

妊娠期推奨体重増加量区別にみた妊婦の生理的特性および栄養素摂取量と正期産児の出生体重との関連

メタデータ	言語: 出版者: 琉球大学 公開日: 2018-08-09 キーワード (Ja): キーワード (En): 作成者: Tamashiro, Yoko, 玉城, 陽子 メールアドレス: 所属:
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Table 4 Energy and nutritional intake for the recommended gestational weight gain according to fetal birth weight percentile

		2nd trimester					3rd trimester					Mean ± SD	
Variable	Recommended gestational weight gain	Fetal birth weight percentile				P	Multiple comparison	Fetal birth weight percentile				P	Multiple comparison
		≤10th ^a n=15	10-50th ^b n=86	50-90th ^c n=71	90th < ^d n=20			≤10th ^a n=15	10-50th ^b n=99	50-90th ^c n=89	90th < ^d n=25		
n-3 polyunsaturated fat (mg/1,000kcal)	Below	-	1.1 ± 0.2	1.0 ± 0.2	-	0.415	1.5 ± 0.7	1.2 ± 0.3	0.9 ± 0.2	-	0.088		
	Within	1.1 ± 0.3	1.2 ± 0.3	1.2 ± 0.3	1.4 ± 0.3	0.255	1.2 ± 0.1	1.2 ± 0.3	1.2 ± 0.3	1.2 ± 0.2	0.656		
	Above	1.1 ± 0.2	1.1 ± 0.3	1.2 ± 0.4	1.0 ± 0.3	0.232	1.0 ± 0.1	1.2 ± 0.3	1.2 ± 0.3	1.0 ± 0.1	0.100		
n-6 polyunsaturated fat (mg/1,000kcal)	Below	-	5.9 ± 0.7	5.0 ± 1.0	-	0.170	6.2 ± 0.8	5.6 ± 0.9	5.4 ± 1.1	-	0.451		
	Within	5.4 ± 1.3	5.8 ± 1.2	5.6 ± 1.0	6.3 ± 1.1	0.271	5.7 ± 0.8	5.6 ± 1.1	5.7 ± 0.9	6.0 ± 0.6	0.890		
	Above	5.4 ± 1.4	5.6 ± 1.1	5.9 ± 2.0	5.0 ± 1.2	0.630	5.6 ± 0.9	5.7 ± 1.1	5.8 ± 1.3	5.2 ± 0.7	0.317		
Vitamin D (µg/1,000kcal)	Below	-	4.2 ± 1.4	4.6 ± 2.8	-	0.902	7.0 ± 7.4	4.9 ± 2.6	3.4 ± 1.7	-	0.216		
	Within	3.6 ± 1.3	5.7 ± 3.6	5.2 ± 2.5	5.4 ± 1.6	0.235	5.9 ± 1.4	6.1 ± 3.6	4.2 ± 1.8	5.0 ± 2.1	0.010 c<b		
	Above	4.1 ± 1.1	3.7 ± 1.6	4.9 ± 2.9	3.9 ± 1.7	0.354	2.0 ± 0.6	4.2 ± 1.9	5.0 ± 2.5	4.1 ± 1.3	0.062		
Vitamin B ₆ (mg/1,000kcal)	Below	-	0.6 ± 0.1	0.5 ± 0.1	-	0.047 c<b	0.7 ± 0.4	0.6 ± 0.1	0.6 ± 0.1	-	0.259		
	Within	0.6 ± 0.1	0.6 ± 0.2	0.6 ± 0.2	0.7 ± 0.1	0.399	0.6 ± 0.1	0.6 ± 0.1	0.6 ± 0.1	0.7 ± 0.1	0.311		
	Above	0.6 ± 0.1	0.6 ± 0.1	0.6 ± 0.1	0.6 ± 0.3	0.540	0.5 ± 0.1	0.6 ± 0.1	0.6 ± 0.1	0.6 ± 0.1	0.175		
Vitamin B ₁₂ (mg/1,000kcal)	Below	-	3.2 ± 1.1	3.1 ± 1.4	-	0.420	4.8 ± 4.2	3.4 ± 1.6	2.4 ± 0.8	-	0.153		
	Within	3.0 ± 0.9	3.8 ± 2	3.3 ± 1.3	4.3 ± 1.0	0.186	3.9 ± 1.1	4.0 ± 2.0	3.4 ± 1.4	3.9 ± 1.5	0.325		
	Above	2.9 ± 1.0	2.8 ± 1.0	3.7 ± 2.0	2.8 ± 0.9	0.255	1.4 ± 0.4	3.2 ± 1.3	3.8 ± 1.8	2.8 ± 0.8	0.014		
Folate (mg/1,000kcal)	Below	-	174.7 ± 44.7	172.0 ± 46.6	-	0.969	170.8 ± 69.6	196.6 ± 63.9	171.1 ± 25.3	-	0.286		
	Within	161.6 ± 31.8	184.6 ± 57.6	183.9 ± 61.5	172.7 ± 35.0	0.652	151.3 ± 39.7	170.1 ± 48.4	181.3 ± 61.5	187.4 ± 41.3	0.374		
	Above	222.4 ± 72.6	156.0 ± 54.6	168.3 ± 60.1	195.4 ± 87.5	0.361	147.7 ± 36.5	180.0 ± 66.4	197.4 ± 53.1	183.2 ± 59.1	0.403		
Vitamin C (mg/1,000kcal)	Below	-	57.1 ± 18.4	57.5 ± 21.4	-	0.630	54.3 ± 25.3	66.4 ± 26.5	60.9 ± 20.7	-	0.651		
	Within	58.4 ± 18.1	63.5 ± 22.6	62.9 ± 25.9	50.3 ± 15.5	0.429	52.4 ± 22.0	59.6 ± 20.7	60.1 ± 24.2	67.3 ± 23.0	0.581		
	Above	72.6 ± 20.4	51.8 ± 20.3	59.6 ± 25.8	67.0 ± 40.7	0.607	50.0 ± 12.5	62.7 ± 29.2	69.3 ± 27.5	63.3 ± 27.5	0.298		
Calcium (mg/1,000kcal)	Below	-	270.0 ± 80.3	255.5 ± 67.7	-	0.594	255.8 ± 65.7	286.8 ± 74.4	276.9 ± 63.5	-	0.657		
	Within	249.6 ± 82.2	288.0 ± 95.8	270.7 ± 76.0	275.9 ± 63.2	0.584	246.4 ± 53.2	285.4 ± 91.2	285.1 ± 67.9	321.8 ± 67.5	0.235		
	Above	301.0 ± 58.2	257.3 ± 68.4	272.9 ± 82.6	323.4 ± 110.0	0.322	224.7 ± 48.2	281.9 ± 84.6	289.2 ± 92.3	281.8 ± 87.2	0.515		
Iron (mg/1,000kcal)	Below	-	4.1 ± 0.6	4.0 ± 0.6	-	0.897	4.1 ± 1.3	4.3 ± 0.8	4.1 ± 0.7	-	0.483		
	Within	3.8 ± 0.6	4.2 ± 0.9	4.2 ± 0.9	4.3 ± 0.8	0.506	3.9 ± 0.5	4.1 ± 0.8	4.2 ± 0.9	4.3 ± 0.8	0.819		
	Above	4.5 ± 0.9	3.8 ± 0.9	4.0 ± 0.8	4.3 ± 1.2	0.566	3.5 ± 0.5	4.1 ± 0.9	4.4 ± 0.9	4.1 ± 0.9	0.093		
Zinc (mg/1,000kcal)	Below	-	4.6 ± 0.4	4.0 ± 0.4	-	0.010 c<b	4.4 ± 0.7	4.5 ± 0.5	4.2 ± 0.5	-	0.371		
	Within	4.2 ± 0.3	4.4 ± 0.5	4.4 ± 0.6	4.6 ± 0.6	0.367	4.2 ± 0.3	4.4 ± 0.5	4.5 ± 0.5	4.7 ± 0.6	0.241		
	Above	4.6 ± 0.2	4.1 ± 0.5	4.4 ± 0.6	4.5 ± 0.8	0.137	3.9 ± 0.5	4.3 ± 0.6	4.3 ± 0.6	4.3 ± 0.5	0.613		
Copper (µg/1,000kcal)	Below	-	0.6 ± 0.1	0.6 ± 0.1	-	0.934	0.6 ± 0.1	0.6 ± 0.1	0.6 ± 0.1	-	0.852		
	Within	0.6 ± 0.1	0.6 ± 0.1	0.6 ± 0.1	0.6 ± 0.09	0.925	0.6 ± 0.1	0.6 ± 0.1	0.6 ± 0.1	0.7 ± 0.1	0.358		
	Above	0.6 ± 0.0	0.6 ± 0.1	0.6 ± 0.1	0.61 ± 0.15	0.817	0.6 ± 0.2	0.6 ± 0.1	0.6 ± 0.1	0.6 ± 0.1	0.358		

The "below" group with a the birth weight percentile of ≤10 comprised 1 individual, and was therefore excluded from the analysis.

Analysis of covariance: Multiple comparison with Bonferroni test

Covariance: age, pre-pregnancy BMI

Fetal birth weight percentile: Classification based on the "Introduction of the new gestational age-specific standards for birth size (2010)" by the Japan Pediatric Society

Recommended gestational weight gain: below (<9kg), within (9-12kg), and above (>12kg) for underweight (BMI<18.5kg/m²) women, and below (<7kg), within (7-12kg), above (>12kg) for normal weight (18.5≤BMI<25.0kg/m²) women.