

**Supplementary table 1. Distribution of body size perception in each BMI category in boys and girls; Young HUNT1(YH1) and Young HUNT3(YH3):**

	YH1 boys(n=1834)				YH1 girls(n=1845)			
	Obese(%)	Overweight(%)	Normal weight(%)	Underweight(%)	Obese(%)	Overweight(%)	Normal weight(%)	Underweight(%)
<b>Body size perception</b>								
Very fat	11(2)	8(3.29)	2(0.14)	0	23(35.93)	19(7.28)	9(0.63)	1(1)
Quite fat	40(72.73)	139(57.20)	113(7.81)	1(1.12)	38(59.38)	182(69.73)	311(21.9)	1(1)
Like others	4(7.27)	94(38.68)	967(66.83)	19(21.35)	3(4.69)	59(22.61)	948(66.76)	26(26)
Quite thin	0	2(0.82)	354(24.46)	59(66.29)	0	1(0.38)	146(10.28)	66(66)
Very thin	0	0	11(0.76)	10(11.24)	0	0	6(0.42)	6(6)
<b>Total</b>	<b>55</b>	<b>243</b>	<b>1447</b>	<b>89</b>	<b>64</b>	<b>261</b>	<b>1420</b>	<b>100</b>
	YH3 boys(n=1358)				YH3 girls(n=1430)			
	Obese(%)	Overweight(%)	Normal weight(%)	Underweight(%)	Obese(%)	Overweight(%)	Normal weight(%)	Underweight(%)
<b>Body size perception</b>								
Very fat	8(8.60)	1(0.37)	6(0.64)	0	16(20.78)	16(5.56)	8(0.79)	0
Quite fat	72(77.42)	104(38.10)	64(6.79)	0	55(71.43)	158(54.86)	167(16.55)	0
Like others	13(13.98)	167(61.17)	611(64.79)	5(10.20)	6(7.79)	113(39.24)	676(67.00)	15(26.79)
Quite thin	0	0	245(25.98)	33(67.35)	0	0	154(15.26)	34(60.71)
Very thin	0	1(0.37)	17(1.80)	11(22.45)	0	1()	4(0.40)	7(12.5)
<b>Total</b>	<b>93</b>	<b>273</b>	<b>943</b>	<b>49</b>	<b>77</b>	<b>288</b>	<b>1009</b>	<b>56</b>

Weight categories are calculated according to Cole et al. 2000 and Cole et al. 2007.