

OBESITY PROGRAMME IN SCHOOL HEALTH SERVICES



Dr Siti Rosemawati Haji Md Yussof

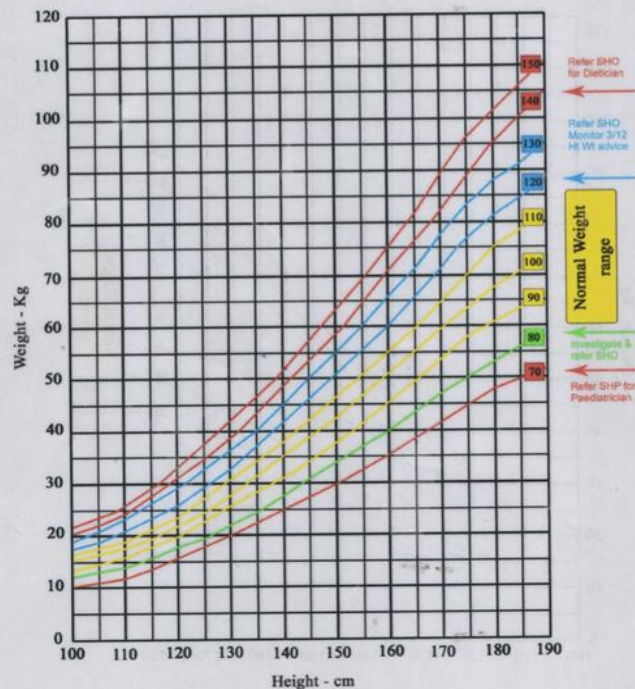
HEALTH SCREENING

Educational Level	Screening Activity
Year 1	Anthropometric screening Distance vision screening Completion of Immunization Medical check-up Health talk (Dental and personal hygiene)
Year 2 & 3	Review of weight problems and borderline distance vision
Year 4	Anthropometric screening Distance vision screening Audiometry screening Medical check-up Health talk (Food traffic light)
Year 5	Review of weight problems and borderline distance vision
Year 6	Anthropometric screening Distance vision screening Health talk (Healthy lifestyle)
Year 8	Anthropometric screening Distance vision screening Colour vision screening Health talk (HPV vaccination)

WEIGHT FOR HEIGHT REFERENCE CHART UNTIL DEC 2010

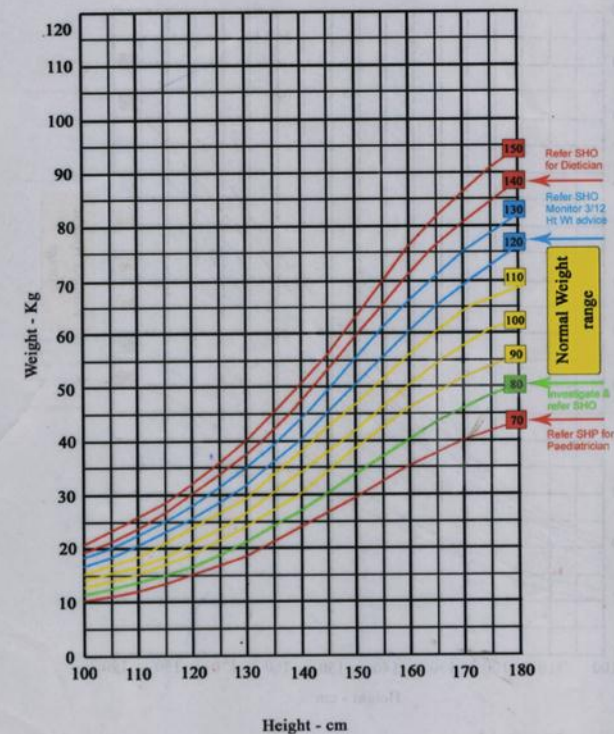
BOYS

WEIGHT FOR HEIGHT
PERCENTAGE CHART



GIRL

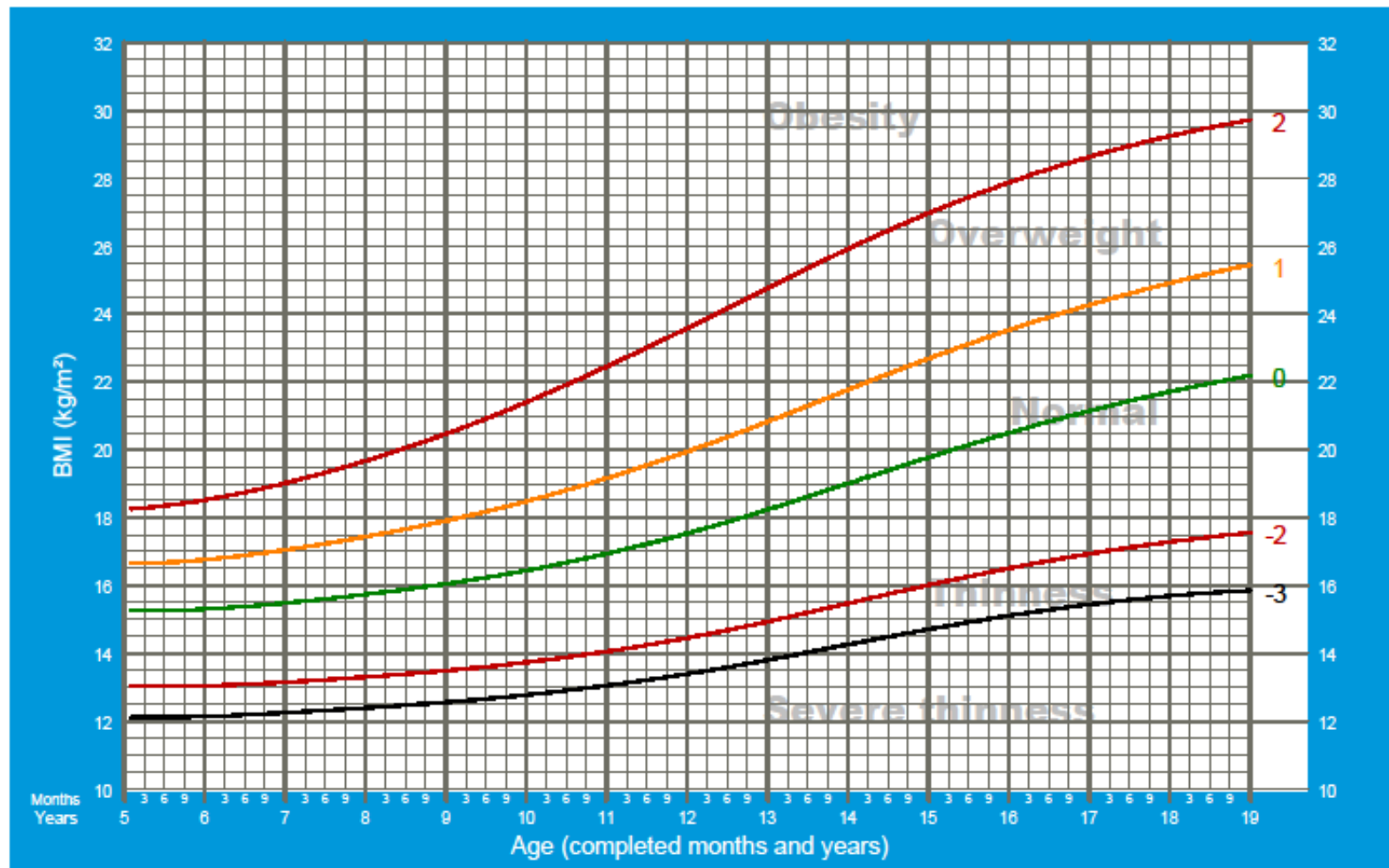
WEIGHT FOR HEIGHT
PERCENTAGE CHART



$\geq 140\%$ Obese; $\geq 120 - 140\%$ Overweight; $80 - 119\%$ Normal; $\leq 79\%$ Underweight

BMI-for-age BOYS

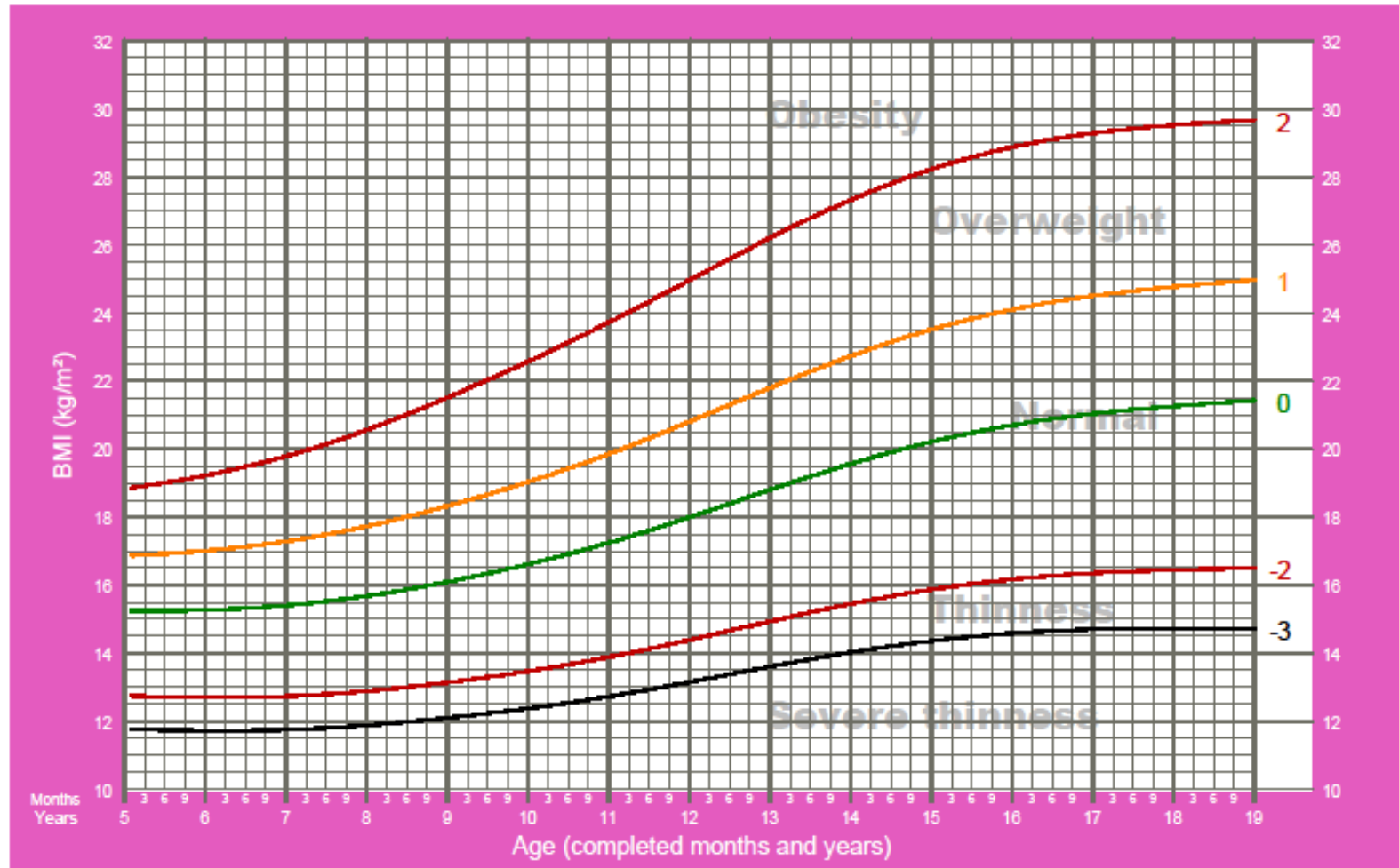
5 to 19 years (z-scores)



2007 WHO Reference

BMI-for-age GIRLS

5 to 19 years (z-scores)



2007 WHO Reference

NUMBER OF STUDENTS BEING SCREENED 2005-2011

YEAR	TARGET POPULATION	NUMBER SCREENED
2005	31683	31014
2006	30875	29926
2007	31260	30731
2008	30149	29702
2009	29873	29167
2010	29326	28659
2011	29677	29160

NUTRITIONAL STATUS 2005-2011

Nutritional Status	Percentage in the last 6 years						
	2005	2006	2007	2008	2009	2010	2011
Overweight	16.2	13.7	14.3	14.0	14.4	14.2	12
Obese	12.4	11.9	12.2	12.8	12.7	13.2	18
Underweight	4.2	4.4	4.4	4.7	4.9	4.9	21.2

Year 1, 4, 6 and 8

NEW
BMI
CHART

PERCENTAGE NUTRITIONAL STATUS BY EDUCATIONAL YEAR IN 2011

Educational Level	Percentage nutritional status in 2011			
	Normal	Overweight	Obese	Underweight
Year 1	48	7.0	13	28.6
Year 4	41	12.2	19	22.9
Year 6	44	14.1	21	17.3
Year 8	49	14.5	17	16.3
Average	45	12	18	21.2

WEIGHT MANAGEMENT PROGRAMMES

- ◉ Brunei Muara District
 - > Obesity clinic
 - > Nutrition group counseling
- ◉ Tutong District
 - > Dietary counselling from dietitian and doctor
- ◉ No programmes in Temburong and Kuala Belait District
- ◉ **AIM:** To encourage healthy lifestyle for the whole family and avoid stigmatization

OBESITY CLINIC

- Target groups:
 - > Year 1
 - > Year 6
 - > Year 8
- Run by 2 doctors and nurses from School Health Services
- Based in SHS office, Sg. Assam health centre, Sengkurong health centre, Sg Besar clinic

OBESITY CLINIC

- ◉ Referral Criteria:
 - > Obese children ($\geq 140\%$)
 - > Schools in Brunei Muara district
 - > Parents are counseled together with their children
 - > Referrals encouraged from outpatient clinics
- ◉ Year 6 and Year 8: blood test for FBS and cholesterol with BP check

OBESITY CLINIC

● Follow up

- > According to weight gained/lost
- > E.g. weight loss or no weight gain : 4 - 5 months
- > < 2kg weight gain: 3 months
- > Weight gain $\geq 2 - 4$ kg: 2 months
- > Weight gain ≥ 4 kg: 6 to 8 weeks with blood test

REVIEW OF OBESE STUDENTS in 2011

Present Status		
No Change	Increased	Decreased
27.5%	48.2%	21.3%

INDIVIDUAL OBESITY CLINIC





GROUP NUTRITION COUNSELLING

- ◉ Target group:
 - > Year 4 obese children
- ◉ Site: Health Promotion Centre
- ◉ Group counseling and educational activities
- ◉ Run by staff of health promotion centre and school health services
- ◉ Single visit session
- ◉ HPC Galleria visit

NUTRITION COUNSELLING



FUTURE PLAN: ACTIVE ADOLESCENT PROGRAMME

- ◉ Target group: 12-17 years old adolescent in schools
- ◉ Referral clinic
- ◉ Run by multidisciplinary team
 - > Specialist endocrinologist
 - > GP
 - > Nurses
 - > Dietician
 - > Community psychologist
 - > Physiotherapist/Sport science

AAP

- ◉ Intervention:
 - > Group session with questionnaires
 - > Individual counseling session with parents
- ◉ Assessment and investigations:
 - > Fitness assessment
 - > Skin-fold measurement
 - > Blood tests
- ◉ 6 months interactive programme
- ◉ The programme will be piloted in January 2013

THANK YOU....