

APPENDIX A1: Dietary Guidelines for the Prevention of Obesity

Practising sensible and healthy dietary habits is the key to the prevention of excessive weight gain. The committee recommends the following dietary strategies for prevention of obesity among Malaysians:-

1. Maintain healthy body weight by balancing food intake with regular physical activity

The first step to achieve healthy body weight is to practice healthy eating and be physically active. In most cases, overweight or obesity is a result of excess intake of calories and lack of physical activity over a period of time. The amount of energy needed to maintain a healthy body weight depends on an individual's age, sex, physiological condition and physical activity level.

2. Eat a balance diet by enjoying a variety of foods

The body needs foods as the source of energy and nutrients to grow, move, work, play, think and learn. However, no single food can supply all the nutrients in the amounts the body needs. Therefore, the best way to ensure that we meet the nutrients requirements is to eat a variety of foods within the recommended amounts according to the Malaysian Food Pyramid (Appendix A2).

3. Minimize fat in food preparation and choose foods that are low in fat

Dietary fat is the major determinant of the energy density of diets. It imparts taste and flavour to foods enhancing their palatability, as well as promotes the absorption of fat-soluble vitamins. Despite its importance, excessive consumption of dietary fat can have adverse effects on health such as obesity and other non-communicable diseases. In the Malaysian diet, the main source of dietary fat is reported to be cooking oil used in food preparation. Here are some tips to reduce dietary fat intake:

- Adopt alternative cooking methods such as grilling, microwave or steaming in preference to frying in oil or deep frying.
- Use only a little cooking oil.
- Choose lean cuts of meat, discarding the skin where applicable (e.g. chicken).
- Use small amounts of visible fats such as margarine, butter, salad oils, cream, mayonnaise and coconut milk.
- Choose low fat or fat free products (e.g. skimmed milk, low fat milk, low fat yogurt, and low fat cheese). (Note: low fat products are not recommended for children below 2 years, whilst skimmed milk products are not recommended for children below 5 years).
- Cut down on high fat foods that contains hidden fats (e.g. traditional *kuih*, pastry and cake).

4. Reduce sugar intake and choose foods low in sugar

Sugar is considered as simple carbohydrate that lacks in other nutrients (empty calories) and tends to displace other more nutritious foods. Excessive intake of sugar can have an adverse effect on health including problems of overweight. Here are some tips to reduce sugar intake:

- Encourage gradual sugar reduction in foods while taste adapts to the change. Use 1/2 or 3/4 of usual amount in cakes or in drinks.
- Cut down on confectionery and sugary food items.
- Use fresh fruit instead of canned fruits.
- Drink plain water, low calorie or sugar free drinks.
- Spices such as cinnamon or nutmeg can enhance the natural flavour without added sugar.

5. Adhere to a regular mealtime

Skipping meals can lead to overeating during the next mealtime and often results in overweight and obesity. Avoid unhealthy habit of skipping breakfast, little or no lunch and a huge dinner. A sensible dietary habit includes a regular breakfast, lunch and dinner. Snacking between meals can help curb hunger, but it should not replace a main meal. Low calorie and high fibre snacks are preferable for maintaining healthy body weight.

6. Choose healthier food and smaller portion size when eating out

Snacks and meals eaten away from home provide a large part of daily calories for many people. Therefore, when eating out, choose smaller portions of foods and cut down on serving size of foods. Appendix A7 provides a guide when eating out according to place of eating.

7. Promote and practice breastfeeding

The increased initiation and duration of breastfeeding may provide low-cost, readily available strategy to help prevent obesity in childhood (Hediger et al. 2001) and adolescent (Gillman et al. 2001). However, the maternal weight change associated with breastfeeding is minimal among normal weight women, and for overweight women the weight gained during pregnancy is not reduced by breastfeeding (Sichieri et al. 2003). Therefore, after childbirth, in addition to breastfeed their babies for at least 6 months, women are encouraged to adopt a healthy lifestyle, including diet and exercise to prevent postpartum weight gain.

8. Alcohol intake

Avoid drinking alcohol. Regular consumption of alcohol is not recommended because of its high calorie content. Alcohol provides 7 kcal per gram, which is less than that provided by fat (9 kcal per gram) but more than that contributed by either carbohydrates (4 kcal per gram) or protein (4 kcal per gram).

If you drink alcoholic beverages, do so in moderation (not more than one drink for women and two drinks for men daily). A standard drink is one 12 ounce beer, one 5 ounce glass of wine, or one 1.5 ounce shot of distilled spirits. Each of these drinks contains about half an ounce of alcohol.

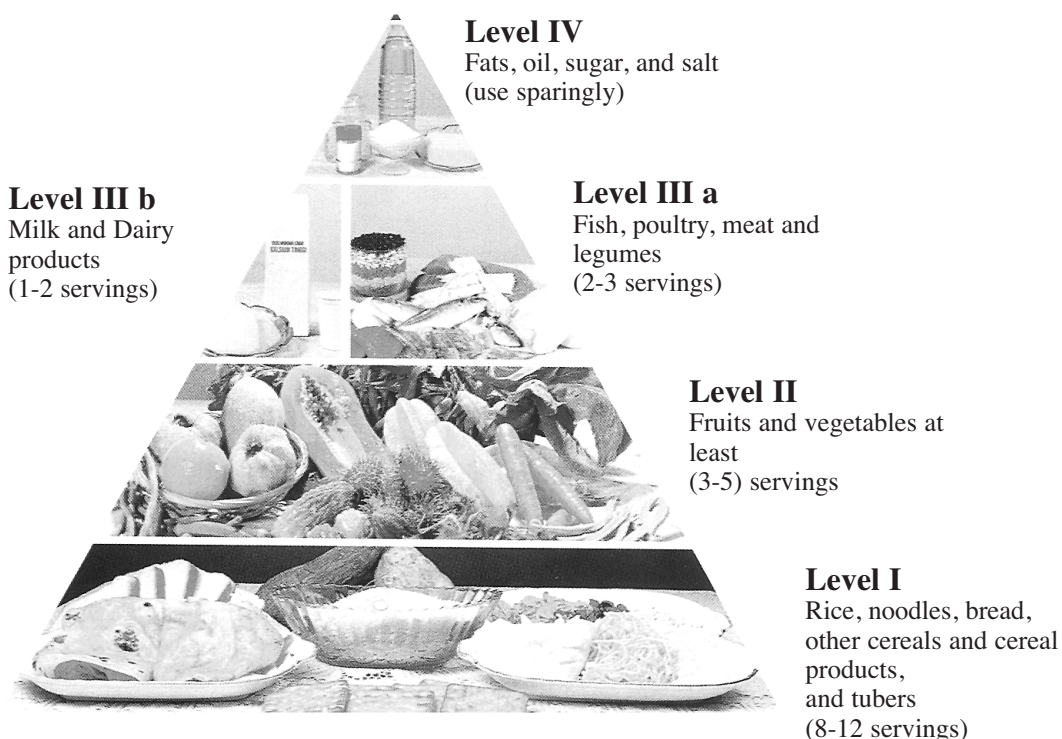
9. Building good food habits from childhood

Prevention of obesity should begin in childhood. This includes learning healthy eating and activity habits from an early age.

These are some guidelines for parents to instil good eating habits in their children.

- Set good examples as parents because children tend to imitate what they see.
- Eat a variety of foods so you and your children will be less likely to develop nutrient deficiencies or excesses.
- Keep your child busy because he or she may eat out of boredom instead of hunger.
- Serve small portions on individual plates.
- Help your child eat more slowly. Eating too fast can result in overeating.
- Encourage your child to participate in planning, shopping, and cooking meals.
- Have low-calorie nutritious snacks available.
- Encourage adequate fruit and vegetable intakes.

APPENDIX A2 : Malaysian Food Pyramid



Source: MOH (1999)

Level I: Eat adequate amount of rice, cereal products and tubers

Eating adequate amount of rice, cereal products such as noodles, bread, pasta, chapatti, thosai, oats, barley and other products and tubers such as potato, tapioca and sweet potato, is a key to a healthy diet. These foods known as complex carbohydrates also provide vitamins, minerals and fibre. A daily diet should comprise of 8 to 12 servings of these food groups. Generally, they are low in fat if cook without using too much cooking oil, coconut milk, butter and ghee.

Level II: Eat more of fruits and vegetables

Most fruits and vegetables are excellent sources of vitamins and minerals. They are also low in fat and high in fibre that helps to maintain a healthy body weight. It is recommended to include 3 to 5 servings of these foods daily. Fibre may help to fill up the stomach and thus reduce food intake.

Level IIIa: Eat fish, meat, poultry and legumes in moderation

Fish, meat, poultry and legumes are good sources of protein, some vitamins and minerals. However, meat and poultry also contain a significant amount of fat, unless the visible fat is trimmed. The number of serving recommended for this group is 2 to 3 servings daily.

Level IIIb: Consume milk and dairy products in moderation

Milk and dairy products such as cheese, yoghurt, yoghurt drinks, lassi are essential sources of calcium and protein. This group, however, does not include condensed milk, butter and cream. Adults are recommended to take 1 to 2 servings daily. Lower fat alternatives are preferable.

Level IV: Consume least fats, oils, sugar and salt

Fats, oils, sugar and salt are placed at the tip of the pyramid because they are required in small amounts. Therefore, use these foods sparingly.

APPENDIX A3. Calorie content of local dishes and franchised fast foods

Type of food *	Portion size	Weight	Calories
High calories (>600 kcal/ serving)			
Western fast food set comprise of 2 pieces fried chicken, 1 bun, 1 mash potato, 2 potato wedges and 1 glass of carbonated drink	1 set	-	762
Nasi biryani with chicken curry and yellow dhall gravy	1 set	385	632
Medium calories (400 – 600 kcal / serving)			
Beef burger with fries and carbonated drink	1 set	-	422
Chicken soto	1 bowl	493	528
Nasi kerabu with one small fried fish, fish cracker and coconut sauce	1 set	300	535
Chicken rice	1 set	300	565
Nasi lemak with fried chilli paste, $\frac{1}{2}$ boiled egg, fried anchovies and fried groundnuts	1 set	282	480
Low calories (<400 kcal / serving)			
Beef burger	1 piece	100	234
Idli with dhall gravy and coconut chutney	1 set	197	236
Chicken satay 5 pieces, 8 small cubes compressed rice and 1 small bowl coconut sauce)	1 set	200	258
Chapatti with yellow dhall gravy, and coconut chutney	1 set	179	322
Mee soup	1 bowl	522	35

* Criteria for high/moderate/low calories based on Buku Resepi Sihat, Pilihan Bijak (NSM 2002)

Source: Suzana et al. (2002); Tee et al. (1997)

APPENDIX A4: Calorie content in selected local *kuih* and western pastries

Type of food *	Portion size	Weight	Calories
High Calories (>200 kcal/serving)			
Lepat pisang	1 piece	116	238
Cheese cake	1 piece	116	281
Medium Calories (100-200 kcal / serving)			
Plain cake	1 piece	23	100
Kuih kastard jagung	1 piece	93	108
Popiah goreng	1 piece	50	113
Pisang goreng	3 small pieces	66	131
Vadai	1 piece	44	143
Kuih lapis	1 piece	100	152
Kuih talam ubi kayu	1 piece	96	156
Kuih seri muka	1 piece	99	192
Yau-car-kue	1 piece	46	192
Plain doughnut	1 piece	54	193
Low Calories (<100 kcal / serving)			
Tapai pulut (Fermented glutinous rice)	1 pack	30	50
Popiah basah	1 piece	40	74
Kuih apam	3 small pieces	40	77

* Criteria for high/moderate/low calories based on Buku Resepi Sihat, Pilihan Bijak (NSM 2002)

Source: Suzana et al. (2002); Tee et al. (1997)

APPENDIX A5: A guide to reading food labels when shopping

Consumers should have adequate knowledge in nutrition to make healthy choices when shopping for food. Food labels provide information which will assist in making good food choices. The information to look for on food labels includes ingredients, expiry date, nett weight and storage instruction. Labels also provide specific nutrition information on Calories, carbohydrates, protein and fat content of the food. Compare the nutrient content among products and choose the one that suits your health needs.

A sample format for the labelling of mandatory nutrients is shown below:

Nutrition Information¹		
Serving size: 200 ml		
Servings per package: 5		
	Per 100 ml	Per Serving (200 ml) (or per package²)
Energy	100 kcal (420 kJ) ³	200 kcal (840 kJ)
Carbohydrate	23.8 g	47.6 g
Total Sugars ⁴	11.5 g	23.0 g
Protein	1.1 g	2.2 g
Fat	0 g	0 g

Source: MOH (2003)

Footnotes:

1 This is the recommended title for nutrition labels.

2 If the package contains only a single portion.

3 1 kcal = 4.2 kJ

4 Only for ready-to-drink beverages. Total sugars refer to all monosaccharides and disaccharides contained in the beverage.

APPENDIX A6: Nutrient content claims

Nutrition content claims on food labels such as low calorie, low fat, sugar free can help consumers to make healthier food choices. Conditions for making claims of 'low in' or 'free of' are shown below:-

Component	Claim	Not More Than
Energy	Low	40 kcal (170 kJ) per 100g (solids) or 20 kcal (80kJ) per 100 ml (liquids)
	Free	4 kcal per 100 g (100 ml)
Fat	Low	3 g per 100 g (solids) or 1.5 g per 100 ml (liquids)
	Free	0.15 g per 100 g (100 ml)
Saturated Fat	Low	1.5 g per 100g (solids) or 0.75 g per 100 ml (liquids) and 10% of total energy of the food
	Free	0.1 g per 100 g (solids) or 0.1 g per 100 ml (liquids)
Cholesterol	Low	0.02 g per 100g (solids) or 0.01 g per 100 ml (liquids)
	Free	0.005 g per 100 g (solids) or 0.005 g per 100 ml (liquids)
TFA	Low	1.5 g per 100g (solids) or 0.75 g per 100 ml (liquids) and 10% of total energy of the food
	Free	0.1 g per 100 g (solids) or 0.1 g per 100 ml (liquids)
Sugars	Free	0.5 g per 100 g (or 100 ml)
Sodium	Low	0.12 g per 100 g
	Very Low	0.04 g per 100 g
	Free	0.005 g per 100 g

Source: MOH (2003)

APPENDIX A7: Food choices when eating out

Place of eating	Healthier food choices	Foods to be reduced
Malay restaurants or food stalls	<ul style="list-style-type: none"> • <i>Laksa asam, mee soup, mee tomyam or mee hailam.</i> • Plain rice with dishes such as grilled or baked fish/ chicken/ lean meat, <i>tomyam, soup, asam pedas</i> and <i>ulam</i> or ‘sayur air’ • <i>Rojak buah, pecal, acar</i> • <i>Popiah basah, apam</i> 	<ul style="list-style-type: none"> • <i>Nasi lemak, nasi minyak, nasi beryani and nasi tomato</i> • Fried dishes such as fried mee • Santan dishes such as ‘<i>ayam masak lemak cili api</i>’ or ‘<i>sayur lemak</i>’ • Fried ‘kuih’ such as banana fritters, currypuff • Traditional ‘kuih’ cooked with coconut milk and sugar such as ‘kuih talam’
Chinese restaurants or food stalls	<ul style="list-style-type: none"> • Clear soup, noodle soup • Porridge • Chicken rice (remove the skin) • Steamed dim sum and dishes • Steam boat with non-fried items • Tofu dishes • Grilled or barbequed meat • Stir fried vegetables with little oil • Plain dessert or jelly, such as almond jelly 	<ul style="list-style-type: none"> • Concentrated soup, eg. shark fin soup, corn soup • Fried dishes such as fried noodles, kuey teow, fried fish or sweet and sour dishes • <i>Bak kut teh</i> with internal organ • Egg dishes • Stir fried vegetables with excessive oil
Indian restaurants/ food stalls	<ul style="list-style-type: none"> • Capati, nan bread, idli, tosai, putu mayam • Chicken or fish tandoori • Dhall dishes • Curry without coconut milk • Vegetables fried with little oil 	<ul style="list-style-type: none"> • Puri, roti canai, murtabak • Fried mee • Curry dishes using coconut milk • <i>Rojak mamak</i> • Additional yoghurt or tairu • Laddu
Western restaurants	<ul style="list-style-type: none"> • Sandwiches with low fat fillings such as salad, tuna or chicken without mayonnaise • Deep pan pizza with chicken or vegetables topping • Mash or bake potatoes • Barbequed or grilled fish, seafood or meat • Fish fillet • Clear soup • Salad with lemon or vinaigrette dressing • Corn on the cob (without margarine) • Low fat yoghurt / dairy products 	<ul style="list-style-type: none"> • Mayonnaise and high fat salad dressing • Crispy pizza with pepperoni, meat, sausage and extra cheese • Deep fried dishes, eg. french fries and battered fish • Casserole dishes • Bolognaise with meat sauce and extra cheese • Pastries, creamed soup and pies
Beverages	<ul style="list-style-type: none"> • Mineral / plain water • Chinese tea • Plain tea / coffee • Barley drinks, lai chee kang • Soya drinks • Fresh unsweetened fruit juice • Low fat / skimmed milk products • Plain ice cream / jelly with fruit flavours 	<ul style="list-style-type: none"> • Carbonated drinks • High calories drinks, eg. Cendol, air batu campur, the tarik, lassi • Ice cream

Note: Consumers should ask for less sugar, salt, oil when eating out.

REFERENCES FOR APPENDICES A1 – A7

- Gillman MW, Rifas-Shiman SL, Camargo CA, Berkey CS, Frazier AL, Rockett HRH, Field AE & Colditz GA. (2001). Risk of overweight among adolescents who were breastfed as infants. *Journal of the American Medical Association*. 285(19):2461-7.
- Hediger ML, Overpeck MD, Kuczmarski RJ & Ruan WJ. (2001). Association between infant breastfeeding and overweight in young children. *Journal of the American Medical Association*. 285(19): 2453-2460.
- MOH. (1999). *Malaysian dietary guidelines*. Kuala Lumpur: Jawatankuasa Penyelaras Makanan dan Pemakanan Kebangsaan (NCCFN), Ministry of Health.
- MOH. (2003). *Guide to nutrition labelling and claims*. Kuala Lumpur: Food Quality Control Division, Ministry of Health.
- NSM. (2002). *Resipi sihat, pilihan bijak*. Volume 2. Kuala Lumpur: Nutrition Society of Malaysia.
- Sichieri R, Field AE, Rich-Edwards JR & Willet WC. (2003). Prospective assessment of exclusive breastfeeding in relation to weight change in women. *International Journal of Obesity*. 27: 815-820.
- Suzana S, Rafidah G, Noor Aini MY, Nik Shanita S, Zahara AM & Shahrul Azman MN. (2002). *Atlas of food exchanges and portion sizes*. Kuala Lumpur: MDC Publisher.
- Tee ES, Ismail MN, Nasir MA & Katijah I. (1997). *Nutrient composition of Malaysian foods*. 4th Ed. Kuala Lumpur: Institute for Medical Research.

APPENDIX B: Physical Activity Guidelines for the Prevention of Obesity

Interventions aimed at increasing levels of physical activity in the community are an important approach to promote reductions of body weight of the whole population. Such interventions need to take into account the following points:

- Increasing the levels of physical activity of community has numerous potential benefits for population health in addition to preventing further increases in average BMI, e.g. reduction risk of Type 2 diabetes, coronary heart disease and certain cancers.
- Physical activity should always be encouraged, but it should not be presented as requiring excessive physical bouts involving boring routines or requiring expensive equipment.
- Physical activity should be fun in order to encourage regular participation and to discourage sedentary behaviour.

There is some evidence that physically active children remain active in adult life, so the promotion of a variety of general activities in young children may be especially important.

The public health perspective views that an increase in the physical activity level of the general population is likely to bring about health and economic benefits to the nation. The guidelines refer to the minimum level required to maintain healthy body weight and not meant for high level fitness or sports training (DHAC 1999). These guidelines are suitable for Malaysians of all ages and aims to instil values that physical activity is good for health and healthy people are more productive.

Approaches to enhance physical activities:

1. Being active is an opportunity
2. Be active every day in as many ways as possible
3. Do light to moderate intensity activity for at least 30 minutes preferably everyday
4. Where possible, enjoy some regular vigorous activity.

1. Being active is an opportunity

Change your mind set. Moving around should not be seen as troublesome but as a chance to burn off extra calories. Reinforce movement – increase opportunities for reinforcement. Think small but regular and fun. Think prevention is better than cure.

This approach emphasizes the importance of all forms of activity, ranging from simple movement, low to moderate intensity physical activity to more vigorous activity.

2. Be active every day as many ways as possible

With the availability of labour saving devices, people tend to become sedentary. Malaysians should be encouraged to walk or cycle to the local shop instead of driving, use stairs instead of lifts or escalators, park their car some distance away from their destination and enjoy outdoor family activities.

3. Do light to moderate intensity activity for at least 30 minutes preferably everyday

Previously, exercise was thought to be more beneficial when done vigorously 3 to 4 days a week for a minimum of 30 minutes. However, current evidence shows that shorter period of moderate intensity activities amounting to 30 minutes or more daily (eg – 3 sessions of 10 minutes each) or doing 30 minutes continuously will improve blood pressure, blood cholesterol levels and maintain body weight.

However, for preventing weight gain or regain in formerly obese individuals, 60 – 90 minutes of moderate intensity activity or lesser amounts of vigorous intensity activity is required (Saris et al. 2003). To prevent the transition to overweight or obesity, moderate intensity activity of approximately 45 – 60 minutes per day is needed. For children, even more activity time is recommended.

4. Where possible, enjoy some regular vigorous activity.

This guideline adds an extra level to the above three recommendations for those adults who are able and wish to achieve greater health and fitness benefits. Children and teenagers under the age of 18 should follow this guideline routinely.

APPENDIX B1: Types and levels of physical activities recommended for prevention of obesity

Mild or Moderate	Vigorous
<ul style="list-style-type: none"> • Fast walking on flat surface • Cycling on level surface • Light gardening • House cleaning chores • Golf: walking and pulling or carrying clubs • Ballroom / line dancing • Light or moderate strength–developing exercise • Volleyball • Snorkelling • Badminton • Aerobics • Roller-blading • Bowling 	<ul style="list-style-type: none"> • Jogging • Cycling up the hill • Moving heavy furniture • Heavy gardening (eg – use cangkul) • Swimming • Football / Futsal • Basketball • Squash • Tennis

APPENDIX B2: How to become physically active ?

B2.1 Office workers

Urban male office workers:	Urban female office workers:
<ul style="list-style-type: none"> • Wake up 10 minutes earlier than your usual time, and do some light stretching exercises. • If you have to take bus or taxi walk briskly to the bus or taxi stand. • Walk up the stairs instead of the lift if your office is within the first five floors. If you have to take the lift, stop five floors below your office and walk the rest of the way up. Initially you may feel breathless but after a few months of daily walking up the stairs you will be more energetic in completing the task of walking up the stairs). • While in the office, take 5 to 10 minutes break to brisk walk in the office. • Try to do some physical activities while in the office. • Take a walk after dinner. • Be physically active even while watching television. • While at home help your spouse to do some of the household chores. • During weekends, wash your own car. • If you go to the market or night market park your car further away from the market. • Carry your own shopping goods without using the trolley to the car. • If you have young children, play actively with your children. • Try to find time to take up games on a regular basis. 	<ul style="list-style-type: none"> • Wake up 10 minutes earlier than your usual time and do some light stretching exercises. • If you have to take bus or taxi walk briskly to the bus or taxi stand. • Walk up the stairs instead of the lift if your office is within the first five floors. If you have to take the lift, stop five floors below and walk the rest of the way up. Initially you may feel breathless but after a few months daily walking up the stairs you will be more energetic in competing the task. • While working in the office, take 5 to 10 minutes break to brisk walk in the office. • Try to do some physical activities while in the office. • Take a walk after dinner. • If you want to go for a walk after dinner walk with your husband or a friend. • If it is not possible to go for a walk after dinner try vacuuming or cleaning the house. • Keep active after dinner till it is time for bed. • During weekends, go for family outings in the park and play with the children. • If you have young children, play actively with your children. • Wear a comfortable T-shirt and pants and a pair of suitable shoes. • While watching television do rope skipping or stationary cycling. • Join a neighbourhood sports club and take up regular game.

B2.2 Housewives

Urban Housewives:	Rural housewives:
<ul style="list-style-type: none"> • Wake up 10 minutes earlier than your usual time and do some light stretching exercises. • Move or walk faster whenever you do your housework. • Try to be on your feet all day. • Spend less time sitting down. • Avoid sitting down in front of the television for a long stretch. • If you live in a high-rise building, walk-up stairs to the first 5 floors, and take the lift the rest of the way up. • Do rope skipping or stationary cycling 15 to 20 minutes everyday, at any time of the day. • Be more vigorous in doing your household work for example vacuuming, mopping, scrubbing or cleaning the windows. • Organize evening walks with your neighbours. • Walk to the market or shops if within walking distance. • Carry your own shopping bags, do not use the trolley. • At weekends take your family to the park, play actively with your children. 	<ul style="list-style-type: none"> • Grow your own vegetables around the house. • Walk to the mosque, surau, temple, shops, every day. • Avoid sitting down in front of the television for a long stretch. • Do light stretching exercises.

B2.3 Pensioners

Urban male pensioners:	Urban female pensioners
<ul style="list-style-type: none"> • Brisk walking in the morning around your place of living for at least 30 minutes, 4 to 5 times a week. • Walk briskly to the mosque or surau or shops regularly. • Stationary cycling while watching television. • Grow your own vegetables if possible. • Swim once or twice a week. • Play badminton once or twice a week. • Avoid sitting too long in front of the television. • For Muslim men perform more sunat prayers. 	<ul style="list-style-type: none"> • Brisk walk in the morning or in the evening around your home area for at least 30 minutes, 4 to 5 times per week. • Walk briskly to the mosque or surau or shops regularly. • Stationary cycling while watching television. • Grow your own vegetables if possible. • Avoid sitting too long in front of the television. • For Muslim women perform more sunat prayers. • Organize swimming for women only once or twice a week. • Be more vigorous in doing your household chores.

B2.4 Others

Rural adult men:	Children and teenagers
<ul style="list-style-type: none"> • Wake up 10 minutes earlier than your usual time and do some light stretching exercises. • Walk briskly to the mosque or surau or shops. • Cycle to places if they are too far to walk. • Clean your house compound three times a week. • Grown your own vegetables. • Avoid sitting ideally for too long. • Get involved in gotong-royong activities e.g. cleaning the surau or mosque or school compound. • For Muslim men perform more sunat prayers. 	<p>Aim for at least 60 minutes activities per day:</p> <ul style="list-style-type: none"> • Walk, cycle skip or run. • Take part actively in physical education. activity classes during school. • Play actively during school recess. • Join after-school or community physical activity programs. • Spend less time watching television or playing video games. • Take part in school sports activities. • Join school outdoor activities such as camping, canoeing, mountain climbing, snorkelling, orienteering and repelling. • If possible walk or cycle to school. • Help your parents in the daily household chores.

REFERENCES FOR APPENDICES B – B2:

DHAC. (1999). National physical activity guidelines for adults. Canberra, Australia: Department of Health and Aged Care.

Saris WH, Blair SN, van Baak MA, Eaton SB, Davies PS, Di Pietro L, Fogelholm M, Rissanen A, Schoeller D, Swinburn B, Tremblay A, Westerterp KR & Wyatt H. (2003). How much physical activity is enough to prevent unhealthy weight gain? Outcome of the IASO 1st Stock Conference and consensus statement. *Obesity Reviews*. 4 (2):101-114.

Appendix C: Psycho-behavioural Guidelines for Prevention of Obesity

Psycho-behavioural management can help prevent unnecessary indulgence of food and overeating. Therefore, modification of behaviour using psychological approaches is an important strategy in preventing obesity. Some of these techniques include:

1. Restrict exposures to external cues such as environment conducive to overeating:
 - Avoid route with plenty of food stalls – reinforce use of alternative routes where there are less cues.
 - Eat before you go for grocery shopping.
 - Stick to your shopping list when buying foodstuff.
 - Learn to cope with stress without resorting to food, drinks and/or alcohol.
 - During buffet or functions, use small plate and take small portions.
2. Encourage and reinforce physical activity:
 - Encourage active lifestyle; discourage sedentary behaviour.
 - Make physical activity fun and rewarding so as to reduce sedentary activities.
 - Encourage active family- or community-based recreational activities for more social support.
 - Reduce time spent watching television and playing computer or other sedentary games.
3. Discourage unhealthy eating behaviour as reward:
 - Use alternative non-food reward such as giving books or sports equipment and opportunities for fun physical activities.
 - Avoid associating unhealthy foods with happy occasions such as parties having pizza, fries, fried finger foods and alcohol by replacing with healthier foods for example fruits, low calorie and non-alcoholic drinks.
4. Encourage health-seeking behaviour:
 - Reinforce health-seeking behaviour by participating in health screenings and campaigns.
 - Reward health seeking behaviour with tangible and social rewards.
 - Encourage medical supervision for weight management.
5. Promote positive attitude to health and weight management:
 - Enhance self-esteem and body image acceptance.
 - Promote positive self image and self respect.
 - Improve quality of life by promoting healthy lifestyle attitudes (“Health is Wealth”).
 - Rectify distorted perceptions on the importance and methods of managing excess weight.
 - Monitor food intake and exercise.

**Appendix D: Consensus Workshop Participants
16 December 2004, Kuala Lumpur**

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