Table S1 – Studies of dietary intake differentiated by socioeconomic group

| **Reference** | **Dataset used & Study type** | **Populations Studied** | | **Dietary Intake Measures** | | | | | | | | | | | | | | | | **Socioeconomic Assessment Measure** | | | | | |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Location** | **Age & Gender included &**  **Sample size** | **Assessment Method** | **F&V variety** | **Food groups (as per definitions of ADG) investigated and reported results** | | | | | | | | | **Results from combined food groups** | **Reporting methods** | | | | **Income** | | **Occupation** | **Education** | **Area-level disadvantage** | **Other Measures** |
| **Fruit** | **Vegetables** | **Milk, yoghurt, cheese etc** | **Lean meat, poultry, fish, eggs, nuts etc** | **Grains & cereals** | **Healthy Oils & Spreads** | **Discretionary Foods & Drinks** | **Sugar Sweetened Beverages** | **Alcohol** | **Continuous serves or weight** | **Dichotomous measure** | **Single derived score** | **Multiple derived scores** | **Income metric** | **Equivalent annual income ranges** |
| **Peer-reviewed literature studies** | | | | | | | | | | | | | | | | | | | | | | | | | |
| Ball, Crawford & Mishra  2007 (49) | Study specific  Cross sectional survey | Melbourne | 18-65y women only  n=1,347 | FFQ | -- | E ↓ | E ↓ | -- | -- | -- | -- | -- | -- | -- | -- | Serves/day |  |  |  |  |  |  | - University  - y12/ certificate/ trade  - Up to y10 |  |  |
| Beckford, Grimes & Riddell  2015 (43) | Australian National Children’s Nutrition & Physical Activity Survey 2007  Cross sectional survey | Australia | 2-16y all genders  n=642 | 24h | -- | -- | -- | -- | -- | -- | -- | -- | Selected drinks  O ↓ | -- | -- | g/day |  |  |  |  |  |  |  |  | No description of assessment measure provided |
| Brennan & Singh  2010 (29) | Study specific 2008  Cross sectional survey | Adelaide | 60-71y all genders  n=444 | BFS Methods | -- | juice/tinned only, n/a | -- | Selected foods, n/a | Selected foods, n/a | Selected foods, n/a | Selected foods, n/a | -- | -- | -- | I -, O ↓ |  |  | usual grocery purchase score |  | Dichotomous | ≤$20k  >$20k |  |  |  | Self-rated subjective measure of Socioeconomic Position |
| Chung et al  2018 (42) | Longitudinal Study of Australian Children 2004-14  Cross sectional survey | Australia | 2-10y all genders  n=3,190 | FFQ | -- | -- | -- | -- | -- | -- | -- | Selected foods  O ↓ | Selected drinks  O ↓ | -- | O↓ |  | yes/no consumed |  |  |  |  |  |  |  | Composite measure (income, occupation, education) |
| Feng & Astell-Burt 2013 (34) | 45 and Up Study 2006-09  Cross sectional survey | New South Wales | 45y+ all genders  n=206,457 | FFQ | -- | n/a | n/a | milk only, n/a | Red or processed meat, or fish, n/a | -- | -- | -- | -- | n/a | I↓, A↓ |  |  | Unhealthy Lifestyle Index score (partial diet) |  | Quartiles | <$20k  $20k-$39,999k  $40k-$69,999k  ≥$70k |  |  | SEIFA IRSAD |  |
| Gasser et al  2017 (35) | Longitudinal Study of Australian Children 2004-14  Cross sectional survey | Australia | 2-15y all genders  n=7,301 | FFQ | -- | n/a | n/a | n/a | -- | -- | -- | n/a | n/a | -- | G↓, E↓,  I ↓, O↓ |  |  | Dietary intake score (partial diet) |  | HH income quartiles | <$26k  $26k-$51,999k $52k - $103,999k |  | - University  - Completed school  - Didn’t complete school | SEIFA IRSD | Composite measure (occupation, education, income) |
| Giskes et al  2002a (45) | Australian National Nutrition Survey 1995  Cross sectional survey | Australia | 13-64y all genders  n=8,349 | 24h | I ↓ | I ↓ | excluding potatoes, I ↓ | -- | -- | -- | -- | -- | -- | -- | -- | F&V no. varieties | yes/no consumed |  |  | HH income Quintiles | <$22,499k  $22.5k-$37,499 $37.5k-$52,499  $52.5k-$74,999  ≥$75k |  |  |  |  |
| Giskes et al  2002b (55) | Australian National Nutrition Survey 1995  Cross sectional survey | Australia | 18-64y all genders  n=8,883 | 24h | -- | I ↓ | excluding potatoes, I ↓ | -- | -- | -- | -- | -- | -- | -- | -- | F&V g/day |  |  |  | HH income: Quintiles | <$22,499k  $22.5k-$37,499 $37.5k-$52,499  $52.5k-$74,999  ≥$75k |  |  |  |  |
| Grech et al  2017 (36) | Australian National Nutrition Survey 2011-13  Cross sectional survey | Australia | 18-34y all genders  n=2,397 | 24h | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | G↓, E↓,  I ↓ |  |  | Diet quality score (full diet) |  | Equivalised HH income: Quintiles | Ranges not stated |  | - University  - Student  - Vocational  - No tertiary education | SEIFA IRSD |  |
| Hardy et al  2018 (40) | NSW Schools Physical Activity and Nutrition Survey 2010 & 2015  Cross sectional survey | New South Wales | 5-16y all genders  n=1,150 | FFQ | -- | A - | A - | -- | -- | -- | -- | A ↓ |  |  |  |  | F&V ADG recommended s/day | Junk food intake measure |  |  |  |  |  | SEIFA IRSD |  |
| Inglis, Ball & Crawford 2007 (30) | Socioeconomic Status & Activity in Women  Cross sectional survey | Melbourne | 18-65y women only  n=1,580 | FFQ | -- | E ↓, I - | E ↓, I - | -- | -- | -- | -- | Takeaway foods  E -, I ↓ | -- | -- | -- |  | 2 s/day fruit, 3-4 s/day veg Takeaway >1 times/week |  |  | Gross income: Tertiles (per week <$500, $500-$999, ≥$1000, unknown) | <$26k  $26k-$51,948  ≥$52k  Unknown |  | - Degree or higher degree  - y12, trade or certificate  - Less than y12 |  |  |
| Kunaratnam et al 2017 (31 | Healthy Beginnings Trial 2007-10  Cross sectional survey | Sydney | 2y child & 16-47y women only  n=243 | FFQ | -- | E -, I ↓ | E -, I - | milk only, E - | -- | -- | -- | E -, I ↓ | E ↓, I - | -- | -- |  | ADG recommended s/day |  |  | HH income: dichotomous | <$40k  ≥$40k |  | - University  - No university |  |  |
| Livingstone et al 2017 (17) | Australian National Nutrition Survey 2011-13  Cross sectional survey | Australia | 19y+ all genders  n=4,875 | 24h | E ↓, I ↓, A ↓ | E ↓, I ↓,  A - | E ↓, I -,  A - | E ↓, I ↓,  A ↓ | E -, I ↓, A ↓ | E -, I -,  A - | n/a | E ↓, I -, A - | n/a | E -, I -, A - | E↓, I↓, A↓ |  |  | Diet quality score (full diet) | Diet quality score component per food group | Equivalised HH income: Quintiles (per week ≤$398, $399-$638, $639-$958, $959-$1151, ≥$1152) | ≤$20,696  $20,697-$33,176  $33,177-$49,816  $49,817-$59,852  ≥$59,853 |  | - Low (some high school)  - Medium (high school /certificate/diploma)  - High (university) | SEIFA IRSD |  |
| Martin et al 2017 (32) | Healthy Lifestyles (HeLP-her) 2006 & 2012  Cross sectional survey | Melbourne & rural Victoria | 18-50y women only  n=543 | FFQ | -- | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | I ↓, E ↓ |  |  | Diet quality score (full diet) |  | HH income: Tertiles | ≤$40k  $41k - $80k  >$80k |  | - No formal education  - Trade /certificate/diploma  - University | All of moderate disadvantage by SEIFA IRSD |  |
| McKinnon et al 2013 (51) | Brisbane Food Study 2000  Cross sectional survey | Brisbane | 18y+ all genders  n=1,003 | BFS Methods | E↓, I ↓ | juice/tinned only, n/a | -- | Selected foods, n/a | Selected foods, n/a | Selected foods, n/a | Selected foods, n/a | -- | -- | -- | E↓, I ↓ |  |  |  | usual grocery purchase score, F&V variety | HH income: quartiles | ≤$25,999  $26k-$51,999 $52k-$77,999  ≥$78k |  | - University  - Diploma  - Vocational  - No post-school |  |  |
| McLeod et al 2011 (47) | Melbourne InFANT Program 2008  Cross sectional survey | Melbourne | 23-41y women only  n=527 | FFQ | E ↓ | E - | E ↓ | E ↓ | E - | E ↓ | n/a | E - | n/a | -- | E ↓ |  |  | Diet quality score (full diet) | Diet quality score component per food group |  |  |  | - University  - Vocational  - No post-school |  |  |
| Miura et al 2011a (58) | Brisbane Food Study 2009  Cross sectional survey | Brisbane | 25-64y all genders  n=903 | FFQ | -- | E ↓ | excluding potatoes, E ↓ | -- | -- | -- | -- | Takeaway foods,  E ↓ | -- | -- | -- | F&V s/day |  |  | Takeaway statistical correlation only |  |  |  | - University  - Diploma  - Vocational  - No post-school |  |  |
| Miura et al 2011b (59) | Brisbane Food Study 2009  Cross sectional survey | Brisbane | 25-64y all genders  n=903 | FFQ | -- | -- | -- | -- | -- | -- | -- | Takeaway foods,  E ↓, I ↓ | -- | -- | -- |  |  |  | Takeaway statistical correlation only | HH income: quartiles | ≤$30k  $30,001-$46,500  $46,501-$61,999  ≥$62k |  | - University  - Diploma  - Vocational  - No post-school |  |  |
| Olstad et al 2018 (37) | Australian National Nutrition Survey 2011-13  Cross sectional survey | Australia | 19-85y all genders  n=8,207 | 24h | -- | E ↓, I -, A - | E -, I -,  A - | -- | -- | -- | -- | -- | -- | -- | -- |  | 2 s/day fruit, 4 s/day veg. |  |  | HH equivalised gross income tertiles | Ranges not stated |  | - Less than y12  - y12/trade /diploma  - Tertiary | SEIFA IRSD |  |
| Renzaho et al 2010 (44) | Victorian Child’s Health & Wellbeing 2006  Cross sectional survey | Victoria | 4-12y all genders  n=3,370 | FFQ | -- | E ↓, I - | E ↓, I - | -- | -- | -- | -- | -- | -- | -- | -- |  | ADG recommended s/day |  |  | HH income quintiles | <$20k  $20k-$39k  $40k-$59k $60k-$79k  ≥$80k |  | - High school  - tertiary /further education |  |  |
| Terry et al 2017 (41) | Study specific 2013  Cross sectional survey | Rural Victoria | 5-11y all genders  n=550 | FFQ | -- | O - | O ↓ | milk only, n/a | -- | -- | -- | n/a | O ↓ | -- | -- | F&V, Disc, drinks s/day |  |  |  |  |  |  | - Primary  - Secondary  - Tertiary  - Other |  | - Health-care card holder  - Non-health-care card holder |
| Thorton et al 2013 (48) | READI 2007-08  Cross sectional survey | Victoria | 18-45y women only  n=1,341 | FFQ | -- | E ↓, I - | E ↓, I - | milk only, E ↓, I - | -- | -- | -- | -- | -- | -- | -- |  | F&V <1/day or 1+/day. Milk reg/low fat. |  |  | HH income 4 categories (per week <$299, $299-$499, $500-$699, $700-$999) | <$15.5k  $15.5k-$25.9k  $25.9k-$36.3k  $36.3k-$51.9k |  | - No formal qualification  - y10  - y12/trade /diploma/certificate  - University |  |  |
| Turrell et al 2009 (38) | Study specific 2009  Cross sectional survey | Melbourne | 18-74y all genders  n=2,564 | BFS Methods | E↓, I ↓, O↓ | juice/tinned only, n/a | -- | Selected foods, n/a | Selected foods, n/a | Selected foods, n/a | Selected foods, n/a | -- | -- | -- | E↓, I ↓, Occ↓ |  |  |  | usual grocery purchase score, F&V variety | HH income quintiles | <$20.8k  $20.8k-$36,399  $36.4k-$51,999  $52k-$77,999  ≥$78k | - Manager /professional  - White-collar employee  - Blue-collar employee | - University  - Diploma  - Vocational  - No post-school | Low, middle, high proportion of HH earning <$400/week in area |  |
| Turrell & Kavanagh 2006 (54) | Brisbane Food Study 2000  Cross sectional survey | Brisbane | 18y+ all genders  n=1,003 | BFS Methods | E↓, I ↓, O↓ | juice/tinned only, n/a | -- | Selected foods, n/a | Selected foods, n/a | Selected foods, n/a | Selected foods, n/a | -- | -- | -- | E↓, I ↓, Occ↓ |  |  |  | usual grocery purchase score, F&V variety | HH income quartiles | <$20.8k  $20.8k-$36,399  $36.4k-$51,999  $52k-$77,999  ≥$78k |  | - University  - Diploma  - Vocational  - No post-school |  |  |
| Turrell et al 2004 (38) | Brisbane Food Study 2000  Cross sectional survey | Brisbane | 18y+ all genders  n=1,003 | BFS Methods | A - | juice/tinned only, n/a | -- | Selected foods, n/a | Selected foods, n/a | Selected foods, n/a | Selected foods, n/a | -- | -- | -- | A - |  |  |  | usual grocery purchase score, F&V variety | HH income quartiles | <$20.8k  $20.8k-$36,399  $36.4k-$51,999  $52k-$77,999  ≥$78k |  |  | SEIFA IRSD |  |
| Turrell et al 2003 (52) | Brisbane Food Study 2000  Cross sectional survey | Brisbane | 18y+ all genders  n=1,003 | BFS Methods | E↓, I ↓, O↓ | juice/tinned only, n/a | -- | Selected foods, n/a | Selected foods, n/a | Selected foods, n/a | Selected foods, n/a | -- | -- | -- | E↓, I ↓, Occ↓ |  |  |  | usual grocery purchase score, F&V variety | HH income quintiles | <$20.8k  $20.8k-$36,399  $36.4k-$51,999  $52k-$77,999  ≥$78k | - Manager /professional  - White-collar employee  - Blue-collar employee | - University  - Diploma  - Vocational  - No post-school |  |  |
| Turrell et al 2002 (53) | Brisbane Food Study 2000  Cross sectional survey | Brisbane | 18y+ all genders  n=1,003 | BFS Methods | E↓, I ↓, O↓ | juice/tinned only, n/a | -- | Selected foods, n/a | Selected foods, n/a | Selected foods, n/a | Selected foods, n/a | -- | -- | -- | E↓, I ↓, Occ↓ |  |  |  | usual grocery purchase score, F&V variety | HH income quintiles | <$20.8k  $20.8k-$36,399  $36.4k-$51,999  $52k-$77,999  ≥$78k | - Manager /professional  - White-collar employee  - Blue-collar employee | - University  - Diploma  - Vocational  - No post-school |  |  |
| Venn & Strazdins 2017 (46) | HILDA survey 2005-12  Cross sectional survey | Australia | 15y+ all genders  n=11,927 | FFQ | -- | I - | I - | -- | -- | -- | -- | Selected foods I - | -- | -- | -- |  | F&V ADG recommended s/day, disc >1/day |  |  | Low income = <80% of sample median p.a. HH equivalised disposable income. | Ranges not given |  |  |  | Reported "feeling poor" |
| Wen et al  2010 (50) | Healthy Beginnings Trial 2008  Cross sectional survey | Sydney | 16-46y women only  n=409 | FFQ | -- | E↓, I ↓ | E-, I ↓ | Milk only, E↓, I - | -- | Selected E↓, I - | -- | Takeaway E↓, I ↓  Processed meat E -, I –  Chips E↓, I - | E↓, I ↓ | -- | -- |  |  |  |  | HH income: dichotomous | <$40k  ≥$40k |  | - University  - Under university |  |  |
| Worsley et al 2003a (56) | Australian National Nutrition Survey 1995  Cross sectional survey | Australia | 18y+ all genders  n=10,754 | FFQ | I ↓ | Selected single foods, n/a | Selected single foods, n/a | Selected single foods, n/a | Selected single foods, n/a | Selected single foods, n/a | Selected single foods, n/a | Selected single foods, n/a | -- | -- | -- |  | yes/no consumed |  |  | HH per capita income, tertiles | <$8,749.75  $8749.75-$17,499.50  >$17,499.50 |  |  |  |  |
| Worsley et al 2003b (57) | Australian National Nutrition Survey 1995  Cross sectional survey | Australia | 18y+ all genders  n=5,240 | FFQ | E ↓ | Selected single foods, n/a | Selected single foods, n/a | Selected single foods, n/a | Selected single foods, n/a | Selected single foods, n/a | Selected single foods, n/a | Selected single foods, n/a | -- | -- | -- |  | yes/no consumed |  |  |  |  |  | - University  - Vocational  - No higher qualification |  |  |
| Zarnowiecki et al 2014 (33) | Study specific 2010  Cross sectional survey | Adelaide | 9-13y all genders  n=625 | FFQ | n/a | n/a | n/a | -- | -- | -- | -- | n/a | n/a | -- | G↓ |  |  |  | Statistical correlations only | HH gross income tertiles | <$60k  $60,001-$100k  >$100k | - Manager  - Professional  - Technician /Trades  - Community & personal service  - Clerical & administrative  - Sales  - Machinery operators & drivers  - Labourers  - Not in labour force | - Never attended school  - Some high school  - Completed high school  - Trade /diploma  - University degree  - Higher university degree |  |  |
| **Non-peer reviewed grey literature studies** | | | | | | | | | | | | | | | | | | | | | | | | | |
| AIHW 2018 (28) | Australian National Nutrition Survey 2011-13  Cross sectional survey | Australia | 2y+ all genders  n= 11,925 | 24h | -- | A↓ | A – | A↓ | A↓ | A↓ | -- | -- | -- | -- | -- | Serves/day |  |  |  |  |  |  |  | SEIFA IRSAD |  |

Key

|  |  |
| --- | --- |
| 24h | 24 hour recall |
| FFQ | Food frequency questionnaire |
| AIHW | Australian Institute of Health and Welfare |
| BFS Methods | Brisbane Food Study where type of food usually purchased is studied rather than dietary intake – excluded from further analysis (see results & discussion) |
| G | Socioeconomic status derived from a combination of measures |
| I | Income used as a measure of socioeconomic status |
| Occ | Occupation used as a measure of socioeconomic status |
| E | Education level used as a measure of socioeconomic status |
| A | Area-level disadvantage used as a measure of socioeconomic status |
| O | Other measures of socioeconomic status applied (e.g. composite measure) |
| ↓ | Intake of lowest socioeconomic group assessed in study to be "less healthy" than a higher socioeconomic group |
| - | No significant difference between socioeconomic groups |
| -- | Food group not investigated in this study |
| n/a | Food group investigated, but individual result for food group not available |
| Selected | Only a few selected foods within the food group were studied/reported |
| ADG | Australian Dietary Guidelines 2013 |
| HH | Household |
| SEIFA IRSD | Socio-Economic Indexes for Areas Index of Relative Socioeconomic Disadvantage |
| s/day | Serves per day |
| F&V | Fruit and vegetables |
| p.a. | Per annum |
| y | years |