Supplementary File 4. Characteristics of included studies

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| Study | Design | Population studied | Control or Comparative Group | Nutrition Ax Method | Validated or recognised measure | Outcomes | Study Quality Score^ | Main Findings |
| Adolfo et al, 2009  (USA) | Cross-cue reactivity | SCZ, SAD  80% receiving SGAs  Outpatients  n=15 | Control  n=18 | Caffeine use history.  Assessor not described | Unknown | Caffeine (mg) |  | SMI group had higher intake of caffeine (mg) and caffeinated drinks.  Statistical trend for smokers to have greater caffeine urges. |
| Amani et al. 2007  (Iran) | Cross-sectional | SCZ  Medications not described  Inpatients  n=30 | Control  n=30 | Semi-quantitative FFQ  Assessed by nutrition students | Unknown | Diet quality (score),  Food groups (% of people consuming) |  | People with a SMI consumed more carbonated drinks & hydrogenated oils & ate less nuts & vegetable oils.  Females with SMI had lower diet quality compared with controls. |
| Archie et al. 2007  (Canada) | Cross-sectional | SMI  100% prescribed APMs  (70% SGAs, 15% FGAs, 15% combination)  Outpatients  n=101 | General population data | Dietary Fat Screener & Fruit & Vegetable & Fibre Screener  Assessor not described | Correlates with 100-item FFQ – recognized acceptable measure | Fat (g),  Saturated fat (g),  Fibre (g),  Fruit (servings/day),  Vegetables (servings/day) | + | People with SMI had a high fat, and saturated fat, intake. Intake of fruit & vegetables was higher in the SMI group compared to general population data. |
| Arrojo-Romero et al. 2015  (Spain) | Cross-sectional (4 arm) | SCZ, SAD  Medications reported in chlorpromazine equivalents  Inpatients  n=145  Other SMI  Medications reported in chlorpromazine equivalents  Inpatients  n=64 | Control  n=290 | Standardised questionnaire  Assessed by physician | Unknown | Caffeine (mg/day) |  | Frequency of caffeine use in SCZ inpatients was significantly higher than in SCZ outpatients.  Frequency of high caffeine users among caffeine users was significantly higher in SCZ outpatients compared to SCZ inpatients.  Smoking was significantly associated with caffeine.  No significant difference in caffeine intake between people with SCZ and controls. |
| Baethge et al. 2009  (Germany) | Longitudinal | BPD  Medications not described  Outpatients  n=352 | None | Estimated daily coffee consumption.  Assessed by study investigator. | Unknown | Caffeine (cups/day) |  | Mean 3 (+/-2) cups of coffee per day.  Coffee intake higher in smokers.  Coffee intake associated with suicidal ideation. |
| Bly et al. 2014  (USA) | Cross-sectional | SCZ  100% prescribed SGAs  Outpatients  n=143  BPD  100% prescribed SGAs  Outpatients  n=116 | Matched population data  n=259 | 24 hour recall (x3 within 10 days)  Assessed by dietitian.  Analysed by the Nutrition Data Systems for Research software | Recognised acceptable measure | Energy (kcal/day), Macronutrients (kcal/day),  Fibre (g/day),  EFAs (g/day) |  | SMI group had lower energy & omega-6 to omega-3 ratio & higher fibre intake compared to population data.  BPD group has lower energy & mono- & polyunsaturated fat & higher fibre intake compared to population data. |
| Bobes et al. 2010  (Spain) | Cross-sectional | SCZ  100% prescribed APMs Outpatients  n=1704 | None | Series of verbal questions.  Assessor not described | Unknown | Caffeine (cups/day),  Salt (yes or no to meals),  Fibre (freq of intake),  Low caloric diet (freq of intake),  Saturated fat (freq of intake) |  | Smokers more likely to consume daily caffeine (1 or more cups per day), & less likely to avoid salt & saturated fat, or to follow a high fibre or low caloric diet |
| Brown et al. 1999  (UK) | Cross-sectional | SCZ  91% prescribed psychotropic medication  Outpatients  n=102 | General population data | DINE  Assessor not described | Validated for a study of health educators in general practice attenders | Fat (g),  Unsaturated fat (g),  Fibre (g),  Fruit (portions/day),  Vegetables (portions/day) |  | People with SCZ had diets higher fat and lower in fibre than the general population.  No SMI participants ate the recommended 5 portions of fruit or vegetables per day. |
| Chang et al. 2017  (USA) | Cross-sectional | BPD  63% prescribed MS  52% prescribed SGAs  Outpatients  n=91 | Control  n=75 | 7 day diet record  Assessed by dietitian  Analysed using Nutrition Data System for Research software 2011 | Recognised acceptable measure | Energy (kcal),  Linoleic acid (g) | + | Energy intake higher in BPD group compared to controls (statistical trend)  Non-significant difference in linoleic acid intake between groups |
| Clayton et al. 2008  (Australia) | Cross-sectional | BPD  100% prescribed MS  Outpatients  n=15 | Control  n=15 | FFQ  Assessor not described | Unknown | EFAs (mg/day) |  | BPD had significantly lower intake of EFAs (except DPA) compared to controls |
| Ellingrod et al. 2011  (USA) | Cross-sectional | SCZ, SAD, SCZF  100% prescribed APMs  (88% SGAs, 12% FGAs)  26% prescribed MS  Setting not described  n=63 | APM group compared to no APM group | 24 hour recall (x3 within study period).  Assessor not described  Analysed by the Nutrition Data Systems for Research software | Recognised acceptable method | Energy (kcals/day), Macronutrients (g/day),  FA subgroups (g/day),  Fibre (g/day) |  | Statistical trend for SMI group to have lower PUFA: SFA ratio. |
| Elmslie et al. 2001  (New Zealand) | Cross-sectional | BPD  87% prescribed pharmacotherapy  Outpatients  n=89 | Matched population data  n=445 | 24 hour recall & 4-day estimated diet record.  Assessor not described  Analysed by Diet Cruncher software | Recognised acceptable measure | Energy (kJ)  Macronutrients (g) |  | BPD group consumed more total fluid & sweetened drinks.  Females with BPD consumed more energy than reference group. |
| Evans et al. 2014  (USA) | Cross-sectional | BPD  63% prescribed MS  52% prescribed SGAs  Outpatients  n=47 | Control  n=44 | 7 day diet record  Assessed by dietitian  Analysed using Nutrition Data System for Research software 2011 | Recognised acceptable measure | Energy (kCal),  EFA (g),  Selenium (mcg) | + | Energy, SFA, eicosanoic & docosanoic FA intake higher in BPD compared to controls.  Intake of selenium, EPA, DHA, DPA & AA lower in BPD group compared to controls. |
| Evans et al. 2015  (USA) | Cross-sectional | BPD  63% prescribed MS  48% prescribed SGAs  Outpatients  n=56 | Control  n=46 | 7 day diet record  Assessed by dietitian  Analysed using Nutrition Data System for Research software 2011 | Recognised acceptable measure | Macronutrients (% total energy),  EFA (% total FA), | + | Intake of EPA, DHA, AA lower in BPD group compared to controls.  No difference in intake of macronutrients as % of energy intake, SFA, PUFA, MUFA, LA or ALA |
| Fawzi et al. 2015  (Egypt) | Cohort | SCZ  100% prescribed APM  (58% FGA, 17% SGA, 25% combination)  Outpatients  n=100 | None | 24 hour recall (x3 within study period)  Assessor not described  Analysed using program based on Egyptian Food Composition Tables | Recognised acceptable measure | Energy (kCal),  Macronutrients (g) |  | Mean energy, protein, CHO & fat intake slightly higher in SCZ group with metabolic syndrome compared to SCZ group without metabolic syndrome. |
| Fusar-Poli et al. 2009  (Italy) | Cross-sectional | SMI  Medications not described  Outpatients  n=123 | General population data | Questionnaire  Assessor not described | Unknown | Fruit, vegetables (no. per day) |  | Low fruit and vegetable intake. |
| Gothelf et al. 2002  (Israel) | Cohort | SCZ  100% prescribed OLZ  Inpatients  n=10 | None | Weighed food record  (2 consecutive days)  Assessed by dietitian | Recognised acceptable measure | Energy (kCal) |  | People receiving OLZ had a significant increase in caloric intake coinciding with weight gain. |
| Gupta et al. 2009  (UK) | Cross-sectional | SCZ  Medication not described  Residential care  n=21  (low care)  n=41  (high care) | General population data | FFQ (past 7 days), responses cross-checked with staff.  Assessor not described | Unknown | ‘Healthy’ and ‘unhealthy’ food categories |  | People in both high level and medium level care made more unhealthy food choices. Provision of healthy food options may not automatically equate to healthier diets. |
| Gurpegui et al. 2004  (Spain) | Cross-sectional | SCZ  94% taking APMs  (75% FGAs, 25% SGAs)  Outpatients  n=250 | None | Self-reported alcohol & caffeine intake.  Assessor not described | Unknown | Caffeine (mg/kg/day), | - | Caffeine associated with smoking and alcohol intake.  No clear association between caffeine intake and APM or symptom severity. |
| Gurpegui et al. 2006  (Spain) | Case control | SCZ  94% taking APMs  (75% FGAs, 25% SGAs)  Outpatients  n=250 | Control  n=290 | Self-reported alcohol & caffeine intake.  Assessor not described | Unknown | Caffeine (mg/day), |  | Amongst caffeine users, high caffeine intake more frequent in SMI compared to controls. |
| Hahn et al. 2014  (Australia) | Cross-sectional | SMI  Medications not described  Setting not described  n=1,286 | None | Semi-structured interview using standardised questionnaire.  Assessor not described | Unknown | Food intake (g),  Difficulty purchasing food (shortage of $) |  | 74% people with psychosis ate <4 servings of fruit & vegetables combined daily.  Unhealthy dietary intake associated with other detrimental lifestyle factors. |
| Hamera et al. 1995  (USA) | Cohort | SCZ, SAD  100% prescribed APM (52.9% oral, 29.4% LAI. 17.6% combination)  Outpatients  n=17 | None | Substance use checklist  (previous 24 hours)  Assessor not described | Unknown | Caffeine (cups) | - | No association between psychosis symptom severity and caffeine, but caffeine intake increased with increased tension & depression. |
| Hardy et al. 2012  (UK) | Cross-sectional | SCZ  100% prescribed APM  (75% SGA, 12.5% FGA, 12.5% combination)  Outpatients  n=8 | None | Food diary (1 week).  Assessed by study investigator. | Recognised acceptable measure | Dietary pattern (qualitative data) | - | People with SCZ had low overall consumption and variety of consumption of fruit and vegetables with a high consumption of convenience and ready-to-eat meals.  Poor diet literacy in people with SCZ. |
| Haruyuki et al. 2015  (Japan) | Cross-sectional | SCZ  Medication not described  Outpatients  n=51 | General population data | Photographic 3-day food record.  Assessed by dietitian. | Recognised acceptable measure | Energy (kcal),  Macronutrients (g), Micronutrients (mg/µg),  Fibre (g) |  | SCZ patients had higher intake of energy, CHO, fat, calcium, phosphorus and sodium compared to general population. |
| Heald et al. 2017  (UK) | Cross-sectional | SCZ, SAD  100% neuroleptics  (54% oral SGAs, 35% depot APM, 11% MS)  Outpatients  n=32 | None | Dietary questionnaire.  Assessor not described. | Recognised acceptable measure | Food categories (portions, days eaten) |  | Most participants were not eating fruit (84%) and vegetables (75%) on >5 days/week.  Majority chose white bread. 62.5% had takeaway foods within the last week. |
| Henderson et al. 2005  (USA) | Cross-sectional | SCZ, SAD  100% prescribed SGAs  Outpatients  n=36 | None | 4-day food record  Assessor not described  Analysed through Minnesota Nutrient Data System | Recognised acceptable measure | Energy (kcal),  Macronutrients (% EI),  Sugars (g), |  | Mean energy intake by APM in descending order was olanzapine (2,583.6kcal/day), clozapine (2,199kcal/day), risperidone (1,921kcal/day), (p=0.33, n=12 in each group). |
| Henderson et al. 2006  (USA) | Cross-sectional | SCZ, SAD  98% prescribed SGAs  Outpatients  n=88 | Matched population data  n=723 | 4-day dietary record & block FFQ.  Assessed by trained dietary interviewers.  Analysed by Minnesota Nutrient Database. | Recognised acceptable measure  FFQ validated against 24-hr diet recall, 3-day diet record & serum carotenoids. | Energy (kcal)  Macronutrients (g, % EI)  Fat subgroups (g, % EI),  Micronutrients (mg, mcg),  Fibre (g),  Caffeine (mg), |  | SMI group consumed less energy, CHO, protein, fat, fibre, sodium & folate but more caffeine than the comparison group. |
| Jacka et al. 2011  (Australia) | Cross-sectional | BPD  Medications not described  Setting not described  n=23 | Control  n=691 | Dietary Questionnaire for Epidemiological Studies.  Assessor not described. | Validated against weighted food records in healthy Australian-, Greek- and Italian-born adults living in Australia. | Energy (kJ),  Glycaemic load,  Dietary patterns: ‘western’, ‘modern’, & ‘traditional’ | + | BPD group had higher glycaemic load, & higher scores on the ‘western’ & ‘modern’ diet scores.  Higher ‘western’ & ‘modern’ score positively associated, & ‘traditional’ score negatively associated, with BPD. |
| Jahrami et al. 2017  (Bahrain) | Case control | SCZ, SAD, SCZF  Medications not described  Outpatients  n=120 | Control  n=120 | FFQ (past 1 month).  Assessor not described. | Pilot study with 15 patients with SCZ (unpublished data) | Energy (kcal),  Macronutrients (g),  Fat subgroups (g),  Micronutrients (mg),  Fibre (g),  Caffeine (mg),  Individual foods (g/ml) | + | SMI group had excessive dietary intakes (energy, macronutrients, high energy/nutrient poor foods) when compared to controls. |
| Kilbourne et al. 2007  (USA) | Cross-sectional | SCZ  80% prescribed APM  Setting not described  n=1720  BPD  32% prescribed APM  Setting not described  n=1925 | Control  n=3065 | Questionnaire (3 nutrition & 3 eating habits questions).  Assessor not described. | Unknown | Eating habits,  Fruit juice (# servings),  Fruit (# servings),  Vegetables (# servings), |  | BPD & SCZ groups more likely to report suboptimal eating behaviours and report difficulties obtaining or cooking food. |
| Killan et al. 2006  (Germany) | Cross-sectional | SMI  Medications not described  Inpatients  n=363 | General population data n=7124 | Standardised questionnaire.  Assessor not described. | Unknown | ‘Unhealthy nutrition behaviour’ (based on consumption of fruit, vegetables, salty snacks, sweets, fast food & ready-to-eat meals – not quantified)), |  | SMI group had higher levels of unhealthy lifestyle practices including ‘unhealthy nutrition behaviour’. |
| Konarzewska et al. 2014  (Poland) | Cross-sectional | SCZ  100% prescribed APM  Setting not described  n=52 | Control  n=45 | 24-hour recall (3 consecutive days using food images)  Assessor not described.  Analysed by Diet 5 software | Recognised acceptable measure | Energy (kcal),  Macronutrients (g), Micronutrients (mg & µg),  Fibre (mg) |  | Male SCZ group reported lower energy, glucose, protein and fibre, vitamins B2+C, & minerals zinc, magnesium, iron, copper, calcium compared to control. While D3, folic acid, calcium & magnesium did not meet recommended intakes.  Female SCZ group reported higher saturated fat intakes. D3, C, folic acid, calcium and magnesium did not meet requirements. |
| Manzaneres et al. 2014  (Spain) | Cross-sectional | SMI  86% prescribed APM  Outpatients  n=65 | Control  n=25 | 24-hour recall.  Assessed by dietitian  Analysed by CESNID, Barcelona University software | Recognised acceptable measure | Energy (kcal)  Macronutrients (%EI)  Refined sugar (%EI)  Sodium (mg) |  | SMI & high risk for psychoses groups had higher energy & saturated fat (% of total energy) intakes compared to controls.  Symptom severity positively associated with energy intake. |
| McCreadie et al. 2003  (Scotland) | Cross-sectional | SCZ  94% prescribed APM  Outpatients  n=102 | General population data | FFQ (part of Scottish Health Survey, modelled on the Health Survey for England).  Assessed by research nurse  Analysis program not required | Unknown | Selected foods: fruit, vegetables, legumes, oily fish, cereal, wholemeal bread (% of intake) |  | Mean weekly fruit & vegetables consumed by SCZ group was 16 (recommended intake is 35 per week). More males in SCZ group consumed inadequate fruit, vegetables, milk, potatoes & pulses compared to general population.  More females with SCZ consumed inadequate milk & potatoes compared to general population. |
| Mucheru et al. 2017  (Australia) | Cross-sectional | SMI  Medications not described  Outpatients  n=221 | None | Short Diet Questions derived from 1995 National Nutrition Survey.  Assessor not described.  Analysis program not required | Unknown | Fruit, vegetables, breakfast consumption, meal frequency (frequency of intake) |  | Most participants did not meet recommendations for vegetables (86.9%) or fruits (70.6%).  Average number of meals per day was 3.72, breakfast was consumed on average 4.27 times per week. |
| Nenke et al. 2015  (Australia) | Cross-sectional | SMI  85% prescribed APM  34% prescribed MS  Setting not described  n=184 | General population data | Dietary Questionnaire for Epidemiological Studies.  Assessed by trained researcher  Analysed using nutrient table for use in Australia (NUTTAB95) database | Validated against weighted food records in healthy Australian-, Greek- and Italian-born adults living in Australia. | Energy (kJ)  Macronutrients (g)  Micronutrients (mg/ug)  Fibre (g)  Selected foods (g) |  | SMI group consumed more fat and less fibre and vitamin E compared to general population.  SMI group did not achieve RDIs for fruit & vegetables (98%), fibre (89%), fish (61%), magnesium (73%) & folate (86%) and 58% exceeded RDIs of saturated fat and sodium. |
| Noguchi et al. 2013  (Japan) | Cross-sectional | Bipolar Depression  Medications not described  Outpatients  n=75  Unipolar Depression  Medications not described  Outpatients  n=91 | None | Brief self-administered diet history questionnaire (BDHQ).  Assessor not described.  Analysed by a computer algorithm using the Standard Tables of Food Composition in Japan. | Validated against 16-day diet records in Japanese adults. | Dietary patterns: ‘plant foods & fish products’, ‘fish’ & ‘western/meat’  Energy (kcal)  Macronutrients (%EI)  EFAs (%EI)  Micronutrients (mg, ug/1000kcal) |  | No difference in energy (kJ), nutrient intakes or dietary pattern scores between bipolar depression and unipolar depression.  In men, psychiatric symptoms more pronounced with infrequent intakes of vegetables, mayonnaise, potatoes, soy products, seaweed and fish products.  No correlations between dietary pattern scores and symptom scores in women. |
| Nunes et al. 2014  (Brazil) | Case control | SCZ  100% prescribed APM  (68% SGAs, 28% FGAs, 4% combination)  Outpatients  n=25 | Control  n=25 | FFQ (previous 1 month)  Assessor not described.  Analysed by NUTRIBASE Software | Validated against two-consecutive 24hr recalls in a Brazilian adult sample | Energy (kcal)  Macronutrients (%EI)  Fat subgroups (g/1000kcal, %EI)  Micronutrients (mg, ug/1000kcal)  Fibre (g/1000kcal) |  | SCZ group had higher intake of energy, energy per kg of body weight, % of CHO & TFAs but lower intakes of other types of fat, phytosterols & vitamin A compared to controls. |
| Osborn et al. 2007  (UK) | Cross-sectional | SMI  74% prescribed APM (64% SGAs, 35% LAI)  Outpatients  n=74 | Control  n=148 | DINE  Assessed by a ‘rater’  Analysis program not required | Validated against a 4-day diet record in 206 factory workers in the UK. | Fat, saturated fat, fibre (score)  Health/dietary knowledge (score) |  | SMI group had lower fibre and higher saturated fat diets compared to controls.  SMI group had lower knowledge on the health benefits of diet on cardiovascular risk. |
| Ratliff et al. 2012  (USA) | Cross-sectional | SCZ, SAD  100% prescribed APM (69% SGAs, FGAs 31%)  Outpatients  n=130 | Matched population data  n=250 | 24-hour recall (using food models)  Assessed by trained personnel.  Analysis program not described | Recognised acceptable measure. | Energy (kcal)  Macronutrients (g)  Sodium (mg)  Caffeine (mg) |  | SMI group consumed higher sugar, fat, saturated fat & protein compared to controls.  Both groups exceeded sodium upper limits. |
| Roick et al. 2007  (Germany) | Cross-sectional | SCZ  60% prescribed SGAs  Inpatients  n=194 | General population data  n=2,419 | Eating & drinking section of German national health survey.  Assessor not described.  Analysis program not required | Unknown | Eating & drinking habits, dietary choices | - | SCZ group more frequently consumed instant meals, calorie-reduced food & supper snacks, and less frequently consumed breakfast & healthy groceries compared to general population. |
| Ryan et al. 2003  (UK) | Cross-sectional | FEP  Medication Naïve  Inpatients  n=26 | Control  n=26 | DINE  Assessor not described  Analysis program not required | Validated against a 4-day diet record in 206 factory workers in the UK. | Monounsaturated fat, saturated fat, fibre (score) |  | FEP group consumed more saturated fat compared to controls.  No difference between groups for fibre and monounsaturated fat intakes |
| Ryan et al. 2004  (UK) | Cohort | FEP  Medication Naïve  Inpatients  n=19 | Control  n=19 | DINE  Assessor not described.  Analysis program not required | Validated against a 4-day diet record in 206 factory workers in the UK. | Monounsaturated fat, saturated fat, fibre (score) | + | FEP group consumed more saturated fat and less fibre compared to controls. |
| Samele et al. 2007  (UK) | Case control | FEP  89% prescribed psychotropic medication  Mixed settings  n=89 | Control  n=89 | Health & lifestyle questionnaire (includes FFQ).  Assessed by study researcher  Analysis program not required | Unknown | ‘High-fat/fast-food diet’, ‘high in fruit & vegetables diet’ |  | FEP group more likely to consume high fat, fast food and less likely to consume fruit and vegetables. |
| Saarni et al. 2009  (Finland) | Cross-sectional | SMI  APM prescription ranges: 69% in SCZ, 35% in ONP, 32% in affective psychosis  Setting not described  n=208 | General population data (Health 2000 study) | Standardised dietary questions from Finnish Health Examination Survey  Assessor not described.  Analysis program not required. | Unknown | Healthfulness of diet (based on vegetable & saturated fat intake) | - | No significant difference in diet healthfulness between SMI group and population data. |
| Simonelli-Munoz et al. 2012  (Spain) | Cross-sectional | SCZ, SAD, SCZF  100% prescribed APM (64% SGAs, 4% FGAs, 32% combination)  Outpatients  n=159 | None | Quality of dietary habits questionnaire.  Assessed by nurse.  Analysis program not required. | Unknown | ‘Healthy/unhealthy’ diet score | - | Mean diet score for SMI group was in the ‘unhealthy’ category, with only 22% of SMI group scoring in the ‘healthy’ category.  Key reasons included fast eating and poor consumption of fruits, vegetables & fish. |
| Stokes et al. 2004  (UK) | Cross-sectional | SCZ  100% prescribed APM (55% clozapine, 45% FGA)  Outpatients/residential  n=20 | General population data | 7-day WFR (meals) & diet history/nursing observation (snacks).  Assessed by nutritionist.  Analysed by NETWISP program | Recognised acceptable measure. | Energy (kcal)  Fat (g)  Sugar (g) |  | SCZ group consumed more energy, sugar & fat compared to general population. |
| Strassnig et al. 2003  (USA) | Cross-sectional | SCZ, SAD, PNOS  Medications not described  Outpatients  n=146 | General population data | 24-hour recall (using food models)  Assessor not described.  Analysed by ESHA Food Processor Nutrition Software 7.5 | Recognised acceptable measure. | Energy (kcal)  Macronutrients (g, %EI)  Fibre (g)  Caffeine (mg) |  | SMI group consumed more energy, CHO, fat & caffeine compared to general population data.  Higher caffeine intake in smokers. |
| Strassnig et al. 2005  (USA) | Cross-sectional | SCZ, SAD, PNOS  Medications not described  Outpatients  n=146 | General population data | 24-hour recall (using food models).  Assessed by trained researcher.  Analysed by ESHA Food Processor Nutrition Software 7.5 | Recognised acceptable measure. | Total fat & fat subgroups (g) Vitamins A, C & E (mg) |  | SMI group consumed more fat, saturated fat & polyunsaturated fat compared to general population data. |
| Strassnig et al. 2006  (USA) | Cross-sectional | SCZ, SAD, PNOS  Medications not described  Outpatients  n=146 | General population data | 24-hour recall (with food models).  Assessor not described.  Analysed by ESHA Food Processor Nutrition Software 7.5 | Recognised acceptable measure. | Caffeine (mg) |  | SMI group consumed more caffeine than general population data.  Caffeine intake positively associated with smoking, but not associated with BMI or dietary factors. |
| Sugawara et al. 2014  (Japan) | Cross-sectional | SCZ, SAD  Medications not described  Outpatients  n=338 | None | Brief self-administered diet history questionnaire (BDHQ).  Assessor not described.  Analysed by a computer algorithm using the Standard Tables of Food Composition in Japan. | Validated against 16-day diet records in Japanese adults. | Energy (kcal)  Macronutrients (g/1000kcal)  EFAs (g/1000kcal)  Fibre (g/1000kcal)  Micronutrients (mg, ug/1000kcal) |  | Those following a 'healthy dietary pattern' were less likely to be obese.  Healthy pattern was positively associated with intake of protein, fat, dietary fibre, n-3 polyunsaturated fatty acids (PUFA), n-6 PUFA, folate, riboflavin, pyridoxine, cobalamin, and ascorbic acid & was inversely associated with the intake of carbohydrates. |
| Sugawara et al. 2016  (Japan) | Cross-sectional | SCZ  Medications not described  Mixed settings  n=22,072 | None | Brief survey questionnaire.  Assessor not described.  Analysis program not required. | Unknown | Soft drink, cakes or other sweets (frequency of intake) |  | 27.9% of inpatients & 27.8% consumed soft drink everyday.  34.6% of inpatients & 28.5% of outpatients consumed soft drink >1x week.  39.3% of inpatients & 36.3% of outpatients consumed cakes or other sweets more than once per day. |
| Suvusaari et al. 2007  (Finland) | Cross-sectional | SMI  100% prescribed APM  Setting not described  n=118 | General population data (Health 2000 study) | Standardised diet-related questions on intake of specific foods from Finnish Health Examination Survey  Assessor not described.  Analysis program not required. | Unknown | Healthfulness of diet (based on vegetable & saturated fat intake) |  | No difference for healthfulness of diet between SMI group and general population.  No difference of healthfulness of diet between diagnoses within SMI group. |
| Treur et al 1999  (Multinational) | Cohort | SCZ  100% prescribed SGA  Outpatients  n=527  BPD  100% prescribed SGA  Outpatients  n=93  \* 17% of total sample prescribed MS | None | Series of questions on the frequency of consumption of specific food groups  Assessed by physician.  Analysis program not required. | Unknown | Specific food categories (frequency of intake) |  | 25.5% reported increased in sweet foods & sweetened beverage consumption,  23.6% reported decrease in sweet food/drink consumption.  Higher weight gain in those who reported increased consumption of sweet food/drinks. |
| Tsuruga et al. 2015  (Japan) | Cross-sectional | SCZ, SAD  100% prescribed APM (38% APM polypharmacy)  Outpatients  n=237 | Control  n=404 | Brief self-administered diet history questionnaire (BDHQ).  Assessor not described.  Analysed by a computer algorithm using the Standard Tables of Food Composition in Japan. | Validated against 16-day diet records in Japanese adults. | ‘Vegetable’ & ‘Cereal’ (bread, rice, confectionary) dietary patterns |  | Cereal dietary pattern was positively associated with SCZ.  Vegetable dietary pattern was not associated with SCZ. |
| Wallace & Tennant 1998  (Australia) | Cross-sectional | SMI  95% prescribed APM  Outpatients  n=170 | None | 24-hour recall (with food models)  Assessed by ‘researcher’  Analysis program not described. | Recognised acceptable measure. | Food groups (servings per day) | - | All respondents ate less than the five food group recommendations. Only 5% of respondents consumed recommended amounts of fruit and vegetables. |
| Williamson et al. 2015  (UK) | Prospective Cohort | FEP  Medication not described  Outpatients  n=143 | General population data n=1186 | 4-day food diary.  Assessor not described.  Analysed by NetWISP dietary analysis software. | Recognised acceptable measure. | Energy (kJ)  Macronutrients (g)  Non-milk extrinsic sugar (g)  Micronutrients (mg, ug) |  | FEP group consumed more fat, saturated fat & non-milk extrinsic sugar (statistical trend), & less vitamin D, folate & selenium compared to general population data.  No sig. difference in energy intake. |
| Winstead 1976  (Germany/USA) | Cross-sectional | Psychosis  Inpatients  n=24  Other mental illness  Inpatients  n=11  \* 30% of total sample prescribed FGA or antidepressant. | None | Inpatients recorded daily intake of coffee  Reviewed by inpatient staff & subsequently interview for accuracy  Analysis program not utilised | Unknown | Coffee (‘high’ users defined as ≥5 cups of coffee per day) | - | People with psychosis had a higher incidence of ‘high’ coffee users compared to other mental illnesses. |

\* SCZ = Schizophrenia, SAD = Schizoaffective disorder, SCZF = Schizophreniform disorder, BAD = Bipolar affective disorder, PNOS = Psychosis not otherwise specified, SMI = Severe mental illness, FEP = First-episode psychosis, APM = Antipsychotic medication, SGA = Second Generation Antipsychotic, FGA = First Generation Antipsychotic, LAI = Long Acting Injectable antipsychotic, MS = Mood Stabiliser, FFQ = Food Frequency Questionnaire, FA = fatty acids, EFA = essential fatty acids, Fe = iron, Se = selenium, Zn = zinc, CHO = carbohydrate, TFAs = trans fatty acids.

^ Study design quality scores were based on 10 criterion according the American Academy of Nutrition and Dietetics Quality Criteria Checklist: Primary Research [[1](#_ENREF_1)]