

Supplementary table 1: characteristics of the cohorts included

Study name / acronym	Country	City / region	Sample type	Collection period (years)
BELSTRESS	Belgium	Different cities	Work-based	1994-1998
Bus Santé	Switzerland	State of Geneva	Population-based	2001-2009
CoLaus	Switzerland	Lausanne	Population-based	2003-2006
Copenhagen City Heart Study 1	Denmark	Copenhagen	Population-based	1976-1978
Copenhagen City Heart Study 2	Denmark	Copenhagen	Population-based	1982-1984
Copenhagen City Heart Study 3	Denmark	Copenhagen	Population-based	1992-1994
Copenhagen City Heart Study 4	Denmark	Copenhagen	Population-based	2002-2004
Dubbo Study	Australia	Dubbo, NSW	Population-based	1988-1989
EpiPorto	Portugal	Porto	Population-based	1999-2003
GAPP	Liechtenstein		Population-based	2010-2012
HAPIEE Project Czech Republic	Czech Republic	7 cities	Population-based	2002-2005
HAPIEE Project Lithuania	Lithuania	Kaunas	Population-based	2002-2005
HAPIEE Project Russia	Russia	Novosibirsk	Population-based	2003-2005
Health2006 RCPH, Denmark	Denmark	Capital Region	Population-based	2006-2008
Hordaland Health Study (HUSK)	Norway	Hordaland	Population-based	1997-1999
MCCS	Australia	Melbourne	Population-based	1990-1994
MOLI-SANI	Italy	Molise	Population-based	2005-2010
MONA LISA	France	Haute-Garonne	Population-based	2005-2007
Osservatorio Epidemiologico Cardiovascolare (OEC)	Italy	51 centres distributed throughout the Italian territory	Population-based	1998-2002
Osservatorio Epidemiologico Cardiovascolare/Health Examination Survey (OEC/HES)	Italy	One centre in each Italian Region	Population-based	2008-2012
PRIME Belfast	Northern Ireland	Belfast	Population-based	1991-1994
REGICOR-Hermes	Spain	Girona	Population-based	2003-2006
Workforce Diabetes Survey	New Zealand	Auckland & Tokoroa	Work-based	1988-1990

Supplementary table 1 (continued)

Study name / acronym	Overall sample size	Sample size used	Age range	Age (mean \pm SD)	% women
BELSTRESS	21,419	21,128	35-59	45.5 \pm 5.9	23.5
Bus Santé	9,314	9,230	34-75	51.5 \pm 10.8	50.1
CoLaus	6,733	6,181	35-75	53.1 \pm 10.8	52.6
Copenhagen City Heart Study 1	14,223	14,171	20-93	52.6 \pm 12.0	54.2
Copenhagen City Heart Study 2	12,698	12,620	20-98	56.0 \pm 12.4	55.2
Copenhagen City Heart Study 3	10,135	9,663	21-93	57.6 \pm 15.2	55.9
Copenhagen City Heart Study 4	6,237	6,001	20-94	58.8 \pm 16.5	57.5
Dubbo Study	2,805	2,762	59-98	69.2 \pm 7.0	55.9
EpiPorto	2,485	2,381	18-92	53.4 \pm 15.2	61.5
GAPP	1,626	1,604	25-41	36.4 \pm 4.9	53.7
HAPIEE Project Czech Republic	8,857	7,170	44-72	58.2 \pm 7.1	53.5
HAPIEE Project Lithuania	7,161	7,067	45-75	61 \pm 7.6	54.6
HAPIEE Project Russia	9,630	9,359	45-69	58.2 \pm 7.1	54.4
Health2006 RCPH, Denmark	3,471	3,469	18-71	49.4 \pm 13.0	55.2
Hordaland Health Study (HUSK)	25,532	25,532	40-49; 71-74	47.7 \pm 9.3	54.3
MCCS	41,514	41,484	27 - 76	55.3 \pm 8.7	59.0
MOLI-SANI	24,325	24,046	35-99	55.6 \pm 11.9	52.0
MONA LISA	1,626	1,626	35-75	55.1 \pm 11.0	49.0
Osservatorio Epidemiologico Cardiovascolare (OEC)	9,714	9,676	35-74	54.4 \pm 11.3	49.4
Osservatorio Epidemiologico Cardiovascolare/Health Examination Survey (OEC/HES)	9,103	8,694	35-79	56.8 \pm 12.4	49.8
PRIME Belfast	2,745	2,744	50-59	54.3 \pm 2.9	0
REGICOR-Hermes	5,801	5,700	35-75	54.6 \pm 11.2	52.7
Workforce Diabetes Survey	5,677	5,671	40-65	48.8 \pm 6.2	27.6

Supplementary table 1 (continued)

Study name / acronym	% smokers (men)	% smokers (women)	Fasting	References
BELSTRESS	29.0	24.1	No	[1]
Bus Santé	27.2	23.8	Yes	[2, 3]
CoLaus ^a	29.3	25.0	Yes	[4]
Copenhagen City Heart Study 1	69.9	58.0	No	
Copenhagen City Heart Study 2	64.0	53.4	No	
Copenhagen City Heart Study 3	52.7	45.9	No	
Copenhagen City Heart Study 4	34.8	31.2	No	
Dubbo Study	20.5	11.4	Yes	[5, 6]
EpiPorto	34.8	17.7	Yes (overnight)	[7, 8]
GAPP	23.2	18.6	Yes	[9]
HAPIEE Project Czech Republic	29.3	25.0	Yes	
HAPIEE Project Lithuania	28.5	7.7	Yes	
HAPIEE Project Russia	48.7	9.4	Yes	[10]
Health2006 RCPH, Denmark	21.0	23.3	Yes	[11, 12]
Hordaland Health Study (HUSK) ^b	33.6	33.4	No	[13]
MCCS	14.5	9.1	68% of participants	[14, 15]
MOLI-SANI ^c	42.0	13.9	Yes (overnight)	[16-18]
MONA LISA	15.4	14.1	Yes (at least 10 hours)	[19-21]
Osservatorio Epidemiologico Cardiovascolare (OEC) ^d	31.2	21.8	Yes (at least 8 hours)	[22, 23]
Osservatorio Epidemiologico Cardiovascolare/Health Examination Survey (OEC/HES) ^d	21.4	18.5	Yes (at least 8 hours)	[24]
PRIME Belfast	31.6	§	Yes (overnight)	[25]
REGICOR-Hermes ^e	31.0	17.1	Yes (10-14h)	[26]
Workforce Diabetes Survey	26.4	22.7	Yes (at least 10 hours)	[27-29]

§ PRIME Belfast included only men. See also ^a, www.colaus.ch; ^b, www.husk-en.b.uib.no; ^c, www.moli-sani.org; ^d, www.cuore.iss.it; ^e, www.regicor.org

REFERENCES

- 1 De Bacquer D, Pelfrene E, Clays E, et al. Perceived job stress and incidence of coronary events: 3-year follow-up of the Belgian Job Stress Project cohort. *Am J Epidemiol*. 2005 Mar 1;**161**:434-41.
- 2 Guessous I, Gaspoz JM, Theler JM, et al. High prevalence of forgoing healthcare for economic reasons in Switzerland: a population-based study in a region with universal health insurance coverage. *Prev Med*. 2012 Nov;**55**:521-7.
- 3 Guessous I, Bochud M, Theler JM, et al. 1999-2009 Trends in prevalence, unawareness, treatment and control of hypertension in Geneva, Switzerland. *PLoS One*. 2012;**7**:e39877.
- 4 Firmann M, Mayor V, Vidal PM, et al. The CoLaus study: a population-based study to investigate the epidemiology and genetic determinants of cardiovascular risk factors and metabolic syndrome. *BMC Cardiovasc Disord*. 2008;**8**:6.
- 5 Simons LA, McCallum J, Friedlander Y, et al. Dubbo study of the elderly: sociological and cardiovascular risk factors at entry. *Aust N Z J Med*. 1991 Oct;**21**:701-9.
- 6 Simons LA, McCallum J, Simons J, et al. The Dubbo study: an Australian prospective community study of the health of elderly. *Aust N Z J Med*. 1990 Dec;**20**:783-9.
- 7 Santos AC, Severo M, Barros H. Incidence and risk factors for the metabolic syndrome in an urban South European population. *Prev Med*. 2010 Mar;**50**:99-105.
- 8 Santos AC, Barros H. Prevalence and determinants of obesity in an urban sample of Portuguese adults. *Public Health*. 2003 Nov;**117**:430-7.
- 9 Conen D, Schon T, Aeschbacher S, et al. Genetic and phenotypic determinants of blood pressure and other cardiovascular risk factors (GAPP). *Swiss Med Wkly*. 2013;**143**:w13728.
- 10 Peasey A, Bobak M, Kubinova R, et al. Determinants of cardiovascular disease and other non-communicable diseases in Central and Eastern Europe: rationale and design of the HAPIEE study. *BMC Public Health*. 2006;**6**:255.
- 11 Thuesen BH, Cerqueira C, Aadahl M, et al. Cohort Profile: The Health2006 cohort, Research Centre for Prevention and Health. *Int J Epidemiol*. 2013 Apr 24.

- 12 Osler M, Linneberg A, Glumer C, et al. The cohorts at the Research Centre for Prevention and Health, formerly 'The Glostrup Population Studies'. *Int J Epidemiol.* 2011 Jun;**40**:602-10.
- 13 Naess O, Sogaard AJ, Arnesen E, et al. Cohort profile: cohort of Norway (CONOR). *Int J Epidemiol.* 2008 Jun;**37**:481-5.
- 14 Hodge AM, English DR, O'Dea K, et al. Dietary patterns and diabetes incidence in the Melbourne Collaborative Cohort Study. *Am J Epidemiol.* 2007 Mar 15;**165**:603-10.
- 15 Giles GG, English DR. The Melbourne Collaborative Cohort Study. *IARC Sci Publ.* 2002;**156**:69-70.
- 16 Di Castelnuovo A, De Curtis A, Costanzo S, et al. Association of D-dimer levels with all-cause mortality in a healthy adult population: findings from the MOLI-SANI study. *Haematologica.* 2013 May 3.
- 17 Iacoviello L, Rago L, Costanzo S, et al. The Moli-sani project: computerized ECG database in a population-based cohort study. *J Electrocardiol.* 2012 Nov-Dec;**45**:684-9.
- 18 Di Castelnuovo A, Costanzo S, Persichillo M, et al. Distribution of short and lifetime risks for cardiovascular disease in Italians. *Eur J Prev Cardiol.* 2012 Aug;**19**:723-30.
- 19 Wagner A, Dallongeville J, Haas B, et al. Sedentary behaviour, physical activity and dietary patterns are independently associated with the metabolic syndrome. *Diabetes Metab.* 2012 Nov;**38**:428-35.
- 20 Bongard V, Dallongeville J, Arveiler D, et al. [Assessment and characteristics of chronic renal insufficiency in France]. *Ann Cardiol Angeiol (Paris).* 2012 Aug;**61**:239-44.
- 21 Wagner A, Sadoun A, Dallongeville J, et al. High blood pressure prevalence and control in a middle-aged French population and their associated factors: the MONA LISA study. *J Hypertens.* 2011 Jan;**29**:43-50.
- 22 Giampaoli S, Vanuzzo D. The Italian atlas of cardiovascular diseases. 1st Edition [Atlante italiano delle malattie cardiovascolari – prima edizione.]. *Ital Heart J.* 2003;**4**:1S-121S.
- 23 The Italian atlas of cardiovascular diseases. 2nd Edition [Atlante italiano delle malattie cardiovascolari – seconda edizione.]. *Ital Heart J.* 2004;**5**:49-92.

- 24 Giampaoli S, Vanuzzo D, Palmieri L, et al. Progetto CUORE. Epidemiologia e prevenzione delle malattie cardio-cerebrovascolari. Protocollo e manuale delle operazioni dell'Osservatorio Epidemiologico Cardiovascolare/Health Examination Survey 2008-2011. Roma, Italy; 2010.
- 25 Yarnell JW. The PRIME study: classical risk factors do not explain the severalfold differences in risk of coronary heart disease between France and Northern Ireland. Prospective Epidemiological Study of Myocardial Infarction. *Qjm*. 1998 Oct;**91**:667-76.
- 26 Grau M, Subirana I, Elosua R, et al. Trends in cardiovascular risk factor prevalence (1995-2000-2005) in northeastern Spain. *Eur J Cardiovasc Prev Rehabil*. 2007 Oct;**14**:653-9.
- 27 Scragg R, Baker J, Metcalf P, et al. Hypertension and its treatment in a New Zealand multicultural workforce. *N Z Med J*. 1993 Apr 28;**106**:147-50.
- 28 Scragg R, Baker J, Metcalf P, et al. Serum lipid levels in a New Zealand multicultural workforce. *N Z Med J*. 1993 Mar 24;**106**:96-9.
- 29 Scragg R, Baker J, Metcalf P, et al. Prevalence of diabetes mellitus and impaired glucose tolerance in a New Zealand multiracial workforce. *N Z Med J*. 1991 Sep 25;**104**:395-7.