

## Supplement Table: Overview of studies included in this review

Author	Country	Total Sample Size	Sample Population	Covariates
Chen <i>et al</i> (2013)	China	53 (cohort A) 50 (cohort B)	Adults from suburbs of Nanjing, China	Socio-demographics
D'Anna-Hernandez <i>et al</i> (2011)	United States	21	Non-smoking pregnant women (ages 18-45 years) who are at <17 weeks gestational age and experiencing non-complicated pregnancies	Trimester of pregnancy
Dettenborn <i>et al</i> (2010)	Germany	59	Employed and unemployed adults	Unemployment; hair-related characteristics
Dettenborn <i>et al</i> (2012)	Germany	87	Depressed patients, healthy controls	Depression
Dettenborn <i>et al</i> (2012)	Germany	360	Healthy individuals (1-91 years old)	Hair-related characteristics; socio-demographics and lifestyle factors
Dowlati <i>et al</i> (2010)	Canada	121	Depressed and non-depressed patients attending a cardiac rehabilitation center	Depression; hair-related characteristics
Gerber <i>et al</i> (2013)	Switzerland	42	University students	Socio-demographics; psychiatric symptoms; physical activity and other lifestyle factors
Gow <i>et al</i> (2010)	Canada; USA	187	Adults with adrenal insufficiency, house hold controls (all within the age range of 18-70 years old)	Adrenal insufficiency; sex; hydrocortisone; drugs for osteopenia/osteoporosis
Grassi-Oliveira <i>et al</i> (2012)	Brazil	23	Treatment seeking crack cocaine-dependent women	Negative life events; early life stress
Groeneveld <i>et al</i> (2013)	The Netherlands	42	Children entering school	School entry; hair-related characteristics; socio-demographics; fearfulness; medication intake
Hinkelmann <i>et al</i> (2013)	Germany	84	Major depressive disorder patients, controls	Major depression; childhood maltreatment;
Karlén <i>et al</i> (2011)	Sweden	99	Students	Socio-demographics; serious life events
Kirschbaum <i>et al</i> (2009)	Germany	142	Mothers with newborns 2-4 days of age, mothers of toddlers 3 to 9 months, non-pregnant nulliparous women	Pregnancy; post-partum; being the mother of a toddler; age; frequency of hair washing
Krumbholz <i>et al</i> (2013)	Germany	1	Hair samples were collected over a pregnancy cycle	Pregnancy; hair segment
Li <i>et al</i> (2012)	China	58	Healthy male adolescents (mean±SD age: 16.2±1.2years), healthy males (mean±SD age: 27.3±2.5 years)	Ultraviolet exposure; hot water immersion; shampoo immersion; location of hair on the head
Luo <i>et al</i> (2012)	China	84	Women with PTSD who experienced the earthquake , women without PTSD who did not experience earthquake, controls (from an area not significantly affected by earthquake)	Post-traumatic stress disorder
Manenschiijn <i>et al</i> (2011)	Netherlands	295	Bipolar disorder patients, healthy controls	Bipolar disorder; adiposity; sex
Manenschiijn <i>et al</i> (2011)	Netherlands	122	Workers who worked in a fast-forward rotating shift, workers who only worked during the day	Shiftwork; adiposity
Manenschiijn <i>et al</i> (2011)	Netherlands	205	Healthy adults, hypercortisolemic, and a hypocortisolemic	Cushing's syndrome; adiposity; socio-demographics; hair-related characteristics; blood pressure
Manenschiijn <i>et al</i> (2012)	Netherlands	116	Patients with Cushing's syndrome, patients with cyclic Cushing's syndrome, non-obese healthy controls	Cushing's syndrome; socio-demographics
Manenschiijn <i>et al</i> (2013)	The Netherlands	283	Elderly adults	Cardiovascular disease; socio-demographics; adiposity; lifestyle factors
O'Brien <i>et al</i> (2012)	United States	135	Adults	Socio-demographics; subjective stress; adiposity; blood pressure
Pereg <i>et al</i> (2011)	Israel	112	Acute myocardial infarction patients, hospitalized controls	Acute myocardial infarction

<b>Raul <i>et al</i> (2004)</b>	France	44	Healthy individuals	Hair-related characteristics; socio-demographics
<b>Saleem <i>et al</i> (2013)</b>	Canada	56	Cardiac rehabilitation patients	One year verbal memory; socio-demographic factors; psychiatric symptoms; adiposity; medication intake
<b>Sauvé <i>et al</i> (2007)</b>	Canada	39	Healthy individuals	Hair-related characteristics; sex
<b>Skoluda <i>et al</i> (2012)</b>	Germany	395	Amateur endurance athletes, controls	Endurance sports; cigarette smoking; gender
<b>Stalder <i>et al</i> (2010)</b>	Germany	76	Alcoholics in acute withdrawal, abstinent alcoholics, gender-and-age matched controls	Alcoholism
<b>Stalder <i>et al</i> (2012)</b>	Germany	155 (study 1) 58 (study 2)	Healthy individuals	Stress related measures; adiposity; hair-related characteristics; socio-demographics; lifestyle factors
<b>Stalder <i>et al</i> (2012)</b>	Germany	45 (study 1) 68 (study 2)	Healthy individuals	Intra-individual stability of hair cortisol concentrations
<b>Stalder <i>et al</i> (2013)</b>	Germany	1258	Employees of an aerospace company	Metabolic syndrome (MetS); cardio-metabolic parameters; hair-related characteristics; socio-demographics; lifestyle factors
<b>Stuedte <i>et al</i> (2011)</b>	Germany	30	Generalized anxiety disorder patients and gender-and-age matched controls	Generalized anxiety disorder
<b>Stuedte <i>et al</i> (2011)</b>	Uganda	27	Post-Traumatic Stress Disorder (PTSD) patients, traumatized controls without PTSD	Post-traumatic stress disorder; gender
<b>Stuedte <i>et al</i> (2013)</b>	Germany	78	PTSD patients, traumatized controls, non-traumatized controls	PTSD; trauma; lifestyle factors
<b>Thomson <i>et al</i> (2010)</b>	Canada	38	Cushing's syndrome patients, healthy controls	Cushing's syndrome
<b>Vaghri <i>et al</i> (2012)</b>	Canada	333	Healthy preschoolers	Parental Income; maternal and paternal education; age; gender
<b>Van Uum <i>et al</i> (2008)</b>	Canada	54	Chronic pain patients, non-obese controls	Chronic pain
<b>Xie <i>et al</i> (2011)</b>	China	40	Non-obese healthy male graduate students (22-30 years old), female participants	Hair segment
<b>Yamada <i>et al</i> (2007)</b>	Canada	60	Neonatal intensive care unit (NICU) infants >25 weeks gestational age, NICU term infants, healthy term infants	Stay in neonatal intensive care unit (NICU)